

1968 BUILDING CODE OF THE CITY OF NEW YORK

**Plus Reference Standards and Selected Rules and
Regulations of the Department of Buildings**

**Local Law No. 76 Effective December 6, 1968
Includes Amendments to July 1, 2008**

**Michael R. Bloomberg
Mayor**

**Robert D. LiMandri
Commissioner
Department of Buildings**

**Martha K. Hirst
Commissioner
Department of Citywide Administrative Services**



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New York City Department of Buildings
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First Deputy Commissioner

Special Acknowledgement:

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VOLUME 1

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**1968 BUILDING CODE
OF THE CITY OF NEW YORK**

**Plus Selected Rules of the Department of Buildings
LOCAL LAW NO. 76 Effective Dec. 6, 1968
INCLUDES AMENDMENTS To July 1, 2008**

MICHAEL R. BLOOMBERG
MAYOR

ROBERT D. LiMANDRI
Commissioner

PREFACE

This revision brings the 1968 Building Code current to July 1, 2008.

When enacted by the City Council on October 22, 1968, the 1968 Building Code was hailed as a great improvement over the anachronistic 1938 Building Code and included what was then the latest thinking in building code science, incorporating advances in technology and construction that had been made following the Second World War. Over the years, the Council amended the 1968 Building Code to address certain changes as needed; however, the 1968 Building Code never enjoyed a complete overhaul, gradually falling behind and becoming increasingly outdated. By the turn of the 21st Century, the 1968 Building Code had become an antiquated, complicated tangle of provisions.

In 2003, the Department of Buildings began a multi-year effort to replace the 1968 Building Code, culminating with Mayor Michael R. Bloomberg's signing of Local Law 33 of 2007. The result was the 2008 New York City Construction Codes, which replaced the 1968 Building Code with a new set of codes that increases public

safety, incorporates the latest in engineering and technology, and contains progressive ideas on sustainable development. Most importantly, the new Construction Codes must be thoroughly reviewed and updated every three years, ensuring that New York City's construction regulations never again become outdated.

While the 2008 New York City Construction Codes will apply to all new buildings beginning July 1, 2009, the 1968 Building Code, and its predecessor from 1938, will continue to remain relevant for years to come. First, certain new buildings filed prior to July 1, 2009 will continue to be subject to the 1968 code. Additionally, provisions of the 1968 code will apply to most alterations to existing buildings. Lastly, buildings constructed in accordance with the 1968 code generally must maintain compliance with its provisions.

The flowchart that follows the editor's note illustrates the circumstances under which the 1968 code remains applicable for alteration projects.



Robert D. LiMandri
Commissioner

Preface

EDITOR'S NOTE:

For further information, readers may wish to refer to the published series of the Department of Buildings' Directives and Memorandums, which are available at CityStore (NYC.gov/citystore) or visit the Department of Buildings website at NYC.gov/buildings for the latest policy and procedure notices.

The legislature enacted, effective September 1, 1986, Chapter 839 of the state laws of 1986, which made certain technical corrections and changes to the recodification.

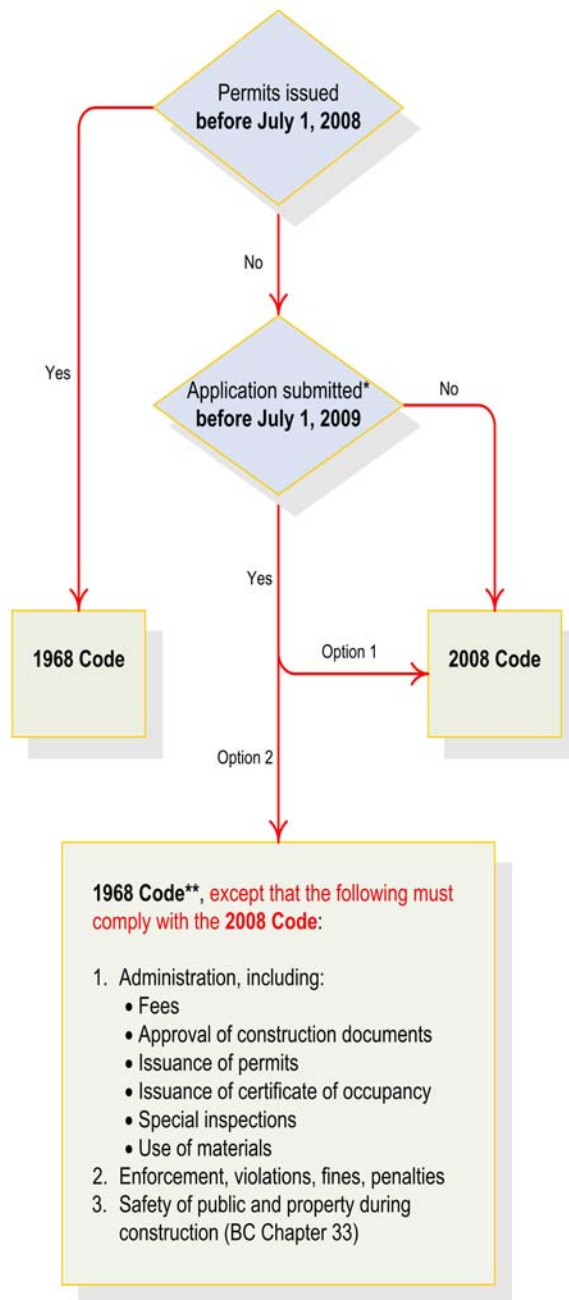
Within the Reference Standards Appendix of this volume are references to specific sections in the Building Code. Standards enacted prior to the recodification of the Building Code refer to the code using the old section numbers. Editorial notes pointing out discrepancies between the former code and the recodified version not specifically indicated as changes, or references to laws that have amended the code since recodification, are indicated with asterisks and corresponding footnotes in bold italics at the following the section. Obvious errors (such as misspellings) are corrected and noted within the text with a [*sic*] following the particular word.

Page Setup:

Where text is interrupted by a table, left column above the table will continue unto the right column above the table. Text below the table will follow the same pattern.

Which code applies?

New Buildings



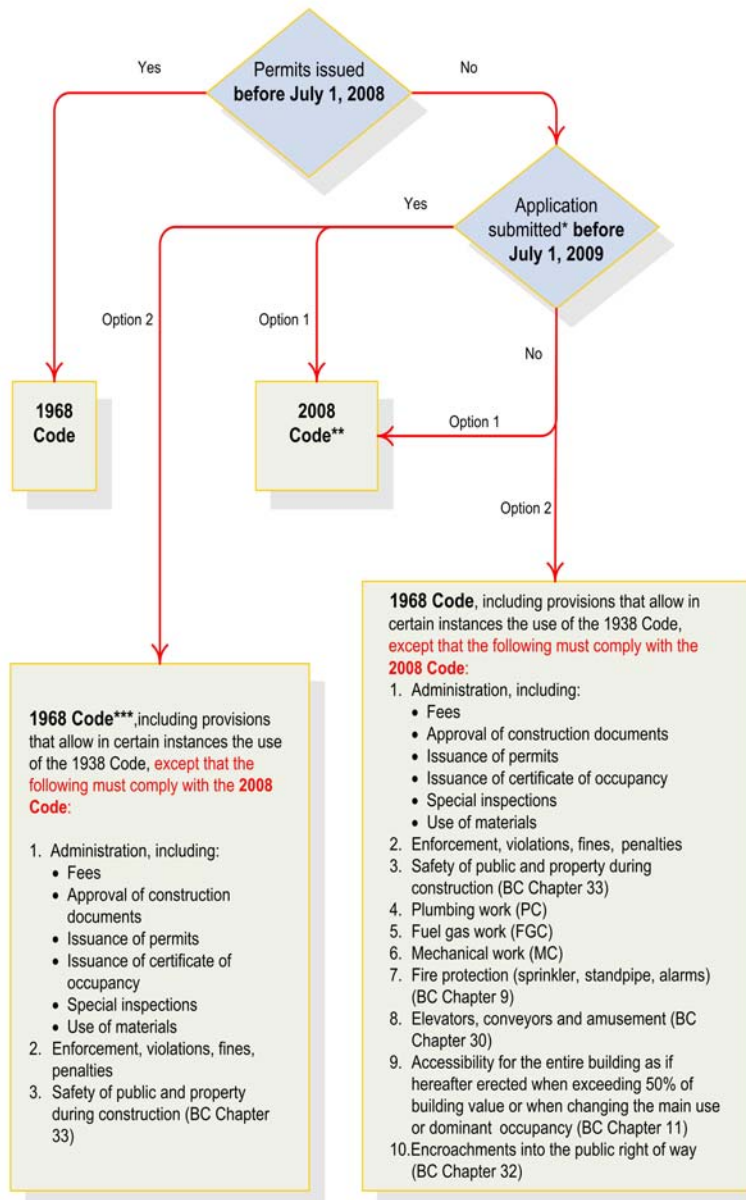
* Submission of application for construction document approval

** In addition, this option remains available only if:

- (1) the application is not abandoned;
- (2) the work is commenced within 12 months of issuance of a permit, and
- (3) the work is diligently carried out to completion

Which code applies?

Alterations to Existing Buildings



* Submission of application for construction document approval

** The 2008 Code cannot be elected where the 2008 Code provisions as applied to the particular building would result in a reduction in fire safety or structural safety. As an alternative, the entire building may be made to comply with 2008 Code

*** In addition, this option remains available only if:

- (1) the application is not abandoned;
- (2) the work is commenced within 12 months of issuance of a permit, and
- (3) the work is diligently carried out to completion

TABLE OF CONTENTS

Volume I

**TITLE 26, ADMINISTRATIVE CODE
HOUSING AND BUILDINGS**

CHAPTER 1— DEPT. OF BUILDINGS [REPEALED]
SUBCHAPTER 1—General Provisions
SUBCHAPTER 2—Licenses

Article

- 1—General Provisions**
- 2 Master Plumbing License; Master Fire
Suppression Piping Contractor License**
- 3—Welder License**
- 4 High Pressure Boiler Operating Engineer
and Portable High Pressure Boiler
Operating Engineer Licenses**
- 5 Hoisting Machine Operator License**
- 6 Rigger License**
- 7—Sign Hanger Licenses**
- 8—Oil Burning Equipment Installer License**
- 9 Concrete Testing Laboratory License**
- 10 Supported Scaffold Certificate of
Completion**
- 11 General Contractor Registration—**

SUBCHAPTER 3—Building Construction

Article

- 1—General Provisions**
- 2 Permits**
- 3 Fees**
- 4 Inspections**
- 5 Certificates of Occupancy**
- 6 Projections Beyond Street Line**
- 7 Safety in Building Operations**
- 8 Unsafe Buildings and Property**
- 9 Violations and Punishments**
- 10—Miscellaneous Provisions**

SUBCHAPTER 4—Regulation Of Outdoor Signs

Article—

- 1—Maintenance Permit for Outdoor Signs**
- 2—Outdoor Advertising Companies**

**TITLE 27, ADMINISTRATIVE CODE
CONSTRUCTION AND MAINTENANCE**

**CHAPTER 1—BUILDING CODE
SUBCHAPTER**

- 1 Administration and Enforcement**
- 2 Definitions**
- 3 Occupancy and Construction Classifications**
- 4 Building Limitations**
- 5 Fire Protection Construction Requirements**
- 6 Means of Egress**
- 7 Special Uses and Occupancies**
- 8 Places of Assembly**
- 9 Loads**
- 10 Structural Work**
- 11 Foundations**
- 12 Light, Heat, Ventilation and Noise Control**
- 13 Mechanical Ventilation, Air Conditioning, and
Refrigeration Systems**
- 14 Heating and Combustion Equipment**
- 15 Chimneys and Gas Vents**
- 16 Plumbing and Gas Piping**
- 17 Fire Alarm, Detection and Extinguishing
Equipment**
- 18 Elevators and Conveyers**
- 19 Safety of Public and Property During
Construction Operations**

INDEX

Title 26, Chapter 1
Title 27, Chapter 1

**Note: Strikethrough indicates repeal of text as per Local Law 33-2007
(See Title 28 of Administrative Code for new provisions)**

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BUILDING CODE AMENDMENTS

The following is a listing of the Local Laws amending the Building Code during the period from December 6, 1968 through July 1, 2008.

For the date of the Mayor's approval of the Local Laws listed below, see "Dates of N.Y.C. Local Laws approved by the Mayor," in this index.

Title 26: Housing and Buildings

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[641-1.0] – [641-3.0]	26-101 – 103 (Repealed)	33-2007
[4.0]	104 (Repealed)	33-2007; 91-1989; 45-1984
[641-5.0] – [642-1.0]	105 – 111 (Repealed)	33-2007
[642-2.0]	112 (Repealed)	33-2007; 107-1993
[642-3.0] – [643a-3.0]	113 – 117	33-2007
[4.0]	118 (Repealed)	33-2007; 48-2006; 48-1983; 45-1983
[5.0] – [7.0]	119 – 121 (Repealed)	33-2007
[8.0]	122 (Repealed)	33-2007; 17-1982
[9.0] – [10.0(b)]	123 – 124(b) (Repealed)	33-2007
[10.0(c)]	124(c) (Repealed)	33-2007; 107-1993
[11.0]	125 (Repealed)	33-2007; 65-1997; 62-1991; 80-1985; 17-1982
[11.0(b)]	125(b) (Repealed)	33-2007; 80-1985; 17-1982
[11.0(c)]	125(c) (Repealed)	33-2007; 16-1984
[11.0(e)]	125(e) (Repealed)	33-2007; 27-1996
[11.0(g)]	125(g) (Repealed)	33-2007; 77-2005; 35-2004; 44-2003
	125.1 (Repealed)	33-2007; 99-1991
[12.0(a)(b)(c)]	126(a)(b)(c) (Repealed)	33-2007
[12.0(d)]	126(d) (Repealed)	33-2007; 77-2005; 35-2004; 44-2003

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[12.0(e)]	126(e) (Repealed)	33-2007; 37-2007
[12.1(a)]	126.1(a) (Repealed)	33-2007; 03-1998
[12.1(a)(e)]	126.1(a)(e) (Repealed)	33-2007; 65-1997; 80-1985
[12.1(a)(f)]	126.1(a)(f) (Repealed)	33-2007; 37-2007
[12.1(b)(c)(d)]	126.1(b)(c)(d)	33-2007
[12.2(a)(f)(g)(h)(i)(j)(k)]	126.2(a)(f)(g)(h)(i)(j)(k) (Repealed)	33-2007; 03-1998; 80-1985
[12.2(b)(c)(d)(e)]	126.2(b)(c)(d)(e) (Repealed)	33-2007
[12.2(f)]	126.2(f) (Repealed)	33-2007; 02-2000
[12.3]	126.3 (Repealed)	33-2007; 80-1985
[12.4 (1) – (9)]	126.4(1) – (9) (Repealed)	33-2007
[12.4 (10)]	126.4(10) (Repealed)	14-2001; 03-1998; 80-1985
[12.5]	126.5 (Repealed)	33-2007
[13.0]	127 (Repealed)	33-2007; 23-1990
	127.1 (Repealed)	33-2007; 23-1990
	127.2 (Repealed)	33-2007; 06-1993
	127.3 (Repealed)	33-2007; 14-2001
	127.3(g) (Repealed)	33-2007; 31-2005
[14.0]	128 (Repealed)	33-2007; 25-1984
[644-1.0] – [2.0]	129 – 130 (Repealed)	33-2007
[B26-1.0]	131 (Repealed)	33-2007; 45-1969
[1.1]	132 (Repealed)	33-2007
[1.2]	133 (Repealed)	33-2007; 55-1989; 63-1970

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[1.3]	134 (Repealed)	33-2007; 59-1996; 61-1970
[1.4] – [1.5]	135 – 136 (Repealed)	33-2007
[1.6]	137 (Repealed)	33-2007; 36-2007; 51-2001; 91-1981
[1.7]	138 (Repealed)	33-2007; 55-1989; 79-1981
[1.8]	139 (Repealed)	33-2007; 73-1969
[1.9]	140 (Repealed)	33-2007
[2.0] - [2.3]	141 – 144 (Repealed)	33-2007; 55-1989; 79-1981
[2.0(e)]	141(e) (Repealed)	33-2007; 10-1999
[2.0(h)(1)]	141(h)(1) (Repealed)	33-2007; 10-1999
[2.4]	145 (Repealed)	33-2007; 79-1981
[2.5]	146 (Repealed)	33-2007; 55-1989; 79-1981
[2.6]	147 (Repealed)	33-2007; 55-1989; 91-1981
[2.6(a)(b)]	147(a)(b) (Repealed)	33-2007; 51-2001
[2.7]	148 (Repealed)	33-2007; 55-1989; 79-1981
[2.8]	149 (Repealed)	33-2007; 55-1989; 79-1981
[2.9]	150 (Repealed)	33-2007; 55-1989
[2.9(a)]	150(a) (Repealed)	33-2007; 51-2001
	150.1 (Repealed)	33-2007; 51-2001
[2.10] – [2.12]	151 – 153 (Repealed)	33-2007; 55-1989; 79-1981
	153.1 (Repealed)	33-2007; 55-1989
[3.0] – [3.1]	154 – 155 (Repealed)	33-2007
[3.2]	156 (Repealed)	33-2007; 61-1970
[3.3]	157 (Repealed)	33-2007; 45-1969

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[3.4]	158 (Repealed)	33-2007
[4.0]	159 (Repealed)	33-2007; 61-1970
[4.1]	160 (Repealed)	33-2007
[4.2] – [4.4]	161 – 163 (Repealed)	33-2007; 61-1970
[4.3(a)(1)]	162(a)(1) (Repealed)	33-2007; 108-1993
[4.5] – [4.6]	164 – 165 (Repealed)	33-2007
[5.0]	166 (Repealed)	33-2007; 73-1969
[5.1] – [5.2]	167 – 168 (Repealed)	33-2007
[5.3]	169 (Repealed)	33-2007; 73-1969
[5.4]	170 (Repealed)	33-2007; 91-1981
[5.5]	171 (Repealed)	33-2007; 73-1969
[6.0]	172 (Repealed)	33-2007; 45-1983
[6.1] – [6.7]	173 – 179 (Repealed)	33-2007
[6.8]	180 (Repealed)	33-2007; 91-1981
[6.9(a)(b)]	181(a)(b) (Repealed)	33-2007;
[6.9(c)]	181(c) (Repealed)	33-2007; 63-1970
	181.1 (Repealed)	33-2007; 18-2007
[7.0] – [7.1]	182 – 183 (Repealed)	33-2007
[7.2]	184 (Repealed)	33-2007; 63-1970
[7.3] – [7.7]	185 – 189 (Repealed)	33-2007
[7.8]	190 (Repealed)	33-2007; 91-1981
[7.9(a)(b)]	191(a)(b) (Repealed)	33-2007
[7.9(c)]	191(c) (Repealed)	33-2007; 63-1970
[8.0] – [8.5]	192 – 197 (Repealed)	33-2007
[8.6]	198 (Repealed)	33-2007; 91-1981
[8.7]	199 (Repealed)	33-2007; 63-1970
[9.0] – [9.1]	200 – 201 (Repealed)	33-2007
[9.2]	202 (Repealed)	33-2007; 61-1970

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[9.3]	203 (Repealed)	33-2007; 91-1981
[9.4]	204 (Repealed)	33-2007; 65-1990
	204.1(a)(b)(e) (Repealed)	33-2007
	204.1(c)(d) (Repealed)	33-2007; 24-2008
	204.2 (Repealed)	33-2007; 24-2008
	204.3 (Repealed)	33-2007; 24-2008
	204.4 (Repealed)	33-2007; 24-2008
	Article 10 of Subchapter 2 (Repealed)	33-2007; 52-2005
	Article 11 of Subchapter 2 (Repealed)	33-2007; 36-2007
[C26-10.0] – [22.0]	26-205 – 209 (Repealed)	33-2007
[30.0]	210 (Repealed)	33-2007; 05-1976
[31.0]	211 (Repealed)	33-2007; 38-1990; 91-1981
[32.0]	212 (Repealed)	33-2007; 56-1993; 38-1990; 40-1987; 35-1984; 91-1981
[32.0(2)(5)]	212(2)(5) (Repealed)	33-2007; 109-1993
[32.0(2)(5)(7)(a)]	212(2)(5)(7)(a) (Repealed)	33-2007; 107-1993
	212.1 (Repealed)	33-2007; 48-2006 58-1988
	212.4 (Repealed)	50-1988
[33.0]	213 (Repealed)	33-2007; 62-1991; 48-1991; 91-1981
[33.0(b)(c)]	213(b)(c) (Repealed)	33-2007; 40-1987
[34.0]	214 (Repealed)	33-2007; 53-1993; 72-1991; 54-1991; 38-1990; 25-1984
[34.0(a)(14)]	214(a)(14) (Repealed)	33-2007; 53-1993

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[34.1]	214.1 (Repealed)	33-2007; 55-1991; 34-1988; 76-1985
[35.0]	215 (Repealed)	33-2007; 38-1990; 25-1984
[40.0] – [82.0]	216 – 239 (Repealed)	33-2007
[82.5]	240 (Repealed)	33-2007; 59-1996; 05-1972
[83.0] – [83.5]	241 – 242 (Repealed)	33-2007
[84.0]	243(a) (Repealed)	33-2007; 14-1989; 05-1986
[84.0(b)]	243(b) (Repealed)	33-2007; 59-1996
[84.0(c)(d)]	243(c)(d) (Repealed)	33-2007
[Article 8-A]	Article 9 (Repealed)	33-2007; 39-1972
[84.5] – [85]	244 – 245 (Repealed)	33-2007
[85.5]	246 (Repealed)	33-2007; 41-1978
[85.5(a)(4)]	246(a)(4) (Repealed)	33-2007; 17-1982
[86.0]	247 (Repealed)	33-2007
[86.5]	248 (Repealed)	33-2007; 33-1991; 17-1982
[86.5(f)]	248(f) (Repealed)	33-2007; 10-1981
[86.5(g)]	248(g) (Repealed)	33-2007; 16-1984; 17-1982
[86.5(g)(3)]	248(g)(3) (Repealed)	33-2007; 87-2005
[86.5(g)(4)]	248(g)(4) (Repealed)	33-2007; 26-2004
[86.5(g)(6)]	248(g)(6) (Repealed)	33-2007; 36-2007
[86.5(i)]	248(i) (Repealed)	33-2007; 87-2005
[86.5(j)]	248(j) (Repealed)	33-2007; 47-2006
[86.5(k)]	248(k) (Repealed)	33-2007; 48-2006
[87.0]	249 (Repealed)	33-2007; 23-1990
[87.5]	250 (Repealed)	33-2007; 39-1972
[91.0]	251 (Repealed)	33-2007

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[92.0]	252 (Repealed)	33-2007; 33-1991; 45-1969
[92.0(a)]	252(a) (Repealed)	33-2007; 93-1996
	252.1 (Repealed)	33-2007; 87-2005
Art.1 & 2 of Subchapter 4 (Repealed)		33-2007; 14-2001
	253 (Repealed)	33-2007
	253(a)(b) (Repealed)	33-2007; 31-2005; 14-2001
	254 (Repealed)	33-2007; 31-2005; 14-2001
	255 – 257 (Repealed)	33-2007
	258 (Repealed)	33-2007; 31-2005; 14-2001

Item Amended		
Old Section Number	New Section Number	Local Law(s)
	259(a)(b)(c)(d) (Repealed)	33-2007; 31-2005; 14-2001
	259(e)(f) (Repealed)	33-2007
	260(a) (Repealed)	33-2007
	260(b)(c)(d) (Repealed)	33-2007; 31-2005; 14-2001
	261(a) (Repealed)	33-2007; 31-2005; 14-2001
	261(b) (Repealed)	33-2007
	262(a)(b)(c)(e) (Repealed)	33-2007
	262(d) (Repealed)	33-2007; 31-2005; 14-2001
	263 (Repealed)	33-2007

Title 27: Construction and Maintenance

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[100.1]	27-101	33-2007
[100.3]	103	33-2007
[100.6]	106 (Repealed)	33-2007; 32-2004; 41-1978
[103.0]	114	16-1984
[103.0(e)]	114(e)	45-1984
[103.0(h)]	114(h)	32-2004
[103.2]	116	06-1974
[103.3]	117	06-1974
[103.4]	118	16-1984
	118.1(a)(b) (Repealed)	33-2007; 37-2007; 65-1997
[103.6]	120	61-1969
[103.7]	121	06-1974
[103.8]	122	72-1977
[103.9]	123	79-1979
	123.1	58-1987
	123.2	10-1999
	123.3	33-2007
[104.1]	124 (Repealed)	33-2007
[104.2]	125 (Repealed)	33-2007
[104.3(a)(b)]	126(a)(b)	33-2007;

Item Amended		
Old Section Number	New Section Number	Local Law(s)
	(Repealed)	51-2001
[105.1]	127 (Repealed)	33-2007
[105.2]	128 (Repealed)	33-2007
[105.3]	129 (Repealed)	11-1998; 10-1980
[105.3(a)]	129(a) (Repealed)	33-2007 38-2007
[106.1]	130 (Repealed)	33-2007
[106.2]	131 (Repealed)	33-2007; 49-1991
	131.1	49-1991
[106.3]	132 (Repealed)	33-2007
[106.3(a)]	132(a) (Repealed)	33-2007; 77-1972
[106.4]	133 (Repealed)	33-2007
[107.1]	134 (Repealed)	33-2007; 39-1972
[107.2]	135 (Repealed)	33-2007
[107.3]	136 (Repealed)	33-2007

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[107.4]	137 (Repealed)	33-2007
[108.1]	138 (Repealed)	33-2007
[108.2]	139 (Repealed)	33-2007; 85-1973
[108.2(2)]	139(2) (Repealed)	33-2007; 22-2002; 65-1996
[108.3]	140 (Repealed)	33-2007; 72-1991
	140.1 (Repealed)	33-2007; 72-1991
[108.4]	141 (Repealed)	33-2007
[108.5]	142 (Repealed)	33-2007; 30-1970
[108.6]	143 (Repealed)	33-2007
	143.1 (Repealed)	33-2007; 03-2007
	143.2(a-h) (Repealed)	33-2007; 04-2007
[108.7]	144 (Repealed)	33-2007; 19-1983; 76-1985
[108.8] – [108.9]	145 – 146 (Repealed)	33-2007
[109.1]	147 (Repealed)	33-2007; 24-2007; 39-1972
[109.2]	148 (Repealed)	33-2007
[109.3]	149 (Repealed)	33-2007; 107-1993
[109.4]	150 (Repealed)	33-2007; 76-1985
[109.5] – [109.6]	151 – 152 (Repealed)	33-2007
[109.7]	153 (Repealed)	33-2007; 107-1993
[109.8] – [110.1]	154 – 156 (Repealed)	33-2007
[110.2]	157 (Repealed)	33-2007
[110.2(c)(3),(4)]	157(c)(3),(4) (Repealed)	33-2007; 85-1973
[110.2(c)(4)]	157(c)(4) (Repealed)	33-2007; 22-2002; 65-1996
[110.3]	158 (Repealed)	33-2007; 33-1988
[110.4]	159 (Repealed)	33-2007

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[110.5]	160 (Repealed)	33-2007; 103-1989; 07-1974
[110.5(a)]	160(a) (Repealed)	33-2007; 65-1996
[111.1]	161 (Repealed)	33-2007
[111.2]	162 (Repealed)	33-2007; 103-1989
[112.1] – [112.2]	163 – 164 (Repealed)	33-2007
[112.3]	165 (Repealed)	33-2007; 65-2007
[112.4]	166 (Repealed)	33-2007
[113.1]	167 (Repealed)	33-2007; 19-1983
[113.2]	168 (Repealed)	33-2007; 30-1970
[113.3]	169 (Repealed)	33-2007; 65-2007
[113.4]	170 (Repealed)	33-2007
[113.5]	171 (Repealed)	33-2007; 73-1982
[114.1] – [114.3]	172 – 174 (Repealed)	33-2007
[114.4]	175 (Repealed)	33-2007; 06-1997
[114.4(a)]	175(a) (Repealed)	33-2007; 51-2001; 30-1982
[114.4(b)]	175(b) (Repealed)	33-2007; 51-2001
[114.5]	176 (Repealed)	33-2007
[115.1]	177 (Repealed)	33-2007; 14-2001
[115.1]	177 & footnote (Repealed)	33-2007; 31-2005
[115.2]	178 (Repealed)	33-2007; 59-1996
[115.3]	179 (Repealed)	33-2007; 63-1970
[116.1]	180 (Repealed)	33-2007; 107-1993
[116.2]	181 (Repealed)	33-2007
[116.3]	182 (Repealed)	33-2007; 06-1997
[116.3(g)(h)]	182(g)(h) (Repealed)	33-2007; 107-1993
[116.4] – [116.5]	183 - 184 (Repealed)	33-2007

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[116.5(d)(1)]	184(d)(1) (Repealed)	33-2007; 32-2004
	184.1 (Repealed)	33-2007; 06-1997
[117.1] – [117.6]	185 – 190 (Repealed)	33-2007
[118.1]	191 (Repealed)	33-2007; 19-1983
	191.1 (Repealed)	33-2007; 28-2005
[118.2] – [118.4]	192 – 194 (Repealed)	33-2007
[118.5]	195 (Repealed)	33-2007; 77-1972
[118.6]	196 (Repealed)	33-2007; 38-1990; 33-1988
[118.7]	197 (Repealed)	33-2007; 11-1988
[118.8]	198 (Repealed)	33-2007; 19-1983
[118.9]	198.1 (Repealed)	33-2007; 76-1985
[118.10]	198.2 (Repealed)	33-2007; 59-1985
	198.3 (Repealed)	33-2007; 09-1987
[119.1] – [119.5]	199 – 203 (Repealed)	33-2007
[119.6]	204 (Repealed)	33-2007; 65-1996; 70-1980
[120.1] – [120.3]	205 – 207 (Repealed)	33-2007
[120.4]	208 (Repealed)	33-2007; 39-1972
[120.5]	209 (Repealed)	33-2007; 39-1972
[120.6] – [120.8]	210 – 212 (Repealed)	33-2007
[121.1]	213 (Repealed)	33-2007; 91-1989; 70-1980
[121.2]	214 (Repealed)	33-2007; 70-1980
[121.2(b)]	214(b) (Repealed)	33-2007; 65-1996
[121.2(c)]	214(c) (Repealed)	33-2007; 16-1984
[121.3]	215 (Repealed)	33-2007
[121.4]	216 (Repealed)	33-2007; 14-1989

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[121.5]	217 (Repealed)	33-2007
[121.6]	218 (Repealed)	33-2007; 12-1993
[121.7]	219 (Repealed)	33-2007; 65-1996; 103-1989; 07-1974
[121.8] – [121.9]	220 – 221 (Repealed)	33-2007
[121.10]	222 (Repealed)	33-2007; 73-1988
[121.10(b)]	222(b) (Repealed)	33-2007; 16-1984
[121.11]	223 (Repealed)	33-2007
[121.12]	224 (Repealed)	33-2007; 45-1969
[122.1] – [122.2]	225 – 226 (Repealed)	33-2007
[123.1]	227 (Repealed)	33-2007; 45-1983
[123.2]	228 (Repealed)	33-2007
[124.1]	228.1 (Repealed)	33-2007; 16-1984
[124.2] – [124.4]	228.2 – 228.4 (Repealed)	33-2007
[125.1]	228.5	26-2004; 16-1984
	228.6 (Repealed)	33-2007; 107-1993
	228.7 (Repealed)	33-2007; 109-1993 107-1993
	228.8 – 228.16 (Repealed)	33-2007; 107-1993
[C26-201.0]	27-232	22-2002; 27-1998; 107-1993; 49-1991; 58-1987; 16-1984; 30-1982; 41-1978; 28-1975; 80-1972; 39-1972; 05-1971; 73-1969
Amended Definitions—		
	Accessible	58-1987
	Accessible Route	58-1987
	Adaptable Dwelling Units	58-1987
	Area of Refuge	39-1972

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
Collecting Safe Area; Dead End; Exit; Family; Fire Area		39-1972
Existing Office Building		05-1973
Gas Meter Piping		30-1982
Gas Meter Service		30-1982
Non-Combustible		80-1972
Definitions Added—		
Atrium		16-1984
Cabaret		41-1978
Elevator Vestibule		26-2004; 16-1984
Existing Building		16-1984
Existing High Rise Building		16-1984
Exit		26-2004
Fire Protection Plan		16-1984
Fire Safety Plan		16-1984
Gas Service Line Valve		30-1982
Gas Service Piping		30-1982
Group Home		28-1975
High Rise		16-1984
Low Rise		16-1984
Mall		16-1984
Office Building		26-2004
Outside Gas Service Line Valve		16-1984
Physical Disability		58-1987
Place of Assembly		23-1990
Primary Entrances		58-1987
Public Areas		16-1984
Smoke Barriers		26-2004; 16-1984
Stage		41-1978
Usable Dwelling Units		58-1987
Valve		16-1984
[300.2]	27-235	39-1972
[301.3]	239	39-1972
[302.1(a)]	243(a)	30-1982
[302.2]	244	61-1969
Table 3-2		30-1982; 39-1972
Table 3-4		50-1976; 06-1972; 54-1970; 61-1969
Table 3-4 Footnotes (e)(m)		26-2004
[305.4]	252	61-1969
[307.1]	254	23-1990
[308.1]	259	16-1984
[309.3]	262	39-1972
[313.3]	271	77-1988; 39-1972
[315.2]	281	12-1993
[400.1]	288	13-1975
[401.1]	291	58-1987

Item Amended		
Old Section Number	New Section Number	Local Law(s)
	291.1 – 292.5	58-1987
	292.6	65-1988; 58-1987
	292.7 – 292.20	58-1987
[403.1]	296	61-1969
[403.2(a)]	297(a)	52-1975
[404.1]	299	61-1969
[406.2]	306	05-1971
[407.2]	308	58-1987; 83-1973
[407.3, .4, .5, .6]	309 – 312	83-1973
[408.1(e)(f)]	313(e)(f)	08-1974
[408.3]	315	104-1993; 54-1970
Table 4-1		10-1999; 45-1984; 16-1984
Table 4-2		45-1984; 16-1984
[409.0]	Article 10	13-1975
[409.1]	316	33-1988
	316.1	33-1988
[409.2]	317	58-1983; 33-1988
[409.3]	317.1	14-1989
[409.4]	317.2	14-1989; 33-1988; 58-1983
[502.2(f)]	324(f)	55-1976
[502.2(g)]	324(g)	26-2004
[502.5]	327	16-1984; 39-1972
[503.1(f)]	331(f)	39-1972
[503.2(f)]	332(f)	13-1987
[503.3]	333	13-1987; 39-1972
	335.1	13-1987
[503.5(d)(2), (3)]	338(d)(2), (3)	39-1972
[503.8(i)]	338(i)	45-1984
[504.1(c)]	339(c)	16-1984
[504.1(c)(6)(7)]	339(c)(6)(7)	86-1979
[504.5]	343	16-1984
[504.5(d)]	343(d)	26-2004
Table 5-1		39-1972; 61-1969
[504.6]	344	84-1979
[504.7]	345	16-1984; 16-1987
[504.10(c)(1)]	348(c)(1)	16-1984
[504.12]	350	39-1972
[504.12(a)]	350(a)	59-1996
[504.13(d)]	351(d)	16-1984
[504.14]	352 (repealed)	80-1989
[504.15]	353	05-1973

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[504.15(c)]	353(c)	86-1979; 26-1975; 05-1973
[504.16]	353.1	16-1984
	353.2	26-2004
	353.3	26-2004
Table 5-2 & Footnotes		39-1972; 61-1969
[C26-600.1]	354	05-1973
[600.3]	356	54-1970
[601.1(d)]	357(d)	58-1987; 39-1972
Table 6-1 & Footnotes		54-1970
[601.4(b)]	360(b)	32-1971
Table 6-2		16-1984
[602.3]	363	26-2004; 16-1984
[603.1]	365	61-1969
[603.1(b)]	365(b)	61-1969
[603.2]	366	32-1971; 61-1969
[603.2(2)]	366(2)	32-1971
[603.2(3)]	366(3)	16-1984
[603.3]	367	16-1984
[604.1]	368	16-1984; 28-1975
[604.2]	369	16-1984
[604.2(g)(3)]	369(g)(3)	65-1980
[604.2(h)]	369(h)	70-1981; 61-1969
[604.2(i)]	369(i)	21-1972
[604.3(h)(3)]	370(h)(3)	21-1972; 54-1970
[604.3(h)(4)]	370(h)(4)	49-1975
[604.4(b)]	371(b)	81-1973; 21-1971
[604.4(c)]	371(c)	26-2004; 16-1984
[604.4(e)]	371(e)	58-1987; 48-1971
[604.4(g)]	371(g)	49-1975
[604.4(j)(1)(b)]	371(j)(1)(b)	14-1993; 05-1973; 54-1970
[604.4(j)(2)]	371(j)(2)	08-1971; 61-1969
[604.5(d)]	372(d)	39-1972
[604.8(b)]	375(b)	28-1975; 54-1970
[604.8(g)]	375(g)	39-1972
[604.8(h)]	375(h)	28-1975; 05-1971
[604.8(i)]	375(i)	61-1969
[604.8(i)(a)]	375(i)(a)	61-1969

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[604.8(i)(1)(b)]	375(i)(1)(b)	28-1975; 05-1971
[604.8(i)(1)(e)(f)]	375(i)(1)(e)(f)	50-1971
[604.8(i)(1)(g)]	375(i)(1)(g)	08-1976; 50-1971
[604.8(i)(2)]	375(i)(2)	54-1970
[604.8(i)(4)]	375(i)(4)	61-1969
[604.8(i)(6)]	375(i)(6)	26-2004
[604.8(j)]	375(j)	31-1981
[604.8(k)]	375(k)	61-1969
	376.1	26-2004
[604.10(c)]	377(c)	58-1987
Table 6-4		39-1972
[604.13]	380	28-1975
[605.1(a)(e)]	381(a)(e)	16-1984
[605.1(d)]	381(d)	39-1972
[605.1(e)(1)]	381(e)(1)	59-1996
[605.2]	382	16-1984
[605.2(a)]	382(a)	59-1996
Article 7 of Subchapter 6 – (Title)		26-2004;
[606.1]	383	26-2004; 61-1969
	383.1	26-2004
[606.2]	384	16-1984
[606.2(a)]	384(a)	59-1996
[606.2(c)]	384(c)	26-2004
[606.3]	385	61-1969
[607.1]	388	50-1973; 39-1972
[608.1]	390	16-1984; 05-1973
[608.2]	391	05-1973
[608.3]	392	05-1973
[608.4]	393	05-1973
[608.5]	394	45-1984
[608.6]	395	05-1973
[608.7]	396	16-1984; 05-1973
[609.1, .2, .3]	Article 10	16-1984
[610.1, .2, .3]	Article 11	16-1984
[C26-701.6]	27-405	39-1972
[704.6]	423	39-1972
[707.3]	440	68-1999; 70-1969
[709.6]	455	82-1973
	459.1	58-1987
	472.1	58-1987
[712.3]	481	103-1989
	483	58-1987
[713.0 (repealed)]		16-1984
[714.1]	488	06-1969
[714.6]	493	06-1969
	493.1	58-1987
Article 17-A of Subchapter 7		03-1998

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
	508.6	02-2000; 03-1998
	508.7	10-1988
[717.1]	509	39-1972
[718.5(b)(1)]	514(b)(1)	39-1972
[719.1] – [719.4]	518 – 521	54-1970
[720.1] – [719.9]	Article 21	16-1984
[721.1] – [719.7]	Article 22	16-1984
[C26-800.1]	27-522	23-1990
[800.3]	524	39-1972
[801.1]	525	39-1972
	525.1	23-1990
	525.1(e)(f)(g)(h)(i)	35-2006
[801.7(a)(5)]	531(a)(5)	39-1972
[801.7(a)(1)(h)]	531(a)(1)(h)	58-1987
[801.9]	533	39-1972
[801.17]	541	41-1978
[801.18]	542	41-1978
[802.2(b)(7)(b), (7)(d)]	546(b)(7)(b), (7)(d)	39-1972
[802.2(b)(8)(b)]	546(b)(8)(b)	39-1972
[802.2(9)]	546(9)	41-1978
[802.3(b)(2)(d)]	547(b)(2)(d)	41-1978
[804.1(a)(3)]	549(a)(3)	41-1978
[804.1(b)]	549(b)	41-1978
[C26-900.1]	27-550	13-1975; 76-1968
[904.0(a)(b)]	569(a)(b)	17-1995
[C26-1000.1]	27-580	13-1975
Table 10-2		17-1995
[1001.4]	594	17-1995
[1002.4(b)]	599(b)	51-1976
[1004.1]	603	65-1990
[1004.3]	605	65-1990
[1004.3(b)]	605(b)	39-1972
[1004.3(c)]	605(c)	62-1971
Table 10-3		65-1990
Table 10-3A		65-1990
[1004.4]	606	65-1990
[1004.5]	607	65-1990
[1004.5(a)(1)(2)]	607(a)(1)(2)	39-1972
[1004.6]	608	65-1990
[1004.7]	609	65-1990
	611.1	65-1990
[1004.10]	612	65-1990
[1004.11]	613	65-1990
	613.1, .2	65-1990
[1005.1(c)]	614(c)	26-2004
[C26-1100.1]	27-652	13-1975
[1101.2(c)]	663(c)	33-1971
[1101.3]	664	33-1971
[1102.3(a)]	670(a)	17-1995
[1106.7(c)(1)]	694(c)(1)	54-1970
[1112.1]	719	33-1971
[1112.2]	720	33-1971

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[C26-1201.1]	27-731	13-1982
[1202.2]	733	61-1969
[1202.3]	734	61-1969
[1203.5]	739	61-1969
[1205.2, .3, .6, .7]	746, 747, 750, 751	61-1969
[1206.3(e)]	754(e)	08-1980
[1206.3(e)(3)]	754(e)(3)	26-2004
[1206.3(f)]	754(f)	26-2004
[1207.2]	758	61-1969
[1207.5]	761	90-1973
[1208.2(a)(1), (b)]	769(a)(1), (b)	38-1972
[1208.2(b)(4)]	769(b)(4)	14-1976
[1208.3(b)(4)]	770(b)(4)	05-1973
[C26-1300.1]	27-771	13-1975
[1300.6(c)]	776(c)	31-1981
[1300.7]	777	80-1973
[1300.7(d)]	777(d)	35-1975
[1300.8]	777.1	16-1984
[1300.8(a)(5)]	777.1(a)(5)	13-1975
[1300.9]	777.2	16-1984
[1301.2(a)]	779(a)	26-2004
[1301.4(c)]	781(c)	32-2004; 54-1970
[1304.3]	786	54-1970
[C26-1400.1]	27-787	13-1975
[1401.1]	793	62-1991
[1401.1(b)]	793(b)	10-1976
[1401.1(c)(1)(g)]	793(c)(1)(g)	45-1969
	826.01	80-1989
[1416.1]	827	70-1969
[1416.4(f)]	830(f)	26-2004
	848.01 - .12	80-1989
Table 14-1		80-1989
[C26-1500.7]	27-855	80-1989
[1501.1]	856	80-1989
[1501.6]	861	80-1989; 03-1976
[1501.8]	863	80-1989
	863.01	80-1989
Tables 15-3, 15-5, 15-6, 15-6.1		80-1989
[1501.9]	864	80-1989
[1501.12]	867	80-1989
	869.01 - .03	80-1989
[1502.2]	871	10-1976
Table 15-8		80-1989
[1502.5]	874	10-1976
[1503.1(d)]	875(d)	04-1976
[1504.1] – [1504.3]	879 – 881	80-1989
[1504.6]	884	80-1989
[C26-1600.6(e)]	901(e)	65-1996
[1600.6(e)(g)]	901(e)(g)	07-1974
[1600.6(f)]	901(f)	22-2002
[1600.6(k)]	901(k)	104-1993; 103-1989;

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
		07-1974
[1600.6(l)]	901(l)	57-2005
[1600.6(v)]	901(v)	22-2002
[1600.6(z)(3)]	901(z)(3)	31-1981
[1600.6(aa)]	901(aa)	35-1975 13-1975
[1600.7(a)(b)]	902(a)(b)	17-2001
[1600.9]	904	30-1982
[1600.10]	905	30-1982
[1602.1]	909	65-1996
[1602.2]	910	65-1996
[1604.3]	915	22-2002
[1605.3]	918	39-1972
[1606.1]	919	51-2001
[1606.3]	921	30-1982
[1606.4]	922	18-1992; 30-1982
[1606.4(a)(1)(b)]	922(a)(1)(b)	17-2001
[1606.4(d)(1)(a)]	922(d)(1)(a)	17-2001
[1606.4(d)(4)]	922(d)(4)	17-2001
Article 8 of Subchapter 16		57-2005
[C26-1700.1]	27-923	16-1987
[1700.7(a)]	929(a)	16-1984
[1700.7(c)]	929(c)	26-2002
	929.1	26-2004
[1701.1(a)(3)]	930(a)(3)	53-1970
Table 17-2		10-1999; 05-1973
Table 17-2 (line 4)		26-2002
[1702.1]	932	39-1972
[1702.1(a)(1)]	932(a)(1)	75-1972
[1702.1(b)]	932(b)	32-1978
[1702.5(a)]	936(a)	39-1972
[1702.11(c)]	942(c)	16-1984; 09-1974
[1702.11(c)(5)]	942(c)(5)	09-1974; 53-1970
[1702.14(b)]	945(b)	16-1984
[1702.14(d)]	945(d)	45-1984; 05-1973
[1702.15(b)(3)]	946(b)(3)	32-2004
[1702.16(b)(1)]	947(b)(1)	10-1999; 16-1984
[1703.1(c)(d)(1)(e)]	954(c)(d)(1)(e)	16-1984
[1703.1(d)]	954(d)	82-1973
[1703.1(i)]	954(i)	45-1984; 05-1973
[1703.1(j)]	954(j)	41-1978
[1703.1(k)(1)]	954(k)(1)	45-1984; 05-1973
[1703.1(l)(1)]	954(l)(1)	10-1999; 05-1973; 61-1969
[1703.1(m)] –	954(m) – (r)	45-1984;

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[1703.1(r)]		05-1973
[1703.1(m)]	954(m)	10-1999
[1703.1(s)]	954(s)	41-1978
[1703.1(t)]	954(t)	10-1999; 16-1984
[1703.1(w)]	954(w)	10-1999
[1703.1(x)]	954(x)	45-1984
[1703.1(aa)]	954(aa)	26-2002
[1703.2]	955	10-1999; 45-1984; 05-1973
[1703.3(a)(b)]	956(a)(b)	10-1999
[1703.4(a)]	957(a)	10-1999; 45-1984; 05-1973
[1703.6(b)]	959(b)	45-1984; 05-1973
[1703.6(c)]	959(c)	10-1999
[1703.6(5)]	959(5)	10-1999
[1703.8(a)]	961(a)	16-1984
[1703.9(c)]	962(c)	26-2002
[1703.9(e)(4)(6)(8)(9)]	962(e)(4)(6)(8)(9)	10-1999
[1703.9(g)(h)(i)]	962(g)(h)(i)	16-1984
[1703.9(g)]	962(g)	10-1999
[1703.10]	963	10-1999
[1703.10(d)]	963(d)	16-1984
[1703.12]	965	10-1999
[1703.13(a)]	966(a)	16-1984
[1703.13(b)]	966(b)	10-1999
Table 17-2		10-1999
[1704.1(a)(2)(5)(9)]	968(a)(2)(5)(9)	16-1984
[1704.1(10)]	968(10)	41-1978
[1704.1(b)]	968(b)	30-1982
[1704.3]	970	16-1984
[1704.5(e)]	972(e)	16-1987; 16-1984
[1704.6(a)(2)]	973(a)(2)	16-1987; 16-1984
[1704.8]	975	16-1987; 16-1984
[1705.0]	978	81-1989; 62-1981
[1705.2]	979	81-1989; 16-1984
[1705.4]	981	49-1991
Article 7 of Subchapter 17		07-2004
[C26-1800.6]	27-987	96-1985
[1800.6(c)]	987(c)	26-2004
[1800.7]	988	46-1975; 65-1969
[1800.8]	989	75-1984; 45-1984; 16-1984
[1800.12]	993	48-1975

Amendments

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[1801.3]	996	29-1973
[1801.4]	996.1	16-1984
[1801.5]	996.2	16-1984
[1802.2]	998	48-1991; 96-1985; 10-1981
[1802.4]	1000	48-1991
[1802.4(b)]	1000(b)	16-1984
[1803.4]	1004	39-1993
[1804.1]	1005	54-1970
[C26-1900.1]	27-1007 – 1009(b) (Repealed)	33-2007
[1900.3(c)]	1009(c) (Repealed)	33-2007; 30-1978
[1900.3(d)]	1009(d) (Repealed)	33-2007; 45-1983
[1900.4] – [1901.1]	1010 – 1017 (Repealed)	33-2007
[1901.2]	1018 (Repealed)	33-2007; 61-1987
[1901.3(a)] – [1901.3(b)(2)]	1019(a) – 1019(b)(2) (Repealed)	33-2007
[1901.3(b)(3)]	1019(b)(3) (Repealed)	33-2007; 71-1977
[1901.3(b)(4)]	1019(b)(4) (Repealed)	33-2007; 71-1977
[1901.3(c)]	1019(c) (Repealed)	33-2007
[1901.4]	1020 (Repealed)	33-2007; 45-1983
[1901.5]	1021 (Repealed)	33-2007; 33-1991
[1901.5(a)(1)(a)]	1021(a)(1)(a) (Repealed)	33-2007; 93-1996
[1901.5(a)(5)]	1021(a)(5) (Repealed)	33-2007; 45-1983
[1901.5(a)(6)]	1021(a)(6) (Repealed)	33-2007; 61-1987
[1901.5(b)]	1021(b) (Repealed)	33-2007; 45-1983
[1901.5(g)]	1021(g) (Repealed)	33-2007; 61-1987
[1901.6]	1022 (Repealed)	33-2007; 61-1987
[1901.6(a)(1)]	1022(a)(1) (Repealed)	33-2007; 53-1975

Item Amended		
Old Section Number	New Section Number	Local Law(s)
[1901.7] – [1904.3]	1023 – 1035 (Repealed)	33-2007
[1904.3(f)(1)]	1035(f)(1) (Repealed)	33-2007; 61-1987
[1905.1] – [1905.2]	1036 – 1037 (Repealed)	33-2007
[1905.2(a)(4)]	1037(a)(4) (Repealed)	33-2007; 73-1980
[1905.3] – [1905.4]	1038 – 1039 (Repealed)	33-2007
[1905.4(d)(1)]	1039(d)(1) (Repealed)	33-2007; 60-1977
[1905.4(h)]	1039(h) (Repealed)	33-2007; 16-1984
[1905.5] – [1906.1]	1040 – 1041 (Repealed)	33-2007
[1907.1]	1042 (Repealed)	33-2007; 24-2008; 52-2005
[1907.1(b)(1)]	1042(b)(1) (Repealed)	33-2007; 24-2008
[1907.1(b)(2)]	1042(b)(2) (Repealed)	33-2007; 54-1970
[1907.2] – [1907.4]	1043 – 1045 (Repealed)	33-2007
[1907.4(b)]	1045(b) (Repealed)	33-2007; 16-2007; 53-1975
[1907.5] – [1907.9]	1046 – 1050 (Repealed)	33-2007
	1050.1(a)(b)(c) (Repealed)	33-2007; 17-2007
[1908.1] – [1908.3]	1051 – 1053 (Repealed)	33-2007
[1909.1]	1054 (Repealed)	33-2007; 73-1969
[1909.2]	1055 (Repealed)	33-2007; 15-1993
[1909.3]	1056 (Repealed)	33-2007; 73-1969
[1909.3(a)(5), (b)]	1056(a)(5), (b) (Repealed)	33-2007; 74-1984
[1909.4]	1057 (Repealed)	33-2007; 73-1969
[1909.4(a)(5)]	1057(a)(5) (Repealed)	33-2007; 50-1973
[1909.5] – [1912.1]	1058 – 1069 (Repealed)	33-2007

BUILDING CODE AMENDMENTS

The following is a listing of the State Laws amending the Building Code during the period from December 6, 1968 through July 1, 2008

Item Amended		State	Effective
Old Section Number	New Section Number	Law(s)	Date(s)
[C26-71.0(b)]	26-229(b)	Chapter 664 Laws of 2007	8/28/07
[C26-1902.1(e)]	27-1026(e)	Chapter 664 Laws of 2007	8/28/07
[C26-1903.1(b)]	27-1031(b)	Chapter 664 Laws of 2007	8/28/07
[643a-10.0(c)(d)]	26-124(c)(d)	Chapter 542 Laws of 2007	8/15/07
—	27-140.1(d)	Chapter 542 Laws of 2007	8/15/07
—	26-126.5	Chapter 45 Laws of 2000	9/4/00
[C26-201.0]	27-232	Chapter 559 Laws of 1995	1/1/96
[1205.7]	27-751	Chapter 559 Laws of 1995	1/1/96
	26-126.4	Chapter 349 Laws of 1990	7/2/90
(Recodification)		Chapter 907 Laws of 1985	9/1/86

REFERENCE STANDARDS REVISIONS

The following is a listing of the revisions to the Reference Standards of the Building Code as approved by the Board of Standards and Appeals and Department of Buildings promulgations through July 1, 2008

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 2-1 List	13-1987	428-83-BCR; 705-80-BCR; 237-87-BCR; 135-88-BCR; 213-90-BCR	5/1/99; 6/1/96; 5/17/96; 3/14/96
RS 3 List		1341-88-BCR	
RS 3-1		1341-88-BCR	
RS 3-2		1341-88-BCR	
RS 3-3-Definitions: Group Homes, Health Centers, Government operated	39-1972 39-1972		
RS 4 List	58-1987; 33-1988		9/5/07; 1/24/07; 8/11/02; 5/21/01; 9/24/00; 8/21/99;
RS 4-4	13-1975; 58-1983; 33-1988	587-76-BCR	9/5/07; 1/24/07; 8/11/02; 5/21/01; 9/24/00; 8/21/99; 8/4/94
RS 4-5	13-1975; 58-1983; 33-1988	587-76-BCR	
RS 4-6	58-1987 (Amended)	886-89-BCR	
RS 5 List	16-1984; 13-1987	252-82-BCR; 435-85-BCR; 1076-86-BCR; 262-86 BCR; 236-87-BCR; 1343-88-BCR; 242-90-BCR	3/4/01
RS 5-1A,B,C,D,E,F		252-82-BCR; 435-85-BCR; 1076-86-BCR; 262-86-BCR; 236-87-BCR; 242-90-BCR	
RS 5-2		217-72-BCR; 1343-88-BCR	
RS 5-3		398-71-BCR; 308-81-BCR; 1343-88-BCR	
RS 5-4		71-79-BCR; 308-81-BCR; 1343-88-BCR	

Amendments

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Amendments

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 5-5		308-81-BCR; 218-72-BCR;	
RS 5-6 through 5-8		1343-88-BCR	
RS 5-10		71-79-BCR; 308-81-BCR;	
RS 5-11		1343-88-BCR	
RS 5-12		219-72-BCR; 308-81-BCR;	
RS 5-13		1343-88-BCR	
RS 5-14		308-81-BCR; 1343-88-BCR	
RS 5-16		1343-88-BCR	
RS 5-17	5-1973	308-81-BCR	
RS 5-18	84-1979	308-81-BCR	
RS 5-18 (5)(6)(7)		353-72-BCR (Amended)	8/26/98
RS 5-19	16-1984	1343-88-BCR	
RS 5-20	16-1984	1343-88-BCR	
RS 5-21	13-1987	1343-88-BCR	3/4/01
RS 6-1			5/31/05
RS 6-1A			5/31/05
RS 7 List		888-80-BCR	
RS 7-1		888-80-BCR	
RS 7-2		82-88-BCR	
RS 7-3 and 7-4		888-80-BCR	
RS 8 List		745-80-BCR; 739-86-BCR;	
RS 8-1		260-86-BCR	
RS 9 List	17-1995	739-86-BCR; 260-86-BCR	
RS 9-2 Notes a,b,c	39-1972	135-88-BCR	
RS 9-2			9/2/01
RS 9-3		135-88-BCR	
RS 9-4		135-88-BCR	
RS 9-5 (7)			9/2/01
RS 9-6	17-1995		
RS-10 List	17-1995; 65-1990	142-80-BCR; 510-79-BCR;	9/2/01; 6/17/96
		799-79-BCR; 51-80-BCR;	
		390-80-BCR; 714-80-BCR;	
		302-73-BCR; 208-85-BCR;	
		425-81-BCR; 738-86-BCR;	
		288-84-BCR; 1077-86-BCR;	
		493-80-BCR; 9-87-BCR;	
		302-71-BCR; 617-87 BCR;	
		455-89 BCR	
RS 10-1A(1.1) through (1.9)	54-1970	264-73-BCR; 747-72-BCR;	
		181-72-BCR	
RS 10-1A(1.1)	17-1995		
RS 10-1B	17-1995		
RS 10-2	17-1995	264-73-BCR	
RS 10-3	17-1995	1077-86-BCR	
RS 10-4	17-1995	1077-86-BCR; 455-89 BCR	
RS 10-5A		799-79-BCR; 1085-80-BCR	6/17/96
		738-86-BCR; 617-87 BCR	
RS 10-5B		617-87 BCR	6/17/96
RS 10-5C	17-1995		
RS 10-6		248-70-BCR; 302-73-BCR;	
		425-81-BCR; 455-89 BCR	
RS 10-6A		249-70-BCR	
RS 10-7 (Modifications Paragraph)	26-2004	9-87-BCR; 455-89 BCR	
RS 10-8		394-71 BCR; 510-79-BCR;	5/17/96
		288-84-BCR; 455-89 BCR	

Amendments

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 10-9		288-84-BCR; 208-85-BCR; 455-89 BCR	
RS 10-9(10)	17-1995		
RS 10-10A			9/2/01
RS 10-10B			9/2/01
RS 10-11 through 10-12		455-89 BCR	
RS 10-13		394-71-BCR; 264-73-BCR; 511-79-BCR	5/17/96
RS 10-14		288-84-BCR; 208-84-BCR; 1077-86-BCR	
RS 10-16 and 10-17		887-80-BCR; 288-84-BCR; 1077-86-BCR	
RS 10-18	17-1995	512-79-BCR; 288-84-BCR	3/8/96
RS 10-19		390-80-BCR; 288-84-BCR; 455-89-BCR	
RS 10-20		512-79-BCR; 288-84-BCR; 455-89 BCR	
RS 10-21		887-80-BCR; 288-84-BCR	
RS 10-22		512-79 BCR; 288-84-BCR; 455-89 BCR	
RS 10-23		302-73-BCR; 493-80-BCR; 288-84-BCR	
RS 10-24A and 24B		493-80-BCR; 288-84-BCR; 455-89 BCR	
RS 10-25		288-84-BCR; 208-85-BCR; 455-89 BCR	
RS 10-26		302-73-BCR; 493-80-BCR; 288-84-BCR; 455-89 BCR	
RS 10-27		288-84-BCR; 208-85-BCR 455-89 BCR	
RS 10-28		512-79-BCR; 288-84-BCR; 455-89 BCR	
RS 10-29		288-84-BCR; 208-85-BCR; 455-89 BCR	
RS 10-30 through 10-38		390-80-BCR; 288-84-BCR; 455-89 BCR	
RS 10-39		390-80 BCR; 288-84 BCR;	
RS 10-40		390-80 BCR; 288-84 BCR; 455-89 BCR	
RS 10-41		302-73 BCR; 493-80 BCR; 288-84 BCR; 455-89 BCR	
RS 10-42		288-84 BCR; 208-85-BCR	
RS 10-44		887-80 BCR; 288-84-BCR; 455-89 BCR	
RS 10-46 through 10-48		390-80-BCR; 288-84-BCR; 455-89 BCR	
RS 10-49		1077-86-BCR	
RS 10-51		887-80-BCR; 288-84-BCR; 1077-86-BCR	
RS 10-52		887-80 BCR; 288-84 BCR; 1077-86 BCR; 455-89 BCR	
RS 10-53 through 10-55		288-84-BCR; 208-85-BCR; 455-89 BCR	
RS 10-56		208-85-BCR	
RS 10-57		288-84-BCR; 208-85-BCR; 455-89 BCR	
RS 10-58	17-1995		
RS 10-59		288-84-BCR; 208-85-BCR	
RS 10-61	65-1990	288-84-BCR; 208-85-BCR	
RS 10-62	65-1990		
RS 10-63	65-1990	288-84-BCR; 208-85-BCR	
RS 10-64	65-1990	288-84-BCR; 208-85-BCR	
RS 10-65		1077-86-BCR	
RS 10-66		302-73-BCR	
RS 10-67 & 10-68		455-89 BCR	

Amendments

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 11 List		289-84-BCR; 1342-88-BCR	
RS 11-1 & 11-2		610-80-BCR; 289-84-BCR; 1342-88-BCR	
RS 11-3		610-80-BCR; 1342-88-BCR	
RS 11-3A		610-80-BCR	
RS 11-4 through 11-7		512-79-BCR; 610-80-BCR; 289-84-BCR; 1342-88-BCR	
RS 11-8		610-80-BCR; 289-84-BCR	
RS 12 List		290-84-BCR; 261-86-BCR; 243-90-BCR	
RS 12-1		253-82-BCR; 243-90-BCR	
RS 12-2		253-82-BCR; 290-84-BCR; 261-86-BC; 243-90-BCR;	
RS 12-3		253-82-BCR; 261-86-BCR; 243-90-BCR	
RS 12-4 & 12-5		253-82-BCR; 243-90-BCR	
RS 12-6		253-82-BCR; 261-86-BCR; 243-90-BCR	
RS 12-7		253-82-BCR; 243-90-BCR	
RS 12-8		253-82-BCR; 261-86-BCR; 243-90-BCR	
RS 12-9		253-82-BCR; 243-90-BCR	
RS 13 List	16-1984	913-82-BCR	4/27/05; 5/4/02
RS 13-1	16-1984	17-87-BCR	5/4/02
RS 13-2		506-77-BCR	
RS 13-3		695-84-BCR; 814-85-BCR	
RS 13-4		723-72-BCR	5/4/02
RS 13-5		913-82-BCR	
RS 13-6	76-1972	913-82-BCR	4/27/05
RS 13-7 through 13-11A	80-1973	913-82 BCR	
RS 13-11B		1101-79-BCR	
RS 13-12 through 13-16	80-1973	913-82-BCR	
RS 14 List	80-1989	916-82-BCR; 946-87-BCR	5/4/02
RS 14-1		938-80-BCR; 946-87-BCR	5/4/02
RS 14-2		916-82-BCR; 938-80-BCR; 946-87-BCR	
RS 14-3		938-80-BCR	
RS 14-4		916-82-BCR; 938-80-BCR; 917-87-BCR	
RS 14-5A		916-82-BCR; 938-80-BCR; 917-87-BCR	3/8/96
RS 14-5B		1045-83-BCR	
RS 14-6		916-82-BCR; 917-87-BCR	
RS 14-7		1045-83-BCR	
RS 14-8		938-80-BCR; 917-87-BCR	
RS 14-9		1045-83-BCR	
RS 14-10		938-80-BCR	
RS 14-12		1045-83-BCR; 917-87-BCR	
RS 14-13 through 14-14		1045-83-BCR	
RS 14-18 through 14-22	80-1989		
RS 14-22			5/4/02
RS 15 List	80-1989	1050-83-BCR; 915-82-BCR; 939-80-BCR; 947-87-BCR	
RS 15-1 & 15-2		1050-83-BCR; 915-82-BCR; 947-87-BCR	
RS 15-3	80-1989	1050-83-BCR; 947-87-BCR	
RS 15-4		1050-83-BCR; 947-87-BCR	
RS 15-5		939-80-BCR; 947-87-BCR	
RS 15-6	80-1989	1050-83-BCR	
RS 15-7		1050-83-BCR	
RS 15-8	80-1989	1050-83-BCR	
RS 15-9 through 15-16	80-1989		

Amendments

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 16 List	71-1997; 82-1986; 30-1982; 29-1989	1025-88-BCR	
RS 16 Table of Contents	7-1974		
RS 16 Illustrations	85-1973		
RS 16-1 Table	63-1976; 29-1989; 100-1989		
RS 16 P102.2(b)	2-2001; 75-1971; 58-1973		
RS 16 P102.4(a)(1)	58-1973; 63-1976; 29-1987		
RS 16 P102.4(b)	63-1976		
RS 16 P102.4(b)(3)a.	39-1972; 58-1973		
RS 16 P102.4(b)(4)	58-1973; 63-1976		
RS 16 P102.4(c)	63-1976		
RS 16 P102.4(e)(3)	39-1972; 58-1973		
RS 16 P102.4(e)(13)	63-1976		
RS 16 P103.1	13-1993; 63-1976; 29-1987		
RS 16 P103.2(c)	63-1976		
RS 16-4 P104.1(c)	58-1987		
RS 16 Table RS 16-5	61-1969; 45-1984		
RS 16 P104.0(c)	58-1987		
RS 16 P104.2	29-1989		
RS 16 P104.4(a)(3)	29-1989		
RS 16 P104.10(b)	74-1995		
RS 16 P105.2	63-1976		
RS 16 P106.4	100-1989		
RS 16 P107.2(b)(8)	29-1987		
RS 16 P107.2(b)(12)	10-1999		
RS 16 P107.3(a)(2)	10-1999; 5-1973		
RS 16 P107.6(i)	86-1996		
RS 16 P107.13	69-1977		
RS 16 P107.18	67-1977		
RS 16 P107.26	82-1986; 67-1977		
RS 16 P107.26(i)	45-1984		
RS 16 P108.2(c)	65-1996		
RS 16 Table 16-12	26-2004		
RS 16 P110.2	7-1974; 103-1989		
RS 16 P110.2(b)(c)	65-1996		
RS 16 P110.13	7-1974; 103-1989		
RS 16 Figs. 16-9 A,B	103-1989		
RS 16 P113.0	85-1973		
RS 16 P113.1	65-1996		
RS 16 P113.7(b)	21-1981		
RS 16 P113.9	65-1996		
RS 16 Tables 16-21; 16-22; 16-23 A,B; 16-24; Figs. 16-12 A,B; 16-13 A,B	85-1973; 103-1989		
RS 16 P114.12	12-1982	1025-88-BCR	
RS 16 P115.0	30-1982		
RS 16 P115.1	54-1970		
RS 16 P115.2 through 115.5	30-1982		
RS 16 P115.5(a)	89-1995		
RS 16 P115.8(o)(3)&(10)	38-1989		
RS 16 P116.1(h)(3)&(4)	85-1973		

Amendments

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 17 List		310-90 BCR; 384-82-BCR	1/9/02; 6/23/99
RS 17-1		310-90 BCR	
RS 17-1(2)(b)	5-1973		
RS 17-1(4)(b)(1)	5-1973		
RS 17-1(4)(c)(3)		384-82-BCR	
RS 17-1(5)(a)		177-72-BCR; 1014-80-BCR	
RS 17-1(5)(b)(1)			7/24/96
RS 17-2		310-90 BCR; 633-83-BCR	
RS 17-2(2)(2-5.5)			7/24/96
RS 17-2(4)(4-4.19.4)			6/25/99
RS 17-2(4)(4-4.19.5)			6/25/99
RS 17-2A			6/25/99
RS 17-2B			6/25/99
RS 17-3		515-75-BCR	4/13/03
RS 17-3(1)(a)			1/9/02
RS 17-3(7)(a)(1)	16-1984		
RS 17-3(8)(a)	16-1984		
RS 17-3(13)(c)(14)		149-75- BCR	
RS 17-3(13)(e) and (h)(2)(b)		149-75-BCR	
RS 17-3(18)	16-1984		
RS 17-3(20)		515-75-BCR	
RS 17-3(20)(III)(E)	16-1984		
RS 17-3(20)(IV)(a)			1/9/02
RS 17-3A	16-1987; 5-1973		4/13/03
RS 17-3A(11)(a)	16-1984		
RS 17-3A(15)(e)	16-1984		
RS 17-3A(18)(d)(3)	16-1984		
RS 17-3A(18)(d)(4)(f)&(g)	16-1984		
RS 17-3B	16-1987; 5-1973		4/13/03
RS 17-3B(1)(a)			1/9/02
RS 17-3B(6)(a)		49-74-BCR	
RS 17-3B(18)(d)(3)	16-1984		
RS 17-3C	16-1987	886-89-BCR	4/13/03
RS 17-3D	16-1987		
RS 17-4		310-90-BCR; 633-83-BCR	
RS 17-5		310-90-BCR	1/9/02
RS 17-5A		310-90-BCR; 1014-80-BCR	
RS 17-5B		310-90-BCR; 1014-80-BCR	
RS 17-5C		310-90-BCR; 633-83-BCR	
RS 17-5D		310-90-BCR; 1014-80-BCR	
RS 17-5E		310-90-BCR; 1014-80-BCR	
RS 17-6		310-90-BCR; 1014-80-BCR	
RS 17-6A		310-90-BCR	
RS 17-7		310-90-BCR; 1014-80-BCR	
RS 17-8		310-90-BCR; 633-83-BCR	
RS 17-9		310-90-BCR; 633-83-BCR	
RS 17-10		310-90-BCR; 633-83-BCR	
RS 17-11		310-90-BCR; 633-83-BCR	
RS 17-12		310-90-BCR; 798-81-BCR	
RS 17-13			10/26/04
RS 17-14			10/26/04

Amendments

Item Amended	Local Law(s)	Board of Standards and Appeals	Department of Buildings – Effective Dates
RS 18 List		11-91-BCR; 98-83-BCR; 678-85-BCR	1/16/03; 3/13/96 3/8/96
RS 18-1		11-91-BCR; 678-85-BCR	1/16/03; 3/13/96
RS 18-1 110.11 (f)			3/13/96
RS 18-1 211.1(a) & (b)		385-82-BCR; 678-85-BCR	
RS 18-1 211.3		385-82-BCR; 678-85-BCR	
RS 18-1 211.3(a)			3/13/96
RS 18-1 211.3(a)(1)(b)	16-1984		
RS 18-1 211.3(a)(2)		385-82-BCR; 678-85-BCR	
RS 18-1 211.3(b)(1) & (2)			3/13/96
RS 18-1 211.3(c)			3/13/96
RS 18-1 211.8			3/13/96
RS 18-1 214.6		385-82-BCR; 678-85-BCR	
RS 18-1 805.1(s)			5/22/95
Rule 901.2		1240-79-BCR	
RS 18-3		11-91- BCR; 385-82-BCR; 678-85-BCR	1/16/03
RS 18-4		11-91-BCR; 1156-80-BCR	
RS 18-5		11-91-BCR; 1156-80-BCR	1/16/03
RS 18-7		678-85-BCR	
RS 18-8 Section (6)(g)(1)&(2)		1156-80-BCR	
RS 18-8 Section 13(a)&(b)		1156-80-BCR	
RS 18-9	65-1969	11-91-BCR; 1156-80-BCR	
RS 18-10		11-91-BCR; 934-84-BCR	
RS 18-10 (Section 1 through 10.2)			3/8/96
RS-19 List	61-1987	1155-80-BCR; 111-90-BCR	10/1/06
RS 19-1		1155-80-BCR	10/1/06
RS 19-2	73-1969		
RS 19-2 Section 3.1.1	50-1973		
RS 19-2 4.0 through 6.0	50-1973		
RS 19-2 7.1	50-1973		
RS 19-2 7.1(3)		454-71-BCR; 731-71-BCR	
RS 19-2 8.1.3.1	50-1973		
RS 19-2 8.1.3.3	50-1973		
RS 19-2 8.5	73-1969	479-77-BCR	
RS 19-2 12.1.2	50-1973		
RS 19-2 15.3	50-1973		
RS 19-2 15.3.5	50-1973		
RS 19-2 15.4	50-1973		
RS 19-2 17.3.1	50-1973		
RS 19-2 17.3.2(c)	50-1973		
RS 19-2 17.4.2	50-1973		
RS 19-2 18.1.1	50-1973		
RS 19-2 19.0	50-1973		
RS 19-2 19.1.1	50-1973		
RS 19-2 19.1.3	50-1973		
RS 19-2 19.1.4	50-1973		
RS 19-2 20.1.1(e)	50-1973		
RS 19-2 20.1.2(c)(d)(e)&(i)	50-1973		
RS 19-2 20.1.3(b)	50-1973		
RS 19-2 20.1.4	50-1973		
RS 19-2 20.3.4	50-1973		
RS 19-2 20.4.1(e)	50-1973		
RS 19-2 20.4.2(b)&(c)	50-1973		
RS 19-2 20.4.3(a)(b)&(c)	50-1973		
RS 19-2 20.5.1(b)	50-1973		
RS 19-2 21.1.1	50-1973		
RS 19-2 21.6	50-1973		
RS 19-2 22.2.4	50-1973		
RS 19-3	73-1969		
RS 19-4	61-1987	234-90-BCR	

DATES OF N.Y.C. LOCAL LAWS - APPROVED BY THE MAYOR

Local Law	Approved by the Mayor	Local Law	Approved by the Mayor
Year of 1968		82.....	December 28
76.....	November 6, 1968	83.....	December 28
Year of 1969		84.....	December 28
6	February 20, 1969	85.....	December 28
45.....	August 12	90.....	December 28
61.....	December 4	Year of 1974	
65.....	December 22	4.....	May 6, 1974
70.....	December 29	6.....	May 16
73.....	December 29	7.....	May 16
Year of 1970		8.....	May 16
29.....	June 30, 1970	9.....	May 16
30.....	July 10	Year of 1975	
53.....	November 2	11	March 31, 1975
54.....	November 17	13.....	March 31
61.....	December 3	14.....	March 31
63.....	December 15	15.....	April 23
Year of 1971		24.....	June 2
5.....	January 7, 1971	26.....	June 2
8.....	January 22	28.....	June 2
21.....	May 27	31.....	July 11
32.....	June 23	32.....	July 11
33.....	June 23	35.....	July 28
48.....	June 29	46.....	September 11
50.....	October 20	48.....	October 7
51.....	November 19	49.....	October 7
62.....	November 19	50.....	October 7
75.....	December 22	52.....	October 29
Year of 1972		53.....	October 29
5.....	January 18, 1972	Year of 1976	
6.....	January 18	3.....	February 10, 1976
21.....	March 28	4.....	February 10
38.....	May 18	5.....	February 10
39.....	May 18	8.....	March 1
75.....	November 6	10.....	March 1
76.....	November 6	14.....	March 1
77.....	November 6	18.....	March 15
80.....	November 21	50.....	October 12
Year of 1973		51.....	October 12
5.....	January 18, 1973	55.....	November 1
28.....	July 2	63.....	December 10
29.....	July 2	65.....	December 23
50.....	September 21	Year of 1977	
58.....	October 15	60.....	September 2, 1977
63.....	October 25	67.....	September 30
80.....	December 28	69.....	September 30
81.....	December 28	71.....	October 6
		72.....	October 6

Amendments

Local Law	Approved by the Mayor	Local Law	Approved by the Mayor
Year of 1978		Year of 1986	
30.....	October 6, 1978	5.....	April 29, 1986
32.....	October 6	22.....	July 8
41.....	December 13	73.....	December 8
Year of 1979		80.....	December 22
56.....	September 18, 1979	82.....	December 30
57.....	September 18	Year of 1987	
78.....	November 14	1.....	February 2, 1987
79.....	December 4	9.....	March 5
84.....	December 13	13.....	March 23
86.....	December 13	16.....	April 20
Year of 1980		29.....	June 30
8.....	February 8, 1980	40.....	July 6
10.....	February 21	58.....	August 5
65.....	November 6	61.....	August 5
****70.....	December 3	Year of 1988	
73.....	December 15	11.....	March 9, 1988
Year of 1981		33.....	May 27
10.....	February 9, 1981	34.....	June 8
21.....	March 18	46.....	July 11
31.....	March 27	49.....	July 11
62.....	July 27	50.....	July 11
70.....	August 31	58.....	August 19
79.....	October 21	65.....	November 4
91.....	December 31	73.....	December 8
Year of 1982		77.....	December 8
12.....	March 5, 1982	Year of 1989	
13.....	March 5	14.....	March 14, 1989
17.....	March 30	29.....	May 15
30.....	June 15	38.....	June 28
73.....	November 10	55.....	July 25
Year of 1983		80.....	November 8
19.....	May 31, 1983	81.....	November 8
***45.....	October 11	91.....	December 6
48.....	October 26	100.....	December 27
58.....	November 7	103.....	December 27
Year of 1984		Year of 1990	
16.....	March 27, 1984	23.....	June 7, 1990
25.....	May 30	38.....	July 12
35.....	June 26	65.....	November 14
45.....	July 12	Year of 1991	
74.....	November 21	33.....	May 23, 1991
75.....	November 21	48.....	July 17
Year of 1985		49.....	July 17
59.....	August 5, 1985	54.....	July 17
76.....	December 2	55.....	July 17
80.....	December 6	62.....	July 17
96.....	December 31	72.....	July 23
		99.....	December 24

Amendments

Local Law	Approved by the Mayor	Local Law	Approved by the Mayor
Year of 1992		Year of 2002	
18.....	March 9, 1992	22.....	July 29, 2002
Year of 1993		26.....	September 4
6.....	January 22, 1993	Year of 2003	
12.....	January 22	44.....	July 14, 2003
13.....	January 22	Year of 2004	
14.....	February 9	7.....	May 5, 2004
15.....	February 9	26.....	June 24
39.....	May 28	32.....	July 12
53.....	June 30	35.....	July 12
56.....	June 30	Year of 2005	
104.....	December 28	28.....	April 4, 2005
107.....	December 28	31.....	April 28
108.....	December 28	52.....	May 19
109.....	December 28	57.....	June 6
Year of 1995		77.....	August 9
17.....	February 21, 1995	87.....	October 3
74.....	September 21	99.....	December 1
89.....	December 19	Year of 2006	
Year of 1996		35.....	August 23, 2006
27.....	March 18, 1996	47.....	December 5
59.....	July 9	48.....	December 5
65.....	July 12	Year of 2007	
86.....	November 4	3.....	February 15, 2007
93.....	December 12	4.....	February 15
Year of 1997		16.....	April 17
6.....	February 12, 1997	17.....	April 17
65.....	August 19	18.....	April 17
71.....	September 11	24.....	May 29
Year of 1998		33.....	July 3
3.....	January 14, 1998	36.....	August 2
10.....	March 13	37.....	August 2
11.....	March 13	38.....	August 2
27.....	July 7	65.....	December 31
Year of 1999		Year of 2008	
10.....	March 24, 1999	24.....	June 3, 2008
68.....	November 22	26.....	June 3
Year of 2000			
2.....	February 4, 2000		
Year of 2001			
2.....	January 5, 2001		
14.....	March 19		
17.....	March 30		
51.....	August 8		
64.....	December 10		

Editor's note: For the effective dates of the recent local laws noted in this update, view these local laws on the New York City Council website, www.nycouncil.info.

EFFECTIVE DATES OF STATE LAWS

State Law	Effective Date	State Law	Effective Date
Laws of 1985		Laws of 2000	
Chapter 907.....	September 1, 1986	Chapter 45.....	September 4, 2000
Laws of 1990		Laws of 2007	
Chapter 349.....	July 2, 1990	Chapter 542.....	August 15, 2007
Laws of 1995		Laws of 2007	
Chapter 559.....	January 1, 1996	Chapter 664.....	August 28, 2007

EFFECTIVE DATES OF BOARD OF STANDARDS AND APPEALS

BSA	Effective Date
170-69-BCR.....	July 10 1969
247-70-BCR.....	June 22 1970
248-70-BCR.....	June 22
249-70-BCR.....	June 22
260-70-BCR.....	July 1
393-71-BCR; 394; 395; 396;.....	1971
397; 398.....	June 29
454-71-BCR.....	December 21
731-71-BCR.....	December 14
177-72-BCR.....	April 18 1972
181-72-BCR.....	April 18
217-72-BCR.....	April 25
218-72-BCR.....	June 20
219-72-BCR.....	April 25
239-72-BCR.....	May 9
353-72-BCR.....	June 27
(Amended March 11, 1975).....	
723-72-BCR.....	December 12
747-72-BCR.....	January 9 1973
264-73-BCR.....	June 14
302-73-BCR.....	June 19
339-73-BCR.....	July 17
341-73-BCR.....	July 17

Amendments

BSA	Effective Date	
49-74-BCR.....	March 12	1974
213-74-BCR.....	June 4	
149-75-BCR.....	May 6	1975
515-75-BCR.....	December 2	
587-76-BCR.....	July 27	1976
281-77-BCR.....	July 19	1977
369-77-BCR.....	July 19	
479-77-BCR.....	September 7	
506-77-BCR.....	September 20	
935-78-BCR.....	November 28	1978
71-79-BCR.....	February 20	1979
72-79-BCR.....	March 13	
510-79-BCR.....	June 12	
511-79-BCR.....	June 12	
512-79-BCR.....	June 12	
571-79-BCR.....	June 26	
799-79-BCR.....	September 8	
1101-79-BCR.....	November 27	
1240-79-BCR.....	February 25	
51-80-BCR.....	February 19	1980
142-80-BCR.....	June 17	
390-80-BCR.....	June 10	
493-80-BCR.....	May 13	
610-80-BCR.....	June 10	
664-80-BCR.....	June 24	
693-80-BCR.....	July 8	
705-80-BCR.....	October 21	
714-80-BCR.....	July 22	
745-80-BCR.....	July 22	
750-80-BCR.....	October 21	
887-80-BCR.....	November 5	
888-80-BCR.....	November 5	
938-80-BCR.....	November 5	
939-80-BCR.....	October 14	
1014-80-BCR.....	November 25	
1085-80-BCR.....	December 9	
1155-80-BCR.....	January 6	1981
1156-80-BCR.....	January 6	
308-81-BCR.....	June 16	
425-81-BCR.....	July 14	
798-81-BCR.....	November 4	
1084-81-BCR.....	February 2	1982
253-82-BCR.....	June 15	
252-82-BCR.....	June 22	
385-82-BCR.....	August 10	
913-82-BCR.....	January 18	1983
915-82-BCR.....	January 18	
916-82-BCR.....	January 18	
98-83-BCR.....	March 1	

Amendments

BSA	Effective Date	
1155-80-BCR.....	May 10	
427-83-BCR.....	June 14	
428-83-BCR.....	June 14	
633-83-BCR.....	September 13	
1045-83-BCR.....	December 6	
1050-83-BCR.....	December 6	
288-84-BCR.....	June 5	1984
289-84-BCR.....	May 22	
290-84-BCR.....	May 22	
695-84-BCR.....	September 11	
934-84-BCR.....	December 18	
208-85-BCR.....	March 19	1985
435-85-BCR.....	May 21	
678-85-BCR.....	October 1	
814-85-BCR.....	October 29	
260-86-BCR.....	April 22	1986
261-86-BCR.....	April 22	
262-86-BCR.....	April 22	
738-86-BCR.....	September 16	
739-86-BCR.....	September 16	
1076-86-BCR.....	January 27	1987
1077-86-BCR.....	January 27	
9-87-BCR.....	February 10	
17-87-BCR.....	February 10	
236-87-BCR.....	March 31	
237-87-BCR.....	March 31	
617-87-BCR.....	July 8	
946-87-BCR.....	December 22	
947-87-BCR.....	December 22	
82-88-BCR.....	March 1	1988
135-88-BCR.....	March 1	
373-88-BCR.....	May 3	
1025-88-BCR.....	September 27	
1341-88-BCR.....	December 6	
1342-88-BCR.....	December 6	
1343-88-BCR.....	December 20	
455-89-BCR.....	June 27	1989
886-89-BCR.....	December 12	
111-90-BCR.....	May 1	1990
213-90-BCR.....	September 11	
234-90-BCR.....	September 11	
242-90-BCR.....	September 11	
243-90-BCR.....	September 11	
310-90-BCR.....	January 22	1991
11-91-BCR.....	March 12	

TITLE 26 HOUSING AND BUILDINGS

CHAPTER 1 [REPEALED]		
DEPARTMENT OF BUILDINGS		
Sub-Art. or Sec.	Sub-chapter or Sec.*	Subchapter 1 General Provisions
[641-1.0]	101	Definitions
[641-2.0]	102	Seal; Judicial Notice
[641-3.0]	103	Records in Department
[641-4.0]	104	Complaint Book
[641-5.0]	105	Taxpayers' Requests for Institution of Actions
[641-6.0]	106	Proofs, Affidavits and Oaths
[641-7.0]	107	Cooperation of Other Departments
[641-8.0]	108	Reports from Different Institutions and Agencies
[641-9.0]	109	Annual Report
[641-10.0]	110	Publications of Statistics and Other Data
[642-1.0]	111	Uniforms and Badges
[642-2.0]	112	Falsely Impersonating an Officer
[642-3.0]	113	Subordinates; Discipline of
[642-4.0]	114	Certain Outside Work, Employment and Financial Interests Prohibited
[643a-1.0]	115	Notice and Orders
[643a-2.0]	116	Contents of Notices and Orders
[643a-3.0]	117	Service of Notices and Orders
[643a-4.0]	118	Stop Work Notices and Orders
[643a-5.0]	119	List Pendens
[643a-6.0]	120	Enforcement Proceedings
[643a-7.0]	121	Certificate of Commissioner; Presumptive Evidence
[643a-8.0]	122	Non-Compliance With Order and Illegal Places of Assembly; Punishment; Penalty
[643a-9.0]	123	Non-Compliance With Orders Execution of Work by Department
[643a-10.0]	124	False Statements in Certificates, Forms, Written Statements, Applications, Reports or Certificates
[643a-11.0]	125	Violations of Building Laws; Punishments; Penalty Violations

[643a-12.0]	126	Violations of Zoning Resolutions
[643a-12.1]	126.1	Environmental Control Board; Civil Penalties
[643a-12.2]	126.2	Environmental Control Board Proceedings; Order to Certify Correction
[643a-12.3]	126.3	Civil Penalty for Failure to Certify the Correction of a Violation
[643a-12.4]	126.4	Limitations on Power of Commissioner to Designate Administrative Code Provisions Which May Enforced by the Environmental Control Board
[643a-13.0]	127	Dangerous Buildings, Places and Things; Nuisance
	127.1	Penalties for Violation or Order to Vacate and Order to Seal, Secure and Close; Access to Premises
	127.2	Violations of Zoning Resolution in Residential Districts; Public Nuisance; Order of Closure
	127.3	Illegal Outdoor Signs; Public Nuisance
[643a-14.0]	128	Liens on Premises for Inspection, Reinspection, Examination, Service or Permit Fees
[644-1.0]	129	Record of Applications
[644-2.0]	130	Borough Superintendents to Furnish Tax Department With Copies of Permits

**"C26" omitted from section numbers in this column.*

SUBCHAPTER 1 GENERAL PROVISIONS

~~§[641-1.0] 26-101 Definitions.~~ For the purposes of this chapter:

1. The term "multiple dwelling" shall mean such dwelling as defined by section four of the multiple dwelling law;
2. The term "building" shall mean any building, structure, premises, or part thereof;
3. The term "service equipment" shall mean equipment, and all components thereof, which provide sanitation, power, light, heat, ventilation, air conditioning, refuse disposal, fire-fighting, transportation or other facilities for buildings.
4. The term "commissioner" shall mean the city commissioner

of buildings.

5. The term "department" shall mean the city department of buildings.

~~§[641-2.0] 26-102 Seal; judicial notice.-~~

The commissioner may design and adopt a seal for the department, and cause the same to be used in the authentication of the orders and proceedings of the department, and for such other purposes as he or she may prescribe. The courts shall take judicial notice of such seal, and of the signature of the commissioner and the deputy commissioners of such department.

~~§[641-3.0] 26-103 Records in department.-~~

The department shall keep records of every building in the city. Such records shall be kept in the manner and form prescribed by the commissioner.

~~§[641-4.0] 26-104 Complaint book.~~ The department shall keep a general complaint book, or several such books, in which may be entered any complaint made by any person in reference to any building. Such entry shall include the name and residence of the complainant, the name of the person complained of, the date of the entry of the complaint and any suggested remedies. Except for entries of names and residences of the complainants, such book shall be open to public examination during the office hours of the department, subject to such regulations as the commissioner may prescribe. The commissioner shall cause all complaints to be investigated.

~~§§ Local Law 91-1989.~~

~~§[641-5.0] 26-105 Taxpayers' requests for institution of actions.~~ Taxpayers' requests for institution of actions for liens upon buildings shall be presented to the department.

~~§[641-6.0] 26-106 Proofs, affidavits and oaths.-~~

Proofs, affidavits and examinations as to any matter arising in connection with the performance of any of the duties of the department may be taken by or before the commissioner, or a deputy commissioner, or such other person as the commissioner may designate; and such commissioner, deputy or other person may administer oaths in connection therewith.

~~§[641-7.0] 26-107 Cooperation of other departments.-~~

Upon request of the commissioner, it shall be the duty of all departments to cooperate with the department of buildings at all times, and to furnish to such department such information, reports and assistance as the commissioner may require.

~~§[641-8.0] 26-108 Reports from different institutions and agencies.-~~

a. All dispensaries and hospitals in the city shall make weekly statements to the department as to the cases of sickness received in such hospital or treated in such

dispensary from each building. Such statement shall show the location of such building by street and number, the nature of the sickness treated, whether the patient was an adult or child and the date of the treatment.

b. The police department shall furnish to the department a weekly statement of the number of arrests of persons living in such buildings. Such statement shall show the location of such building, by street and number, the offense with which the person is charged, the age and name of the offender, and such other information as the department may require. The commissioner shall prescribe and furnish blank forms for making such statements.

c. Such department may require reports and information of such facts relative to the condition of persons residing in such buildings as the commissioner may deem useful in carrying out the duties of the department. Such reports also may be required from all dispensaries, hospitals, charitable or benevolent societies, infirmaries, prisons and schools, and from the managers, principals and officers thereof. The managers, principals and officers of such institutions shall give such information promptly and shall make such reports, verbally or in writing, as the commissioner may require.

~~§[641-9.0] 26-109 Annual report.~~ The annual report of the department shall be published in book form for public information. Such report shall contain the statistics kept by the department.

~~§[641-10.0] 26-110 Publication of statistics and other data.~~ The commissioner may provide for the publicity of the papers, files, reports, records and the proceedings of the department whenever he or she deems it necessary for the public good.

~~§[642-1.0] 26-111 Uniforms and badges.~~ The commissioner may provide or designate a suitable uniform to be worn by inspectors. He or she shall also provide a metal badge with a suitable inscription thereon, and shall require that such badge shall be worn by the inspectors, officers and other employees of the department.

~~§[642-2.0] 26-112 Falsely impersonating an officer.-~~ Any person who falsely represents himself or herself as an officer, inspector or employee of the department, or a not for profit corporation performing services on behalf of the department pursuant to article twenty seven of subchapter one of chapter one of title twenty seven of the code, or as acting under the authority of the department or of such not for profit corporation, or who without authority uses, wears or displays a shield or other insignia or emblem such as is worn by such officer, inspector or employee, shall be guilty of a misdemeanor.

~~§ Local Law 107-1993.~~

~~§[642-3.0] 26-113 Subordinates; discipline of.~~ The commissioner shall have power to punish any employee, for.

neglect of duty, or omission to properly perform his or her duty, or for violation of rules, or neglect or disobedience of orders, or incapacity or absence without leave, by forfeiting or withholding compensation for a specified time, or by suspension from duty with or without pay for a period of not exceeding thirty days.

~~§[642-4.0] 26-114 Certain outside work, employment and financial interests prohibited.~~ It shall be unlawful for any officer or employee of the department to be engaged in conducting or carrying on business as an architect, civil engineer, structural engineer, sanitary engineer, carpenter, plumber, iron worker, mason or builder, or any other profession or business concerned with the construction, alteration or equipment of buildings. It shall also be unlawful for such employees to be engaged in the manufacture or sale of automatic sprinklers, fire extinguishing apparatus, fire protection devices, fire prevention devices, devices relating to the means or adequacy of exit from buildings, or articles entering into the construction or alteration of buildings, or to act as agent for any person engaged in the manufacture or sale of such articles, or own stock in any corporation engaged in the manufacture or sale of such articles.

~~§[643a-1.0] 26-115 Notices and orders.~~ The commissioner shall have the power to issue notices and orders for enforcing compliance with any law, rule or regulation in respect to any matters under the jurisdiction of the department, and for remedying any condition found to exist in, on or about any building, enclosure or premises, in violation of any law, rule or regulation in respect to any such matters. Each such notice or order issued by the commissioner shall have his or her signature affixed thereto; but the commissioner may authorize any subordinate to affix such signature.

~~§[643a-2.0] 26-116 Contents of notices and orders.~~ All notices and orders issued by the commissioner shall, in addition to the statement of requirements, contain a description of the building, premises or property affected; and except for such orders as may be served pursuant to section three hundred twenty six of the multiple dwelling law, the notice or order shall be addressed to the owner, lessee or occupant of the building, premises or property affected. It shall be unnecessary to designate such owner, occupant or lessee by name in the notice or order; but the premises shall be designated in the address so that the premises may readily be identified.

~~§[643a-3.0] 26-117 Service of notices and orders.~~ Except for such orders as may be served pursuant to section three hundred twenty six of the multiple dwelling law, service of notices and orders issued by the commissioner may be made: (a) by delivery of a copy thereof personally to the owner, lessee or occupant of the building, premises or property affected thereby; or (b) by

delivery of a copy thereof personally to any person of suitable age and discretion in charge or apparently in charge of such building, premises or property, or any building work being executed thereon; or (c) by posting a copy thereof in a conspicuous place upon such building, premises or property and mailing a copy thereof to the owner of such building, premises or property at his or her last known address, in which latter case the service shall be deemed to have been effected three days after the date of mailing.

~~§[643a-4.0] 26-118 Stop Work notices and orders.~~ Notwithstanding the provisions of sections 26-115 through 26-117 of this subchapter, a notice or order to stop work may be issued by the commissioner, or his or her authorized representative, at any time when it is found that building work is being executed in violation of the provisions of any law, rule or regulation enforceable by the department, or in a dangerous or unsafe manner. Such notice or order may be given orally or in writing to the owner, lessee or occupant of the property involved, or to the agent of any of them, or to the person or persons executing the work and may require all persons in and about the building or premises to vacate the same forthwith, and also require such work to be done as, in the opinion of the commissioner, may be necessary to remove any danger therefrom. The police department shall, upon the request of the commissioner, assist the department in the enforcement of this section.

Conditions warranting issuance of a stop work order include but are not limited to, the failure to have a construction site safety coordinator present in the course of on-going construction at those sites where department rules and regulations require that a construction site safety coordinator be designated and present; the failure to erect a sidewalk shed (or portions thereof) as required by section 27-1021 of the code, or the removal of a sidewalk shed or portions thereof, when such sidewalk shed is still required pursuant to such section.

In addition to the penalties provided for in this subchapter, failure to comply with a stop work order shall be subject to the payment of a penalty in the sum of two thousand dollars for the first violation, five thousand dollars for the second violation, and ten thousand dollars for the third and every subsequent violation, to be paid to the department prior to the rescission of the stop work order; provided, however, this shall not apply to any work performed to remedy an unsafe or hazardous condition.

~~§Local Law 48-2006.~~

~~§[643a-5.0] 26-119 Lis pendens.~~ The commissioner, after issuing any notice or order, or in any subsequent action or proceeding, may also file a notice of lis pendens, consisting of a copy of the notice or order issued by the commissioner and a notice of the action or proceeding instituted or to be instituted thereon.

~~§[643a-6.0] 26-120 — Enforcement proceedings.—~~

a. Upon the violation of any law, rule or regulation enforceable by the department, or the failure to comply with any order issued by the commissioner thereunder, the commissioner may, in his or her discretion, request the corporation counsel to institute legal proceedings to restrain, correct or abate such violation, or to compel compliance with such order; and the corporation counsel shall thereupon institute such actions or proceedings as may be necessary and appropriate for such purposes.

b. Such actions and proceedings may be instituted by the corporation counsel in the name of the city in any court of civil jurisdiction in the city and shall be given preference over pending causes therein. In such actions or proceedings, the city may apply for restraining orders preliminary injunctions or other provisional remedies, with or without notice; and no undertakings shall be required as a condition to the granting or issuing of any such order, injunction or remedy, or by reason thereof.

c. In no case shall the department, or any officer or employee thereof, be liable for costs in any such action or proceeding; and officers and employees of the department, acting in good faith and without malice, shall be free from liability for acts done in any such action or proceeding.

d. Any judgment rendered in any such action or proceeding shall be and become a lien upon the premises involved and named in the complaint in such action or proceeding, the lien to date from the time of filing a notice of lis pendens in the office of the clerk of the county in which the premises is located, and to have priority before any mortgage or other lien existing prior to such filing, except tax and assessment liens.

~~§[643a-7.0] 26-121 Certificate of commissioner; presumptive evidence.—~~ In any action or proceeding founded upon a claim by the commissioner that any law, rule or regulation enforceable by the department has been violated, or that a lawful order issued by him or her has not been complied with, a certificate in writing by the commissioner, or his authorized representative shall be presumptive evidence of any matter stated therein.

~~*§[643a-8.0] 26-122 Non-compliance with order and illegal places of assembly; punishment; penalty.—~~ Every person who owns or operates a place of assembly without a current permit or emergency lighting as required by law, or who shall fail to comply with an order issued by the commissioner except an order issued pursuant to section 26-126.2; or who shall knowingly violate any requirement of any notice or order of the commissioner, shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punishable by a fine not to exceed five thousand dollars, or by imprisonment not to exceed six months, or both. Such person shall also be subject to the payment of a penalty of not more than five thousand dollars to be

recovered in a civil action brought in the name of the city in any court of competent jurisdiction or in a proceeding before the environmental control board.

**Local Law 80-1985, language juxtaposed per Ch. 907-1985.*

~~§[643a-9.0] 26-123 Non-compliance with orders; execution of work by department.—~~ Upon the failure to comply with any order of the commissioner within the time limited thereby, and subject to the provisions of article eight of subchapter three of this chapter, any work required to be executed by such order may be executed by the commissioner through the officers, agents or contractors of the department; and the city shall be reimbursed promptly for all costs and expenses of such work. Such costs and expenses shall become a lien upon the premises involved and named in the commissioner's order, from the time of filing of a notice of lis pendens as provided in section 26-119 of this subchapter; and such lien shall be enforceable in accordance with the mechanics' lien laws applicable in the city.

~~*§[643a-10.0] 26-124 False statements in certificates, forms, written statements, applications, reports or certificates of correction.—~~

a. Any person who shall knowingly make a false statement or who shall knowingly falsify or allow to be falsified any certificate, form, signed statement, application, report or certification of the correction of a violation required under the provisions of this code or any rule or regulation of any agency promulgated thereunder, shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not less than one thousand dollars nor more than five thousand dollars, or by imprisonment not to exceed six months, or both.

b. Such person shall also be liable for a civil penalty of not less than one thousand dollars nor more than five thousand dollars which may be recovered in a proceeding before the environmental control board. In any such proceeding which relates to a false statement in a certification filed pursuant to section 26-126.2, if an inspection made within six months after the filing of the certification finds a condition constituting a violation which is the same as the condition described in the notice of violation with respect to which such certification was filed, there shall be a rebuttable presumption that the condition described in such notice of violation continued and is the same condition found in the inspection.

*c. In addition to any other penalty provided by law, the commissioner may refuse to accept any application or other document submitted pursuant to or in satisfaction of any requirement of this chapter or of chapter one of title twenty-seven of this code or any rule or regulation of any agency promulgated thereunder that bears the signature of any person who has been found, after a hearing at the office of administrative trials and hearings pursuant to the

Title 26 / Subchapter 1

~~department's rules, to have knowingly or negligently made a false statement or to have knowingly or negligently falsified or allowed to be falsified any certificate, form, signed statement, application, report or certification of the correction of a violation required under the provisions of this chapter or of chapter one of title twenty-seven of this code or any rule or regulation of any agency promulgated thereunder.~~

~~[†]d. The provisions of this section shall apply with respect to any certificate, form, signed statement, application or report submitted to a not-for-profit corporation performing services on behalf of the department pursuant to article twenty-seven of subchapter one of chapter one of title twenty-seven of the code.~~

~~[‡]Local Law 80-1985, language juxtaposed per Ch. 907-1985.~~

~~[†]Chapter 542 of Laws of 2007; Local Law 107-1993.~~

~~****§[643a-11.0] 26-125 Violations of building laws: punishments; penalty.--**~~

~~a. Except as otherwise provided in subdivisions b and f of~~

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~~this section, section 26-126 or 26-248 of this title, every person who shall violate any of the provisions of any laws, rules or regulations enforceable by the department or who shall knowingly take part or assist in any such violation shall be guilty of an offense, and upon conviction thereof shall be punishable by a fine of not more than five thousand dollars. Such person shall also be subject to the payment of a penalty of not more than five thousand dollars to be recovered in a civil action brought in the name of the city in any court of record in the city.~~

~~b. Notwithstanding any other law, rule or regulation, and in addition to any other penalties provided in this code or elsewhere, any person who shall convert, or knowingly take part or assist in the conversion or permit the maintenance of the conversion of a residence, which is legally approved for occupancy as a one family, or two-family dwelling, to a dwelling for occupancy by four or more families shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for a period not to exceed one year and by a fine for each dwelling unit added of not less than one thousand dollars nor more than five thousand dollars for the first offense, not less than two thousand five hundred dollars nor more than fifteen thousand dollars for a second offense and not less than ten thousand dollars nor more than twenty thousand dollars for a third or subsequent offense.~~

~~c. In addition to the penalties provided in subdivision a of this section, any owner who shall fail to file a report pursuant to the provisions of section 27-228.5 or 27-1000 of the code shall be liable for a civil penalty of not less than twenty five dollars nor more than one hundred dollars per day not to exceed one thousand dollars commencing with the date after which such report was required to be filed with the department and terminating on the date of the filing of such report with the department.~~

~~d. In addition to the penalties provided in subdivision a of this section, any owner who shall fail to file a report pursuant to the provisions of section 27-793 of this code shall be liable for a civil penalty of not less than twenty five dollars nor more than fifty dollars per day, commencing with the day following the date on which such report was required to be filed with the department and terminating on the date of the filing of such report with the department, provided that the maximum amount of such penalty shall not exceed one thousand five hundred dollars for any report for a building greater than six stories and five hundred dollars for any report for a building of six stories or less.~~

~~*e. In addition to the penalties provided in subdivision a of this section and notwithstanding the provisions of subdivision d of this section, any owner who files a report pursuant to the provisions of section 27-793 of this code after the date such report was required to be~~

~~filed with the department but who provides evidence in accordance with rules promulgated by the commissioner that the boiler was inspected in accordance with the provisions of subdivision b of section 27-793 of this code shall only be liable for a civil penalty of fifty dollars for any report for a building six stories or less and one hundred fifty dollars for any report for a building greater than six stories.~~

~~f. As an alternative to the penalties provided in subdivision b of this section, any person who violates the provisions of such subdivision may be subject to the payment of a civil penalty of one thousand dollars per day for each dwelling unit added, commencing on the date such notice of violation was issued and terminating on the date of the filing of a valid certification that the condition constituting the violation has been corrected or the date of final adjudication of the violation, whichever occurs first, to be recovered in a civil action brought in the name of the city in any court of record in the city or returnable to an administrative tribunal of competent jurisdiction. There shall be a rebuttable presumption that the violation continued to exist from the date of the issuance of a notice of violation until the date of adjudication or proof of correction to the satisfaction of the commissioner.~~

~~†g. (i) Notwithstanding any other provision of law, where a notice of violation or summons is issued on or after July fourteen, two thousand three for a violation of section 27-147 of this code or paragraph (a) of section 32-653 or paragraph (a) of section 42-542 of the zoning resolution, or any provision amending, replacing or supplementing such sections of the zoning resolution, for an awning in existence on such date, no penalty may be imposed, nor may injunctive relief be sought to restrain such violation, during the period commencing on such date and ending on the later of (A) January fourteen, two thousand six and (B) the date established by the commissioner in accordance with paragraph (iii) of this subdivision as the date of the conclusion of a program of education of the public regarding amendments of section 32-653 or 42-542 of the zoning resolution or the replacement or supplementation of such sections. Where the person to whom the violation was issued cures such violation during such period, no penalty may subsequently be sought or imposed for such violation.~~

~~(ii) The provisions of paragraph i of this subdivision shall not apply where such awning creates an imminent threat to public health or safety.~~

~~(iii) The commissioner shall develop a program to educate the public regarding amendments, adopted after the enactment of the local law that added this paragraph, of section 32-653 or 42-542 of the zoning resolution or the replacement or supplementation of such sections. Such program shall be implemented as soon as practicable following the adoption of such amendments, replacement or supplementation, and~~

shall continue for a period of time deemed sufficient by the commissioner to provide reasonable notice to the public of the requirements imposed by such amendments, replacement or supplementation. The date of the conclusion of such program shall be established by the commissioner by rule which date shall be no later than May thirty-one, two thousand six.

~~***Local Law 65-1997; Local 62-1991; Local Law 80-1985, language juxtaposed per Ch. 907-1985.~~

~~*Local Law 27-1996.~~

~~*Local Law 77-2005; 35-2004; Local Law 44-2003.~~

~~***§26-125.1 Violation of building laws; punishment and penalties for illegal operation of cranes and derricks.~~

~~a. Any person who:~~

~~(1) shall operate a crane or derrick as such terms are defined in section 27-232 of this code without first having obtained a license required to operate such crane or derrick, except for learners operating such crane or derrick in the presence of and under the direct supervision of a licensed operator, pursuant to reference standard 19-2; or (2) is in charge of, in control of, or is either supervising or directing construction activities at a construction site, and who (i) either permits or authorizes the operation of a crane or derrick by a person who he or she either knows or should know does not have a license to operate such equipment, except for learners operating such crane or derrick in the presence of and under the direct supervision of a licensed operator, pursuant to reference standard 19-2; or (ii) either permits or authorizes the operation of a crane or derrick without having first obtained all necessary approvals and permits for the operation of the equipment, or for the work to be performed, shall be guilty of a class B misdemeanor and upon conviction thereof shall be subject to a civil penalty of not more than twenty-five thousand dollars in addition to a sentence not to exceed ninety days.~~

~~b. Any person who:~~

~~(1) shall operate a crane or derrick as such terms are defined in section 27-232 of this code without first having obtained a license required to operate such crane or derrick, except for learners operating such crane or derrick in the presence of and under the direct supervision of a licensed operator, pursuant to reference standard 19-2; (2) is in charge of, in control of, or is either supervising or directing construction activities at a construction site, and who (i) either permits or authorizes the operation of a crane or derrick by a person who he or she either knows or should know does not have a license to operate such equipment, except for learners operating such crane or derrick in the presence~~

~~of and under the direct supervision of a licensed operator, pursuant to reference standard 19-2; or (ii) either permits or authorizes the operation of a crane or derrick without having first obtained all necessary approvals and permits for the operation of the equipment, or for the work to be performed, where such operation results in serious physical injury to another person or persons, as such term is defined in section 10.00 of the penal law, shall be guilty of a class A misdemeanor and upon conviction thereof shall be subject to a civil penalty of not more than one hundred thousand dollars in addition to a sentence not to exceed six months.~~

~~e. There shall be no liability under the provisions of this section for the operation of a crane or derrick by any person who has been duly licensed by the department to operate such crane or derrick, or by a learner who operates such crane or derricks in the presence of and under the direct supervision of such person, during the thirty calendar days subsequent to the expiration of such person's license; provided, however, that, for one year after the effective date of this section, there shall be no liability under the provisions of this section for the operation of a crane or derrick by any person who has been duly licensed by the department to operate such crane or derrick, or by a learner who operates such crane or derrick in the presence of and under the direct supervision of such person, during the one year period subsequent to the expiration of such person's license.~~

~~d. For purposes of this section, the terms "crane" and "derrick" shall have the meaning as ascribed by section 27-232 of this code.~~

~~***Local Law 99-1991.~~

~~†[643a-12.0] 26-126 Violations of zoning resolutions.~~

~~a. The owner, lessee, or occupant of any building in which a violation of the zoning resolution has been committed or shall exist, or the agent, architect, builder, contractor, or any other person who commits, takes part or assists in any such violation or who maintains any building in which any such violation shall exist, shall be guilty of a misdemeanor, and where the violation shall be for the construction, alteration, use or occupancy of any building, structure or area set forth within use groups five through eighteen inclusive in a zoning district where such use is not permitted, the person convicted thereof shall be punished by a fine of not less than two hundred fifty dollars nor more than one thousand dollars for the first offense, not less than five hundred dollars nor more than one thousand dollars for a second offense and five thousand dollars for a third, and all subsequent offenses, or for any such offense by imprisonment for not more than ninety days, or by both fine and imprisonment.~~

~~b. Any such person, having been served with an order to remove any such violation, who shall fail to comply with such order within ten days after such service or who shall continue to violate any provision of the zoning resolution in the respect named in such order, shall be guilty of a misdemeanor.~~

~~c. In addition to the foregoing remedies, the city may maintain an action for an injunction to restrain any violation of such zoning resolution.~~

~~*d. (i) Notwithstanding any other provision of law, where a notice of violation or summons is issued on or after July fourteen, two thousand three for a violation of section 27-147 of this code or paragraph (a) of section 32-653 or paragraph (a) of section 42-542 of the zoning resolution, or any provision amending, replacing or supplementing such sections of the zoning resolution, for an awning in existence on such date, no penalty may be imposed, nor may injunctive relief be sought to restrain such violation, during the period commencing on such date and ending on the later of (A) January fourteen, two thousand six, and (B) the date established by the commissioner in accordance with paragraph (iii) of this subdivision as the date of the conclusion of a program of education of the public regarding amendments of section 32-653 or 42-542 of the zoning resolution or the replacement or supplementation of such sections. Where the person to whom the violation was issued cures such violation during such period, no penalty may subsequently be sought or imposed for such violation.~~

~~(ii) The provisions of paragraph i of this subdivision shall not apply where such awning creates an imminent threat to public health or safety.~~

~~(iii) The commissioner shall develop a program to educate the public regarding amendments, adopted after the enactment of the local law that added this paragraph, of section 32-653 or 42-542 of the zoning resolution or the replacement or supplementation of such sections. Such program shall be implemented as soon as practicable following the adoption of such amendments, replacement or supplementation, and shall continue for a period of time deemed sufficient by the commissioner to provide reasonable notice to the public of the requirements imposed by such amendments, replacement or supplementation. The date of the conclusion of such program shall be established by the commissioner by~~

~~rule which date shall be no later than May thirty one, two thousand six.~~

~~*e. Notwithstanding any other law, rule or regulation, and in addition to any other penalties provided by law, any person who shall convert, or knowingly take part or assist in the conversion or permit the maintenance of the conversion of a building legally approved for industrial or manufacturing use, except as provided by section 42-03 of the zoning resolution and the multiple dwelling law, to occupancy as a dwelling shall be subject to imprisonment for a period not to exceed one year and by a fine for each dwelling unit added of not less than one thousand dollars nor more than five thousand dollars for the first offense, not less than two thousand five hundred dollars nor more than fifteen thousand dollars for a second offense committed within an eighteen month period of the first offense and not less than ten thousand dollars nor more than twenty thousand dollars for a third or subsequent offense committed within an eighteen month period of the first offense.~~

~~#Local Law 37-2007; Local Law 77-2005; Local Law 35-2004; Local Law 44-2003.~~

~~*§[643a-12.1] 26-126.1 Environmental control board; civil penalties.~~

~~a. In addition to or as an alternative to any of the remedies and penalties provided in subchapters one, two and three of chapter one of this title or chapter one of title twenty seven any person who shall violate or fail to comply with any of the provisions of subchapters one, two and three of chapter one of this title or chapter one of title twenty seven or the rules and regulations promulgated hereunder shall, except as otherwise specifically provided in subdivision c of section 26-126.2, be liable for a civil penalty which may be recovered in a proceeding before the environmental control board. Such proceeding shall be commenced by the service of a notice of violation returnable before the board. The provisions of sections 26-244, 26-246 and 26-248 relating to notification prior to the commencement of judicial proceedings shall not apply to the recovery of civil penalties in proceedings before the environmental control board.~~

~~Except as otherwise specifically provided, such civil penalty shall be determined in accordance with the following schedule:~~

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	First Violation		Second or Subsequent Violation by the respondent of the same provision of law, rule or regulation and, if the respondent is the owner, agent, lessee or other person in control of the premises with respect to which the violations occurred, at the same premises (all violations committed within an eighteen month period).	
	Minimum (Dollars)	Maximum (Dollars)	Minimum (Dollars)	Maximum (Dollars)
[†] 27-118.1(a).....	250	2,500	1,000	10,000
[†] 27-118.1(b).....	2,500	5,000	5,000	25,000
27-508.3(b).....	0	300	350	1,000
Any Provision of subchapter 19 of Chapter 1 of title 27.....	0	5,000	0	10,000
Any provisions of subchapters 1,2, and 3 of chapter 1 of this title and all other provisions of chapter 1 of title 27 or any provisions of the zoning resolution and related rules and regulations.....	0	2,500	0	10,000

(Reference to a section of the code is intended to include any rules and regulations related to such section).

[†]*Local Law 37-2007.*

b. For the purposes of the multiple offense schedule, if the respondent is the owner or agent of the building or structure with respect to which the violation occurred or a lessee of the entire building or structure, the term premises shall mean the entire building or structure. If the respondent is the lessee or person in control of a part of such building or structure, the term premises shall mean that part of such building or structure leased to or under the control of the respondent.

e. Notwithstanding any other provision of this section, if the respondent is the owner or agent of the building or structure with respect to which the violation occurred or a lessee of the entire building or structure, a prior violation by the same respondent shall not serve as a predicate for purposes of the multiple offense schedule set forth in this section if the prior violation or the violation for which penalties are to be imposed occurred within an area of the building or structure which, at the time of the violation, was leased to and under the control of a person other than the respondent, except that this provision shall not apply if both the prior violation and the violation for which penalties are to be imposed occurred within areas leased to and under the control of the same lessee. In any proceeding before the board, the burden of proof with respect to this exception shall be upon the respondent.

d. The commissioner may, by rule or regulation, establish a schedule of civil penalties providing a maximum penalty for the violation of each separate provision of law, rule or regulation based on the degree of seriousness of the violation. Such maximum penalties shall not exceed the maximum penalties for such violations set forth in this section.

e. In addition to the penalties set forth in subdivision a of this section: (i) any individual who shall violate or fail to comply with the provisions of section 27-118.1 of this

code shall also be subject to the payment of a penalty of not less than fifty dollars nor more than one hundred dollars per day, for each dwelling unit added, commencing on the date such notice of violation was issued and terminating on the date of the filing of a certification that the condition constituting the violation has been corrected or the date of final adjudication of the violation by the environmental control board, whichever occurs first, and there shall be a rebuttable presumption that the violation continued to exist from the date of the issuance of the notice of violation until the date of the filing of the certification or final adjudication; and (ii) a third or subsequent violation of section 27-118.1 of this code by the same respondent and, if the respondent is the owner, agent, lessee or other person in control of the premises with respect to which the violation occurred at the same premises (all violations committed within an eighteen month period), shall result in a civil penalty of not less than five thousand dollars nor more than fifteen thousand dollars.

[†]*Local Law 37-2007; Local Law 3-1998; Local Law 65-1997; Local Law 80-1985, language juxtaposed per Ch. 907-1985.*

***f. In addition to the penalties set forth in subdivision a of this section any person who shall violate or fail to comply with the provisions of subdivision b of section 27-118.1 of this code shall also be subject to the payment of a penalty of not less than two hundred fifty dollars nor more than five hundred dollars per day, for each dwelling unit added, commencing on the date such notice of violation was issued and terminating on the date of the filing of a certification that the condition constituting the violation has been corrected or the date of final adjudication of the violation by the environmental control board, whichever occurs first, and there shall be a rebuttable presumption that the violation continued to exist from the date of the issuance of the notice of

violation until the date of the filing of the certification or final adjudication.

~~***Local Law 37-2007.~~

~~** §[643a-12.2] 26-126.2 Environmental control board proceedings; order to certify correction.~~

~~***a. Except as otherwise provided in subdivision e, f, i and j of this section whenever the commissioner serves a notice of violation such notice shall include an order which requires the respondent to correct the condition constituting the violation and to file a certification with the department that the condition has been corrected. Such order shall require that the condition be corrected within thirty days from the date that the order is issued and that certification of the correction of the condition shall be filed with the department in a manner and [sic] form and within such further period of time as shall be established by rule or regulation of the department.~~

~~b. If the board finds, upon good cause shown, that the respondent cannot correct the violation within the period specified in subdivision a, it may, with the concurrence of the commissioner, postpone the period for compliance with such order upon such terms and conditions and for such period of time as shall be appropriate under the circumstances.~~

~~c. For violations which are subject to the penalties for a first violation as set forth in section 26-126.1 of this title, if the respondent complies with the order issued pursuant to subdivision a of this section within the time set forth in such subdivision, there shall be no civil penalty for such first violation. Such violation may however serve as a predicate for purposes of the multiple offense schedule set forth in section 26-126.1 of this title.~~

~~d. In any proceeding before the environmental control board, if the board finds that the commissioner has failed to prove the violation charged, it shall notify the commissioner and the order requiring the respondent to correct the condition constituting the violation shall be deemed to be revoked.~~

~~e. Subdivisions a, b, c and d of this section shall not apply to environmental control board proceedings to impose penalties for violations of section 26-122 (except violations relating to the operation of an illegal place of assembly), section 26-124 and section 26-126.3 of this title or to impose penalties for any violation which the commissioner in his [or her]** discretion determines to be hazardous.~~

~~**Copy in brackets not enacted but probably intended.~~

~~**f. A notice of violation alleging a violation of subdivision a or b of section 27-508.3 of this code shall include an order (i) directing the respondent to correct the condition constituting the violation within thirty days from the date that the order is issued and to file a certification that the condition has been corrected with the department in a manner and form and within such further period of time as shall be established by rule of the department or (ii) directing a respondent who is a record owner of a premises~~

~~on which a tobacco product advertisement is placed or maintained in violation of subdivision a of section 27-508.3 of this code but who has not posted or placed such advertisement or has not directed, caused or contracted for the posting or placing of such advertisement by a servant, agent, employee, contractor or other individual under such record owner's control, to notify, within thirty days from the date the notice of violation alleging a violation of subdivision a of section 27-508.3 of this code was issued, the person who posted or placed such advertisement or who directed, caused or contracted for the posting or placing of such advertisement, by certified mail of the notice of violation, and to send, by certified mail, a copy of such notification to the department. A record owner shall not be deemed to have directed, caused or contracted for the posting or placing of a tobacco product advertisement by a servant, agent, employee, contractor or other individual under such record owner's control unless the record owner retains the right to cause the content of an advertisement to be changed. A general "compliance with laws" provision in a lease or contract shall not constitute such a right for purposes of this subdivision. A notice of violation issued pursuant to subdivision a or b of section 27-508.3 of this code shall also contain a statement that any hearing for a third or subsequent violation of subdivision a or b of section 27-508.3 by a wholesale or retail dealer of cigarettes shall also constitute a hearing for the revocation of a license issued to such wholesale dealer pursuant to section 11-1303 of this code or to such retail dealer pursuant to section 20-202 of this code, where the wholesale or retail dealer of cigarettes is found to be in violation.~~

~~***g. Where the respondent receives a notice of violation of subdivision a or b of section 27-508.3 of this code and the respondent complies with item (i) of subdivision f of this section, there shall be no civil penalty for such violation; provided, however, where such violation is a first violation, such violation may serve as a predicate for purposes of the multiple offense schedule as set forth in section 26-126.1 of this chapter and for purposes of revoking a license pursuant to subdivision k of this section.~~

~~***h. Where the respondent receives a notice of violation of subdivision a of section 27-508.3 of this code and the respondent is a record owner of premises who complies with item (ii) of subdivision f of this section, the notice of violation issued to such record owner shall be dismissed and shall not serve as a predicate for purposes of the multiple offense schedule as set forth in section 26-126.1 of this chapter.~~

~~***i. Where a respondent receives a notice of violation alleging a violation of subdivision a or b of section 27-508.3 of this code, and such respondent establishes that the school building, playground, amusement arcade, child day care center, or youth center that is within one thousand feet of the respondent's building, structure or premises opened, or was authorized or licensed by, or received a permit from a city or state, or certified to the~~

Title 26 / Subchapter 1

~~department as required pursuant to subdivision o of section 27 508.2 of this code after the date such respondent placed or caused to be placed, maintained or caused to be maintained the tobacco product advertisement that is the subject of the alleged violation on such respondent's building, structure or premises, then upon the respondent so establishing within thirty days of the date of issue of the notice of violation, the environmental control board shall grant an adjournment in contemplation of dismissal. Where the respondent corrects the condition constituting the violation and certifies such correction to the department (i) within ninety days of the issuance of such adjournment in contemplation of dismissal of a notice of violation of subdivision a of section 27 508.3 or (ii) within thirty days of the granting of such adjournment in contemplation of dismissal of a notice of violation of subdivision b of section 27 508.3, in a manner and form as shall be established by rule of the department, the notice of violation shall be dismissed and shall not serve~~

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as a predicate for purposes of the multiple offense schedule as set forth in section 26-126.1 of this chapter or for purposes of revoking a license pursuant to subdivision k of this section.

~~***j.~~ Where the respondent receives a notice of violation of section 27-508.5 of this code, the respondent shall be liable for a civil penalty as set forth in section 26-126.1 of this chapter and for purposes of revoking a license pursuant to subdivision k of this section.

~~***k.~~ In addition to the penalties provided in subdivision f of this section, where a wholesale or retail dealer of cigarettes is found liable for a third or subsequent violation, within an eighteen month period, the license issued to such wholesale dealer of cigarettes pursuant to section 11-1303 of this code, or to such retail dealer of cigarettes pursuant to section 20-202 of this code, shall be revoked.

~~***Local Law 3-1998.~~

~~***Local Law 80-1985, language juxtaposed per Ch. 907-1985.~~

~~***Local Law 2-2000; Local Law 3-1998.~~

~~***§[643a-12.3] 26-126.3 Civil penalty for failure to certify the correction of a violation.~~ a. Any person who shall fail to comply with an order of the commissioner issued pursuant to subdivision a of section 26-126.2 of this title within the time specified in such subdivision or within such further period of time as may be provided by the environmental control board pursuant to subdivision b of section 26-126.2 of this title, in addition to the penalties which may be imposed for the violation pursuant to section 26-126.1 of this title be liable for a civil penalty of not more than five thousand dollars for each violation for which there has been a failure to comply with such order. Such civil penalty may be recovered in a proceeding before the environmental control board.

b. For the purposes of this section, if the environmental control board finds that a respondent has knowingly made false statements relating to the correction of a violation in a certification filed pursuant to section 26-126.2 of this title such certification as to correction shall be null and void and the penalties set forth in this section may be imposed as if such false certification had not been filed with and accepted by the department.

~~***Local Law 80-1985, language juxtaposed per Ch. 907-1985.~~

~~***§[643a-12.4] 26-126.4 Limitations on power of commissioner to designate administrative code provisions which may be enforced by the environmental control board.~~ Notwithstanding any other provision of law, the commissioner may not designate the following provisions of the administrative code for enforcement by the environmental control board:

- (1) Paragraph (6) or (7) of subdivision (c) of section 27-339.
- (2) Subdivision (c) of section 27-353.
- (3) Section 2-4 or 4-4 of building code reference standard RS13-1.
- (4) Paragraph (12) of subdivision (f) of section 27-972.
- (5) Paragraph (10) of subdivision (g) of section 27-972.

(6) Subdivision (c) of section 27-975.

(7) Subdivision (c) of section 27-989.

(8) Section 27-228.

(9) Any provision of the administrative code specified in section 15-232 of such code.

~~***Ch. 349, Laws of 1990; Local Law 80-1985, language juxtaposed per Ch. 907-1985. Sub.10 Local Law 3-1998, repealed by Local Law 14-2001.~~

~~***26-126.5 Enforcement of environmental control board judgements against owners for certain building code violations.~~

a. Notwithstanding any provision of law to the contrary, an environmental control board judgement against an owner for a building code violation with respect to (i) a private dwelling, (ii) a wooden framed single occupancy multiple dwelling, or (iii) a dwelling with a legal occupancy of three or fewer dwelling units shall constitute a tax lien on the property named in the violation with respect to which such judgement was rendered, as hereinafter provided.

b. Such liens shall be entered and enforced as follows:

(i) There shall be filed in the office of the department a record of all such unpaid judgements. Such records shall be kept by tax lot and block number and shall be accessible to the public during business hours. An entry of a judgment on the records of the department shall constitute notice to all parties.

(ii) All such unpaid judgments shall constitute a lien upon the property named in the violation with respect to which such judgment was rendered when the amount thereof shall have been definitely computed as a statement of account by the department, and the department shall cause to be filed in the office of the city collector an entry of the account stated in the book in which such charges against the property are to be entered. Such lien shall have a priority over all other liens and encumbrances except for the lien of taxes and assessments. However, no lien created pursuant to this section shall be enforced against a subsequent purchaser in good faith or mortgagee in good faith unless the requirements of paragraph (i) of this subdivision are satisfied.

(iii) A notice thereof, stating the amount due and the nature of the charge, shall be mailed by the city collector within five days after such entry to the last known address of the person whose name appears on the records in the office of the city collector as being the owner or agent of the property or as the person designated by the owner to receive tax bills or, where no name appears, to the property, addressed to either the "owner" or the "agent".

(iv) Such notice mailed by the city collector pursuant to this section shall have stamped or printed thereon a reference to this section.

(v) If such charge is not paid within thirty days from the date of entry, it shall be the duty of the city collector to receive interest thereon at the same rate as unpaid real property taxes, to be calculated to the date of payment from the date of entry.

(vi) ~~Such charge and the interest thereon shall continue to be, until paid, a lien on the property. Any remedy or procedure available for the enforcement of tax liens against such property, including, but not limited to, any sale of a tax lien or any foreclosure of a tax lien, shall be available with respect to such tax lien. In addition, such tax lien may be satisfied in accordance with the provisions of section thirteen hundred fifty four of the real property actions and proceedings law.~~

(vii) ~~In any proceeding to enforce or discharge a lien created pursuant to this section, the validity of the lien shall not be subject to challenge based on the lawfulness of the judgment, except as provided in this section.~~

(viii) ~~No such challenge may be made except by (1) the owner of the property or (2) a mortgagee or lienor whose mortgage or lien would, but for the provisions of this section, have priority over the department's lien.~~

e. ~~Notwithstanding the foregoing provisions, no such judgement shall be entered and enforced as a tax lien against any property unless at the time of the issuance of the notice of violation a copy of such notice was also served on all mortgagees and lienors of record of such property by mail addressed to the recorded addresses of such mortgagees and lienors.~~

d. ~~The procedures provided in this section for the enforcement of environmental control board judgements against owners shall be in addition to any other methods provided under any other provision of law for the enforcement of such judgements.~~

~~*Chapter 45, Laws of 2000.~~

~~ §[643a-13.0] 26-127 Dangerous buildings, places and things; nuisance; order to vacate building; expenses.~~**

a. ~~Whenever any building, excavation, business, pursuit, matter or thing, or the lot on which it is situated, or the plumbing, sewerage, drainage, light or ventilation thereof is, in the opinion of the commissioner, in a condition or in effect dangerous or detrimental to life or health, the commissioner may declare that the same, to the extent that he or she may specify, is a public nuisance and he or she may order the same to be removed, sealed, abated, suspended, altered or otherwise improved or purified. The commissioner may order or cause any excavation, building, sewer, plumbing, pipe, passage, ground, matter or thing or the lot on which it is situated to be purified, cleansed, disinfected, removed, altered, repaired or improved. Any building, structure, place or premises perilous to life or property by reason of the nature or condition of its contents, its use, the overcrowding of persons therein, defects in its construction, or deficiencies in fire alarm, or fire extinguishing equipment or fire escape equipment, or by reason of any condition in violation of law or order of the commissioner, is a public nuisance within the meaning of the code and the penal law. The commissioner is empowered to abate any such public nuisance.~~

b. ~~In case any order to remedy a condition imminently perilous to life or property issued by the commissioner or~~

~~the department is not complied with, or the commissioner certifies in writing that an emergency exists requiring such action, he or she may order and immediately cause any building, structure, place or premises (i) to be vacated; and, also, if the commissioner determines such action is necessary to the preservation of life and safety, (ii) to be sealed, secured and closed; provided, however, that the commissioner shall not order sealed, secured and closed any dwelling unit or other space lawfully used for residential purposes unless such dwelling unit or other space is sealed pursuant to article eight of subchapter three of chapter one of title twenty six of the code.~~

e. ~~All orders issued pursuant to this section shall be posted upon the premises. Immediately upon the posting of an order upon the premises, officers and employees of the police department, the department, and other authorized officers and employees of the city shall immediately act upon and enforce such order. The police department shall provide all reasonable assistance to the department and other authorized officers and employees necessary to carry out the provisions of this section.~~

d. ~~For the purpose of this section, "sealed" and "sealed, secured and closed" shall mean the use of any means available to render the building, structure or part thereof inaccessible, including but not limited to the use of a padlock or cinder blocks.~~

e. (i) ~~Any order to seal, secure and close issued pursuant to item (ii) of subdivision b of this section shall contain notice of the opportunity for a hearing with respect to such order to determine if the order was properly issued in accordance with the provisions of this section. Such hearing shall be conducted by the commissioner, or in the commissioner's discretion, by the office of administrative trials and hearings or the environmental control board. If the matter is referred to such office or board, the hearing officer shall submit his or her findings of fact and a recommended decision to the commissioner. The hearing shall be held within three business days after the receipt of the written request of an owner, lessor, lessee, or mortgagee for such hearing and the commissioner shall render a decision within three business days after such hearing is concluded.~~

(ii) ~~Any order issued pursuant to this section shall be served in accordance with section 26-117 of the code and, in addition, shall be mailed to the record owner of such premises and any record mortgagee of such premises at the address for such person as set forth in the recorded instrument and to the person designated as owner or agent of the building or designated to receive real property tax or water bills for the building at the address for such person contained in one of the files compiled by the department of finance for the purpose of the assessment or collection of real property taxes and water charges or in the file compiled by the department of finance from real property transfer forms filed with the city register upon the sale or transfer of real property. A copy shall also be~~

filed with the county clerk of the county in which such premises are located. Such filing shall be notice of the order to any subsequent owner and such owner shall be subject to such order

f. An order issued pursuant to this section shall not be rescinded unless the owner, lessor, lessee or mortgagee seeking such rescission provides assurance, in a form satisfactory to the commissioner, that the conditions which caused the issuance of such order have been corrected and will not reoccur. If such order is rescinded, upon the request of the owner, lessor, lessee or mortgagee, the commissioner shall provide a certified copy of such rescission, which may be filed with the county clerk of the county in which such premises are located.

g. Expenses of enforcing orders. The expenses attending the execution of any and all orders duly made by the department shall respectively be a several and joint personal charge against each of the owners or part owners, and each of the lessees and occupants of the building, structure, enclosure, place or premises to which such order relates, and in respect to which such expenses were incurred; and also against every person or body who was by law or contract bound to do that in regard to such building, structure, enclosure, place or premises which such order requires. Such expenses shall also be a lien on all rent and compensation due, or to grow due, for the use of any building, structure, place or premises, or any part thereof, to which such order relates, and in respect to which such expenses were incurred.

h. The commissioner shall give written notice of the closing of any building, structure, enclosure, place or premises pursuant to this section, and any subsequent actions taken with respect thereto, as soon as practicable, to (i) the borough president of the borough within which the closing has occurred; (ii) the council member representing the district within which the closing has occurred; and (iii) the local community board. On January first of each year, the commissioner shall submit a report to the council, setting forth the number of closings made in the previous year, the locations of such closings, and the nature and use of the premises closed. The commissioner shall, in addition, as soon as practicable after a building, structure, enclosure, place or premises has been closed, make and publish a report of said closing in a manner calculated to quickly notify the local community in which such closing occurred. The commissioner shall also make and publish a report of any premises reopened pursuant to his or her permission under this section. Failure to comply with this subdivision shall not invalidate any action taken by the commissioner pursuant to this section.

~~** Local Law 23-1999.~~

~~* §26-127.1 Penalties for violation of order to vacate and order to seal, secure and close; access to premises.~~

a. Any person who violates the provisions of a vacate

order issued pursuant to section 26-127 of this code shall be liable for a civil penalty of not more than twenty five thousand dollars and an additional civil penalty of not more than one thousand dollars for each day the violation continues.

b. Except as authorized by the commissioner, any person who removes or causes to be removed the seal from any premises sealed in accordance with an order of the commissioner or his or her designee shall be guilty of a misdemeanor punishable by imprisonment for no more than one year or a fine not to exceed fifty thousand dollars, or both such fine and imprisonment. Such person shall also be subject to a civil penalty not to exceed fifty thousand dollars.

c. The commissioner shall allow access to the premises to an owner, or a lessor, lessee or mortgagee, in accordance with the terms of the parties' lease or mortgage agreement, upon the following conditions: (i) the submission of a written affirmation, satisfactory to the commissioner, that such person or persons will commence or cause to be commenced without delay all work necessary to correct the conditions stated in the vacate order or otherwise to make the premises meet all applicable laws, rules and regulations and will complete such work within a period of time and in a manner to be approved by the commissioner; (ii) the submission of an affirmation or other proof satisfactory to the commissioner describing the steps that have been taken and will be taken in the future to ensure that the premises will be used or operated in a lawful manner and specifying such lawful use; (iii) if a license, permit or certificate of occupancy is necessary for such lawful use, the submission of a written affirmation or other proof, satisfactory to the commissioner, describing the steps that have been taken and will be taken in the future to ensure that such premises will be used or operated in compliance with any law requiring such license, permit or certificate of occupancy; and (iv) if the premises are leased and the person making the affirmations described in items (i), (ii) and (iii) is not such lessee, the commissioner may also require any authorized person seeking access pursuant to this subdivision to submit an affirmation or other proof that proceedings to enable such person to take actions necessary to ensure compliance with the affirmations submitted by such authorized person pursuant to items (i), (ii) and (iii) have been commenced.

d. Any person who makes a material false statement in any document submitted pursuant to subdivision c of this section which statement he or she knows or has reason to know will be relied upon by the commissioner in determining whether he or she will allow access to the premises shall be liable for a civil penalty of not more than fifty thousand dollars.

e. Notwithstanding any other law, rule, or regulation, any person, corporation, partnership, association or any other legal entity who permits a building, structure, enclosure, place or premises, or any part thereof, to be unlawfully occupied or used in contravention of an order of the

~~commissioner pursuant to section 26-127, or who negligently fails to prevent or prohibit such unlawful occupancy or use, shall be liable for a civil penalty of not more than one million dollars, if any other person suffers serious physical injury, as defined in section ten of the penal law, or death in the building, structure, place or premises or any part thereof subject to such order as a result of such unlawful occupancy or use. If more than one person suffers serious physical injury or death, such penalty shall be recoverable for each person suffering injury or death. Such penalty shall be recovered in a civil action brought by the corporation counsel in the name of the city in any court of competent jurisdiction. In determining the amount of the civil penalty to be imposed the court shall consider:~~

- ~~(i) The extent and severity of injury to persons and property caused by the violation;~~
- ~~(ii) The history of violations by the defendant at such premises, or any other premises, of laws, rules or regulations enforced by the department;~~
- ~~(iii) The degree of willfulness, recklessness, or negligence displayed by the defendant in committing the subject violation;~~
- ~~(iv) The defendant's financial resources; and~~
- ~~(v) The defendant's good faith efforts to cure the subject violation, including efforts to obtain entry or possession of the premises in order to do so.~~

~~In the event that any person seriously injured or the family of any person [sic] who has died as the result of any unlawful occupancy or use described in this subdivision is unable to collect a judgment recovered in a civil action for personal injury or wrongful death against a defendant who has violated this subdivision because of the insolvency of such defendant, the city may, in its discretion, pay to such injured person or the family of such deceased person an amount, as hereinafter provided, collected from such defendant in an action relating to the same injury or death commenced by the corporation counsel against such defendant pursuant to this subdivision. Payments pursuant to this subdivision shall be made as a matter of grace and shall be in such amounts and in accordance with such standards and procedures as shall be established by the mayor, provided, however, that any payment made pursuant to this subdivision shall be in an amount not exceeding out-of-pocket expenses, including indebtedness reasonably incurred for medical or other services necessary as a result of the injury upon which such action is based; loss of earnings or support resulting from such injury; burial expenses not exceeding two thousand five hundred dollars of a person who died as a result of such unlawful occupancy or use described in this subdivision; and the unreimbursed cost of repair or replacement of articles of essential personal property lost, damaged or destroyed as a direct result of such unlawful occupancy or use. In no event shall the payment made to any person exceed the amount of such person's uncollected judgment for personal injury or wrongful death and in no event shall the total amount paid~~

~~to any number of persons with such uncollected judgments against a single defendant exceed the actual amount collected by the city from such defendant in an action under this subdivision.~~

~~*Local Law 23-1990.~~

~~**§26-127.2—Violations of the zoning resolution in residential districts; public nuisance; order of closure.~~

~~a. Any building or part thereof that is located in a residential district, which is occupied for a commercial or manufacturing use in violation of the zoning resolution without a valid certificate of occupancy, is hereby declared to be a public nuisance.~~

~~b. If a building or part thereof in which such a nuisance occurs is not occupied primarily as a residence, the commissioner may, in addition to or as an alternative to any other remedy under any other provision of law, after notice and the opportunity for a hearing in accordance with section, order the closing of such building or part thereof to the extent necessary to abate the nuisance.~~

~~c. A notice of hearing with respect to an order of closure shall be served on the owner and mortgagee of record of such building or part thereof and on the person alleged to be occupying such building or part thereof for commercial or manufacturing use in the following manner:~~

~~(1) service may be made on the owner by delivering such notice to the owner or to an agent of the owner or to a person of suitable age and discretion at the residence or place of business of the owner or, if upon reasonable application such delivery cannot be completed, by affixing such notice in a conspicuous place at the owner's place of business or residence or by placing it under the entrance door at either of such locations or by delivering such notice to a person employed by the owner to work at or to manage or maintain the premises at which the nuisance is located and, in all instances except personal delivery upon such owner by mailing the notice of hearing as follows:~~

- ~~(i) to the person registered with the department of housing preservation and development as the owner or agent of the premises, at the address filed with such department in compliance with article two of subchapter four of chapter two of title twenty-seven of the administrative code; or~~
- ~~(ii) to the person designated as owner of the building or designated to receive real property tax or water bills for the building at the address for such person contained in one of the files compiled by the department of finance for the purpose of the assessment or collection of real property taxes and water charges or in the file compiled by the department of finance from real property transfer forms filed with the city register upon the sale or transfer of real property; or~~
- ~~(iii) to the person in whose name the real estate affected by the order of the commissioner is recorded in the office of the city register or the county clerk as the case may be at the address set forth on the recorded instrument.~~

~~(2) service may be made on an owner that is a corporation pursuant to section three hundred six of the business~~

corporation law; however, service upon a corporation shall be deemed to have been completed forty five days following service upon the secretary of state;

(3) service may be made upon mortgagees of record by mailing such notice to the mortgagees at the address set forth on the recorded instrument;

(4) service may be made upon an occupant (i) by delivering such notice to the occupant or to a person employed by the occupant to work at or to manage or maintain the premises at which the nuisance is located; or (ii) by affixing such notice to the premises at which the nuisance is located in a conspicuous place or by placing a copy under the entrance door of such premises and mailing a copy of such notice to the occupant at such premises; (iii) and in all instances except personal delivery upon such occupant, by mailing the notice of hearing to the occupant at the premises at which the nuisance is located.

(5) proof of service pursuant to paragraphs (1), (2), (3), and (4) of this subdivision shall be filed with commissioner.

d. Such hearing shall be conducted by the office of administrative trials and hearings. The administrative law judge assigned to hear the matter shall submit his or her proposed findings of fact and recommended decision to the commissioner. If based on such recommended decision, proposed findings of fact, and the record of the hearing the commissioner determines that the building or part thereof is located in a residential district and that it has been occupied for a commercial or manufacturing use in violation of the zoning resolution without a valid certificate of occupancy, he or she may issue an order of closure. Such order shall not bar legally required ingress or egress for residential occupancy of parts of the building, which are not subject to the order of closure.

e. At such hearing it shall not be a defense that the owner, occupant, lessor, lessee, mortgagee, or other person having an interest in the property lacked knowledge of or did not acquiesce or participate in the commercial or manufacturing use of such property.

f. A closure ordered by the commissioner pursuant to this section shall not constitute an act of possession, ownership, or control by the city over the closed premises.

g. An order of closure shall be posted at the building or part thereof, which is the subject of such order, and shall be mailed to the record owner of such premises, and any record mortgagee at the address for such person set forth in the recorded instrument, and to the person designated as owner or agent of the building or designated to receive real property tax or water bills for the building at the address for such person contained in one of the files compiled by the department of finance for the purpose of the assessment or collection of real property taxes and water charges or in the file compiled by the department of finance from real property transfer forms filed with the city register upon the sale or transfer of real property. A copy shall also be filed with county clerk or register of the county in which such premises are located. Such

filing shall be notice of the order to any subsequent owner and such owner shall be subject to such order.

h. On the tenth business day after the posting of such order and upon the written directive of the commissioner, police officers and authorized employees of the department shall act upon and enforce such order by sealing, padlocking, or otherwise preventing access to the premises in a manner that will not bar legally required ingress or egress for residential occupancy of parts of the building that are not subject to the closure order.

i. If at any time after the issuance of such order, the owner, mortgagee, or other person having an interest in the property provides assurance, in a form satisfactory to the commissioner, that the commercial or manufacturing use of the premises has been discontinued and will not reoccur, or such owner, mortgagee, or other person establishes that the premises may be lawfully occupied for such manufacturing or commercial use, the commissioner shall rescind the closure order. If such order is rescinded, the commissioner shall, upon request of such owner, mortgagee, or other person, provide a copy of such ~~recession~~, which may be filed with the county clerk or register of the county in which such premises are located.

j. It shall be a misdemeanor for any person to use or occupy or to permit any other person to use or occupy any building or part thereof that has been sealed, padlocked, or otherwise closed pursuant to an order of the commissioner. Mutilation or removal of a posted order of the commissioner shall be punishable by a fine of not more than two hundred fifty dollars or by imprisonment not exceeding fifteen days, or both, provided such order contains therein a notice of penalty.

k. Intentional disobedience or resistance to any provision of an order issued by the commissioner pursuant to this section, in addition to any other punishment prescribed by law, shall be punished by a fine of not more than one thousand dollars, or by imprisonment not exceeding six months, or both.

~~***Local Law 6-1993.~~

~~As enacted but "recession" probably intended.~~

~~***26-127.3 Illegal outdoor signs; public nuisance.~~

a. A sign with a surface area greater than two hundred square feet that is erected, maintained, attached, affixed, painted on, or in any other manner represented on a building or premises in violation of the zoning resolution, the administrative code or rules adopted pursuant thereto is hereby declared to be a public nuisance. The commissioner may, after notice and hearing, order the removal of such illegal sign or its sign structure or both, as hereinafter provided.

b. The commissioner shall serve a notice of hearing with regard to the proposed nuisance abatement on the owner and mortgagee of record of the building or premises and other persons having a recorded interest in the property in the manner provided in subdivision e of section 26-127.2 of this code for the service of an order of closure. If the sign is under the control of an outdoor advertising company, as defined in section 26-259 of the code, and an address for such company is reasonably

ascertainable, the notice shall also be served on such outdoor advertising company by mail to the last known address for such company or, if such company is registered in accordance with section 26-260 of the code, at the address provided to the department by the registrant.

~~e. The office of administrative trials and hearings shall conduct the hearing. The administrative law judge assigned to hear the matter shall submit his or her proposed findings of fact and recommended disposition to the commissioner. If based on such recommended disposition, proposed findings of fact and the record of the hearing the commissioner determines (i) that the sign has a surface area greater than two hundred square feet and, (ii) that the sign has been erected, maintained, attached, affixed, painted on, or in any other manner represented on the building or premises in violation of the zoning resolution, the administrative code or rules adopted pursuant thereto, he or she may order the removal of the illegal sign or its sign structure or both.~~

~~d. At such hearing it shall not be a defense that an owner or other person having an interest in the property lacked knowledge of or did not participate in the erection or maintenance of the illegal sign.~~

~~e. The commissioner's order of removal shall be posted, mailed and filed in the manner provided in subdivision g of section 26-127.2 of this code for an order of closure.~~

~~f. On or after the tenth business day after the posting of such order and upon the written directive of the Commissioner, police officers and authorized representatives of the department shall act upon and enforce such order by removing, covering, painting over or otherwise rendering ineffective the illegal sign or its sign structure or both. Such work shall at all times be performed by a licensed sign hanger where required by law. Nothing in this section shall be construed to prohibit an owner or other person having an interest in the property from removing or causing the removal of an illegal sign or its sign structure prior to the arrival of such enforcement officers. On and after the posting of such removal order, no further permits for signs shall be issued for such building or premises pursuant to section 26-253 or sections 27-147, 27-148 and article sixteen of sub chapter one of title twenty seven of this code and, if the sign structure is not removed, no further display shall be exhibited on such sign structure unless and until the commissioner rescinds such order. The commissioner may rescind the order if the owner or other person having an interest in the building or premises provides assurance in a form satisfactory to the commissioner that all signs erected or maintained at such building or premises will be in compliance with the zoning resolution, the administrative code or rules adopted pursuant to such provisions. If such order is rescinded, the commissioner shall, upon request of such owner, mortgagee or other person, provide a certified copy of such rescission which may be filed with the county clerk or register of the county in which such building or premises is located.~~

~~*g. The costs and expenses for painting over, covering, rendering ineffective or for the removal and storage of such sign and its sign structure may be recovered from the owner of the premises or, if the illegal sign is under the control of an outdoor advertising company and notice was served on such company in accordance with subdivision b of this section, from such outdoor advertising company. Such amounts may be recovered by the city in an action or proceeding in any court of appropriate jurisdiction and, with respect to amounts owed by an outdoor advertising company, by drawing upon any bond posted or other security provided by such company pursuant to section 26-260 of this code. Nothing in this subdivision shall be construed to limit the ability of an owner to seek recovery of such costs and expenses from any other party.~~

~~***Local Law 31-2005~~

~~h. In addition, such costs and expenses shall constitute a lien on the land and building on which the sign was located which may be entered and enforced pursuant to section 26-128 of this code in the same manner as an unpaid fee.~~

~~i. The commissioner shall adopt rules to provide for the storage and disposal of any sign or sign structure removed pursuant to this section. If the identity and address of the owner of such property is reasonably ascertainable, notice of the removal shall be sent to the owner within a reasonable period of time after the removal. If such property is not claimed within thirty days after its removal it shall be deemed to be abandoned and may be sold at a public auction after having been advertised in the City Record and the proceeds paid into the general fund or if the commissioner determines that the property is not saleable, he or she may turn over such property to the department of sanitation for disposal. Property removed pursuant to this section shall be released to the owner or other person lawfully entitled to possession upon payment of the costs of removal and storage as set forth in the rules of the department and any fines or civil penalties imposed for the violation or, if an action or proceeding for the violation is pending in court or before the environmental control board, upon the posting of a bond or other form of security acceptable to the department in an amount which will secure the payment of such costs and any fines or civil penalties which may be imposed for the violation.~~

~~j. For the purposes of this section the terms "sign" and "surface area", in reference to a sign, shall be as defined under section 12-10 of the zoning resolution.~~

~~k. An order of the commissioner issued pursuant to subdivision e of this section shall be a final determination of the commissioner for purposes of review pursuant to article seventy eight of the civil practice law and rules. Notwithstanding any inconsistent provision of paragraph (a) of subdivision six of section six hundred sixty-six of the New York city charter, such order shall not be subject to review by the board of standards and appeals.~~

~~***Local Law 14-2001.~~

~~§[643a-14.0] 26-128 Liens on premises for inspection, reinspection, examination, service or permit fees.-~~

a. Any unpaid fee for an inspection, reinspection, examination or service performed by the department, and all permits issued by the department, pursuant to law shall constitute a lien upon the land and buildings upon or in respect to which such inspection, reinspection, examination or service was performed or permit issued, as hereinafter provided.

b. There shall be filed in the office of the department a record of all fees for inspections, reinspections, examinations or services performed and all permits issued by or on behalf of the department. Such records shall be kept on a building by building basis and shall be accessible to the public during business hours. An entry of a fee on the records of the department shall constitute notice to all parties.

c. All such unpaid fees shall constitute a lien upon the land and building upon, or in respect to which, such inspection, reinspection, examination or service was performed or permit issued when the amount thereof shall have been definitely computed as a statement of account by the department and the department shall cause to be filed in the office of the city collector an entry of the account stated in the book in which such charges against the premises are to be entered. Such lien shall have a priority over all other liens and encumbrances except for the lien of taxes and assessments. However, no lien created pursuant to this section shall be enforced against a subsequent purchaser in good faith or mortgagee in good faith unless the requirements of subdivision b of this section are satisfied.

d. A notice thereof, stating the amount due and the nature of the charge, shall be mailed by the city collector, within five days after such entry, to the last known address of the person whose name appears on the records in the office of the city collector as being the owner or agent or as the person designated by the owner to receive tax bills or, where no name appears, to the premises, addressed to either the owner or the agent.

e. If such charge is not paid within thirty days from the date of entry, it shall be the duty of the city collector to receive interest thereon at the rate of fifteen percent per annum, to be calculated to the date of payment from the date of entry.

f. Such charge and the interest thereon shall continue to be, until paid, a lien on the premises. Such lien shall be a tax lien within the meaning of sections 11-319 and 11-401 of the code and may be sold, enforced or foreclosed in the manner provided in chapter three or four of title eleven of such code or may be satisfied in accordance with the provisions of section thirteen hundred fifty four of the real property actions and proceedings law.

g. Such notice mailed by the city collector pursuant to this section shall have stamped or printed thereon a reference to this section.

h. In any proceedings to enforce or discharge a lien created pursuant to this section the validity of the lien shall not be subject to challenge based on:

- (1) The lawfulness of the inspection, reinspection, examination, service or permit, or
- (2) The propriety and accuracy of the fee for which a

lien is claimed, except as provided in this section.

i. No such challenge may be made except by (1) the owner of the property, or (2) a mortgagee or lienor whose mortgage or lien would, but for the provisions of this section, have priority over the department's lien.

~~§[644-1.0] 26-129 Record of applications.-~~

Each borough superintendent shall keep a record of all applications presented to him or her concerning, affecting or relating to the construction, alteration or removal of buildings. Such record shall include the date of the filing of each such application; the name and address of the applicant; the name and address of the owner of the land on which the building mentioned in such application is situated; the names and addresses of the architect and builder employed thereon; a designation of the premises by street number, or by any means sufficient to identify the same;* statement of the nature and proposed use of such building; and a brief statement of the nature of the application, together with a memorandum of the decision of the borough superintendent upon such application and the date of the rendition of such decision. The books containing such records are hereby declared to be public records, and shall be open to inspection at all reasonable times.

**Colon enacted; semicolon probably intended.*

~~§[644-2.0] 26-130 Borough superintendents to furnish tax department with copies of permits.-~~

Whenever any permit shall be granted by the commissioner or any borough superintendent for the erection or alteration of any building or for the installation or alteration of any service equipment therein, a copy of such permit shall be furnished by the commissioner or such superintendent to the department of finance within five days after the issuance of such permit.

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**SUBCHAPTER 2
LICENSES**

TABLE OF CONTENTS

Art.
[Sec]* or Sec.**

Art. 1 General Provisions

[1.0]	131	General License Requirements
[1.1]	132	Application for License
[1.2]	133	Qualifications of Applicant
[1.3]	134	Examination of Applicant
[1.4]	135	Exemptions from Examination
[1.5]	136	Issuance of License
[1.6]	137	Term of License; Renewal
[1.7]	138	Use of License
[1.8]	139	Revocation of Licenses
[1.9]	140	Violations and Penalties

**Art. 2 Master Plumber License; Master Fire
Suppression Piping Contractor License**

[2.0]	141	Definitions
[2.1]	142	Requirement of License
[2.2]	143	Exemption
[2.3]	144	License Board
[2.4]	145	Certificate Application
[2.5]	146	License Qualifications
[2.6]	147	License Fees
[2.7]	148	Certificate of Competence; Licensed Plumber Plate
[2.8]	149	Business Operation, Master Plumbers
[2.9]	150	Expiration and Renewal of License
	150.1	Renewals of Master Plumber and Fire Suppression Piping Contractor Licenses
[2.10]	151	Suspension; Revocation of License
[2.11]	152	Practice Without License and Other Violations; Penalties; Actions for Penalties
[2.12]	153	Publication of a Roster of Licensees
	153.1	Waiver of Examinations

Art. 3 Welder License

[3.0]	154	Requirement of License
[3.1]	155	License Applications
[3.2]	156	License Qualifications
[3.3]	157	License Fees
[3.4]	158	License Conditions

**Art. 4 High-Pressure Boiler Operating Engineer
and Portable High-Pressure Boiler
Operating Engineer Licenses**

[4.0]	159	Requirement of License
[4.1]	160	Definition
[4.2]	161	License Applications
[4.3]	162	License Qualifications
[4.4]	163	License Fees
[4.5]	164	License Conditions
[4.6]	165	Licensing of Existing Operating Engineers

Art. 5 Hoisting Machine Operator License

[5.0]	166	Requirement of License
[5.1]	167	License Applications
[5.2]	168	Classification of Licenses
[5.3]	169	License Qualifications
[5.4]	170	License Fees
[5.5]	171	License Conditions

Art. 6 Rigger License

[6.0]	172	Requirements of License
[6.1]	173	Exemptions
[6.2]	174	Classification of Rigger Licenses
[6.3]	175	License Applications
[6.4]	176	Master Rigger Qualifications
[6.5]	177	Special Rigger Qualifications
[6.6]	178	Bond Requirements
[6.7]	179	Workers' Compensation
[6.8]	180	License Fees
[6.9]	181	License Conditions
	181.1	Violations and Penalties

Art. 7 Sign Hanger Licenses

[7.0]	182	Requirement of License
[7.1]	183	Classification of Sign Hanger Licenses
[7.2]	184	Exemptions
[7.3]	185	License Applications
[7.4]	186	Master Sign Hanger Qualifications
[7.5]	187	Special Sign Hanger Qualifications
[7.6]	188	Bond Requirements
[7.7]	189	Workers' Compensation
[7.8]	190	License Fees
[7.9]	191	License Conditions

Art. 8 Oil-Burning Equipment Installer License

[8.0]	192	Requirement of License
[8.1]	193	Classification of Oil Burning Equipment Installer Licenses
[8.2]	194	License Applications
[8.3]	195	Class A Oil Burning Equipment Installer Qualifications
[8.4]	196	Class B Oil Burning Equipment Installer Qualifications
[8.5]	197	Bond Requirement
[8.6]	198	License Fees
[8.7]	199	License Conditions

Art. 9 Concrete Testing Laboratory License

[9.0]	200	Requirement of License
[9.1]	201	License Applications
[9.2]	202	License Qualifications
[9.3]	203	License Fees
[9.4]	204	License Conditions

Art. 10 Supported Scaffold Certificate of Completion

204.1	Requirements of Certificate of Completion
204.2	Exemptions
204.3	Issuance of Supported Scaffold Certificate of Completion; Qualifications
204.4	Issuance of Supported Scaffold User Certificate
204.5	Violations and Penalties

Art. 11 General Contractor Registration

204.11 General Contractor
 204.12 Requirement of Registration
 204.13 Unlawful Use of General Contractor Title
 204.14 Compliance with Other Provisions
 204.15 Registration Fees
 204.16 Application Requirements
 204.17 Insurance
 204.18 Warranties
 204.19 Duties and Responsibilities
 204.20 Seizure, Forfeiture
 204.21 Fines; Issuance, Renewal, Suspension and Revocation of Registration
 204.22 Violations and Penalties

* "B26" omitted from section numbers in this column.

** "26" omitted from section numbers in this column.

ARTICLE 1 GENERAL PROVISIONS

~~§[26-1.0] 26-131 General license requirements.~~ It shall be unlawful, on and after December sixth, nineteen hundred sixty eight, for any person to engage in or carry on in the city any business, trade or calling regulated by this subchapter, without having first obtained a license therefor from the commissioner in accordance with and subject to the provisions of this subchapter, except that any certificates of qualification or licenses issued for any such business, trade or calling issued by the department, or by any other city department or agency, prior to December sixth, nineteen hundred sixty eight, shall continue to remain in full force and effect until the expiration or termination thereof in accordance with the terms thereof, unless sooner revoked or suspended for cause as hereinafter provided.

~~§[26-1.1] 26-132 Application for license.~~

~~All applications for licenses shall be submitted on forms furnished by the department, and shall be accompanied by the required fee, as hereinafter provided. Each application for a license shall set forth the name, residence address and business address of the applicant, and such information and supporting data concerning his or her qualifications for the license as the commissioner may require.~~

~~*§[26-1.2] 26-133 Qualifications of applicant.~~ All applicants for licenses shall be at least eighteen years of age, shall be able to read and write the English language, shall be of good moral character, and shall meet the qualifications prescribed for the particular license, as hereinafter provided.

~~*Local Law 55-1989.~~

~~**§[26-1.3] 26-134 Examination of applicant.~~ Every applicant for a license shall be examined as to his or her fitness and qualifications [†]therefor in accordance with

~~rules and regulations adopted and promulgated by the commissioner under and pursuant to the provisions of chapter forty five of the charter. The commissioner may require the applicant to submit to an oral, written and practical examination or any or all of said examinations; and such examinations and investigations required to determine the fitness and qualifications of said applicant shall, upon the request of the commissioner, be conducted by the department of citywide administrative services, which shall certify the results thereof, pursuant to the provisions of section eight hundred eighteen of the charter.~~

~~**Local Law 59-1996.~~

~~†As enacted but "therefore" probably intended.~~

~~§[26-1.4] 26-135 Exemptions from examination.~~

~~Notwithstanding the provisions of section 26-134 of this subchapter, the commissioner shall have the power to exempt from examination any person who, prior to December sixth, nineteen hundred sixty eight, held a license or was otherwise qualified under the provisions of the code theretofore in effect.~~

~~§[26-1.5] 26-136 Issuance of license.~~

~~The commissioner shall issue a license to each applicant who shall have submitted satisfactory evidence of his or her qualifications, and shall have satisfactorily passed all required examinations to determine his or her fitness and qualifications, provided that no license shall be issued unless and until the applicant shall have paid the required fee therefor and complied with such other and further requirements for the particular license as may be hereinafter provided. All licenses issued by the commissioner shall have his or her signature affixed thereto; but the commissioner may authorize any subordinate to affix such signature.~~

~~**§[26-1.6] 26-137 Term of license and registrations; renewal.~~

~~All licenses and registrations, except for plumbing licenses, fire suppression piping contractor licenses and general contractor registrations, issued by the commissioner under the provisions of this subchapter shall expire one year from the date of issuance thereof, and may be renewed annually, provided that application for renewal of the license or registration is made thirty calendar days prior to the expiration date of the license or registration. A plumbing license, a fire suppression piping contractor license and a general contractor registration shall expire two years from the date of issuance thereof, and may be renewed every two years thereafter, provided that application for renewal of the license or registration is made between thirty and sixty calendar days prior to its expiration date. All applications for renewal of a license or registration shall be accompanied by the required renewal fee. If application for renewal is not made as provided above, the commissioner may, nevertheless, renew the license or registration provided the applicant pays an additional fee in an amount specified by rule of the department, except as otherwise provided in this subchapter, and provided~~

Title 26 / Subchapter 2

further that the applicant satisfies the commissioner as to his or her qualifications.

~~Local Law 36-2007; Local Law 51-2001.~~

~~*§[26-1.7] 26-138 Use of license.~~

a. ~~No holder of a license issued under this subchapter shall authorize, consent to or permit the use of his or her license by or on behalf of any other person, and subject to the provisions of section 26-131 of this subchapter, no person who has not qualified and obtained a license under this subchapter shall hold himself or herself out to the public as licensed or as the holder of a license issued under this subchapter, either directly or indirectly, by means of signs, sign cards, metal plates, stationery, or in any other manner whatsoever.~~

b. ~~Except for plumbing licenses, and fire suppression piping contractor licenses, nothing herein contained, however, shall be construed to prohibit the use of a license by the holder thereof for or on behalf of a partnership, corporation or other business association, provided that at least one member of the partnership or at least one officer of the corporation is licensed for the same business, trade or calling, and that all work performed~~

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by such partnership or corporation is performed by or under the direct supervision of such license holder or holders.

c. ~~For plumbing licenses, nothing herein contained, however, shall be construed to prohibit the use of a license by the holder thereof for or on behalf of a partnership, corporation or other business association, provided that fifty one percent or more of the control or voting capital stock of such partnership, corporation, or other business association is owned by one or more holders of licenses for the same business trade or calling and that all work performed by such partnership, corporation or other business association is performed by or under the direct and continuing supervision of such license holder or holders. For plumbing licenses, however, where previous to the effective date of this code, a company, corporation, partnership or other business association or its predecessor has been doing plumbing work, it may continue to do so in any one or more of said business forms without complying with the foregoing, if application is made to the department previous to six months after the effective date of this subdivision as amended and necessary evidence shall be furnished within one year of such effective date, when such company, corporation, partnership or other business association or its predecessor has employed an average of ten or more journeymen plumbers doing plumbing work for at least five days a week for a period of ten years or more, such period need not be consecutive but must have occurred within a period of twenty years and provided, however, that such plumbing business must continue to have all plumbing work conducted under the management and direction of a licensed master plumber employed by such plumbing business and that said licensed master plumber is not otherwise interested in, associated with or employed by any other plumbing business operating in this city except as a joint venture in which the said master plumber's employer is one of the joint venturers.~~

d. ~~For fire suppression piping contractor licenses, nothing herein contained, however, shall be construed to prohibit the use of a license by the holder thereof for or on behalf of a partnership, corporation or other business association, provided that fifty one percent or more of the control or voting capital stock of such partnership, corporation, or other business association is owned by one or more holders of licenses for the same business trade or calling and that all work performed by such partnership, corporation or other business association is performed by or under the direct and continuing supervision of such license holder or holders. For fire suppression piping contractor licenses, however, where previous to the effective date of this subdivision, a company, corporation, partnership or other business association or its predecessor has been doing fire suppression piping contractor work, it may continue to do so in any one or more of said business forms without complying with the foregoing, if application is made to the department previous to six~~

~~months after the effective date of this subdivision and necessary evidence shall be furnished within one year of such effective date when such company, corporation, partnership or other business association [sic] or its predecessor has employed an average of ten or more journeymen doing fire suppression piping contractor for at least five days a week for a period of ten years or more, such period need not be consecutive but must have occurred within a period of twenty years and provided, however, that such fire suppression piping contractor business must continue to have all fire suppression piping contractor work conducted under the management and direction of a licensed master fire suppression piping contractor employed by such fire suppression piping contractor business and that said licensed master fire suppression piping contractor is not otherwise interested in, associated with or employed by any other fire suppression piping contractor business operating in this city except as a joint venture in which the said master fire suppression piping contractor's employer is one of the joint venturers.~~

~~*Local Law 55-1989.~~

~~§[B26-1.8] 26-139 Revocation of licenses.~~ The commissioner shall have power to revoke or suspend any license upon proof of fraud, deceit, collusion or misrepresentation on the part of the holder in obtaining the license or any renewal thereof, or upon proof of violation of or failure to comply with the provisions of the building code and other applicable laws, rules or regulations relating to the business, trade or calling of the licensee, provided that the commissioner shall not revoke or suspend any license for any cause, unless and until the holder shall have been given at least five calendar days' prior notice in writing and an opportunity to be heard. However, notwithstanding the foregoing, when the public safety may be imminently jeopardized the commissioner shall have the power, pending a hearing and determination of charges, to forthwith suspend any license for a period not exceeding five working days.

~~§[B26-1.9] 26-140 Violations and penalties.~~ Any person who shall violate any of the provisions of this subchapter shall be guilty of a misdemeanor and upon conviction thereof, shall be punishable by a fine not to exceed five hundred dollars, or by imprisonment for a period not to exceed six months, or both. Such person shall also be subject to the payment of a penalty of not more than two hundred fifty dollars, to be recovered in a civil action brought in the name of the city in any court of record in the city.

ARTICLE 2

***MASTER PLUMBER LICENSE; MASTER FIRE SUPPRESSION PIPING CONTRACTOR LICENSE**

*** §[B26-2.0] 26-141 Definitions.** For the purposes of this article:

a. "Board" means the license board established pursuant

to section 26-144 of this article.

b. "Certificate" means the certificate of competence as a master plumber or master fire suppression piping contractor issued by the commissioner to an individual who satisfies the requirements of this subchapter for certification as a master plumber or a master fire suppression piping contractor.

e. "Direct and continuing supervision" means responsible control exercised by a licensed master plumber or a licensed master fire suppression piping contractor, either personally or through one or more levels of competent supervision, over those persons in the direct employ of the licensed individual, partnership, corporation or other business association as authorized by the code performing the actual work of installing, maintaining, repairing, modifying, extending or altering plumbing or gas piping, or the actual work as permitted by the class of license held by the licensee for which such licensee assumes full responsibility. Such control shall be evidenced by such licensee's signature and seal upon any required statements, applications and/or permits.

d. "Direct employ" means that an individual performing the actual work of installing, maintaining, repairing, modifying, extending or altering plumbing or gas piping is an employee of the licensed master plumber, partnership, corporation or other business association as authorized by the code, having responsibility for such work, or an individual performing the actual work of installing, maintaining, repairing, modifying, extending or altering any fire suppression piping system or any part thereof as permitted by the class of license held by the licensee is an employee of the licensed master fire suppression piping contractor, partnership, corporation or other business association as authorized by this code having responsibility for such work. The employer shall not be restricted in the employer's right to use those employees in the employer's work force with proper and necessary training to perform the required work. Such employment shall be evidenced by payroll records such as social security payments, income tax withholding or the disbursement of other funds as required by law for the benefit of such employee.

*e. "Licensed master plumber" means an individual, partnership, corporation or other business association authorized under the provisions of this subchapter to install, maintain, repair, modify, extend or alter plumbing, standpipe where a sprinkler is not or is not now being connected, domestic water, connections to the domestic water, combination domestic water and reserve standpipe supply tank, up to and including the roof tank check valve, gas piping or any piping system referred to in subchapter sixteen of chapter one of title twenty seven of the code and in reference standard RS-16 and up to thirty sprinkler heads off the domestic water in any one building in the city of New York which has satisfied the provisions of this subchapter for operation pursuant to a plate, certificate issued to an individual and seal.

f. "Licensed master fire suppression piping contractor"

means an individual, partnership, corporation or other business association authorized under the provisions of this subchapter to install, maintain, repair, modify, extend or alter a fire suppression piping system in the city of New York who has satisfied the provisions of this subchapter for operation pursuant to a plate, certificate issued to an individual and seal.

g. "Plate" means a licensed master plumber or licensed master fire suppression piping contractor plate issued by the commissioner to an individual who has satisfied the provisions of this subchapter for certification and license as a master plumber or master fire suppression piping contractor. The plate shall permit the individual to perform the work and services permitted within the provisions of this subchapter.

h. "Fire suppression piping system" means any system including any and all equipment and materials in connection therewith with the exception of any electrical components which must be installed by a licensed electrician pursuant to this code, the purpose of which is to control, to contain, to suppress or to extinguish fire and shall include:

*1. the systems, materials and equipment described or referred to in articles one through four of subchapter seventeen of chapter one of title twenty seven of the code and in reference standards RS-17-1, RS-17-2, RS-17-2A and RS-17-2B of the code, with the exception of any electrical components which must be installed by a licensed electrician pursuant to this code, which systems, materials or equipment shall include any standpipe system to which a sprinkler system is or is now being connected; provided, however, that such systems, materials or equipment shall not include any systems, materials or equipment specified in subdivision e of this section, with the exception of up to thirty sprinkler heads off the domestic water in any one building; or

2. any dry, liquid or gaseous chemical fire containment, suppression, control or extinguishment system or any other device or means of control, suppression, containment or extinguishment of fire, with the exception of any electrical components which must be installed by a licensed electrician pursuant to this code, but not including portable fire extinguishers.

i. "Combined standpipe system" means a standpipe to which a sprinkler system is connected or is now being connected, as shown by drawings approved by the department.

j. All other words mean the same as the definitions provided in section 27-232 of the code.

*Local Law 55-1989.

*Local Law 10-1999.

~~§[B26-2.1] 26-142 Requirement of license.~~

a. It shall be unlawful for any person:

1. (a) to install, maintain, repair, modify, extend or alter a plumbing standpipe where a sprinkler is not or is not now being connected, domestic water, connections to the domestic water, combination domestic water and standpipe supply tank, up to and including the roof tank

check valve, gas piping or any piping system referred to in subchapter sixteen of chapter one of title twenty seven of the code and in reference standard RS 16 and up to twenty sprinkler heads off the domestic water in any one building, in the city of New York unless such person is a licensed master plumber, partnership, corporation or other business association as permitted by this code and unless such work is performed under the direct and continuing supervision of a licensed master plumber;

— (b.) — to install, maintain, repair, modify, extend or alter any fire suppression piping system in the city of New York unless such person is a licensed master fire suppression piping contractor, partnership, corporation or other business association as permitted by this code and unless such work is performed under the direct and continuing supervision of a licensed master fire suppression piping contractor; or

2. (a.) to use the title licensed master plumber, master plumber, or any other title in such manner as to convey the impression that such person is a licensed master plumber unless such person is licensed in accordance with provisions of this subchapter;

— (b.) to use the title licensed master fire suppression piping contractor, master fire suppression piping contractor, or any other title in such manner as to convey the impression that such person is a licensed master fire suppression piping contractor unless such person is licensed in accordance with the provisions of this subchapter.

b. A certificate of competence as a master plumber or master fire suppression piping contractor shall be issued only to an individual.

e. There shall be three classes of licenses for master fire suppression piping contractors which are as follows:

1. Class A. The holder of a class A master fire suppression piping contractor license is authorized to perform any work in connection with any and all fire suppression piping systems as defined in paragraphs one and two of subdivision h of section 26-141.

2. Class B. The holder of a class B master fire suppression piping contractor license is authorized to perform any work in connection with any and all fire suppression piping systems as defined in paragraph one of subdivision h of section 26-141.

3. Class C. The holder of a class C master fire suppression piping contractor license is authorized to perform any work in connection with any and all fire suppression piping systems as defined in paragraph two of subdivision h of section 26-141.

d. 1. No individual, corporation, partnership or other business association shall install, maintain, repair, modify, extend or alter a plumbing, standpipe where a sprinkler is not or is not now being connected, domestic water, connections to the domestic water, combination domestic water and reserve standpipe supply tank, up to and including the roof tank check valve, gas piping or any piping system referred to in subchapter sixteen of

chapter one of title twenty seven of the code and in reference standard RS 16 and up to twenty sprinkler heads off the domestic water in any one building in the city of New York or employ a name incorporating the term plumber or plumbing or any modification or derivative of such terms unless such individual has been issued a plate or, a corporation, partnership or other business association is operating pursuant to a plate authorizing the conduct of a plumbing contracting business in the city of New York.

2. No individual, corporation, partnership or other business association shall install, maintain, repair, extend or alter a fire suppression piping system, or any part thereof, in the city of New York or employ a name incorporating the term fire suppression piping or any modification or derivative of such term unless such individual has been issued a plate or, a corporation, partnership or other business association is operating pursuant to a plate authorizing the conduct of a fire suppression piping contracting business in the city of New York except as otherwise provided by this subdivision.

e. 1. No individual, corporation, partnership or other business association shall conduct a plumbing contracting business in the city of New York, unless:

(a) no less than fifty one percent of the control or voting capital stock of such entity is owned by one or more individuals who are licensed master plumbers except as otherwise provided; and

(b) all plumbing or gas piping work performed by such entity is performed by or under the direct and continuing supervision of a licensed master plumber; and

(c) The person in charge of such work is a licensed master plumber; and

(d) the persons actually performing such work are in the direct employ of such licensed master plumber, partnership, corporation or other business association as authorized by the code.

2. No individual, corporation, partnership or other business association shall conduct any fire suppression piping contracting business in the city of New York unless:

(a) no less than fifty one percent of the control or voting capital stock of such entity is owned by one or more individuals who are licensed master fire suppression piping contractors except as otherwise provided; and

(b) all work in connection with a fire suppression piping system performed by such entity is performed by or under the direct and continuing supervision of a licensed master fire suppression [sic] piping contractor; and

(c) the person in charge of such work is a licensed master fire suppression piping contractor; and

(d) the persons actually performing such work are in the direct employ of such licensed master fire suppression piping contractor, partnership, corporation or other business association as authorized by the code.

~~*Local Law 55-1989.~~

~~** §[B26-2.2] 26-143 Exemption. The provisions of~~

~~section 26-142 of this subchapter shall not apply to minor plumbing alterations or ordinary plumbing repairs, as defined and delimited by sections 27-124, 27-125 and 27-126 of the code, or to the installation or alteration of gas service piping and gas meter piping, including meters, valves, regulators or related equipment, when such work is to be performed, serviced and maintained by utility corporations subject to the jurisdiction of the public service commission nor shall the provisions of section 26-142 apply to minor alterations, ordinary repairs and maintenance of a fire suppression piping system.~~

~~***Local Law 55-1989.~~

~~***§[B26-2.3] 26-144 License board.~~

~~a. The commissioner shall appoint annually each member of a license board, to investigate and report, at the request of the commissioner, on all proposed suspensions or revocations of license, make recommendations regarding the surveillance of the practices of licensed master plumbers and licensed master fire suppression piping contractors, and the policing of the activities of unlicensed practitioners, and engage in such other functions as herein provided. The commissioner may, for cause shown, remove any member of the license board and shall fill any vacancy therein. Such board shall consist of:~~

- ~~1. Two officers or employees of the department representing the commissioner.~~
- ~~2. Five individuals who are licensed master plumbers at least four of whom shall be selected from nominees of the New York City contracting plumbing association whose members perform the largest dollar value of work within the city and one of whom shall be the holder of a class A or class B master fire suppression piping contractor license.~~
- ~~3. Two individuals who are licensed master fire suppression piping contractors both of whom shall hold a class A license and shall be selected from nominees of the New York city sprinkler/fire suppression piping contractors association whose members perform the largest dollar value of work within the city.~~
- ~~4. A professional engineer having at least five years' experience in the design of plumbing systems.~~
- ~~5. A registered architect.~~
- ~~6. A professional engineer who is a full member of the society of fire protection engineers.~~
- ~~7. A resident of the city.~~
- ~~8. Two officers or employees of the fire department representing the fire commissioner.~~

~~b. One of the members of the board who is an officer or employee of the department representing the commissioner shall serve as chairperson and all members shall serve without compensation. Eight members including the chairperson, who shall be entitled to vote, shall constitute a quorum of the board for the transaction of business. All actions shall be conducted by majority vote except as otherwise provided.~~

~~c. The commissioner may request the license board to investigate and hear any or all written complaints against anyone allegedly acting in violation of the provisions of~~

~~this subchapter and to report to the commissioner its findings and recommendations. It shall keep minutes of its proceedings and hearings and records of its investigations. Upon the holding of any hearing, the chairperson of the board presiding at such hearing may administer oaths, and the board may issue and cause to be served subpoenas requiring the attendance of witnesses and the production of books and papers pertinent to any hearing held by it upon written complaint. Such subpoenas shall by*** signed by the chairperson and the fees and mileage paid to witnesses upon the service of such subpoenas shall be those prescribed by law. The board shall meet at least once a month except during the months of July and August, and at such other times upon call of the chairperson.~~

~~d. The license board may request the commissioner to appoint duly authorized representatives to conduct investigations and other activities incidental to the functions of the license board. Such appointees shall be non voting members of the committee to which they are appointed, and may include personnel who are not department employees who shall serve without compensation. In addition the commissioner may designate such employees of the department as he or she deems necessary to the service and support of the license board.~~

~~e. The license board shall make recommendations to the commissioner regarding plumbing and fire suppression piping practices and code applications.~~

~~f. The license board shall make recommendations to the commissioner regarding plumbing and fire suppression piping regulations and legislation.~~

~~***Local Law 55-1989.~~

~~***As enacted but "be" probably intended.~~

~~§[B26-2.4] 26-145 Certificate application.~~ All applications for a certificate shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for a certificate shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.

~~***§[B26-2.5] 26-146 Certificate qualifications.~~ In addition to meeting the general qualifications prescribed in section 26-133 of this subchapter:

~~a. all applicants for a master plumber certificate shall submit satisfactory proof establishing that the applicant:~~

- ~~1. has had at least seven years' prior experience in the design and installation of plumbing systems in the United States; or~~
- ~~2. has received a bachelors' degree in engineering or appropriate engineering technology from a college or university registered by the state department of education and has had at least three years prior experience in the design and installation of plumbing systems in the United States.~~

~~b. all applicants for a master fire suppression piping contractor certificate shall submit satisfactory proof establishing that the applicant:~~

~~1. has had at least seven years' prior experience in the design and installation of fire suppression piping systems or four years in the design and installation of plumbing systems and three years in the design and installation of fire suppression piping systems in the United States, for the class of license for which application is made; or~~
~~2. has received a bachelors' degree in engineering or appropriate engineering technology from a college or university registered by the state department of education and has had at least three years' prior experience in the design and installation of fire suppression piping systems in the United States, for the class of license for which application is made.~~

~~e. Applicants who were engaged in plumbing or fire suppression piping work as above provided, prior to entering the armed services of the United States shall be permitted to credit their time in the service as experience in the plumbing or fire suppression piping business, as above provided; but such service credit shall not exceed one third of the time required for experience in this section.~~

~~*Local Law 55-1989.~~

~~* §[B26-2.6] 26-147 License fees. a. The fee for obtaining a certificate shall be two hundred dollars; and the biennial renewal fee to maintain the certificate shall be one hundred dollars.~~

~~b. The fee for obtaining a plate shall be seventy-five dollars, and fifty dollars for a seal. If the plate or seal is lost, and an affidavit is submitted establishing such fact, a new plate or seal shall be issued by the commissioner upon application and payment of a fee of one hundred dollars for a plate and seventy-five dollars for a seal. The biennial renewal fee to retain such plate and seal shall be one hundred and fifty dollars. Such plate or seal shall remain the property of the city of New York. If application for renewal is not made between thirty and sixty calendar days prior to the expiration date of the license, the applicant shall be required to pay an additional fee of fifty dollars.~~

~~*Local Law 55-1989; Local Law 51-2001.~~

~~*§[B26-2.7] 26-148 Certificate of competence; plate; seal.~~

~~a. A certificate of competence shall be issued by the commissioner to an applicant who satisfactorily complies with the experience and examination requirements of this subchapter for a certificate, upon payment of a specified fee. Such certificate shall contain the full name of the individual and a certificate number, and shall be signed by the commissioner.~~

~~b. The issuance of a certificate shall constitute evidence that the person named therein is qualified to obtain a plate and seal while the certificate is valid. The certificate shall entitle the applicant to obtain a plate and seal from the commissioner upon approval of an application showing compliance with the requirements of this subchapter and upon the payment of the specified fees. The holder of a certificate shall not be entitled to perform work or hold him or herself out to perform work as a licensed master~~

~~plumber or licensed master fire suppression piping contractor until such plate and seal have been obtained.~~

~~e. The holder of a certificate shall obtain a plate and seal upon establishing either:~~

~~1. a plumbing contracting business conforming to the requirements of this subchapter and any rules and regulations promulgated by the commissioner. No holder of a certificate shall enter into any contractual agreement to install or alter any plumbing, gas piping, or any piping system referred to in reference standard RS-16, other than an employment agreement with a licensed master plumber, partnership, corporation or other business association as authorized by this code, other than on behalf of an employer holding such plate and seal, unless and until he or she shall have obtained a plate and seal.~~

~~2. a fire suppression piping contracting business conforming to the requirements of this subchapter and any rules and regulations promulgated by the commissioner. No holder of a certificate shall enter into any contractual agreement to install or alter any fire suppression piping system other than employment agreement with a licensed master fire suppression piping contractor, partnership, corporation or other business association as authorized by this code, other than on behalf of an employer holding such plate and seal, unless and until he or she shall have obtained a plate and seal.~~

~~d. The plate and seal shall contain the full name of the holder of the certificate with the words "licensed plumber" or "licensed master fire suppression piping contractor Class A, B or C", and the license number. The plate shall set forth the business organization which is operating pursuant to the plate. The plate shall be prominently and conspicuously displayed at the place of business registered with the department.~~

~~e. Prior to the issuance of any plate or seal, or renewal thereof, the applicant shall file with the department a liability bond and a property damage bond, or in lieu thereof, policies of insurance. The minimum amount of the bonds or insurance policies shall be subject to the approval of the commissioner, conditioned upon the observance of all applicable laws, rules and regulations governing the licensed activities and upon the payment of any judgment awarded for bodily injury, death or damage to or destruction of property occurring in the performance of any regulated work by or under the supervision of such licensee. Each bond or policy of insurance shall contain a provision for continuing liability notwithstanding any recovery thereunder. In addition, prior to the issuance of any plate or seal, or any renewal thereof, the applicant shall file with the department satisfactory evidence of compliance with the workers' compensation law and the disability benefits law.~~

~~f. All business vehicles, advertising and stationery used in connection with work or services requiring:~~

~~1. a master plumber license shall display prominently the full name of the licensee, the words "N.Y.C.licensed plumber", and the licensee's plate number and business~~

address. If the business is conducted under a trade name, or by a partnership or corporation, the trade name, partnership or corporate name shall be placed immediately above the full name or names of the certified master plumber or master plumbers to whom the plate was issued.

2. a master fire suppression piping contractor license shall display prominently the full name of the licensee, the words "N.Y.C. licensed master fire suppression piping contractor class A, B, or C," and the licensee's plate number and business address. If the business is conducted under a trade name, or by a partnership or corporation, the trade name, partnership or corporate name shall be placed immediately above the full name or names of the certified master fire suppression piping contractor or contractors to whom the plate was issued.

g. If a licensed master plumber or licensed master fire suppression piping contractor withdraws from a partnership, corporation, or other business association operating pursuant to such plate, the right of such business to perform the work and service requiring such license shall lapse if the provisions of this subchapter are no longer satisfied.

h. Not more than one plate and seal shall be issued to the holder of a certificate, and upon such individual's death or retirement from performing work and services, or upon the revocation or suspension of his or her certificate, his or her plate and seal shall immediately be surrendered to the commissioner. Nothing contained herein shall be construed to prevent the legal representative of a deceased plate and seal holder, with the consent of the commissioner, from retaining such plate and seal for the purpose of completing all unfinished work of such deceased licensee for which plans have been approved and a permit issued, provided such work is performed by or under the direct and continuing supervision of a licensed master plumber or licensed master fire suppression piping contractor as appropriate and is completed within one year from the date of the death of the original licensee.

i. The licensed master plumber or licensed master fire suppression piping contractor, partnership, corporation or other business association as authorized by the code, shall maintain a place of business within the city of New York at the time of issuance of the plate and during the life thereof which is in conformance with the zoning regulations and the rules and regulations of the commissioner and which complies in other respects with the building code. The licensee shall promptly notify the commissioner of any change of address of his or her place of business within thirty calendar days of such change.

j. 1. An individual who is a licensed master plumber whose interest or ownership in a corporation, partnership or other business association constitutes any portion of the fifty one per cent interest or control required by this subchapter shall be prohibited from possessing an interest or ownership in more than one other plumbing corporation, partnership or other business association at his or her established place of business, where such

interest or ownership would constitute any portion of the fifty one per cent interest or control required by this subchapter. Both corporations, partnerships or other business associations in which the individual who is a licensed master plumber has an interest shall be located at the same place of business. For the purposes of this subdivision, where two or more individuals who are licensed master plumbers possess an interest or ownership in any corporation, partnership or other business association which together represents more than fifty one per cent of the interest or control of such entity, all of such licensees shall be deemed to possess a portion of the fifty one percent interest or control required by this subchapter.

2. An individual who is a licensed master fire suppression piping contractor whose interest or ownership in a corporation, partnership or other business association constitutes any portion of the fifty one per cent interest or control required by this subchapter shall be prohibited from possessing an interest or ownership in more than one other fire suppression piping corporation, partnership or other business association, at his or her established place of business, where such interest or ownership would constitute any portion of the fifty one per cent interest or control required by this subchapter. Both corporations, partnerships or other business associations in which the individual who is a licensed master fire suppression piping contractor has an interest shall be located at the same place of business. For the purposes of this subdivision, where two or more individuals who are licensed master fire suppression piping contractors possess an interest or ownership in any corporation, partnership or other business association which together represents more than fifty one per cent of the interest or control of such entity, all of such licensees shall be deemed to possess a portion of the fifty one per cent interest or control required by this subchapter.

k. Nothing contained in this section shall be construed to prevent an individual, corporation, partnership or other business association authorized under the provisions of this subchapter from entering into a joint venture of limited duration for a particular project with another business entity similarly authorized.

**Local Law 55-1989.*

~~§[B26-2.8] 26-149 Business operation, licensed master plumbers/licensed master fire suppression piping contractors.-~~

a. The master plumber or fire suppression piping contractor, so licensed, shall conduct his or her business to provide direct and continuing supervision in accordance with the provisions of this subchapter.

b. All documents which are required to be filed with any department or agency of the city of New York shall bear the stamp of the seal as well as the signature of such licensee. The licensed master plumber or licensed master fire suppression piping contractor performing the work and services of the licensee shall personally sign all

applications and other documents required to be filed pursuant to the code.

c. All certificates of competence and all plates shall be recorded by the commissioner as provided in section 26-153 of this subchapter.

~~§ Local Law 55-1989.~~

~~§[B26-2.9] 26-150 Expiration and renewal of license.~~

a. All certificates of competence, plates and seals shall expire on the two year anniversary date of the issuance of the certificate, plate and seal. Application for the biennial renewal of certificates, plates and seals shall be made between thirty and sixty days prior to the expiration/anniversary date. The failure of an individual to renew such certificate, plate and seal prior to the expiration/anniversary date shall have the effect of cancellation of the certificate, plate and seal. If a certificate, plate and seal is canceled, the individual shall apply for a new certificate, plate and seal.

b. Failure to apply for renewal of a certificate prior to its expiration shall not deprive the holder of the right of renewal during the ensuing year, except that the fee for such renewal after thirty days prior to the expiration date shall be one hundred dollars instead of fifty dollars.

c. If a holder of a certificate fails to renew his or her certificate for a period up to five years, reinstatement during that period shall occur upon the payment of a fee of fifty dollars for each year or part thereof after the expiration date.

d. If a holder of a certificate fails to renew his or her certificate for a period in excess of five years, the commissioner may require such person to submit to reexamination or to provide evidence of retained proficiency. In addition, the holder shall pay a fee of fifty dollars for each year or part thereof after the expiration date.

e. If a holder of a certificate has held a certificate of competency for five years without a plate and seal, then said person shall submit an affidavit satisfactory to the commissioner stating that over the five year period the individual has been engaged in the design and installation of:

1. Plumbing systems in the United States; or
2. Fire suppression piping systems in the United States.

~~§ Local Law 55-1989; Local Law 51-2001.~~

~~§26-150.1 Renewals of Master Plumber and Fire Suppression Piping Contractor Licenses.~~ A certificate of competence, plate and seal for a licensed master plumber and for a licensed fire suppression contractor shall be renewed provided that the certificate holder shall have satisfactorily completed a seven hour continuing education course approved by the department within two years prior to the renewal date. The content of the course and the qualifications of providers of the course shall be approved by the department in accordance with the rules of the department.

~~§ Local Law 51-2001.~~

~~§[B26-2.10] 26-151 Suspension; revocation of license.~~

a. The commissioner shall have the power to suspend or revoke a certificate of competence and/or a licensee's plate and seal and/or to impose a fine not to exceed five thousand dollars for each finding and/or to order any licensed master plumber or licensed master fire suppression piping contractor to repair damage resulting from any act or omission enumerated in paragraph two of this subdivision upon the recommendation of the board after a hearing and finding of any one or more of the following:

- (1) fraud or deceit in obtaining a certificate, plate or seal; or
- (2) gross negligence, incompetence or misconduct relating to the business, trade or calling of the person who is licensed or certified; or
- (3) fraudulent dealings; or
- (4) failure to comply with the code or any order, regulation or requirement lawfully made by the commissioner; or
- (5) failure to comply with any order, regulation or requirement lawfully made by the commissioner of environmental protection or commissioner of transportation pertaining to water services, house connections or street openings which relate to requirements of this subchapter or made by the fire commissioner relating to fire suppression piping matters; or
- (6) a practice of failing timely to perform or complete contracts relating to home improvements as defined by section 20-386 of the code or a practice of abandoning contracts on residential buildings containing four dwelling units or less.
- (7) poor moral character that adversely reflects on his or her fitness to conduct a plumbing or fire suppression piping contracting business.

b. The chairperson may request three individuals, at least two of whom shall be members of the board, to act as a hearing panel with the approval of the board. The panel shall conduct such hearing and issue a report and recommendation to the board in lieu of the hearing under subdivision a of this section; provided, however, that after such panel has issued a report and recommendation, the board may conduct such further proceedings with respect to the referenced matter as it deems advisable.

c. Any person claiming to have been injured by the fraud, deceit, negligence, incompetence or other misconduct of any person who is licensed or certified may prefer charges against such licensee before the board.

d. All charges and/or specifications shall be submitted by the commissioner in writing to the board or panel. Such charges, and/or specifications, unless dismissed without hearing by the commissioner as unfounded or trivial, shall be heard and determined by the board, with a recommendation to the commissioner.

e. The chairperson shall determine the time and place of such hearing. A copy of the charges and/or specifications, together with a notice of the time and place of hearing,

shall be served upon the accused personally or by certified or registered mail return receipt requested and by ordinary mail at least ten days before the day fixed for the hearing.

f. At such hearing, the accused shall have the right to appear personally, to be represented by counsel, to cross-examine witnesses, and to produce evidence and witnesses in his or her defense.

g. If a majority of the members of the board or hearing panel, as applicable, vote in favor of finding the accused guilty, the board or hearing panel may recommend the revocation or suspension of the certificate, plate and seal of the accused or such other action as it shall deem appropriate.

h. The fees required for the reinstatement of a certificate, plate and seal after suspension or revocation shall be the same as those required to obtain an original certificate, plate and seal. If reinstatement of the certificate, plate and seal, is not requested within thirty days of the lifting of the suspension or revocation, then appropriate late fees shall be imposed.

i. Nothing in this section shall deprive the commissioner of the power to refer an individual upon whom sanctions have been or may be imposed in accordance with this section to any governmental entity, including but not limited to any court of competent jurisdiction, for appropriate action.

**Local Law 55-1989.*

~~§[B26-2.11] 26-152 — Practice without license and other violations; penalties; actions for penalties.~~

a. Any person not authorized to perform the work and services of a licensed master plumber or licensed master fire suppression piping contractor in accordance with the provisions of this subchapter or any person filing or attempting to file a licensed master plumber or licensed master fire suppression piping contractor's statement or other document on behalf of another, or representing himself or herself as another, or giving false or forged evidence of any kind to the commissioner or any other city official, or otherwise violating any of the provisions of this subchapter, shall be subject to a penalty of not less than five hundred dollars nor more than five thousand dollars for the first offense, and not less than one thousand dollars nor more than five thousand dollars for each and every subsequent offense, upon findings after administrative hearings by the board.

**Local Law 55-1989.*

~~§[B26-2.12] 26-153 — Publication of a roster of licensees.~~

a. The commissioner shall publish a complete roster of master plumber licensees and of master fire suppression piping contracting licensees in the City Record. Each roster shall be published biennially, with a supplement published in each alternate year.

b. Each roster shall contain an alphabetical listing of all holders of a certificate of competence. It shall also include the holders' certificate number as well as the

business name and address of his or her employer. An additional list with the same information shall be printed in numerical order by certificate number.

c. Each roster shall also contain an alphabetical listing of corporations, partnerships, business associations and individuals authorized to engage in the plumbing contracting or fire suppression piping business within the city. Next to each business name shall be the name or names of the holders of licensed master plumber or licensed master fire suppression piping contractor plates, plate and seal numbers and business addresses.

d. Each supplement shall contain all the information described in subdivisions b and c of this section.

**Local Law 55-1989.*

~~§ 26-153.1 — Waiver of examinations.~~

a. Any individual who, on or after the effective date of this section shall meet the following qualifications and who, within six months after the effective date of this section shall make application to the department of buildings for a master fire suppression piping contractor license, and within one year shall furnish all necessary evidence, shall be issued a certificate for the particular class for which he or she is qualified without taking the examination for such certificate required by this article, however all other provisions of this article, including but not limited to those governing the fire suppression piping contractor certificate shall apply to those individuals covered by this section.

1. class A Any individual who, during the seven consecutive years immediately preceding his or her application for a master fire suppression piping contractor certificate class A, has been engaged in the business of designing and installing fire suppression piping systems, as defined in paragraphs one and two of subdivision h of section 26-141, primarily in the city of New York.

2. class B Any individual who, during the seven consecutive years immediately preceding his or her application for a master fire suppression piping contractor certificate class B, has been engaged in the business of designing and installing fire suppression piping systems, as defined in paragraph one of subdivision h of section 26-141, primarily in the city of New York.

3. class C Any individual who, during the seven consecutive years immediately preceding his or her application for a master fire suppression piping contractor certificate class C, has been engaged in the business of designing and installing fire suppression piping systems, as defined in paragraph two of subdivision h of section 26-141, but not including any dry chemical system, primarily in the city of New York; or any individual who qualifies under paragraph two of this subdivision may qualify under this paragraph upon the successful completion of an approved course in the design of carbon dioxide and dry, liquid or gaseous chemical extinguishing systems.

b. The department of buildings shall determine whether

~~an individual has been engaged in the business of designing and installing fire suppression piping systems. The following factors may be considered:~~

- ~~1. department of buildings records (i.e. permits, filings, plans, etc.);~~
- ~~2. self employment or employment by a piping contractor engaged in such business;~~
- ~~3. knowledge of applicable law, rules, regulations, directives and memorandums, and recognized national standards.~~

~~*Local Law 55-1989.~~

ARTICLE 3 WELDER LICENSE

~~§[B26-3.0] 26-154 Requirement of license. It shall be unlawful to perform manual welding work on any structural member of any building in the city on and after December sixth, nineteen hundred sixty eight, unless such work is performed by a person licensed as a welder under the provisions of this article, or a person qualified or licensed as a welder prior to December sixth, nineteen hundred sixty eight, as provided in section 26-131 of this subchapter.~~

~~§[B26-3.1] 26-155 License applications. All applications for a welder license shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for a welder license shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.~~

~~§[B26-3.2] 26-156 License qualifications. In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a welder license shall submit satisfactory proof of the applicant's fitness to make structural welds, including his or her ability to pass operator qualification tests.~~

~~§[B26-3.3] 26-157 License fees. The fee for a welder license shall be ten dollars; and the annual renewal fee shall be five dollars.~~

~~§[B26-3.4] 26-158 License conditions. All welder licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter.~~

ARTICLE 4

HIGH-PRESSURE BOILER OPERATING ENGINEER AND PORTABLE HIGH-PRESSURE BOILER OPERATING ENGINEER LICENSES

~~§[B26-4.0] 26-159 Requirement of license.-~~

~~a. It shall be unlawful, on and after December sixth, nineteen hundred sixty eight to operate any high pressure steam boiler for any purpose whatsoever in the city or in connection with any vessel on the waters in and around the city not subject to the jurisdiction of the United~~

~~States government, unless such boiler is operated by or under the supervision and in the presence of a person having the requisite high pressure boiler operating engineer license under the provisions of this article, or a person licensed as a high pressure boiler operating engineer prior to December sixth, nineteen hundred sixty eight, as provided in section 26-131 of this subchapter.~~

~~b. Notwithstanding subdivision a of this section, it shall be unlawful, on and after December third, nineteen hundred seventy to operate a portable high pressure steam boiler for any purpose whatsoever in the city, unless such boiler is operated by or under the supervision and in the presence of a person licensed as a portable high pressure boiler operating engineer.~~

~~§[B26-4.1] 26-160 Definition. For the purposes of this article, a high pressure boiler shall be defined as a boiler that carries a pressure of more than fifteen pounds of steam per square inch and is rated in excess of ten hp. or if such boiler produces hot water at a pressure of one hundred sixty psi or at a temperature over two hundred fifty degrees F.~~

~~§[B26-4.2] 26-161 License applications. All applications for high pressure boiler operating engineer and portable high pressure boiler engineer licenses shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for high pressure boiler operating engineer and portable high pressure boiler operating engineer licenses shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.~~

~~§[B26-4.3] 26-162 License qualifications.-~~

~~a. In addition to the general qualifications prescribed in section 26-133 of this subchapter an applicant for a high pressure boiler operating engineer license shall submit satisfactory proof establishing that he or she:~~

~~* (1) Has been employed as a fireman, oiler, general assistant, journeyman, boiler maker or a machinist to a licensed high pressure boiler operating engineer in a building or buildings in the city of New York for a period of five years of the seven years immediately preceding the date of his or her application, provided however, that, in lieu of the experience requirement contained in this paragraph, an applicant for a high pressure boiler operating engineer license who is employed in a fossil fuel production plant located in the Rockaway Peninsula area of Queens county may submit satisfactory proof establishing that he or she has obtained at least five years experience within the seven years immediately preceding the date of his or her application which shall include at least two years of experience obtained during employment under the supervision of a licensed high pressure boiler operating engineer in a steam generating plant located outside of the city of New York but within the state of New York that is owned and operated by a licensed public~~

utility, and shall also include a separate period of at least three years of experience obtained during employment as a fireman, oiler, general assistant, journeyman, boiler-maker or any comparable position *[sic]* as approved by the commissioner, in such steam generating plant; or

(2) Has received the degree of mechanical engineer from a school or college recognized by the university of the state of New York and has had one year's experience in the operation and maintenance of high pressure boilers under the supervision of a licensed high pressure boiler operating engineer in the city of New York within the seven years immediately preceding the date of his or her application; or

(3) Has been a holder for a period of at least four years of a certificate as engineer issued by a board of examining engineers duly established and qualified pursuant to the laws of the United States or any state or territory thereof, or a certificate as a marine engineer issued by the United States Coast Guard and has had one year's experience in the city of New York in the operation and maintenance of stationary high pressure boiler plants under the supervision of a licensed high pressure boiler operating engineer within the seven years immediately preceding the date of his or her application; provided that the applicant shall have filed with his or her application his or her own signed statement that he or she is the person named in said certificate together with the supporting signed statements by three licensed high pressure boiler operating engineers employed in the city of New York at the time of making of such signed statements; or

(4) Has had direct supervision, care, operation and maintenance of a steam generating plant of a governmental building, having boilers of 150 or more hp., for a period of five years immediately preceding the date of his or her application and has had in addition one year's experience on high pressure boilers under the direct supervision of a licensed high pressure boiler operating engineer in the city of New York, within the seven years immediately preceding the date of his or her application; or

(5) Has successfully completed as a registered apprentice an approved training program recognized by New York state apprenticeship council of at least two years and has had at least three years, experience in the city of New York in the operation and maintenance of high pressure boilers under the supervision of a licensed high pressure boiler operating engineer within the seven years immediately preceding the date of his or her application.

b. In addition to the general qualifications prescribed in section 26-133 of this subchapter, an applicant for a portable high pressure boiler operating engineer's license shall submit satisfactory proof establishing that he or she:

(1) Has been the holder of a basic license as a hoisting machine operator as provided in article five of this subchapter for a period of three years immediately preceding the date of his or her application; and

(2) Has served as a fireman, oiler or assistant engineer

on portable high pressure boilers under the supervision of a licensed portable high pressure boiler operating engineer in the city for a period of three years of the seven years immediately preceding the date of his or her application. However, two of the three years of the aforesaid required experience may be obtained outside the city of New York as a fireman, oiler, assistant engineer or engineer on portable high pressure boilers.

**Local Law 108-1993.*

§[B26-4.4] 26-163 License fees. The fee for a high pressure boiler operating engineer license or a portable high pressure boiler operating engineer license shall be twenty five dollars; and the annual renewal fee shall be fifteen dollars. The renewal fee for a portable high pressure boiler operating engineer license shall include the renewal fee for a hoisting machine operator license, as provided in subdivision d of section 26-170 of this subchapter without any additional fee. If application for renewal is not made within thirty calendar days prior to the expiration date of the license, the applicant shall be required to pay an additional fee of ten dollars.

§[B26-4.5] 26-164 License conditions. All high pressure boiler operating engineer licenses and all portable high pressure boiler operating engineer licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter.

§[B26-4.6] 26-165 Licensing of existing operating engineers. Any person who has been performing the duties of an operating engineer on a high temperature hot water plant whose experience as such has been for a period of three years immediately preceding the enactment of this code shall be entitled to a high pressure boiler operating engineer license without complying with the herein above provisions upon satisfying the commissioner that such applicant possesses the aforesaid experience.

ARTICLE 5

HOISTING MACHINE OPERATOR LICENSE

§[B26-5.0] 26-166 Requirement of license. It shall be unlawful for any persons to take charge of or operate any power operated hoisting machine used for hoisting purposes or cableways under the jurisdiction of the department, except power operated scaffolds and window washing machines, unless such person is licensed under the provisions of this article, or a holder of a certificate of qualification as a hoisting machine operator prior to December twenty ninth, nineteen hundred sixty nine, as provided in section 26-131 of this subchapter. The commissioner may, by rule and regulation, exempt operators of mobile cranes of limited size and capacity from the requirements of this section.

~~§[B26-5.1] 26-167 License applications.-~~

All applications for a hoisting machine operator license shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for a hoisting machine operator license shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.

~~§[B26-5.2] 26-168 Classification of licenses.~~ Such licenses shall be classified as follows:

- (a) Basic license to operate cranes, derricks and cableways, excluding power-operated cranes with booms, including jibs and other extensions, which exceed two hundred feet in length and truck-mounted tower cranes which exceed two hundred feet in height.
- (b) Endorsement on basic license to include the operation of hoisting machinery without limitation or restriction.
- (c) Special hoisting machine operator license to operate a specified class of hoisting machine of limited size and capacity. The equipment under this subdivision shall also include the operation of truck cranes with telescopic, hydraulic or folding booms, including jibs and any other extensions to the boom, not exceeding one hundred thirty-five feet in length with a manufacturer's rated capacity of three tons or less used exclusively for the erection, maintenance or removal of signs. Special hoisting machine operators shall be exempt from the provisions of subdivisions (a) and (b) of this section.

~~§[B26-5.3] 26-169 License qualifications.-~~

- (a) The general qualifications prescribed in section 26-133 of this subchapter shall be applicable for a hoisting machine operator license and a special hoisting machine operator license. In addition, all applicants for a hoisting machine operator license shall have had at least two years' prior appropriate experience and all applicants for a special hoisting machine operator license shall have the qualifications as prescribed in subdivision (c) of this section.
- (b) (1) The commissioner shall issue a basic license to a hoisting machine operator who is the holder of a valid certificate of qualification on December twenty-ninth, nineteen hundred sixty-nine, provided application for such license is made prior to the expiration of said certificate of qualification.
- (2) The commissioner shall endorse such license to include the operation of hoisting machinery without limitation or restriction to a holder of a valid certificate of qualification on December twenty-ninth, nineteen hundred sixty-nine, provided application for such endorsement is made prior to the expiration of said certificate and he or she submits proof of satisfactory experience in the operation of cranes with booms, including jibs and other extensions, exceeding two hundred feet in length or truck-mounted tower cranes exceeding two hundred feet in height.
- (3) The commissioner shall endorse such license to

include the operation of hoisting machinery without limitation or restriction to a holder of a valid certificate of qualification on December twenty-ninth, nineteen hundred sixty-nine, provided that the applicant shall satisfactorily demonstrate by operation that he or she is competent to operate a crane with a boom, including jibs and other extensions, exceeding two hundred feet in length or truck-mounted tower crane exceeding two hundred feet in height.

(c) Notwithstanding the provisions of section 26-134 of this subchapter, the commissioner shall issue a special hoisting machine operator license to an applicant who shall have had at least two years' full-time paid experience and who makes application by December twenty-ninth, nineteen hundred seventy, or has satisfactorily passed a practical examination in the operation of equipment for which such license is to be issued.

~~§[B26-5.4] 26-170 License fees.~~ The fee for a license shall be as follows:

- (a) Ten dollars for a license, as described in paragraphs one and two of subdivision (b) of section 26-169 of this subchapter.
- (b) Twenty-five dollars for a license as provided in subdivision c of section 26-168 of this subchapter.
- (c) Fifty dollars for a license as provided in subdivisions (a) and (b) of section 26-168 and paragraphs one and three of subdivision (b) of section 26-169 of this subchapter.
- (d) Ten dollars for the annual renewal of any license.

~~§[B26-5.5] 26-171 License conditions.~~ All licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter.

ARTICLE 6 RIGGER LICENSE

~~§[B26-6.0] 26-172 Requirement of license.~~ It shall be unlawful to hoist or lower any article on the outside of any building in the city of New York on and after December sixth, nineteen hundred sixty-eight, unless such work is performed by or under the supervision of a person licensed as a rigger under the provisions of this article, or a person qualified or licensed as a rigger prior to such date as provided in section 26-131 of this subchapter. The provisions of this article shall apply to the erection or dismantling of a tower crane or a climber crane on a building and to the use of a derrick in their removal, except that such erection or dismantling may be performed by or under the direct supervision of a person licensed by the city for such purpose in accordance with rules and regulations promulgated by the department.

~~§[B26-6.1] 26-173 Exemptions.~~ The provisions of this article shall not apply to the hoisting or lowering of signs

~~if the person so doing possesses a license as a sign hanger, as provided in article seven of this subchapter, or to the hoisting or lowering of any building materials or equipment, other than boilers and tanks, in the course of the construction or alteration of any building or structure.~~

~~§[B26-6.2] 26-174 Classification of rigger licenses.-~~
Such licenses shall be classified as follows:

~~(a) Master rigger license.~~ Licenses the holder thereof to hoist or lower any article, irrespective of weight, on the outside of any building.

~~(b) Special rigger license.~~ Licenses the holder thereof to hoist or lower any article, not exceeding one thousand two hundred pounds in weight, on the outside of any building.

~~§[B26-6.3] 26-175 License applications.-~~ All applications for rigger licenses shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for such licenses shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.

~~§[B26-6.4] 26-176 Master rigger qualifications.-~~ In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a master rigger license shall submit satisfactory proof establishing that the applicant has had at least 5 years' practical experience in the hoisting and rigging business; and the applicant shall also have knowledge of and be able to explain the risks incident to such business and precautions to be taken in connection therewith, safe loads *[sic]* and computation thereof, types of rigging, size and strength of ropes, cables, blocks, poles, derricks, sheerlegs and other tools used in connection with such business.

~~§[B26-6.5] 26-177 Special rigger qualifications.-~~ In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a special rigger license shall submit satisfactory proof establishing that the applicant has had at least one year's practical experience in the hoisting and rigging business; and the applicant shall also have knowledge of and be able to explain the risks incident to such business and precautions to be taken in connection therewith.

~~§[B26-6.6] 26-178 Bond requirements.-~~

~~a.~~ Prior to the issuance of any master rigger license, the applicant shall file with the department a liability bond in the form of a personal bond with at least two sureties, approved by the commissioner, or a corporate surety bond, or policy of insurance, in a solvent and responsible company authorized to do business in this state, approved by the commissioner, in the sum of fifty thousand dollars conditioned for the payment of any judgment recovered against such rigger for the death of or for injury to any person caused in the operation, maintenance or use of any

~~rigging equipment or while engaged in any rigging operation. Such bond or policy may limit the liability of the surety or insurer on any one judgment to the sum of fifty thousand dollars for bodily injury or death, and on all judgments recovered upon claims arising out of the same transaction or transactions connected with the same subject of action, to the sum of one hundred thousand dollars, to be apportioned ratably among the judgment creditors, according to the amount of their respective judgments; and such bond or policy of insurance shall contain a provision for continuing liability thereunder, notwithstanding any recovery thereon.~~

~~b.~~ Prior to the issuance of any master rigger license the applicant shall also file with the department a property damage bond in the form of a personal bond with at least two sureties, approved by the commissioner, or a corporate surety bond, or a policy of insurance, in a solvent and responsible company authorized to do business in this state, approved by the commissioner, in the sum of ten thousand dollars, conditioned for the payment of any judgment recovered against such rigger for damage to, or destruction of, property caused in the operation, maintenance or use of any rigging equipment or while engaged in any rigging operation. Such bond or policy of insurance shall contain a provision for a continuing liability thereunder, notwithstanding any recovery thereon.

~~c.~~ Prior to the issuance of any special rigger license, the applicant shall file with the department a liability bond similar to that required of a master rigger, except that the limits thereof shall be ten thousand dollars and twenty thousand dollars, respectively, and shall also file with the department a property damage bond similar to that required of a master rigger, except that the limit thereof shall be one thousand dollars.

~~§[B26-6.7] 26-179 Workers' compensation.-~~ Prior to the issuance of any rigger license, and any renewal thereof, the applicant shall file with the department satisfactory evidence of compliance with the provisions of the state workers' compensation law.

~~§[B26-6.8] 26-180 License fees.-~~ The fee for a master rigger license shall be one hundred fifty dollars; and the annual renewal fee shall be one hundred dollars. The fee for a special rigger license shall be thirty dollars; and the annual renewal fee shall be twenty five dollars. If application for renewal is not made within thirty calendar days prior to the expiration date of the license, the applicant shall be required to pay an additional fee of twenty dollars.

~~§[B26-6.9] 26-181 License conditions.-~~

~~a.~~ All rigger licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter. In addition, every licensed rigger shall, while rigging operations are in progress, have placed conspicuously on the job two metal plates or wooden signs not less than eighteen inches by twenty-four

inches in size, displaying the word "danger" in letters not less than six inches high, and marked with the rigger's name, address, type of rigger license and license number.

b. Every licensed master rigger shall display prominently to the public on the place where his or her business is conducted, a metal plate or sign marked with the words "master rigger" and his or her license number immediately thereunder.

c. The holder of a rigger license shall at the time of issuance of the license and during the life thereof, have an established place of business within the city of New York. The licensee shall notify the commissioner of any change of address of his or her place of business.

***§26-181.1 Violations and penalties.-**

a. Notwithstanding any inconsistent provision of this subchapter, any licensed rigger or person performing the functions and duties of a licensed rigger who violates the provisions of sections 26-172, 26-178 or 26-179 of this subchapter or fails to ensure that workers have certificates of fitness which shall be required pursuant to the department's rules or any person who violates the provisions of section 27-1045 of the code shall be liable for penalties in accordance with the schedule below, to be recovered in a proceeding before the environmental control board:

	First Offense	Default	Second or subsequent offense	Default
No Certificate of Fitness	\$1,500	\$2,500	\$2,500	\$15,000
No Rigger License	\$1,250	\$2,500	\$2,500	\$15,000
No Required Insurance or Bond	\$1,250	\$2,500	\$2,500	\$15,000
No Record of Inspection at Job Site	\$1,250	\$2,500	\$2,500	\$15,000

b. Any licensed rigger who has been found guilty after proceedings before the environmental control board (1) of one or more of the violations in this section, or (2) of section 27-1050.1 of the administrative code three times within any six month period, shall be subject to immediate suspension of his or her license pending a hearing and determination in accordance with the provisions of section 26-140 of this subchapter.

~~§Local Law 18-2007.~~

**ARTICLE 7
SIGN HANGER LICENSES**

~~§[B26-7.0] 26-182 Requirement of license.~~ It shall be unlawful to hoist or lower or to hang or attach any sign upon or on the outside of any building in the city after December sixth, nineteen hundred sixty eight, unless such work is performed by or under the supervision of a person licensed as a sign hanger under the provisions of this article, or a person qualified or licensed as a sign hanger prior to December sixth, nineteen hundred sixty eight, as provided in section 26-131 of this subchapter.

~~§[B26-7.1] 26-183 Classification of sign hanger licenses.~~ Such licenses shall be classified as follows:

~~(a) Master sign hanger license.~~ Licenses the holder thereof to hoist or lower or to hang or attach any sign, irrespective of weight, upon or on the outside of any building.

~~(b) Special sign hanger license.~~ Licenses the holder thereof to hoist or lower or to hang or attach any sign, not exceeding one hundred fifty square feet in area, measured on one side only, nor exceeding one thousand two hundred pounds in weight, upon or on the outside of any building.

~~§[B26-7.2] 26-184 Exemptions.~~ The provisions of this subchapter shall not apply (a) to signs not exceeding seventy five square feet in area, measured on one side only, nor exceeding twenty five pounds in weight; or (b) to signs supported directly on the ground; or (c) to directional signs; or (d) to temporary signs erected during the construction or alteration of a building and related to such work; or (e) to the erection or placing of any signs by employees of the city, any city department or other governmental agency.

~~§[B26-7.3] 26-185 License applications.~~ All applications for sign hanger licenses shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for such licenses shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.

~~§[B26-7.4] 26-186 Master sign hanger qualifications.~~ In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a master sign hanger license shall submit satisfactory proof establishing that the applicant has had at least five years practical experience in sign hanging during the period of seven years immediately preceding the date of his or her license application; and the applicant shall also have a knowledge of and ability to read plans and specifications relating to sign construction and erection, including supporting framework and other supports, and a knowledge of the problems and practices of sign construction and hanging and be familiar with the equipment and tools used in sign hanging.

~~§[B26-7.5] 26-187 Special sign hanger qualifications.~~ In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a special sign hanger license shall submit satisfactory proof establishing that the applicant has had at least three years' practical experience in sign hanging during the period of five years immediately preceding the date of the license application; and the applicant shall also have a knowledge and ability to read plans and specifications relating to sign construction and erection, including supporting framework and other supports, and a knowledge of the problems and practices of sign construction and hanging and be familiar with the equipment and tools used in sign hanging.

~~§[B26-7.6] 26-188 Bond requirements.~~

a. Prior to the issuance of any sign hanger license, the applicant shall file with the department a liability bond in the form of a personal bond with at least two sureties, approved by the commissioner, or a corporate surety bond, or policy of insurance, in a solvent and responsible company authorized to do business in this state, approved by the commissioner, in the sum of fifty thousand dollars conditioned for the payment of any judgment recovered against such sign hanger for the death of or for injury to any person caused in the operation, maintenance or use of any sign hanging equipment or while engaged in any sign hanging operation. Such bond or policy may limit the liability of the surety or insurer on any one judgment to the sum of fifty thousand dollars for bodily injury or death, and on all judgments recovered upon claims arising out of the same transaction or transactions connected with the same subject of action, to the sum of one hundred thousand dollars, to be apportioned ratably among the judgment creditors, according to the amount of their respective judgments; and such bond or policy of insurance shall contain a provision for continuing liability thereunder, notwithstanding any recovery thereon.

b. Prior to the issuance of any sign hanger license, the applicant shall also file with the department a property damage bond in the form of a personal bond with at least two sureties, approved by the commissioner, or a corporate surety bond, or a policy of insurance, in a solvent and responsible company authorized to do business in this state, approved by the commissioner, in the sum of ten thousand dollars, conditioned for the payment of any judgment recovered against sign hanger for damage to, or destruction of, property caused in the operation, maintenance or use of any sign hanging equipment or while engaged in any sign hanging operation. Such bond or policy of insurance shall contain a provision for a continuing liability thereunder, notwithstanding any recovery thereon.

~~§[B26-7.7] 26-189 Workers' compensation.~~ Prior to the issuance of any sign hanger license, and any renewal thereof, the applicant shall file with the department satisfactory evidence of compliance with the provisions of the state workers' compensation law.

~~§[B26-7.8] 26-190 License fees.~~ The fee for a master sign hanger license shall be one hundred dollars and the annual renewal fee for such license shall be fifty five dollars; the fee for a special sign hanger license shall be seventy five dollars, and the annual renewal fee shall be forty dollars. If application for renewal is not made within thirty calendar days prior to the expiration date of the license, the applicant shall be required to pay an additional fee of thirty dollars.

~~§[B26-7.9] 26-191 License conditions.~~

a. All sign hanger licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter. In addition, every licensed sign hanger shall, while sign hanging operations are in progress, have placed conspicuously on the job two metal plates or wooden signs not less than eighteen inches by twenty four inches in size, displaying the word "danger" in letters not less than six inches high, and marked with the sign hanger's name, address, type of "sign hanger" license and license number.

b. Every licensed sign hanger shall display prominently to the public on the place where his or her business is conducted, a metal plate or sign marked with the words "sign hanger" and his or her license number immediately thereunder.

c. The holder of a sign hanger license shall at the time of issuance of the license and during the life thereof, have an established place of business within the city of New York. The licensee shall notify the commissioner of any change of address of his or her place of business.

ARTICLE 8 OIL-BURNING EQUIPMENT INSTALLER LICENSE

~~§[B26-8.0] 26-192 Requirement of license.~~ It shall be unlawful to install oil burning equipment in the city on and after December sixth, nineteen hundred sixty eight, unless such work is performed by or under the supervision of a person licensed as an oil burning equipment installer under the provisions of this article, or a person qualified or licensed as an oil burning equipment installer prior to December sixth, nineteen hundred sixty eight, as provided in section 26-131 of this subchapter.

~~§[B26-8.1] 26-193 Classification of oil burning equipment installer licenses.~~

Such licenses shall be classified as follows:

(a) Class A oil burning equipment installer license. Licenses

~~the holder thereof to install any type of oil burning equipment, as an independent contractor with full responsibility for the manner in which the work is done, and for the material and equipment used, and for the control and supervision of the persons employed on the work.~~

~~(b) Class B oil burning equipment installer license. Licenses the holder thereof to install oil burning equipment for the use of domestic fuel oils from number one fuel oil and including number four fuel oil (as classified in the current commercial standards published by the United States department of commerce), as an independent contractor with full responsibility for the manner in which the work is done, for the materials and equipment used, and for the control and supervision of the persons employed on the work.~~

~~§[B26-8.2] 26-194 License applications.-~~

~~All applications for oil burning equipment installer licenses shall be subject to the provisions of section 26-132 of this subchapter; and all applicants for such licenses shall comply with and be subject to the provisions of sections 26-133, 26-134 and 26-135 of this subchapter.~~

~~§[B26-8.3] 26-195 Class A oil burning equipment installer qualifications.~~ ~~In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a class A oil burning equipment installer license shall submit satisfactory proof establishing that the applicant has had at least four years' practical experience in the installation of oil burning equipment under the supervision of a qualified or licensed oil burning equipment installer in the city, including at least one years experience in the installation of oil burning equipment for the use of number five and number six fuel oils.~~

~~§[B26-8.4] 26-196 Class B oil burning equipment installer qualifications.~~ ~~In addition to the general qualifications prescribed in section 26-133 of this subchapter, all applicants for a class B oil burning equipment installer license shall submit satisfactory proof establishing that the applicant has had at least three years' practical experience in the installation of oil burning equipment under the supervision of a qualified~~

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or licensed oil burning equipment installer in the city.

~~§[B26-8.5] 26-197 Bond requirement.~~ Prior to the issuance of any oil burning equipment installer license, the applicant shall file with the department a bond conditioned for the payment of any loss or damage suffered by any person by reason of failure to install such equipment in accordance with the provisions of the code, the building code, the air pollution code or other applicable laws and regulations relating to oil burning equipment. Such bond shall be in the amount of two thousand five hundred dollars and shall be approved by the commissioner as to sufficiency of sureties.

~~§[B26-8.6] 26-198 License fees.~~ The fee for an oil burning equipment installer license shall be seventy five dollars; and the annual renewal fee shall be fifty dollars. If application for renewal is not made within thirty calendar days prior to the expiration date of the license, the applicant shall be required to pay an additional fee of thirty dollars.

~~§[B26-8.7] 26-199 License conditions.~~

a. All oil burning equipment installer licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter.

b. The holder of an oil burning equipment installer license shall, at the time of issuance of the license and during the life thereof, have an established place of business within the city of New York. The licensee shall notify the commissioner of any change of address of his or her place of business.

ARTICLE 9

CONCRETE TESTING LABORATORY LICENSE

~~§[B26-9.0] 26-200 Requirement of license.~~ It shall be unlawful, on and after December sixth, nineteen hundred sixty eight, for any person to engage in or carry on the business or calling of a concrete testing laboratory in the city, without having first obtained a license therefor from the commissioner, except as provided in section 26-131 of this subchapter.

~~§[B26-9.1] 26-201 License applications.~~ All applications for a concrete testing laboratory license shall be submitted on forms furnished by the department, and shall be accompanied by the required fee, as hereinafter provided. Each application for such license shall set forth the name and business address of the applicant, and such information and supporting data concerning his or her equipment and qualifications as the commissioner may require. If the applicant is a partnership or a corporation, the application shall be executed by a member of the partnership or by an officer of the corporation.

~~§[B26-9.2] 26-202 License qualifications.~~ All applicants for such license shall maintain a laboratory within fifty miles of the city, and shall submit satisfactory proof establishing that his, her or its business is conducted by

qualified personnel in accordance with procedures, safety requirements and professional standards adopted and promulgated by the commissioner under and pursuant to the provisions of subdivision b of section eleven hundred five of the charter. An investigation of the applicant's place of business equipment and personnel shall be made by the department prior to the issuance of any such license.

~~§[B26-9.3] 26-203 License fees.~~ The fee for a concrete testing laboratory license shall be one hundred dollars; and the annual renewal fee shall be fifty dollars. If application for renewal is not made within thirty calendar days prior to the expiration date of the license, the applicant shall be required to pay an additional fee of thirty dollars.

~~§[B26-9.4] 26-204 License conditions.~~

(a) All concrete testing laboratory licenses shall be conditioned upon and subject to the provisions of sections 26-136 through 26-139 of this subchapter; and all concrete testing laboratories licensed under the provisions of this article, or qualified or licensed prior to December sixth, nineteen hundred sixty eight, as provided in section 26-131 of this subchapter, shall certify the truth and accuracy of all reports filed or required to be filed by any such laboratory under the provisions of the building code or other applicable building laws and regulations.

(b) Each laboratory shall have in responsible charge a director who shall be a registered architect or licensed professional engineer and who shall personally supervise all technical functions of the laboratory relating to testing of concrete and concrete materials.

**Local Law 65-1990.*

ARTICLE 10

SUPPORTED SCAFFOLD CERTIFICATE OF COMPLETION

~~§26-204.1 Requirements of Certificate of Completion.~~ a. It shall be unlawful for an individual to erect, dismantle, repair, maintain or modify any supported scaffold, or to be on any supported scaffold assisting in the erection, dismantling, repair, maintenance or modification of any supported scaffold for which a permit is required unless such individual has been issued a supported scaffold certificate of completion under the provisions of this article.

b. It shall be unlawful for any person to knowingly permit or cause an individual who has not been issued a supported scaffold certificate of completion under this article, to erect, dismantle, repair, maintain, or modify any supported scaffold, or to be on any supported scaffold assisting in the erection, dismantling, repair, maintenance or modification of any supported scaffold in violation of subdivision a of this section. Each day on which a person shall knowingly permit or cause an individual who has not been issued a supported scaffold certificate of completion to erect, dismantle, repair, maintain, or modify any supported scaffold or to be on any supported scaffold assisting in the erection, dismantling,

~~repair, maintenance or modification of any supported scaffold, for which a permit has been issued, shall be a separate violation of this section.~~

~~*c. It shall be unlawful for an individual to use any supported scaffold, for which a permit is required, to assist in the erection, dismantling, repair, maintenance or modification of any building or structure unless such individual has been issued a supported scaffold user certificate pursuant to the provisions of this article.~~

~~*d. It shall be unlawful for any person to knowingly permit or cause an individual who has not been issued a supported scaffold user certificate under this article to use any supported scaffold, for which a permit is required, to assist in the erection, dismantling, repair, maintenance or modification of any building or structure in violation of subdivision c of this section. Each day on which a person shall knowingly permit or cause an individual who has not been issued a valid supported scaffold user certificate to use any supported scaffold, for which a permit is required, to assist in the erection, dismantling, repair, maintenance or modification of any building or structure shall be a separate violation of this section.~~

~~e. For the purposes of this article, "supported scaffold" shall be defined as one or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or similar rigid support forty feet in height or more and including, but not limited to, sidewalk bridge scaffolds, single pole scaffolds, tube and coupler scaffolds, fabricated frame scaffolds, tubular welded frame scaffolds, outrigger scaffolds, needle beam scaffolds, mobile scaffolds, repair bracket scaffolds, mast climber scaffolds that are mechanized or motorized, back structures for personnel hoists and/or material hoists and system scaffolds. Any sidewalk shed that provides a base for a supported scaffold will subject the entire structure, including the sidewalk shed, to the requirements of this article.~~

~~*Local Law 24-2008.~~

~~*§26-204.2 Exemptions.-~~

~~The provisions of this article shall not apply to:~~

~~a. the erection, dismantling, repair, maintenance or modification of any supported scaffold performed by an employee of a public utility when such supported scaffold is located within the interior of a building or structure owned or operated by such utility and when such utility has a safety training program of not less than thirty two hours for its employees who erect, dismantle, repair, maintain or modify such scaffolds; or~~

~~b. employees of a public utility performing work while using a supported scaffold, provided that such employees are trained, pursuant to the United States department of labor occupational safety and health administration's requirements, to be able to recognize the hazards associated with the type of supported scaffold being used, and to understand the procedures to control those hazards; or~~

~~c. the erection, dismantling, repair, maintenance or modification of stand alone, one story sidewalk sheds; or~~

~~*d. a registered architect or professional engineer who is using a supported scaffold to perform inspections, as long as the architect or engineer does not perform work from or participate in the erection, dismantling, repair, maintenance or modification of any building or structure, including the supported scaffold.~~

~~*Local Law 24-2008.~~

~~*§26-204.3 Issuance of Supported Scaffold Certificate of Completion; qualifications.-~~

~~a. Except as otherwise provided in subdivision e of this section, a supported scaffold certificate of completion shall be issued to individuals who have successfully completed a department approved thirty two hour training program or course that complies with the United States department of labor occupational safety and health administration's standards relating to scaffold safety and includes a review of the additional requirements of the New York City Building Code. A holder of a supported scaffold certificate of completion shall also take a department approved eight hour scaffold safety and training refresher program or course every four years.~~

~~b. Such training or refresher program or course shall be conducted (1) pursuant to a registered New York state department of labor apprenticeship training program, or (2) by an educational institution or school chartered, licensed or registered by the New York state department of education or (3) by a provider approved by the department.~~

~~c. Successful completion of the training program or course shall be evidenced by a dated supported scaffold certificate of completion issued by the provider of the training program or course to the individual participant named on such certificate. This certificate of completion, or a copy thereof, or a valid wallet card version of the certificate, shall be readily available to department personnel upon request.~~

~~d. Any training program or course presented under the provisions of this section shall be presented by instructors who are deemed qualified and competent in accordance with the United States department of labor occupational safety and health administration's regulations.~~

~~e. Any person who, within the four years prior to the effective date of this subdivision ~~**~~[this subdivision], has successfully completed a thirty two hour training program or course that complies with the provisions of subdivisions a and b of this section, need not take a second thirty two hour course upon enactment of such local law, provided such person can provide to the department a dated certificate of completion as set forth in subdivision c of this section. Such person shall, however, take a department approved eight hour scaffold safety and training refresher program or course within four years of the initial course and every four years thereafter.~~

~~*Local Law 24-2008.~~

~~**As enacted but probably not intended.~~

~~*§26-204.4 Issuance of Supported Scaffold User Certificate.~~

~~a. Except as otherwise provided in subdivision d of this section, a supported scaffold user certificate shall be issued to individuals using a supported scaffold to assist in the erection, dismantling, repair, maintenance or modification of any building or structure who have successfully completed a department approved four hour training program or course conducted (1) pursuant to a registered New York state department of labor apprenticeship training program, or (2) by an educational institution or school chartered, licensed or registered by the New York state department of education or (3) by a provider approved by the department. Such program or course shall include instruction on the nature of any electrical hazards, fall hazards, or falling object hazards, material handling on scaffolds, the nature of braces and tiebacks and their safe removal and the maximum intended load and load handling capacities of scaffolds. Such training program or course shall be taken every four years.~~

~~b. Successful completion of the training program or course shall be evidenced by a dated supported scaffold user certificate issued by provider of the training program or course to the individual participant named on such certificate. This supported scaffold user certificate, or a copy thereof, or a valid wallet card version of the certificate, shall be readily available to department personnel upon request.~~

~~c. Any training program or course provided under the provisions of this section shall be presented by instructors who are qualified and competent in accordance with the United States department of labor occupational safety and health administration's regulations.~~

~~*d. Any person who, within the four years prior to the effective date of the local law enacting this subdivision, has successfully completed a four hour training program or course that complies with the provisions of subdivision a of this section, need not take a second four hour course upon enactment of this local law, provided such person can provide to the department a dated certificate of completion as set forth in subdivision b of this section. Such person shall, however, take a department approved four hour scaffold safety and training refresher program or course within four years of the initial course and every four years thereafter.~~

~~*Local Law 24-2008.~~

~~§26-204.5 Violations and penalties. — Any person who violates any of the provisions of this article shall be subject to the provisions of section 26-140 of this code.~~

~~*Local Law 52-2005.~~

~~*ARTICLE 11
GENERAL CONTRACTOR REGISTRATION~~

~~§26-204.11 General contractor. — For the purposes of~~

~~this article “general contractor” means any individual, corporation, partnership or other business entity that applies for a new building permit to construct a residential structure containing no more than three dwelling units. The term “general contractor” shall not include an individual, corporation, partnership or other business entity that has been issued a license pursuant to another provision of this subchapter, or pursuant to subchapter twenty two of chapter two of title twenty of this code, and enters into a contract to perform work exclusively within the scope of that license, nor shall it include an individual who constructs a residential structure containing no more than three dwelling units for his or her own occupancy, or any subcontractors working for the general contractor.~~

~~§26-204.12 Requirement of registration.~~

~~a. The department shall accept applications for general contractor registration beginning on April 1, 2008.~~

~~b. The registration shall expire on the second anniversary of such registration or such other date as determined by the commissioner by rule so as to distribute the expiration dates of the registrations more evenly over the course of a year.~~

~~c. Beginning November 1, 2008, it shall be unlawful to conduct business as a general contractor unless the general contractor has applied for and received a general contractor registration in accordance with the provisions of this article.~~

~~§26-204.13 Unlawful use of general contractor title.~~

~~It shall be unlawful to use or cause to be used the title registered general contractor or any other title in a manner as to convey the impression that an individual, corporation, partnership or other business entity, or any person it employs, is a registered general contractor, unless such individual, corporation, partnership or other business entity is registered in accordance with the provisions of this article.~~

~~§26-204.14 Compliance with other provisions. — All applications for a general contractor registration shall comply with and be subject to the provisions of section 26-132 of this subchapter and all applicants shall comply with and be subject to the provisions of sections 26-137 through 26-140 of this subchapter.~~

~~§26-204.15 Registration fees. — The fee for a general contractor registration shall be two hundred dollars, and the biennial renewal fee shall be one hundred sixty dollars. Renewals not submitted in a timely manner shall be subject to an additional late registration surcharge of one hundred sixty dollars.~~

~~§26-204.16 Application requirements.~~

~~a. An application for a general contractor registration or renewal under this article shall be made in writing to the commissioner on a form provided by the department, and~~

shall be accompanied by the following:

1. If the applicant is an individual: the applicant's full name, residence address, business address and business telephone number;
 2. If the applicant is a corporation:
 - (i) the corporate name, address and telephone number of the applicant's principal office or place of business;
 - (ii) the date and state of incorporation;
 - (iii) the name, residence address and residence telephone number of all corporate officers and registered agents and any person owning an interest of ten percent or more in the corporation;
 - (iv) proof that the corporation is in good standing under the laws of the state of New York;
 3. If the applicant is a partnership:
 - (i) the name, address and telephone number of the applicant's principal office or place of business;
 - (ii) the name, residence address and residence telephone number of all partners;
 4. the registration fee;
 5. a verified statement that the applicant or any person owning an interest of ten percent or more in the applicant is financially solvent;
 6. the name and address of the principal location from which the applicant has engaged in the business of general contracting at any time within the last five years;
 7. if the applicant is not a sole proprietor, proof that the applicant is authorized to do business in the state of New York;
 8. proof of insurance as required by section 26-204.17 of this article;
 9. the name and address of the officer, principal or director of the applicant who is primarily responsible for the registrant's compliance with the requirements of subchapters one, two or three of chapter one of title twenty six or chapter one of title twenty seven of this code or any rule adopted thereunder;
 10. upon renewal, proof of completion of such courses pertaining to general contracting activities as the commissioner shall establish by rule; and
 11. any other information that the commissioner may require.
- b. For the purposes of this section, financial solvency shall mean that the applicant's operating capital shall exceed twenty five thousand dollars.
- c. It is a condition of the registration that information in the application be kept current. Any change in required information shall be reported to the department within fourteen days after such change.
- d. For any applicant other than a natural person, the above requirements shall apply to every principal or officer and to any person owning, directly or indirectly, an interest of ten percent or more in the applicant.

~~§26-204.17 Insurance.-~~

- a. Prior to the issuance of a general contractor registration, each applicant shall submit proof of

commercial general liability insurance in an amount not less than one million dollars per occurrence, five million dollars aggregate combined single limit, or as otherwise specified by rule, to insure any and all persons and entities, both public and private, fully for all risks of loss, damage to property or injury to or death of persons, arising out of or in connection with the performance of all work under the registration, including any and all work involving excavation, shoring and underpinning, and including the work of subcontractors.

b. Each policy of insurance required under this section shall include a provision requiring thirty days' advance notice to the commissioner prior to cancellation or lapse of the policy.

c. The registrant shall maintain the insurance required under this section in full force and effect for the duration of the registration period.

~~§26-204.18 Warranties.-~~

a. A warranty shall be provided to the buyer of a new one , two or three family structure that accords with the provisions of article thirty six B of the New York state general business law, including the following:

1. one year from and after the warranty date the home will be free from defects due to a failure to have been constructed in a skillful manner;

2. two years from and after the warranty date the plumbing, electrical, heating, cooling and ventilation systems of the home will be free from defects due to a failure by the builder to have installed such systems in a skillful manner; and

3. six years from and after the warranty date the home will be free from material defects, including, but not limited to, any construction that is not in compliance with the building code or the zoning resolution of the city of New York.

b. Except as otherwise provided in section seven hundred seventy seven b of such article thirty six B, no such warranty shall be modified or excluded in any way.

~~§26-204.19 Duties and responsibilities.-~~

a. The general contractor shall be responsible for providing information to the department about his or her subcontractors and the particular jobs they performed. Such information shall be provided in a format and at the times specified in the rules of the department.

b. The general contractor shall maintain at the work site such technical reports as specified in the rules of the department and shall make such reports available to department personnel on request.

~~§26-204.20 Seizure, forfeiture.-~~

a. 1. For purposes of this section, the term "owner" as applied to vehicles shall mean an owner as defined in section one hundred twenty eight and in subdivision three of section three hundred eighty eight of the vehicle and traffic law.

~~2. For purposes of this section, the term “security interest” as applied to vehicles shall mean a security interest as defined in subdivision k of section two thousand one hundred one of the vehicle and traffic law.~~

~~3. For purposes of this section, the term “unlicensed activity” shall mean the conduct of any activity at a work site for the construction of a residential structure containing no more than three dwelling units without a license for which a license is required under any law, rule or regulation enforced by the commissioner of buildings, and the term “unregistered activity” shall mean the conduct of any activity at a work site for the construction of a residential structure containing no more than three dwelling units without a registration for which a registration is required under any law or regulation enforced by the commissioner of buildings.~~

~~b. 1. Any police officer or authorized officer or authorized employee of the department may seize any vehicle and any tools contained therein which such police officer or authorized officer or authorized employee has reasonable cause to believe is being used in connection with unlicensed or unregistered activity, upon service on the owner or operator of the vehicle of a notice of violation for engaging in such activity. Any vehicle and tools seized pursuant to this subdivision shall be delivered into the custody of the department or other appropriate agency.~~

~~2. The owner or operator of the vehicle and/or tools may make a written demand for a hearing for the return of the seized property. Notice of the right to a hearing shall be provided to the operator at the time of seizure of the vehicle and/or tools, and a copy of such notice shall be sent by mail to the registered and/or title owner of the vehicle, if other than the operator, and to the owner of the tools if other than the owner or operator of the vehicle and if reasonably ascertainable, within five business days of the seizure. The department shall schedule the hearing at the office of administrative trials and hearings (OATH) or its successor agency, as applicable, for a date within ten business days after receipt of the demand and shall notify the operator and the owner(s) of the opportunity to participate in the hearing and the date thereof.~~

~~3. A claimant seeking release of the vehicle and tools at the hearing may be either the person from whom the vehicle and tools were seized, if that person was in lawful possession of the vehicle and tools, or the owner if different from such person.~~

~~4. The OATH judge shall issue a determination within five business days after the conclusion of the hearing.~~

~~5. The department shall establish a procedure whereby an owner or operator who wishes to have the vehicle and/or tools returned pending the hearing shall post a bond in an amount determined by the department, but in no event less than an amount sufficient to cover any applicable removal and storage fees as well as fines and penalties.~~

~~6. The department shall establish a procedure whereby an owner or operator may request the return of the vehicle and/or tools without a hearing if he or she a) establishes that the vehicle and/or tools were seized in error or b) immediately applies for licensure or registration pursuant to the applicable provisions of this subchapter and pays a fine not to exceed removal and storage fees and any fines or penalties that could have been imposed under the provisions of this subchapter. Where the owner or operator establishes that the vehicle and/or tools were seized in error, the department shall expeditiously return such vehicle and/or tools.~~

~~e. Any vehicle and tools for which a written demand for return of the vehicle and/or tools or a hearing pursuant to subdivision b of this section has not been made within thirty days of service on the operator or the owner of the vehicle and/or tools, if other than the operator, of the notice of violation shall be deemed abandoned and shall be disposed of by the department pursuant to applicable law.~~

~~d. 1. Notwithstanding the provisions of section 26-140 of this code, in the event the department chooses to have the violation underlying the seizure returnable to and heard at OATH, that hearing may be combined with the hearing for the return of the seized property and under such circumstances the OATH judge shall make a determination as to both. The OATH judge shall issue a determination within five business days after the conclusion of the hearing.~~

~~2. If the OATH judge finds that the vehicle and/or tools were not used in connection with unlicensed or unregistered activity, the department shall promptly release such vehicle and/or tools.~~

~~3. If the OATH judge finds that the vehicle and/or tools were used in connection with unlicensed or unregistered activity, the department may release such vehicle and/or tools upon payment of all applicable fines and civil penalties and all reasonable costs of removal and storage, or may commence a forfeiture action within twenty business days after the date of the judge's determination.~~

~~e. In the event that the adjudication of the violation underlying the seizure is not held at OATH, and a determination is made that the vehicle and tools were not used in connection with unlicensed or unregistered activity, the department shall promptly release such vehicle and/or tools.~~

~~f. In addition to any other fines or penalties provided in this, any person who violates the provisions of this subchapter shall be subject to a penalty of not less than five thousand dollars nor more than ten thousand dollars to be recovered in a proceeding before OATH and shall be subject to a fine of not less than five thousand dollars nor more than ten thousand dollars or imprisonment for not more than six months, or both.~~

~~g. 1. A forfeiture action pursuant to this section shall be commenced by the filing of a summons with a notice or a summons and complaint in accordance with the civil~~

practice law and rules. Such summons with notice or a summons and complaint shall be served in accordance with the civil practice law and rules on the vehicle operator, the owner of the tools, if different from the vehicle operator, and owner of the vehicle, and on all owners of the subject vehicle listed in the records maintained by the department of motor vehicles, or for vehicles not registered in the state of New York, in the records maintained by the state of registration. A vehicle and/or tools that are the subject of such action shall remain in the custody of the department or other appropriate agency pending the final determination of the forfeiture action, unless released pursuant to the provisions of subdivisions d or e, above.

2. Notice of the institution of the forfeiture action shall be given by certified mail to all persons holding a security interest in such vehicle or tools, if known, if such security interest in the vehicle has been filed with the department of motor vehicles pursuant to the provisions of title ten of the vehicle and traffic law, at the address set forth in the records of such department, or, for vehicles not registered in the state of New York, all persons holding a security interest in such vehicle if such security interest has been filed with the state of registration and which persons are made known by such state to the department, at the address provided by such state of registration.

3. Any person with a security interest in such vehicle or tools who receives notice of the institution of the forfeiture action who claims an interest in such vehicle or tools subject to forfeiture may assert a claim in such action for satisfaction of such person's security interest in such vehicle or tools.

4. Forfeiture pursuant to this subdivision shall be made subject to the interest of a person who claims an interest in the vehicle or tools pursuant to paragraph three of this subdivision, where such person establishes that: (i) the use of the vehicle or tools for the conduct that was the basis for the seizure of the vehicle and tools occurred without the knowledge of such person, or if such person had knowledge of such use, that such person did not consent to such use by doing all that could reasonably have been done to prevent such use, and that such person did not knowingly obtain such interest in the vehicle or tools in order to avoid the forfeiture of such vehicle or tools, or (ii) that the conduct that was the basis for such seizure was committed by any person other than such person claiming an interest in the vehicle or tools, while such property was unlawfully in the possession of a person who acquired possession thereof in violation of the criminal laws of the United States or any state.

5. The department or agency having custody of the vehicle and tools, after judicial determination of forfeiture, shall, at its discretion, either (i) retain such vehicle and tools for the official use of the city; or (ii) by public notice of at least five days, sell such forfeited vehicle and tools at public sale. The net proceeds of any

such sale shall be paid into the general fund of the city.

6. In any forfeiture action commenced pursuant to this subdivision, where the court awards a sum of money to one or more persons in satisfaction of such person's interest in the forfeited vehicle and tools, the total amount awarded to satisfy such interest or interests shall not exceed the amount of the net proceeds of the sale of the forfeited vehicle and tools after deduction of the lawful expenses incurred by the city, including reasonable costs of removal and storage of the vehicle and tools between the time of seizure and the date of sale.

~~§26-204.21 Penalties; issuance, renewal, suspension and revocation of registration.~~

a. The commissioner shall have the power to refuse to issue or renew a registration or, after notice and an opportunity to be heard in a proceeding to be commenced at OATH, impose a penalty of not less than five thousand nor more than ten thousand dollars upon a registrant and/or suspend or revoke a registration under this article upon a finding of any one or more of the following by the applicant or registrant or by a business entity in which one of the applicant's or registrant's principals, officers or directors has been a principal, officer or director:

1. Fraud, misrepresentation, or bribery in securing a registration, permit, approval of work or a temporary or permanent certificate of occupancy.

2. The making of any false statement as to a material matter in any application for a registration, permit, approval of work or a temporary or permanent certificate of occupancy.

3. A practice on the part of the registrant of failure to timely perform or complete its contracts for the construction of new residential structures containing no more than three dwelling units, or the manipulation of assets or accounts, or fraud or bad faith.

4. Failure to comply with any demand or requirement lawfully made by the commissioner.

5. Approval or knowledge on the part of the registrant of an act of omission, fraud, or misrepresentation committed by one or more agents or employees of the registrant, and failure to report such act to the department.

6. Violation of any provision of this subchapter or any rule adopted hereunder.

7. Violation of any provision of subchapters one, two or three of chapter one of title twenty six or chapter one of title twenty seven of this code, or any rule adopted thereunder, including continuing to work in violation of a stop work notice or order issued pursuant to section 26-118 of this code.

b. Notwithstanding the foregoing, when public health or safety may be in imminent jeopardy, the commissioner shall immediately suspend a registration for up to five business days, pending a hearing and determination at OATH.

c. In addition to any of the powers that may be exercised by the commissioner pursuant to this article, the

~~commissioner may refuse to issue or renew or, after notice and an opportunity to be heard in a proceeding to be commenced at OATH, may suspend or revoke, a registration required under this article if (a) the applicant or registrant, or any of its principals, officers or directors, or any of its stockholders owning more than ten percent of the outstanding stock of the corporation has been convicted of a crime which, in accordance with article twenty three a of the correction law, is determined to have a direct relationship to such person's fitness or ability to perform any of the activities for which a registration is required under this article or (b) the applicant or registrant, or any of its principals, officers or directors has been a principal, officer or director of a registered general contractor whose registration has been revoked.~~

~~d. Notwithstanding any inconsistent provision of this subchapter, any registered general contractor who has defaulted at or been found liable after proceedings before the environmental control board or in an adjudication in criminal court of violations of any building code provisions relating to a stop work order, public health or safety, structural integrity, building in compliance with approved plans or fire safety three times within any twenty four month period shall be subject to immediate suspension of his or her registration, pending a hearing and determination at OATH.~~

~~e. The names of all general contractors whose registration was suspended or revoked after an OATH decision shall be posted on the department's website.~~

~~f. General contractors shall notify all their suppliers of all pending suspension or revocation actions against them and shall provide an affidavit to the department stating that this notification has been made.~~

~~§26-204.22 Violations and penalties.-~~

~~a. 1. Any person who shall own, conduct or operate a general contracting business without a registration therefor or who shall knowingly violate any of the provisions of this article or any rules promulgated thereunder or, having had his or her registration suspended or revoked, shall continue to engage in such business, shall be guilty of a misdemeanor, and upon conviction, shall be punishable by imprisonment for not more than six months, or by a fine of not less than five thousand nor more than ten thousand dollars, or both such fine and imprisonment, and each such violation shall be deemed a separate offense.~~

~~2. In addition to the penalties provided by paragraph one of this subdivision, any person who violates any of the provisions of this article shall be liable for a civil penalty of not less than five thousand nor more than ten thousand dollars for each such violation to be recovered in a proceeding before the environmental control board.~~

~~b. The corporation counsel may bring an action in the name of the city to restrain or prevent any violation of this article or any continuance of any such violation.~~

~~*§Local Law 36-2007.*~~

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SUBCHAPTER 3 BUILDING CONSTRUCTION

TABLE OF CONTENTS

Art.
[Sec.]* or Sec.**

Art. 1 — General Provisions

- [10.0] — 205 — Matters Covered
[11.0] — 206 — All New work to Conform

Art. 2 — Permits

- [20.0] — 207 — Requirement of Permit
[21.0] — 208 — Approval of Plans
[22.0] — 209 — Signature to Permit

Art. 3 — Fees

- [30.0] — 210 — Requirement of Fee
[31.0] — 211 — Fee for Approval of Plans and work Permits
[32.0] — 212 — Computation of Fees for work Permits
— 212.1 — Civil penalty for work without a permit
[33.0] — 213 — Fees for Equipment Use Permits
[34.0] — 214 — Special Fees
[34.1] — 214.1 — Special Fees; Asbestos
[35.0] — 215 — Fees for the Testing, Approval, Inspection and Use of Power Operated Cranes, Derricks and Cableways

Art. 4 — Inspections

- [40.0] — 216 — Right of Entry and Inspection
[41.0] — 217 — Inspections of Building work
[42.0] — 218 — Inspection of Completed Buildings
[43.0] — 219 — Inspection of Construction Machinery and Equipment, Etc.
[44.0] — 220 — Inspection of Signs
[45.0] — 221 — Inspection Reports

Art. 5 — Certificates of Occupancy

- [50.0] — 222 — Requirement of Certificate of Occupancy
[51.0] — 223 — Occupancy of Existing Buildings
[52.0] — 224 — Issuance and Filing of Certificate of Occupancy

Art. 6 — Projections Beyond Street Line

- [60.0] — 225 — General Restrictions on Projections Beyond Street Line
[61.0] — 226 — Existing Projections Beyond Street Line
[62.0] — 227 — Rules Governing Projections Beyond Street Line

Art. 7 — Safety in Building Operations

- [70.0] — 228 — General Safety Requirements
[71.0] — 229 — Safety Requirements During Excavation Operations
[72.0] — 230 — Protection of Roofs, Skylights, Etc.
[73.0] — 231 — Regulation of Lots

- [74.0] — 232 — Retaining Walls
[75.0] — 233 — Maintenance and Repair of Protection Fences and Retaining walls
[76.0] — 234 — Report and Inspection of Unsafe Buildings and Property

Art. 8 — Unsafe Buildings and Property

- [80.0] — 235 — Removal or Repair of Structures
[80.5] — 236 — Record and Notice of Unsafe Structures or Premises
[81.0] — 237 — Voluntary Abatement of Unsafe or Dangerous Conditions
[81.5] — 238 — Survey
[82.0] — 239 — Judicial Review of Survey
[82.5] — 240 — Repair or Removal Under Preecept
[83.0] — 241 — Provision for Expense of Executing Preecept
[83.5] — 242 — Return of Preecept; Reimbursement of City
[84.0] — 243 — Fallen Structures and Structures Imminently Dangerous

Art. 9 — Violations and Punishments

- [84.5] — 244 — Notices of Requirements or of Violations
[85.0] — 245 — Emergency Measures
[85.5] — 246 — Judicial Remedies
[86.0] — 247 — Judicial Orders
[86.5] — 248 — Punishments
[87.0] — 249 — Violations of Peremptory Orders
[87.5] — 250 — Appeal

Art. 10 — Miscellaneous Provisions

- [91.0] — 251 — Illegal Practices in the Sale or Use of Lumber for Construction Purposes Prohibited
[92.0] — 252 — Sidewalk Sheds, Fences, Railings, Etc.

**“C26” omitted from section numbers in this column.*

***“26” omitted from section numbers in this column.*

ARTICLE 1 GENERAL PROVISIONS

~~§[C26-10.0] 26-205 Matters covered.~~ All matters affecting or relating to the construction, alteration, repair, demolition, removal, maintenance, occupancy and use of new and existing buildings in the city, including the erection, installation, alteration, repair, maintenance, use and operation of signs and service equipment used in or in connection therewith, are presumptively provided for in this subchapter and in the building code of the city. This subchapter does not presumptively provide for matters that are contained in the charter, the labor law, the multiple dwelling law, subchapters one and two of this chapter and chapter two of title twenty-seven, the zoning resolution, or the general city law; nor does this subchapter apply to structures on waterfront property used in conjunction with and in the furtherance of waterfront commerce and/or

navigation, or to bridges, tunnels or subways, or to structures appurtenant thereto.

~~§[C26-11.0] 26-206 All new work to conform.-~~

~~All building work performed in the city on and after December sixth, nineteen hundred sixty-eight, shall conform to the provisions of this subchapter except that any work for which an application for a permit was filed prior to December sixth, nineteen hundred sixty-eight, and any work for which an application for a permit is filed within twelve months after the effective date of this subchapter, may be performed, at the option of the owner, in its entirety either in accordance with and subject to the requirements of this subchapter or in accordance with and subject to the requirements of the building laws and regulations previously in force in the city, provided that such work is commenced within twelve months after the date of issuance of a permit therefor and is continuously carried on to completion. This section shall not apply to the requirements of article ten of subchapter nineteen of title twenty-seven of the code which shall become effective December twenty-ninth, nineteen hundred sixty-nine.~~

ARTICLE 2 PERMITS

~~§[C26-20.0] 26-207 Requirement of permit.-~~

~~It shall be unlawful, on and after December sixth, nineteen hundred sixty-eight, to construct, alter, repair, demolish, or remove any building in the city, or to erect, install, alter, repair, or use or operate any signs or service equipment in or in connection therewith, unless and until a written permit therefor shall have been issued by the commissioner in accordance with the requirements of this subchapter and the requirements of the building code, subject to such exceptions and exemptions as may be therein provided.~~

~~§[C26-21.0] 26-208 Approval of plans.-~~

~~Whenever plans are required to be filed in connection with an application for a permit, as provided in the building code, all such plans shall be approved by the commissioner prior to the commencement of any work thereunder. All plans and all applications for approval thereof, shall comply with the requirements of the building code, subject to such exceptions and exemptions as may be therein provided; and all elevations on plans shall be referred to the United States coast and geodetic survey mean sea level datum of nineteen hundred twenty-nine, which is hereby established as the city datum.~~

~~**§[C26-22.0] 26-209 Signature to permit.**—Every permit issued by the commissioner shall have his or her signature affixed thereto; but the commissioner may authorize any subordinate to affix such signature.~~

ARTICLE 3 FEES

~~**§[C26-30.0] 26-210 Requirement of fee.**—No work permit or equipment use permit, when required by the provisions of the building code, shall be issued, and no plans or other statement describing building work, when required by the provisions of the building code, shall be approved, unless and until the required fee or fees therefor shall have been paid to the department in accordance with the provisions of this article, except that no fees shall be payable for work permits, equipment use permits or places of assembly permits if the owner of the building or property affected is a corporation or association organized and operated exclusively for religious, charitable or educational purposes, or for one or more such purposes, no part of the earnings of which enures to the benefits of any private shareholder or individual, and provided that the property affected is to be used exclusively by such corporation or association for one or more of such purposes.~~

~~***§[C26-31.0] 26-211 Fee for approval of plans and work permits.-**~~

~~The fees required to be paid under this section, and under section 26-212 of this article, are for the filing and processing of applications for the approval of plans or other statement describing building work, the filing and processing of permit applications, the issuance or renewal of work permits, the inspection of building work, and the issuance of certificates of occupancy. Fifty percent of the total fee for the work permit, but not less than one hundred dollars, or the total fee for the work permit where such fee is less than one hundred dollars, shall be paid by or on behalf of the owner or lessee of the building premises or property affected and shall accompany the first application for the approval of plans or other statement describing the building work when submitted prior to submission of the permit application; and the whole or remainder of the total fee shall be paid before the work permit may be issued. A fee of one hundred dollars shall be paid with an application for renewal of a work permit. Foundation work, plumbing work, sign and service equipment work are included in the term "building" whenever plans for such work are required to be filed with construction or alteration plans; otherwise, separate fees shall be applied and collected for such work in accordance with the provisions of this section and section 26-212 of this article.~~

~~**Local Law 38-1990.*~~

~~***§[C26-32.0] 26-212 Computation of fees for work permits.-**~~

~~Fees for work permits shall be computed as hereinafter provided:~~

~~*****1. New buildings.**—The fees for permits to construct new buildings and open air stadia shall be computed as follows:~~

~~(a) Except as otherwise provided in paragraph (b),~~

twenty-five cents and fifty-three one hundredths of a cent (25.53¢) per square foot or fraction thereof, of the total floor area of the new building, but not less than one hundred dollars per structure.

(b) For a one, two or three family dwelling eleven cents and sixty-three one hundredths of a cent (11.63¢) per square foot, or fraction thereof, of the total floor area of the new building, but not less than one hundred dollars per structure.

(c) One hundred dollars for a garage for not more than three cars when such garage is accessory to a one, two or three family dwelling on the same plot when plans for such garages are filed with the application and plans for the one, two or three family dwellings to which it is accessory.

(d) One hundred dollars for the first two thousand dollars, or fraction thereof, of the cost of the structure; twenty dollars for each additional one thousand dollars, or fraction thereof, of cost to five thousand dollars of the structure; ten dollars and thirty cents for each additional one thousand dollars, or fraction thereof, of the structure cost over five thousand dollars for structures such as radio aerial towers and masts, tank structures, fire escapes and other structures to which fees may not be readily applied under the foregoing provisions. Applications for elevator work submitted separately, seventy dollars.

~~***Local Law 56 1993; Local Law 38 1990.~~

***2. Building alterations.**—The fees for permits to alter buildings shall be computed as follows:

(a) For a one family, two family or three family dwelling, one hundred dollars for the first five thousand dollars or fraction thereof, of the cost of alteration; not including the cost for the installation or alteration of any plumbing or plumbing system or fire suppression piping system; and five dollars and fifteen cents per one thousand dollars, or fraction thereof, of such cost of alterations in excess of five thousand dollars.

(b) For any building not described in paragraph (a) of this subdivision, one hundred dollars for the first three thousand dollars, or fraction thereof, of the cost of alteration; not including the cost for the installation or alteration of any plumbing or plumbing system or fire suppression piping system; twenty dollars per one thousand dollars, or fraction thereof, of the next two thousand dollars of such cost; and ten dollars and thirty cents per one thousand dollars, or fraction thereof, of such cost of alterations in excess of five thousand dollars.

~~***Local Law 109 1993; Local Law 107 1993; Local Law 56 1993; Local Law 38 1990; Local Law 40 1987, applies to permits applied for and inspections performed on and after July 6, 1987.~~

***3. Foundation, open spaces, etc.**—The fees for foundations and earth work permits, and for permits with respect to open spaces without roof, whether enclosed or unenclosed on sites, such as parking lots, gasoline or oil selling stations, storage yards, sales or exhibition or show

spaces used for generally similar purposes shall be computed as follows: (a) ten dollars for each two thousand square feet of area or fraction thereof, but not less than one hundred dollars; and (b) for golf driving ranges, seven dollars and fifty cents for each twenty thousand square feet of area or fraction thereof, but not less than one hundred dollars plus one hundred dollars for an accessory building not to exceed one hundred forty four square feet.

~~***Local Law 38 1990.~~

*****4. Demolition and removal.**—The fees for demolition and removal permits shall be computed by multiplying the street frontage in feet by the number of stories of the building times two dollars and sixty cents, provided the minimum fee shall be not less than two hundred sixty dollars. In the case of a corner lot, the larger street frontage shall be used in computation.

~~***Local Law 50 1988.~~

*****5. Plumbing and fire suppression piping systems.**

(a) Existing buildings.—The fees for permits to install and alter plumbing and plumbing systems and for permits to install and alter fire suppression piping systems in existing buildings shall be computed as follows:

(1) For a one family, two family or three family dwelling, one hundred dollars for the first five thousand dollars, or fraction thereof, of the cost of such installation or alteration; and five dollars and fifteen cents per one thousand dollars, or fraction thereof, of such cost in excess of five thousand dollars.

(2) For any building not described in subparagraph (1) of this paragraph, one hundred dollars for the first three thousand dollars, or fraction thereof, of the cost of such installation or alteration; twenty dollars per one thousand dollars or fraction thereof, of the next two thousand dollars of such cost; and ten dollars and thirty cents per one thousand dollars, or fraction thereof, of such cost in excess of five thousand dollars.

(b) New buildings.—The fees for permits to install plumbing systems and for permits to install fire suppression piping systems in new buildings shall be computed by allocating a portion of the fee for the permit to construct such new building, computed in the manner provided in subdivision one, to the applicable plumbing permit or fire suppression piping system permit, but in no event shall the fee for a permit to install a plumbing system or for a permit to install a fire suppression piping system in a new building be less than one hundred dollars. Such allocation shall be made in accordance with rules promulgated by the commissioner. Any portion of the fee charged for a permit to install a plumbing system or of the fee charged for a permit to install a fire suppression piping system in a new building that is in excess of one hundred dollars shall be deducted from the amount of the fee, computed in the manner provided in subdivision one, charged for the permit to construct such new building.

~~***Local Law 109 1993; Local Law 107 1993; Local Law 38 1990.~~

*** 6. Signs.—**

a. The fees for permits to erect, install or alter signs shall be computed in the same manner as the computation of fees for building alterations as provided in subdivision two of this section. In addition, fees shall be payable to the department as follows:

(1) For ground signs five dollars for each one hundred square feet or fraction thereof, but not less than thirty-five dollars.

(2) For roof signs having a tight, closed or solid surface, fifteen dollars for each one hundred square feet or fraction thereof, but not less than seventy dollars.

(3) For roof signs that do not have a tight, closed or solid surface, fifteen dollars for each one hundred square feet or fraction thereof, when such signs extend to a height of not more than thirty-one feet above roof level, but not less than one hundred dollars. When such signs exceed thirty-one feet above the roof level, twenty-five dollars for each one hundred square feet or fraction thereof, but not less than one hundred thirty-five dollars.

(4) For illuminated signs projecting beyond street line having thirty square feet or less, forty-five dollars annually.

(5) For illuminated signs projecting beyond street line having more than thirty square feet but no more than fifty square feet, seventy dollars annually.

(6) For illuminated signs projecting beyond street line and having more than fifty square feet, seventy-five cents per square foot or part thereof annually, but not less than one hundred dollars.

b. In computing the fees to be charged in subparagraphs one, two and three of paragraph a of this subdivision, each face of any sign, when fronting on different streets, shall be treated as a separate sign.

c. In computing the fees to be charged under subparagraphs four, five and six of paragraph a of this subdivision, only the number of square feet of sign space on one side of such sign shall be used in computing such fee.

*** 7. Service equipment.**

~~Local Law 38-1990.~~

~~a. The fees for permits to install or alter service equipment, other than fire suppression piping systems, shall be computed in the same manner as the computation of fees for alteration of buildings, except as hereinafter provided.~~

~~Local Law 107-1993.~~

~~b. The fees hereinafter provided for permits to install and alter oil burning equipment shall cover the costs for the filing and processing of applications for the approval of plans or other statement describing the work, the filing and processing of permit applications and the issuance of work permits and the inspection in connection therewith.~~

~~(1) For the installation of oil burning equipment other than that described in subparagraph two of paragraph b of this subdivision, the fee shall be forty-five dollars.~~

~~(2) For the installation of oil burning equipment where~~

~~the storage tank exceeds two hundred seventy-five gallon capacity, or where the storage tank is less than two hundred seventy-five gallons and is to be buried, or is to be installed in a multiple dwelling, or a place of assembly, or in a building along the line of a subway, or is to deliver fuel oil to a burner installed above the lowest floor of a business building, the fee shall be as follows:~~

~~one hundred dollars where gross output of equipment is up to and including six million BTU per hour, one hundred thirty-five dollars where gross output is from six million one thousand to twelve million BTU per hour, and one hundred seventy-five dollars where gross output exceeds twelve million BTU per hour. Where the replacement or alteration involves the size of the combustion chamber, the atomization of the fuel used or the maximum capacity of the system, such replacement or alteration shall be considered an installation; except that where the installation involves only a replacement of or alteration of the refractory combustion chamber, regardless of change of gross output, the fee shall be one hundred dollars.~~

~~(3) Gross outputs of oil burning equipment are to be determined as follows:~~

~~(a) Cast iron boilers.—The gross IBR rating shown in column A-1 identified with the net IBR rating shown in column A-4 of table A for automatically fired boilers in the July, nineteen hundred fifty-two "IBR testing and rating code for low pressure cast iron boilers" published by the institute of boiler and radiator manufacturers, or the equivalent in later codes.~~

~~(b) Steel Boiler Institute (SBI) table one, two and three boilers.—One and one-half times the SBI net rating in BTU per hour.~~

~~(c) Warm air furnaces.—The bonnet delivery in BTU per hour as published in the manufacturer's catalogue.~~

~~(4) For the replacement of oil burning equipment as described in subparagraph (1) of this paragraph, the fee shall be thirty-five dollars, and the replacement of oil burning equipment as described in subparagraph two of this paragraph, except where such replacement is considered an installation, the fee shall be one hundred dollars.~~

~~Local Law 38-1990.~~

~~*8. After an application has been withdrawn by the owner, the owner on application to the comptroller of the city of New York, and upon verification of claim by the superintendent, may obtain a refund or a portion of the fee paid as follows:~~

~~(a) If application is withdrawn prior to the commencement of examination of the application, all but forty dollars of the fee paid shall be refunded.~~

~~(b) If the application is withdrawn during the progress of examination of the application, the comptroller shall retain a percentage of the deposit fee paid, which the department shall certify is the equivalent percentage of the examination completed, but not less than one hundred dollars. The~~

remainder of the fee shall be refunded to the owner.

(e) If the application is withdrawn after examination of plans, and before construction is commenced, there shall be refunded such portion of the fee paid as will leave retained by the comptroller fifty per cent of the total computed fee, but not less than one hundred dollars.

~~***Local Law 38-1990.~~

~~9. The department shall adopt such rules and shall prescribe such forms as may be necessary to carry out the provision of this section.~~

~~10. The commissioner shall, when deemed necessary by him or her, require reasonable substantiation of the costs stated in any application for a permit or any accompanying specification or other form that may be prescribed by the department.~~

~~***§26-212.1 Civil penalty for work without a permit.~~

~~(a) Whenever any work for which a permit is required pursuant to section 26-207 or section 27-147 of this code has been performed without such permit, a civil penalty shall be imposed as provided in this section.~~

~~(b) In cases where work has been performed without a permit on a one-family or two-family dwelling such civil penalty shall equal four times the amount of the fee payable for such permit pursuant to this article. Provided, however, that where only part of such work has been performed without such permit, such civil penalty shall be reduced proportionately according to the amount of such work still to be performed at the time a permit is issued. Provided further, however, that such civil penalty shall not be less than five hundred dollars. No civil penalty shall be imposed if the work for which a permit is required was completed prior to the effective date of this section.~~

~~(c) In the case of other work performed without a permit, such civil penalty shall be fourteen times the amount of the fee payable for such permit pursuant to this article. Provided, however, that where only part of such work has been performed without such permit, such civil penalty shall be reduced proportionately according to the amount of such work still to be performed at the time a permit is issued, and provided further, however, that such civil penalty shall not be less than five thousand dollars. No civil penalty shall be imposed if the work for which a permit is required was completed prior to the effective date of this section.~~

~~(d) Such civil penalty and such permit fee shall be payable by the owner of the building on which such work is performed.~~

~~(e) Any claim that work described in subdivision (a) of this section was done prior to January first, nineteen hundred eighty-nine shall be supported by an affidavit and supporting data.~~

~~(f) No permit shall be issued for any work described in subdivision (a) of this section until the civil penalty~~

~~assessed pursuant to this section has been paid.~~

~~***Local Law 48-2006; Local Law 58-1988.~~

~~§[C26-33.0] 26-213 Fees for equipment use permits.~~

~~a. There shall be no fee for equipment use permits of indefinite duration. In other instances, the fee for equipment use permits shall be fifteen dollars for each initial permit and ten dollars for each renewal permit when the permit is for a limited term, but not to exceed fifteen dollars annually, except as hereinafter provided.~~

~~***b. The fees for permits to use and operate boilers shall be as follows: thirty dollars annually for a boiler inspected pursuant to section 27-793 of this code by a duly authorized insurance company or other qualified inspector; sixty five dollars annually for a high pressure boiler inspected pursuant to section 27-793 of this code by a department inspector; sixty five dollars for each boiler inspection by a department inspector after a violation is issued.~~

~~***Local Law 62-1991; Local Law 40-1987, applies to permits applied for and inspections performed on and after July 6, 1987.~~

~~†c. The fees for permits to use and operate elevators and other devices listed in article one of subchapter eighteen of chapter one of title twenty-seven shall be calculated on the basis of sixty-five dollars for each inspection of each device by the department, sixty-five dollars for each elevator inspection by a department inspector after a violation is issued, and thirty dollars for each inspection by a private agency.~~

~~† Local Law 48-1991; Local Law 40-1987, applies to permits applied for and inspections performed on and after July 6, 1987.~~

~~(a) The fees for private inspection agencies and inspectors employed by such agencies which are approved by the commissioner to perform inspections of elevators, escalators and power-operated scaffolds required by article three of subchapter eighteen of chapter one of title twenty-seven and reference standard RS-18-1 of this code and any rules and regulations issued by the commissioner thereunder, shall be payable as follows:~~

~~Private inspection agency. Initial certificate of qualification; one hundred dollars for each certificate approved and issued by the commissioner subsequent to July first, nineteen hundred seventy-nine; annual renewal shall be fifty dollars.~~

~~Private inspector. Initial certificate of qualification; fifteen dollars for each certificate approved and issued by the commissioner subsequent to July first, nineteen hundred seventy-nine; annual renewal shall be ten dollars.~~

~~(b) Where a private inspection agency or a private inspector does not renew within thirty days prior to the expiration of the qualification certificate, the fee for the renewal shall be the same as the fee charged for an initial certificate of qualification.~~

~~* §[C26-34.0] 26-214 Special fees.~~

~~a. The department shall be entitled to charge the following special fees:~~

~~(1) Acknowledgements.....two dollars each.~~

~~(2) Certificates of occupancy.....five dollars per copy.~~

~~(3) Certificates of pending violations:~~

~~(a) multiple and private dwellings....thirty dollars per copy.~~

~~(b) all other buildings..... thirty dollars per copy.~~

~~(4) Certified copy of licenses..... five dollars per copy.~~

~~(5) Curb cuts.... six dollars per linear foot of curb cut including splay, except three dollars per linear foot of curb cut for a private dwelling.~~

~~(6) Marquees.....fifteen dollars annual fee for each one hundred square feet or fraction thereof.~~

~~(7) Places of assembly.....one hundred dollars annual fee; one hundred dollars for each place of assembly inspection by a department inspector after a violation is issued.~~

~~(8) Preparing copy of records:~~

~~(a) For preparing only, or preparing and certifying, a copy of a record or document filed in the department, other than a plan, certificate of occupancy or certificate of pending violation, eight dollars for the first page and five dollars for each additional page or part thereof a page to consist of one face of a card or other record.~~

~~(b) For a half size print made from microfilm of a plan thirty six by forty eight inches or less, eight dollars per copy and for a half size print made from microfilm of a plan exceeding thirty six by forty eight inches, sixteen dollars per copy.~~

~~(c) For extra copies of the same plan, five dollars per extra copy.~~

~~(9) Search inspections:-~~

~~(a) For a requested search inspection of a building, the unit fee shall be based upon a building with a frontage of twenty five feet and a depth of one hundred feet for which the fee shall be twenty dollars per floor for the first three floors and ten dollars for each additional floor. The minimum fee for each building shall be one hundred dollars.~~

~~(b) Such fee shall be increased by forty percent per floor for each twenty five feet or fraction thereof that such structure is in excess of twenty five feet frontage, and twenty five percent per floor for each twenty five feet or fraction thereof that such structure is in excess of one hundred feet in depth.~~

~~(c) A basement or cellar shall be considered a floor, but where a basement and cellar exist in any one structure, cellars shall not be included in computing the fee.~~

~~(d) When the depth of a one or two family dwelling is not more than forty feet the amount of the fee shall be fifty percent of the fee as computed herein.~~

~~(10) Temporary sheds, fences, railings, footbridges, catch platforms, building sidewalk shanties, over the sidewalk chutes thirty dollars per permit except that in case of a sidewalk shed the fee per permit shall be thirty dollars for the first twenty five feet or fraction thereof in the length of the shed, plus ten dollars for each additional twenty five feet or fraction thereof.~~

~~*(11) Acceptance of materials or equipment by code test method. When any material or equipment is submitted for acceptance for compliance with code requirements by the code test method, the application shall be accompanied by the required fee.~~

~~(a) Application for acceptance of materials or equipment six hundred dollars.~~

~~(b) Application for amendment of prior acceptance of materials or equipment five hundred dollars.~~

~~(c) Application for change of identification (change of ownership, corporate name or name of product) of prior acceptance of materials, appliances and methods of construction three hundred fifty dollars.~~

~~*** (12) Approval of materials and appliances. a. Application for approval of materials, appliances and methods of construction six hundred dollars.~~

~~b. Application for change of identification (change of ownership, corporate name or name of product) of prior approval of materials, appliances and methods of construction three hundred fifty dollars.~~

~~e. Application for amendment (change in manufacturing process) of prior approval of materials, appliances and methods of construction (may be accompanied by a change in identification application without additional fee) five hundred dollars.~~

~~*(12) Registration of persons pursuant to subdivision (a) of section 27-140.1 of the building code....fifty dollar annual fee.~~

~~b. Late payment of annual fees set forth in this subchapter shall be subject to the payment of an additional fee, not to exceed fifty percent of the annual fee, as set forth in regulations promulgated by the department.~~

~~*** (13) Application for temporary certificate of occupancy one hundred dollars.~~

~~*Local Law 54-1991; Local Law 49-1988.~~

~~***Local Law 72-1991. Note: There are two paragraph (12)s.~~

~~***Local Law 54-1991.~~

~~+++ (14) Microfilming of applications and associated documentation for certificates of occupancy, temporary certificates of occupancy and/or letters of completion, as required by rule of the commissioner, as follows: thirty-five dollars for mandatory microfilming by the department of applications for new buildings and alterations, payable at time of filing. Such payment will cover the costs for up to two fiche and will be credited toward the final payment due at the time of issuance of a certificate of occupancy, temporary certificate of occupancy, or letter of completion. The charge for each additional fiche is ten dollars.~~

~~+++Local Law 53-1993.~~

~~*Local Law 38-1990.~~

~~†§[C26-34.1] 26-214.1 Special fees; asbestos. (a) Whenever~~

~~pursuant to section 27-198.1 of the code application for a permit is made for work which will involve the performance of an asbestos project and for which the filing with the department of an asbestos inspection report, or proof of approval by the commissioner of environmental protection of an asbestos removal plan is required, the department shall be entitled to charge an additional fee as established by the commissioner of environmental protection in an amount not to exceed twelve hundred dollars.~~

~~(b) Whenever pursuant to section 27-198.1 of the code application for a plan approval or a permit is made for work for which an asbestos investigator is required to submit an asbestos inspection report certifying that the work to be performed will not constitute an asbestos project, the department shall be entitled to charge an additional fee as established by the commissioner of environmental protection in an amount not to exceed twenty-five dollars.~~

~~(c) For the purposes of this section, the terms "asbestos project", "asbestos inspection report" and "asbestos removal plan" shall have the meanings as are ascribed in section 24-146.1 of subchapter six of chapter one of title twenty-four of the code.~~

~~† Local Law 55-1991; Local Law 46-1988; Local Law 76-1985, language juxtaposed per Ch. 907-1985.~~

***§[C26-35.0] 26-215 Fees for the testing, approval, inspection and use of power-operated cranes, derricks and cableways.-**

~~(a) Upon filing an application on a form prescribed by the department, for prototype approval of a mobile crane, except those with hydraulic booms, manufactured after April first, nineteen hundred seventy, to comply with the requirements of section 6.0 of reference standard RS 19-2 the following fees shall be paid:~~

~~(1) Twenty-five hundred dollars when approval has been requested in accordance with 3.1.1.1(6)(a);~~

~~(2) Thirty-five hundred dollars when approval has been requested in accordance with 3.1.1.1(6)(b);~~

~~(3) Four thousand dollars when approval has been requested in accordance with 3.1.1.1(6)(c).~~

~~(b) Upon filing an application on a form prescribed by the department for a prototype approval of a mobile crane with a hydraulic boom; a fee of four thousand dollars shall be paid.~~

~~(c) Upon filing an application for a certificate of approval on a form prescribed by the department, the applicant shall pay the following fees for each crane or derrick; five hundred dollars for mobile cranes with a boom less than two hundred feet in length; one thousand dollars for mobile cranes with a boom two hundred feet or more in length, but less than three hundred feet in length; two thousand dollars for mobile cranes with a~~

~~boom three hundred feet or more in length but less than four hundred feet in length; three thousand dollars for mobile cranes with a boom four hundred feet or more in length; and for climber and tower cranes, regardless of length; and one thousand dollars for all other cranes and derricks. However, notwithstanding the foregoing, the fee for a mobile crane for which a certificate of approval is required with a boom not exceeding fifty feet in length with a maximum rated capacity exceeding three tons shall be three hundred dollars. The boom length as herein specified shall include the jibs and any other extensions to the boom. The fees prescribed herein shall include the issuance of the initial certificate of operation.~~

~~(d) Notwithstanding the provisions of subdivision (a) above, when an applicant has obtained a temporary certificate of approval and has paid fifty percent of the fees for such approval in accordance with rules and regulations of the department of buildings, the remainder of the fee shall be paid simultaneously with the approval of the application.~~

~~(e) If the applicant withdraws his or her application for a certificate of approval, upon application to the comptroller of the city of New York and upon verification of the claim by the commissioner, such applicant may obtain a refund of a portion of the fees as follows:~~

~~(1) If the application is withdrawn prior to the commencement of examination by the department, the entire fee shall be refunded except one hundred dollars.~~

~~(2) If the application is withdrawn after the examination has commenced, the comptroller shall retain a percentage of the fee paid, which the department shall certify is the equivalent percentage of the examination performed, but not less than one hundred dollars. The remainder of the fee shall be refunded to the applicant.~~

~~(3) If the application is withdrawn or if approval is denied after the department has performed its examination, no part of the fee shall be returned to the applicant.~~

~~(f) The fee for a new certificate of approval, when the boom or extension thereof is replaced or altered shall be the full fee required for testing a new crane or derrick which is replaced or altered with a boom or extension of the same size and design.~~

~~(g) The owner of any crane or derrick shall renew the certificate of operation each year. Upon filing an application for such renewals on a form prescribed by the department, the applicant shall pay the following fees for each crane or derrick: two hundred fifty dollars for mobile cranes with a boom less than three hundred feet in length, and four hundred dollars for mobile cranes with a boom three hundred feet or more in length. The length of boom herein specified includes jibs and any other extensions to the boom. The fee for derricks and all other cranes shall be two hundred fifty dollars. However, notwithstanding the foregoing, the fee for a mobile crane with a boom not~~

~~exceeding fifty feet in length with a rated capacity exceeding three tons or less shall be two hundred dollars. Further, when a crane is exempted from the requirements of a certificate of approval but not from the requirements of a certificate of operation, in accordance with paragraph three of subdivision (a) of section 27-1057 of the code, then the fee for the issuance of the initial certificate of operation shall be two hundred fifty dollars and the fee for the annual renewal thereof shall be two hundred dollars.~~

~~(h) The fee for an application for on-site inspection shall be one hundred fifty dollars, except that when such inspection shall cover mobile cranes with booms, including jibs and other extensions to the boom two hundred fifty feet or more in length, or derricks, the fee shall be as follows:~~

~~(1) Two hundred fifty dollars when the inspection is performed on normal working days.~~

~~(2) Seven hundred fifty dollars when, at the written request of the applicant, the inspection is performed on other than normal working days.~~

~~*Local Law 38-1990.~~

ARTICLE 4 INSPECTIONS

~~§[C26-40.0] 26-216 Right of entry and inspection.~~ The commissioner or his or her authorized representatives, in the discharge of their duties, shall have the right to enter upon and inspect, at all reasonable times, any buildings, enclosure, premises, or any part thereof, or any signs or service equipment contained therein or attached thereto, for the purpose of determining compliance with the provisions of the building code and other applicable building laws and regulations. Officers and employees of the department shall identify themselves by exhibiting the official badge of the department; and other authorized representatives of the commissioner shall identify themselves by producing and exhibiting their authority in writing signed by the commissioner.

~~§[C26-41.0] 26-217 Inspections of building work.~~ All inspections of building work shall be made and conducted under the direction of the commissioner and in accordance with and subject to the provisions of this title and the provisions of the building code. The commissioner may accept inspection and test reports from officers and employees of the department and other city departments and governmental agencies; and he or she may also accept inspection and test reports submitted by architects and engineers registered or licensed under the education law, or by other persons or services when he or she is satisfied as to their qualifications and reliability.

~~§[C26-42.0] 26-218 Inspection of completed buildings.~~

The commissioner shall cause all completed buildings to be inspected and a record made of all violations of the laws, rules and regulations relative to such buildings that are enforced by the department.

~~§[C26-43.0] 26-219 Inspection of construction machinery and equipment, etc.~~ The commissioner shall cause inspections to be made of machinery and equipment used for construction and excavation work, and for cableways, hoisting and rigging purposes.

~~§[C26-44.0] 26-220 Inspection of signs.~~

The commissioner shall cause all signs for which permits have been issued to be inspected at least once in every calendar year.

~~§[C26-45.0] 26-221 Inspection reports.~~ All inspection reports shall be in writing, and signed by the inspector, or the responsible individual, or the officer of the service, making the inspection; and a record of all inspections shall be kept by the department.

ARTICLE 5 CERTIFICATES OF OCCUPANCY

~~§[C26-50.0] 26-222 Requirement of certificate of occupancy.~~ It shall be unlawful to occupy or use any building erected or altered after December sixth, nineteen hundred sixty-eight, unless and until a certificate of occupancy shall have been issued by the commissioner, certifying that such building conforms substantially to the approved plans and the provisions of the building code and other applicable laws and regulations. Nothing herein contained, however, shall be deemed to prohibit the commissioner from permitting the temporary occupancy and use of a building in accordance with and subject to the provisions of the building code and paragraph three of subdivision (b) of section six hundred forty-five of the charter.

~~§[C26-51.0] 26-223 Occupancy of existing buildings.~~ The lawful occupancy and use of any building existing on December sixth, nineteen hundred sixty-eight, may be continued unless a change is specifically required by the provisions of the building code; and any changes of occupancy or use of any building existing on such date shall be subject to the provisions of the building code and section six hundred forty-five of the charter.

~~§[C26-52.0] 26-224 Issuance and filing of certificate of occupancy.~~ All certificates of occupancy shall be issued by the commissioner in accordance with and subject to the provisions of the building code and section six hundred forty-five of the charter. A record of all certificates of occupancy shall be kept by the department; and copies shall be furnished upon request, and on the

payment of the required fee.

ARTICLE 6 **PROJECTIONS BEYOND STREET LINE**

~~§[C26-60.0] 26-225 General restrictions on projections beyond street line.~~ It shall be unlawful to construct any part of a building erected after December sixth, nineteen hundred sixty-eight, or altered or enlarged after such date, so as to project beyond the street line and encroach upon a public street or public space, except in accordance with and subject to the provisions of this article and the provisions of the building code. Any permission, express or implied, to construct any part of a building so as to project beyond the street line shall be revocable at will by the city council or the board of estimate; and any part of a building permitted to project beyond the street line shall be so constructed that it may be removed at any time without causing the building to become structurally unsafe in whole or in part, subject to such exceptions and exemptions as may be provided in the building code.

~~§[C26-61.0] 26-226 Existing projections beyond street line.~~ Such parts of buildings as project beyond the street line on January first, nineteen thirty-eight, may be maintained as constructed unless their removal, rearrangement or relocation is directed by the city council or the board of estimate.

~~§[C26-62.0] 26-227 Rules governing projections beyond street line.~~ All rules governing the construction of building projections beyond the street line and all surface and subsurface construction beyond the street line and within the curb line, including curb cuts and driveways, the coverings thereof and the entrance thereto, and the issuance of permits in reference thereto, shall be adopted and promulgated by the commissioner. Nothing herein contained, however, shall be deemed to impair the powers and duties of the commissioner of parks and recreation and the commissioner of transportation to adopt and promulgate such additional rules as may be necessary with respect to the regulation and disposition of projections and encroachments beyond the street line, under and pursuant to the provisions of section eleven hundred five of the charter.

ARTICLE 7 **SAFETY IN BUILDING OPERATIONS**

~~§[C26-70.0] 26-228 General safety requirements.~~ Persons engaged in building operations shall provide reasonable and adequate protection for the safety of all persons and property affected thereby; and all such operations shall be conducted in accordance with and subject to the safety requirements of this article and the

building code, and the safety requirements of article ten of the labor law.

~~§[C26-71.0] 26-229 Safety requirements during excavation operations.~~ The following safety requirements shall apply to the conduct of all excavation operations, whether for construction purposes or otherwise:

~~a. Protection of persons and adjoining property.~~ Any person causing an excavation to be made shall provide adequate fencing on all open sides of the excavation, with suitable means of exit therefrom, and shall also provide such sheet piling, bracing and other supports as may be necessary to prevent the sides of the excavation from caving in before permanent supports are provided. Such person shall be afforded a license to enter and inspect adjoining property, and to perform such work thereon as may be necessary for such purpose; otherwise, the duty of providing safe support for any adjoining property, shall devolve upon the owner thereof, who shall be afforded a similar license with respect to the property where the excavation is to be made.

~~*b. Protection of adjoining buildings.~~ Whenever the safety of any adjoining building is or may be affected by an excavation, it shall be the duty of the person causing such excavation to be made to provide safe support for such building regardless of the depth of its foundations, provided such person is afforded a license to enter and inspect the adjoining building and property, and to perform such work thereon as may be necessary for such purpose; otherwise, such duty shall devolve upon the owner of the adjoining building, who shall be afforded a similar license with respect to the property where the excavation is to be made.

~~(1) Such person shall support the vertical load of the adjoining structure by proper foundations, underpinning, or other equivalent means where the level of the foundations of the adjoining structure is at or above the level of the bottom of the new excavation.~~

~~(2) Where the existing adjoining structure is below the level of the new construction, provision shall be made to support any increased vertical or lateral load on the existing adjoining structure caused by the new construction.~~

~~(3) Where the new construction will result in a decrease in the frost protection for an existing foundation below the minimums established in subchapter eleven of chapter one of title twenty-seven, the existing foundation shall be modified as necessary to restore the required frost protection.~~

~~*Chapter 664 of Laws of 2007.~~

~~e. Support of party walls.~~ Whenever an adjoining party wall is intended to be used by the person causing an excavation to be made, and such party wall is in good condition and sufficient for the uses of the existing and proposed buildings, it shall be the duty of such person to protect such party wall and support it by proper foundations, so that it shall be and remain practically as safe as it was

before the excavation was commenced.

d. Owner responsibility. The responsibility of affording any license referred to in subdivisions (a) and (b) of this section and in section 26-230 of this article, shall rest upon the owner of the property involved; and in case any tenant of such owner fails or refuses to permit the owner to afford such license, such failure or refusal shall be a cause to the owner for dispossessing such tenant through appropriate legal proceedings for recovering possession of real property.

~~§[C26-72.0] 26-230 Protection of roofs, skylights, etc.~~ Whenever any building is to be constructed above the roof of an adjoining building, it shall be the duty of the person causing such building to be constructed to protect the roof, skylights and other roof outlets of the adjoining building from injury, and to use every reasonable means to avoid interference with the use of the adjoining building during the course of construction. Such person shall be afforded a license to enter and inspect the adjoining building and perform such work thereon as may be necessary for such purpose; otherwise, the duty of protecting the roof, skylights and other roof outlets of the adjoining building shall devolve upon the owner thereof. In addition, any person having the duty to alter or maintain chimneys of any adjoining building under and pursuant to the provisions of the building code or other applicable laws and regulations, shall likewise be afforded a license to enter and inspect such adjoining building and perform such work thereon as may be necessary for such purpose; otherwise, such duty shall devolve upon the owner thereof.

~~§[C26-73.0] 26-231 Regulation of lots.~~ The regulation of lots, in conformity with the street on which they are situated, shall be calculated at curb level. Where a lot has more than one street frontage, and is so situated that the street frontages intersect, the curb of the longest street frontage shall be used. When the street frontages do not intersect, the curb along each frontage shall be used to one-half the depth of the lot between street frontages. A lot as referred to in this section, shall mean a parcel of land twenty-five feet by one hundred feet, or less, in one ownership whether adjacent land be in the same or other ownership; but, for this purpose, no land in the same ownership may be divided into lots smaller than twenty-five feet by one hundred feet.

~~§[C26-74.0] 26-232 Retaining walls.~~ The following requirement shall apply to the construction of retaining walls:

a. Retaining walls to conform to street regulation. When the regulation of a lot, in conformity with section 26-231 of this article, requires the ground on such lot to be raised or lowered and kept higher than the ground of

an adjoining lot, provided the ground of such adjoining lot is not maintained in a grade lower than in conformity with the street or streets on which it is situated, any necessary retaining wall shall be made and maintained jointly by the owners of the land on each side and shall stand one-half upon the land of each owner, unless otherwise agreed to by both owners.

b. Retaining walls to support adjoining earth. Where an excavation has been made or a fill placed on any lot within the legal grade required by section 26-231 of this article, and the adjoining land is maintained at a grade in conformity with or lower than the street or streets on which it is situated and is without permanent structures other than frame sheds or similar structures, any retaining wall which shall be necessary to support the adjoining earth shall stand equally upon the lot of each owner and shall be made and maintained jointly by the owners of the land on each side, unless otherwise agreed to by both owners.

c. Surplus retaining wall. Where any owner shall insist on maintaining his or her ground either higher or lower than the legal regulation as provided in section 26-231 of this article, the surplus retaining wall, which may be necessary to support such height or provide for such excavation, shall be made and maintained at the sole expense of such owner, and such additional thickness as may be required shall be built on the land of such owner.

d. Removal of retaining walls. Any retaining wall standing partly on the land of each owner may be removed by either owner when the necessity for such retaining wall ceases to exist.

~~§[C26-75.0] 26-233 Maintenance and repair of protection fences and retaining walls.~~ Unless otherwise provided by special agreement between them, the owners of adjoining properties shall be responsible jointly for the proper maintenance and repair of partition fences and retaining walls dividing their properties; and each such owner shall be responsible for one-half of the costs of maintaining and repairing such fences and retaining walls, except that where the replacement of a partition fence removed by one owner is necessary for safety, the owner removing the fence shall replace it at his or her own cost.

~~§[C26-76.0] 26-234 Report and inspection of unsafe buildings and property.~~ Whenever persons engaged in building operations have reason to believe in the course of such operations that any building or property is dangerous or unsafe, such person shall forthwith report his or her belief in writing to the commissioner of buildings, who shall thereupon cause an inspection to be made of such building or property; and if such building or property is found to be dangerous or unsafe, the commissioner shall cause such action to be taken as he or she may deem

necessary under and pursuant to the provisions of article eight of this subchapter.

ARTICLE 8

UNSAFE BUILDINGS AND PROPERTY

~~§[C26-80.0] 26-235 Removal or repair of structures.~~ Any structure or part of a structure or premises that from any cause may at any time become dangerous or unsafe, structurally or as a fire hazard, or dangerous or detrimental to human life, health or morals, shall be taken down and removed or made safe and secure. A vacant building which is not continuously guarded shall have all openings sealed in a manner approved by the commissioner, and it shall be the duty of the owner thereof promptly to make any repairs that may be necessary for the purpose of keeping such building sealed. Any vacant building not continuously guarded or not sealed and kept secure against unauthorized entry as herein before provided shall be deemed dangerous and unsafe as a fire hazard and dangerous and detrimental to human life, health and morals within the meaning of this article.

~~§[C26-80.5] 26-236 Record and notice of unsafe structures or premises.~~

~~a. Docket, order and notice.~~ Immediately upon the receipt of a report by any officer or employee of the department that a structure or part of a structure or premises is unsafe or dangerous, structurally or as a fire hazard, or is dangerous or detrimental to human life, health or morals, the superintendent shall cause the report to be entered upon a docket of unsafe structures and premises. Such docket shall be kept in the department. The owner, or one of the owners, executors, administrators, agents, lessees or any other person who may have a vested or contingent interest in the structure or premises, shall be served with a printed or written notice containing a description of the structure or premises deemed unsafe or dangerous, or detrimental to human life, health or morals, and an order requiring such structure or premises to be made safe and secure, or removed, or to be vacated and made safe and secure as may be deemed necessary by the superintendent. Such notice shall require the person thus served immediately to certify to the superintendent his or her acceptance or rejection of the order. The notice shall further notify said person that upon his or her refusal or neglect to comply with any of the requirements of this section or of section 26-237 of this article, a survey of the premises named in such notice will be made at a time and place therein named, in accordance with section 26-238 of this article. The notice shall also set forth that, if the premises referred to therein are reported unsafe or dangerous by

the surveyors, their report will be placed before the supreme court and that a trial upon the allegations and statements contained therein, whether such report contains more or less than the notice of survey, will be had before such court at a time and place named in such notice, to determine whether the unsafe or dangerous structures or premises shall be vacated and repaired and secured, or repaired and secured, or taken down and removed, and that a report of such survey, reduced to writing, shall constitute the issue to be placed before the court for trial.

~~b. Manner of service of order and notice.~~ The order and notice pursuant to this section shall be served by delivering to and leaving a copy of the order and notice with the person to whom the order and notice is addressed, if such person can be found within the city after diligent search. In the event that such service cannot be made, service shall be made in accordance with the provisions of subdivision d of section 26-244 of this subchapter.

~~§[C26-81.0] 26-237 Voluntary abatement of unsafe or dangerous conditions.~~ If the person served with a notice as specified in section 26-236 of this article shall immediately certify his or her assent to the securing or removal of such unsafe or dangerous structures or premises, or such structure which is dangerous or unsafe as a fire hazard or detrimental to human life, health or morals, he or she shall be allowed twenty-four hours, running from the time of service of such notice, within which to commence the abatement of the unsafe, dangerous or detrimental condition. Such person shall employ sufficient labor and assistance to secure or remove such conditions as expeditiously as possible.

~~§[C26-81.5] 26-238 Survey.~~

~~a. Identity of surveyors.~~ The survey referred to in section 26-236 of this article shall be made by three competent persons, of whom one shall be the superintendent, or an engineer or an inspector designated in writing by such superintendent; another shall be a licensed architect, appointed either by the county chapter of the American [sic] institute of architects of the borough in which the survey is to be made or by the New York society of architects, Brooklyn society of architects, or a licensed professional engineer appointed by the New York association of consulting engineers or by the county chapter of the New York society of professional engineers of the borough in which the survey is to be made; and the third shall be a practical builder, a licensed professional engineer or a licensed architect appointed by the person served with a notice pursuant to section 26-236 of this article. In case the person served with such notice shall neglect or refuse to appoint such surveyor, the other two surveyors shall make the survey. In case they disagree, they shall appoint a third person to take part in such

survey, who shall be a practical builder, licensed professional engineer or an architect of at least ten years' practice, whose decision shall be final.

b. Posting report of survey. A copy of the report of the survey shall be posted on the structure that is the subject thereof by the persons holding the survey, immediately on their signing such report.

c. Compensation of surveyors. The architect appointed by the county chapter of the American [sic] institute of architects of the borough in which the survey is to be made, or by New York society of architects, the Brooklyn society of architects, or the engineer appointed by the New York association of consulting engineers, or by a chapter of the New York society of professional engineers located in New York city, as herein before provided, who may act on any survey called in accordance with the provisions of this article, and the third surveyor who may have been called in the case of disagreement provided for in subdivision a of this section, shall each be paid the sum of fifty dollars by the finance department upon the voucher of the superintendent. The city is hereby given a cause of action against the owner of the structure surveyed, and of the lot or parcel of land on which the structure is situated, for such sum with interest. The amount so collected shall be paid over to the finance department in reimbursement of the amounts paid as aforesaid.

§[C26-82.0] 26-239 Judicial review of survey.

a. Institution of proceeding. Whenever the report of any such survey, had as aforesaid, shall recite that the structure or premises thus surveyed is unsafe or dangerous, structurally or as a fire hazard, or dangerous or detrimental to human life, health or morals, the corporation counsel shall, at the time specified in the notice, place such notice and report before the justice holding a special term of the court named in the notice.

b. Precedence of proceeding. The determination of the issue in an unsafe structure proceeding shall have precedence over every other business of such supreme court. A trial of the issue shall be held without delay, at the time specified in the notice, and shall be held by the justice holding such court or by a referee, whose decision or report in the matter shall be final, unless a jury trial is demanded, in which case the verdict of such jury shall be final.

c. Postponement of trial. If, for any reason, the issue shall be tried at a time other than that specified in such notice, or to which the trial may be adjourned, the issue may be brought into trial at any time thereafter by the superintendent without a new survey, upon at least three days' notice of trial to the person upon whom the original notice was served, or to his or her attorney. Such notice of trial may be served in the same manner as the

original notice.

d. Precept to abate. Upon the rendition of a verdict of the court or decision of the referee, if such verdict or decision shall find the structure or premises to be unsafe or dangerous, structurally or as a fire hazard, or dangerous or detrimental to human life, health or morals, the justice trying the case, or to whom the report of the referee trying the case shall be presented, shall immediately issue a precept directed to the superintendent, reciting such verdict or decision, and commanding him or her forthwith to vacate and repair and secure, or to repair and secure, or take down or remove the structure or part thereof or other premises that shall have been named in the report, in accordance with such verdict or decision.

§ [C26-82.5]*26-240 Repair or removal under precept.

a. Execution of precept. Upon receiving a precept under the provisions of section 26-239 of this article, the superintendent referred to therein shall immediately proceed to execute such precept, as therein directed, and may employ such labor and assistance and furnish such materials as may be necessary for that purpose. A precept requiring that the structure be repaired and secured shall include, but not be limited to, shoring and sealing of the structure. Whenever the demolition of any structure or part of a structure is to be carried out pursuant to any such precept, and the superintendent upon authorization by the commissioner, requests of either the commissioner of citywide administrative services or the commissioner of the department of housing preservation and development that such structure or part thereof be demolished, such demolition work, as so requested, shall be performed by or under the direction of the commissioner of citywide administrative services in accordance with the provisions of subdivisions b and c of section 4-204 of subchapter two of this chapter of the code, or the commissioner of the department of housing preservation and development. The owner of such structure, or part thereof, or premises, or any party interested therein, if he or she applies to the superintendent immediately upon the issuing of such precept and pays all costs and expenses incurred by the city up to that time, shall be allowed to perform the requirements of such precept at his or her own proper cost and expense, if the performance shall be done immediately and in accordance with the requirements of such precept. The superintendent shall have authority to modify the requirements of any precept upon application to him or her in writing by the owner of such structure, or part thereof, or premises, or his or her representative, or to seal or shore the structure upon an application by the commissioner of housing preservation and development, when such superintendent shall be satisfied that such change will secure the safety of such structure or premises equally well. After a determination to seal or shore the

structure is made by the superintendent upon application by the commissioner of housing preservation and development, written notice of such determination shall be sent by regular mail to the owner at his or her last known address. If no action to rehabilitate and restore the structure is undertaken within eighteen months following the granting of such application by the commissioner of housing preservation and development, which period may be extended for an additional six months by the superintendent upon approval of the supreme court, the structure may be demolished. The owner shall continue to have the right during such periods to request the superintendent in writing to modify the requirements of the precept.

b. Interference prohibited.-

1. It shall be unlawful for any person to interfere, obstruct or hinder the superintendent or commissioner of citywide administrative services or the commissioner of housing preservation and development or the representative of any of them, or any person who, acting under the authority conferred on his or her by such superintendent or commissioner, is performing the work directed by a precept issued out of any court as in this article provided, or the work ordered by the superintendent in accordance with such precept under the provisions of this subchapter.

2. The police commissioner shall enforce such orders or requirements when requested by the superintendent, and shall likewise enforce same at the request of the commissioner of citywide administrative services or the commissioner of housing preservation and development with respect to demolition work performed by or under the direction of such commissioner pursuant to the provisions of this section.

**Local Law 59-1996.*

[C26-83.0] 26-241 Provision for expense of executing precept. The superintendent may make requisition upon the comptroller for such amount of money as shall be necessary to meet the expenses of any preliminary proceedings or the execution of any order or precept issued by any court. Upon the approval of the statement of expenses thereof by any justice of the court from which such order or precept was issued, the finance department shall pay such expenses.

[C26-83.5] 26-242 Return of precept; reimbursement of city. Upon compliance with any precept issued to him or her in a proceeding under this article, the superintendent shall make return thereof, with an endorsement of the action thereunder and the cost and expenses thereby incurred, to the justice then holding the special term of the court from which such precept issued. Such justice shall then tax and adjust the amount endorsed upon such precept, and shall adjust and allow the disbursements of

the proceeding, together with the preliminary expenses of searches and surveys thereof, which shall be inserted in the judgment in such action or proceeding, and shall then render judgment for such amount and for the sale of the premises named in such notice, together with all the right, title and interest that the person named in such notice had in the lot, ground or land upon which such structure was placed, at the time of the filing of a notice of lis pendens in such proceedings, or at the time of the entry of judgment therein, to satisfy such judgment. Such sale shall take place in the same manner and with the same effect as sales under judgment in foreclosure of mortgages. The notice of lis pendens provided for in sections 26-235 through 26-247 of article nine of this subchapter shall consist of a copy of the notice of survey, and shall be filed in the office of the clerk of the county where the property affected by such action, suit or proceeding is located.

[C26-84.0] 26-243 Fallen structures and structures imminently dangerous.-

***a. Recovery of bodies from wrecked structures.-**

Where any persons are known or believed to be buried under the ruins of any fallen structure or part thereof in the city, the superintendent shall cause an examination of the premises to be made for the recovery of the bodies of the killed and injured. Whenever, in making such examination, it shall be necessary to remove any debris from the premises, the commissioners of ports and trade, parks, police and sanitation and the commissioner of transportation, respectively, when called upon by the superintendent, shall cooperate with the superintendent in carrying out the purposes of this article, and shall provide suitable and convenient places for the deposit of such debris.

**Local Law 14-1989; Local Law 5-1986, language juxtaposed per Ch. 907-1985.*

***b. Temporary safeguards for dangerous structures.** In case there shall be, in the opinion of the superintendent, actual and immediate danger that any structure or part thereof will fall, so as to endanger life or property, he or she shall request the commissioner of citywide administrative services or the commissioner of housing preservation and development to cause the necessary work to be done to render such structure or part thereof temporarily safe until the proper proceedings provided for unsafe structures by this subchapter are instituted.

**Local Law 59-1996.*

c. Vacating structures; closing streets and sidewalks.-

Where, in the opinion of the superintendent, there shall be actual and immediate danger that any structure or part thereof will fall so as to endanger life or property, or where any structure or part thereof has fallen and life is endangered by the occupation thereof, the superintendent is hereby authorized and empowered to order and require the inmates and occupants of such structure or part

thereof to vacate the structure forthwith. The police commissioner shall enforce such orders or requirements when so requested by the superintendent.

d. Labor and materials. For the purposes of this article, the superintendent shall employ such labor and materials as may be necessary to perform such work as expeditiously as possible. The superintendent may make requisition upon the comptroller for such amount of money as shall be necessary to meet the expenses of any direction, determination, requirement or order to perform said work.

ARTICLE 9 VIOLATIONS AND PUNISHMENTS

~~§[C26-84.5] 26-244 Notices of requirements or of violations.~~

a. Issue of notices or orders. All notices of the violation of any of the provisions of this subchapter or chapter one of title twenty-seven of the code, and all notices or orders required or authorized by this subchapter or chapter one of title twenty-seven of the code, directing anything to be done, including notices or orders that any structures, premises, or any part thereof, is deemed to be unsafe or dangerous, shall be issued by the superintendent and shall have his or her name affixed thereto.

b. Contents of notices or orders. Each such notice or order, in addition to the statement of requirements, shall contain a description of the structure, premises or property affected.

c. Service of notices or orders. Notices or orders issued by any court in any proceeding, instituted pursuant to this subchapter or chapter one of title twenty-seven of the code to restrain or remove any violation or to enforce compliance with any provision or requirement of this subchapter or chapter one of title twenty-seven of the code, may be served by delivering to and leaving a copy of the notice or order with any person violating, or who may be liable under any provision of this subchapter or chapter one of title twenty-seven of the code, or who may be designated as provided in subdivision d of section 26-247 of this article. Notices or orders to restrain or remove any violation issued by the superintendent or commissioner pursuant to this subchapter or chapter one of title twenty-seven of the code may be served by regular mail. Such notices may be served by any officer or employee of the department, or by any person authorized by the superintendent.

d. Notice or order by posting. If the person to whom such order or notice is addressed cannot be found within the city after diligent search, such notice or order may be served by posting it in a conspicuous place upon the premises where such violation is alleged to have been placed or to exist, or to which such notice or order may refer, or which may be deemed unsafe or dangerous, and also depositing a copy thereof in a post office in the city

enclosed in a sealed, postpaid wrapper addressed to such person at his or her last known place of residence, which shall be equivalent to a personal service of such notice or order upon all parties for whom such search shall have been made.

~~§[C26-85.0] 26-245 Emergency measures.~~

a. Stopping work and vacating and securing structures. In case, in the opinion of the superintendent, any defective or illegal work in violation of or not in compliance with any of the provisions or requirements of this subchapter or chapter one of title twenty-seven of the code shall endanger life or property, the superintendent, or such person as may be designated by him or her, shall have the right and is hereby authorized and empowered to order all further work to be stopped in and about such structure or premises, and to require all persons in and about such structure or premises forthwith to vacate it, and also to cause such work to be done in and about the structure as in his or her judgment may be necessary to remove any danger therefrom. The reason for such order shall be supplied in writing within one working day after the issuance of the order.

b. Violations of protective measures during construction or demolition. During the construction or demolition of a structure, the superintendent shall notify the owner of the structure affected of any failure to comply with any of the provisions of this subchapter or chapter one of title twenty-seven of the code that concern the protection of the public and workers during construction or demolition. Unless the owner so notified proceeds within twenty-four hours to comply with the orders of the superintendent, the superintendent shall have full power to correct the violation. All expenses incurred therefor shall become a lien on the property which may be enforced as provided in section 26-246 of this article.

c. Closing streets temporarily. The superintendent may, when necessary for the public safety, temporarily close the sidewalks, streets, structures or places adjacent to a structure or part thereof, and the police commissioner, or any of his or her subordinates shall enforce all orders or requirements made under this article, when so requested by the superintendent.

~~§[C26-85.5] 26-246 Judicial remedies.~~

a. Action or proceeding, generally. Whenever the superintendent believes that any structure, or any portion thereof, or any plumbing or other mechanical equipment, the construction, removal or demolition of which is regulated, permitted or forbidden by this subchapter or chapter one of title twenty-seven of the code is being constructed, removed or demolished, or has been constructed, in violation of, or not in compliance with any of the provisions or requirements of this subchapter or

~~chapter one of title twenty-seven of the code, or in violation of any detailed statement of specifications or plans submitted and approved thereunder, or of any certificate or permit issued thereunder; or that any provision or requirement of this subchapter or chapter one of title twenty-seven of the code, or any order or direction made thereunder has not been complied with, or that plans and specifications for plumbing and other mechanical equipment have not been submitted or filed as required by this subchapter or chapter one of title twenty-seven of the code; the superintendent may, in his or her discretion, through the corporation counsel, institute any appropriate action or proceeding at law or in equity to restrain, correct or remove such violation, or the execution of any work thereon, or to restrain or correct the erection or alteration of, or to require the removal of, or to prevent the occupation or use of, such structure. Any person who shall maintain or continue any structure, or any portion thereof, or the occupancy or use thereof, or any plumbing or mechanical equipment in violation of any of the provisions of this subchapter or chapter one of title twenty-seven of the code, after having been duly notified as provided in this subchapter or chapter one of title twenty-seven of the code that such structure, or any portion thereof, or the occupancy or use thereof, or that such plumbing or any mechanical equipment is in violation of any provision of this subchapter or chapter one of title twenty-seven of the code, shall be subject to any action or proceeding and any punishment that is provided in this article for the commission of the violation, except that any person shall be subject to any action or proceeding and any punishment that is provided in this article for the commission of the violation, without prior notification that a violation exists, where the violation is any of the following types:~~

- ~~1. A violation which produces an imminent hazard to persons or property by reason of a change of occupancy or use without a permit, or because of the obstruction of exits or unlawful change of exits, or by reason of permitting in a place of assembly more than the approved number of persons.~~
- ~~2. A violation due to the omission of protective equipment or construction which would safeguard persons or property during construction or demolition.~~
- ~~3. A violation that is due to work being done by an unlicensed or non-qualified person, when the law requires that such work be done only by a person licensed or possessed of a certificate of qualification to do such work.~~
- ~~4. A violation that consists of doing work without a permit.~~
- ~~5. A violation for failure to have a required current place of assembly permit or failure to have sprinklers or emergency lighting installed as required by law.~~

~~**b. Corporation counsel to act.** The corporation counsel shall institute any and all actions and proceedings, either~~

~~legal or equitable, that may be appropriate or necessary for the enforcement of the provisions of this subchapter or chapter one of title twenty-seven of the code.~~

~~**e. Courts having jurisdiction.** All courts of civil jurisdiction in the city shall have full legal and equitable jurisdiction over any and all suits and proceedings authorized by this subchapter or chapter one of title twenty-seven of the code to be brought for the recovery of any fine or the enforcement of any provision of this subchapter or chapter one of title twenty-seven of the code, and to make appropriate orders and render judgment therein according to law, so as to give force and effect to the provisions of this subchapter or chapter one of title twenty-seven of the code. Such courts shall give preference to such suits and proceedings over all others. No court shall lose jurisdiction of any action hereunder by reason of a plea that the title to real estate is involved if the object of the action is to recover a fine for the violation of any of the provisions of this subchapter or chapter one of title twenty-seven of the code.~~

~~**d. Restraining order.** In any such action or proceeding the city may, in the discretion of the superintendent and on this affidavit setting forth the facts, apply to any court of record in the city or to a judge or justice thereof, for an order enjoining and restraining all persons from occupying or using for any purpose whatever or doing, or causing or permitting to be done, any work in or upon such structure, or in or upon such part thereof as may be designated in such affidavit, until the hearing and determination of such action and the entry of final judgment therein. The court, or judge or justice thereof, to whom such application is made, is hereby authorized forthwith to make any or all of the orders above specified, as may be required in such application, with or without notice, and to make such other or further orders or directions as may be necessary to render the same effectual. No undertaking shall be required as a condition to the granting or issuing of such injunction order, or by reason thereof.~~

~~**e. Judgment.** All courts in which any action or proceeding is instituted under this subchapter or chapter one of title twenty-seven of the code shall, upon the rendition of a verdict, report of a referee, or decision of a judge or justice, render judgment in accordance therewith.~~

~~**f. Lien of judgment.** Any judgment rendered in an action or proceeding instituted under this subchapter or chapter one of title twenty-seven of the code shall be and become a lien upon the premises named in the complaint in such action; such lien to date from the time of filing a notice of lis pendens in the office of the clerk of the county wherein the property affected by such action, suit or proceeding, is located. Every such lien shall have priority before any mortgage or other lien as may exist prior to such filing except tax and assessment liens.~~

~~**g. Lis pendens.** The notice of lis pendens referred to in~~

this article shall consist of a copy of the notice issued by the superintendent, requiring the removal of the violation, and a notice of the suit or proceedings instituted, or to be instituted thereon. Such notice of lis pendens may be filed at any time after the service of the notice issued by the superintendent as aforesaid; provided he or she may deem such action to be necessary. Any notice of lis pendens filed pursuant to the provisions of this subchapter or chapter one of title twenty-seven of the code may be vacated and cancelled of record upon an order of a justice of the court in which such suit or proceeding was instituted or is pending, or upon the consent in writing of the corporation counsel. The clerk of the county where the notice is filed is hereby directed and required to mark any such notice of lis pendens, and any record or docket thereof, as vacated and cancelled of record upon the presentation and filing of a certified copy of such order or consent.

h. Costs. In no case shall a department, or any officer thereof, be liable for costs in any action, suit or proceeding that may have been, or may hereafter be, instituted or commenced in pursuance of this subchapter or chapter one of title twenty-seven of the code.

i. Officers not liable for damages. An officer of a department, acting in good faith and without malice, shall be free from liability for acts done in any action or proceeding instituted under any provision of this subchapter or chapter one of title twenty-seven of the code, or by reason of any act or omission in the performance of his or her official duties.

~~§[C26-86.0] 26-247 Judicial orders.~~

a. Judicial orders to comply with notices or orders. In case any notice or direction authorized to be issued by this subchapter or chapter one of title twenty-seven of the code is not complied with within the time designated therein, the city, by the corporation counsel, may, at the request of the superintendent, apply to the supreme court, at a special term thereof, for an order directing the superintendent to proceed to make the alterations or remove the violation, as may be specified in such notice or direction.

b. Judicial orders to vacate for violations. Whenever any notice or direction so authorized shall have been served as provided in this article, and shall not have been complied with within the time designated therein, the corporation counsel shall, at the request of the superintendent, in addition to, or in lieu of any other remedy provided for by this subchapter or chapter one of title twenty-seven of the code, apply to the supreme court, at a special term thereof, for an order directing the superintendent to vacate such structure or premises, or so much thereof as he or she may deem necessary, and prohibiting the use or occupancy of such structure or premises for any purpose specified in such order until such notice shall have been

complied with.

e. Responsibility of lessees or occupants. In case any of the notices or orders of the court herein mentioned shall be served upon any lessee or party in possession of the structure or premises therein described, it shall be the duty of the person upon whom such service is made, if such person knows [sic] the address of the owner or agent of the structure or premises named in the notice, to give immediate notice to such owner or agent if such owner or agent shall be within the city, and his or her residence be known to such person, and, if such owner or agent shall be outside the city, by depositing such notice in any post office in the city, properly enclosed in a post paid wrapper addressed to such owner or agent at his or her then known place of residence.

d. Designation of agent by an owner of a structure. Any owner of real estate or of a structure thereon may execute and acknowledge a written designation of a resident of the city upon whom may be served any notice of violation, notice to make safe, notice of survey, summons, mandate, or any paper or process, issued under a provision of this subchapter or chapter one of title twenty-seven of the code, and may file such designation, with the written consent of the person so designated, duly acknowledged in the office of the superintendent. Such designation must specify the location of the property with respect to which the designation is made, the residence and place of business of the person making it and of the person designated. Such designation shall remain in force during the period specified therein, if any, or until revoked by the death or legal incompetency of either of the parties, or until the filing of a revocation by either of the parties, duly acknowledged and endorsed, with the consent of the superintendent. The superintendent shall file and index each designation and shall note, upon the original designation and index, the filing of a revocation. While the designation remains in force, as prescribed in this article, a notice of violation, notice to make safe, notice of survey, summons, mandate, or any paper or process under any provision of this subchapter or chapter one of title twenty-seven of the code, shall be served upon the person so designated, in like manner and with like effect, as if it were served personally upon the person making the designation, even if such person be present in the city.

e. Reimbursement of city for expenses. The expenses and disbursements incurred in the carrying out of any order issued as provided in subdivisions a and b of this section shall become a lien upon the structure or premises named in the order, from the time of filing of a copy of the order, with a notice of lis pendens as provided in this subchapter or chapter one of title twenty-seven of the code, in the office of the clerk of the county where the property affected by such action, suit or proceeding is located; and the supreme court, to whom application shall be made, is hereby authorized and directed to grant any of

the orders above named, and to take such proceedings as shall be necessary to make them effectual, and any justice to whom application shall be made is hereby authorized and directed to enforce such lien in accordance with the mechanics' lien laws applicable to the city.

~~§[C26-86.5] 26-248 Punishments.~~

~~a. General punishments.~~ Except as hereinafter provided with respect to the amount of the fine, the owner of any structure, or part thereof, or land, where any violation of this subchapter or chapter one of title twenty seven of the code shall be placed, or shall exist, and any person who may be employed or assist in the commission of any such violation, and any and all persons who shall violate any of the provisions of this subchapter or chapter one of title twenty seven of the code or fail to comply therewith, or any such requirement thereof, or who shall violate or fail to comply with any detailed order or rule made thereunder, or who shall build in violation of any detailed statement of specifications or plans, submitted and approved thereunder, shall severally, for each and every such violation or non compliance, respectively, be punished by a fine of not more than five thousand dollars.

~~b. Heating plant and fire prevention violations.~~ Any person who shall violate any of the provisions of this subchapter or chapter one of title twenty seven of the code, as to the construction of chimneys, fireplaces, flues, warm air pipes or furnaces, or who shall violate any of the provisions of this subchapter or chapter one of title twenty seven of the code relating to the framing or trimming of timbers, girders, beams, or other woodwork in proximity to chimney flues or fireplaces, shall be punished by a fine of one hundred dollars.

~~c. Violations of the provisions for the registration of plumbers.~~ Any person, corporation or co-partnership that shall violate any of the provisions of section 26-146 of this chapter, shall be punished by a fine of not more than two hundred fifty dollars or by imprisonment not exceeding three months, or by both, and in addition, shall forfeit any certificate of registration that may be held at the time of such conviction, provided that when such violation is of the provision relating to the posting of a metal plate, no punishment of imprisonment shall be imposed, and the fine shall not be more than fifty dollars for the first offense, but shall be not less than two hundred dollars and not more than five hundred dollars for a subsequent offense.

~~d. Continuing violations after notice.~~

1. Except as otherwise provided in paragraph two of this subdivision, any person who, having been served with a notice as prescribed in this subchapter or chapter one of title twenty seven of the code to remove any violation or comply with any requirement of this subchapter or chapter one of title twenty seven of the code, or with any order or rule made thereunder, shall fail to comply with such notice within ten days after such service or shall continue to violate any requirement of this subchapter or chapter one of title twenty seven of the code in the respect

~~named in such notice shall be, upon conviction, guilty of an offense punishable by a fine of not less than two hundred fifty dollars nor more than five hundred dollars for the first such violation, not less than five hundred dollars no more than one thousand dollars for the second such violation, not less than one thousand dollars nor more than two thousand dollars for the third such violation, and not less than two thousand dollars nor more than five thousand dollars for the fourth such violation and for every subsequent violation, or, for any such violation, by imprisonment for not more than ninety days, or by both fine and imprisonment.~~

2. Notwithstanding the provisions of paragraph one of this subdivision, any person who shall convert, or knowingly take part or assist in the conversion of a residence which is legally approved for occupancy as a one family dwelling, to a dwelling for occupancy by two families or which residence is legally approved for occupancy as a two family dwelling, to a dwelling for occupancy by three families, and, having been served with a notice as prescribed in this subchapter or chapter one of title twenty seven of the code to remove such violation, shall fail to comply with such notice within ten days after such service or shall continue to violate the provisions of this paragraph in the respect named in such notice, shall be, upon conviction, guilty of an offense punishable by a fine of not more than five hundred dollars or imprisonment for not more than sixty days or both.

3. Notwithstanding the provisions of paragraphs one and two of this subdivision, the commissioner may determine that the presence of a violation or the failure to comply with any requirement of this subchapter or chapter one of title twenty seven of the code, or any order or rule made thereunder, constitutes a condition dangerous to human life and safety as set forth by the commissioner in the rules and regulations promulgated by the commissioner. In such event, any person who fails to remove such violation or who, fails to comply with any requirements of this subchapter or chapter one of title twenty seven of the code, or any order or rule made thereunder, after having been served with a notice personally or by certified mail indicating that such condition exists and requiring such removal or compliance unless the removal of such condition is prevented by a labor dispute or is the result of vandalism beyond the control of the owner, shall also be liable for a civil penalty of not less than one hundred fifty dollars per day commencing on the date of the service of such notice and terminating on the date that such removal or compliance has been substantially completed. When service of such notice is made by mail to the owner, civil penalties as herein

~~provided shall commence five days from the date of such mailing.~~

e. Jurisdiction of actions to recover fines. For the recovery of any such fine, an action may be brought in the name of the city in the New York city civil court, or other court of record, in the city; and whenever any judgment shall be rendered in such action, it shall be collected and enforced as prescribed and directed by the civil practice law and rules.

f. Discontinuance of action upon removal of violation. If any violation shall be removed or be in process of removal within ten days after the service of a notice as prescribed in this subchapter or chapter one of title twenty-seven of the code, liability shall cease, and the corporation counsel, on request of the commissioner shall discontinue any prosecution or action pending to recover any fine, upon such removal or the completion thereof within a reasonable time. Notwithstanding the foregoing provisions where the commissioner, pursuant to subdivision d of this section, has served a notice requiring removal of a violation or compliance with the requirements of this subchapter or chapter one of title twenty-seven of the code or with any order or rule made thereunder with respect to a condition dangerous to human life and safety, liability shall cease and the corporation counsel on request of the commissioner, shall discontinue such prosecution or action only if the removal or compliance so required has been completed or substantially completed within ten days after the service of such notice. The commissioner shall, upon good cause shown grant additional time for such removal or compliance. In addition, the civil penalties shall be tolled from the date the owner certifies under oath, on a form prescribed by the commissioner, that the removal of the violation has been substantially completed. If subsequent inspection by the commissioner shows a failure to have removed the violation, the civil penalties shall be deemed to have accrued as of the first day notice of violation has been served.

g. [Inconsistent provisions]* Notwithstanding any inconsistent provisions in other subdivisions of this section, any person who is convicted of any of the following violations shall be punished by a fine of not less than five hundred dollars nor more than five thousand dollars for the first violation, not less than one thousand dollars nor more than five thousand dollars for the second violation, not less than fifteen hundred dollars nor more than five thousand dollars for the third violation, and not less than two thousand dollars nor more than five thousand dollars for the fourth violation and every subsequent violation, or, for any such violation, by imprisonment for not more than ninety days, or by both fine and imprisonment:

***Copy in brackets not enacted but probably intended.**

1. Failure to possess a required place of assembly permit;
2. Failure to install required sprinklers or emergency lighting;

‡3. A violation which produces an imminent hazard to persons or property as a result of (a) a change of occupancy or (b) use without a permit.

‡Local Law 37-2005.

4. A violation of the provisions of:

- (a) paragraph six or seven of subdivision (c) of section 27-339 of the code; or
- (b) subdivision (c) of section 27-353 of the code; or
- (c) section 27-353.1 of the code; or
- (d) subdivision (c) of section 27-381 of the code; or
- (e) subdivision (b) of section 27-382 of the code; or
- ‡(f) subdivision (b) or (c) of section 27-384 of the code; or
- (g) section 27-777.1 of the code; or
- (h) section 27-777.2 of the code; or
- (i) subdivision (b) of section 27-929 of the code; or
- (j) paragraph twelve of subdivision (f) of section 27-972 of the code; or
- (k) paragraph ten of subdivision (g) of section 27-972 of the code; or
- (l) subdivision (c) of section 27-975 of the code; or
- (m) subdivision (c) of section 27-989 of the code; or
- (n) section 27-996.1 of the code; or
- (o) section 27-996.2 of the code; or
- ‡(p) section 2-4 or 4-3 of reference standard RS 13-1; or
- ‡(q) subdivision (c) of section 27-383.1 of the code; or
- ‡(r) subdivision (b) of section 27-383; or
- ‡(s) section 27-929.1.

5. Working without a permit and refusing to discontinue the work.

‡‡6. Engaging a person to perform work on or construct a structure where such person has not been issued a license or has not registered and such license or registration is required under any law, rule or regulation enforced by the commissioner.

*** h. Any permit holder or owner who shall permit any sidewalk shed to remain in place for a period of more than thirty days following the expiration of a sidewalk shed permit shall be subject to the provisions of section 26-126.1 of this code and subject to an additional fine of one hundred dollars per day for each day the shed was in place after the thirtieth day up to a maximum of \$10,000.

‡‡ i. Notwithstanding any other law, rule or regulation, and in addition to any other penalties provided in this code or pursuant to any other law, rule or regulation, any person who is convicted of a violation which produces an imminent hazard to persons or property as a result of any (a) obstruction of an exit or (b) unlawful change of an exit shall be punished by a fine of not less than five thousand dollars for a first violation, not less than five thousand dollars nor more than ten thousand dollars for a second violation, not less than ten thousand dollars nor more than fifteen thousand dollars for a third violation, and not less than fifteen thousand dollars nor more than twenty thousand dollars for a fourth violation and any subsequent violation, or for any such violation by imprisonment for not more than six months, or by both the applicable fine and imprisonment.

~~††††j. In addition to the penalties provided for in this section and in section 26-212.1 of this chapter, any person who is convicted of conducting demolition work without a required permit on a one or two family dwelling shall be guilty of a misdemeanor and upon conviction thereof, shall be punishable by a fine of not less than five thousand dollars nor more than ten thousand dollars or by imprisonment not to exceed six months or both. Such person shall also be subject to a civil penalty of not less than five thousand dollars nor more than ten thousand dollars to be recovered in a proceeding brought in the name of the city in any court of competent jurisdiction or in a proceeding before the environmental control board.~~

~~*k. **Violation of stop-work order.** Notwithstanding any inconsistent provision in any other subdivision of this section, any person who shall violate any of the provisions of article twenty four of subchapter one of chapter one of title twenty seven shall be punished by a fine of not less than two thousand nor more than fifteen thousand dollars for each such violation or by imprisonment not exceeding six months, or by both.~~

~~*Local Law 48-2006.~~

~~***Local Law 33-1991.~~

~~†Local Law 26-2004.~~

~~††Local Law 87-2005.~~

~~†††Local Law 36-2007.~~

~~††††Local Law 47-2006.~~

~~*[C26-87.0] **26-249 Violations of peremptory orders.** Any person who shall receive and fail to comply with any written peremptory order of the superintendent or commissioner issued when an immediate compliance with such order is essential to the public peace or safety, within the time specified in such order, in addition to any other punishment prescribed by law shall be punished by a fine of not more than five hundred dollars or by imprisonment not exceeding six months, or by both.~~

~~***Local Law 23-1990.~~

~~[C26-87.5] **26-250 Appeal.** An appeal from any decision or interpretation of the superintendent or commissioner may be taken to the board of standards and appeals pursuant to the procedures of the board, except as provided in section 25-204 of the code.~~

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~~§[C26-91.0] 26-251 Illegal practices in the sale or use of lumber for construction purposes prohibited.~~

~~a. Any person, corporation or partnership who, within the city of New York, shall have in his or her possession, or who shall place, use or affix without authorization from the owner thereof a stamp, label, trade mark, grade mark, serial number or other distinguishing mark, which stamp, label, trade mark, grade mark, serial number or mark is the property of an association of lumber manufacturers or lumber grading bureau upon any lumber sold or intended to be sold, or used or intended to be used, for or in the construction, alteration or repair of a building or other structure within the city of New York, or any person, corporation or partnership who shall knowingly sell or possess or offer for sale such lumber so marked, or who shall knowingly possess or use or prepare to use such lumber so marked for or in the construction, alteration or repair of a building or structure within the city of New York, shall be guilty of an offense punishable by a fine of not less than twenty-five dollars nor more than one hundred dollars for the first offense, and by a fine of not less than one hundred dollars nor more than five hundred dollars, or by imprisonment for not more than six months, or both, for a subsequent offense.~~

~~b. Possession of such lumber so marked, or of a colorable imitation of the principal features of a genuine stamp, label, trade mark, grade mark, serial number or mark as aforesaid, or unauthorized possession of a genuine stamp, label, trade mark, grade mark, serial number or mark, as aforesaid, by any lumber dealer, builder or contractor, or by any employee, partner, or officer thereof, shall be presumptive evidence of a violation of this section.~~

~~* §[C26-92.0] 26-252 (a) Sidewalk sheds, fences, railings, etc.~~ ~~a. It shall be unlawful to construct any sidewalk shed, fence, railing, footbridge, catch platform, builder's sidewalk shanty, or an over-the-sidewalk chute, unless and until a special permit ^{**}therefor shall have been issued by the building commissioner. The fees for such permit shall be as provided in section 26-214 of this chapter. Each applicant for a sidewalk shed permit shall state the reason the sidewalk shed is needed. The term of the sidewalk shed permit shall be one year, or the expiration of the contractor's insurance if such time period is less than one year. No renewals of shed permits, except for new buildings under construction, will be given unless an architect or engineer conducts a thorough examination of that part of the premises on which work is being conducted and submits a report acceptable to the commissioner, which clearly documents the condition of the applicable part of the premises and the scope of work that has been performed thereon, and estimates the time needed to complete the work. To renew a shed permit for a new building under construction, each applicant shall file an~~

application with the commissioner. All renewal applications shall include the name and address of the owner of the premises.

~~^{**}As enacted but "therefore" probably intended.~~

~~b. Following the receipt of a permit to erect a sidewalk shed, the permit holder shall post a sign on the sidewalk shed, which includes the name, address, telephone number, and permit number of the permit holder. The sign shall also include the date that the permit expires. The sign shall measure twenty-five square feet.~~

~~^{*}Local Law 93-1996; Local Law 33-1991; Local Law 45-1969.~~

~~^{}§26-252.1 Workplace exits.~~**

~~(1) Except for the exemptions specified in subdivision j of section 27-371 of title twenty seven of the administrative code of the city of New York, no employer or agent of such employer shall lock the doors of or otherwise prohibit exit from any workplace, when by so doing the health or safety of any employee, independent contractor or other individual working in such workplace may become endangered by fire or other hazardous condition.~~

~~(2) In addition to any other inspection requirements imposed by law, rule or regulation, a minimum of fifty unannounced inspections per year shall be conducted by the fire department to ensure the identification and abatement of any hazardous conditions in violation of this section. Such inspections shall include, but not be limited to, sites where there are known or suspected conditions affecting employee safety and health.~~

~~(3) Any employee who believes that he or she has been the subject of a retaliatory action by his or her employer or the agent of such employer, as defined by section seven hundred forty of the labor law, due to the lawful acts of such employee in furtherance of a civil or criminal enforcement proceeding brought concerning the failure of any employer or the agent of such employer to comply with this section, may bring an action in any court of competent jurisdiction for the relief provided for in this subdivision and shall be entitled to all relief necessary to make such employee whole. Such lawful acts of an employee shall include, but not be limited to, assisting in the investigation and initiation of an enforcement proceeding concerning the non compliance of this section, providing testimony in any such proceeding or providing other assistance in connection therewith. The relief to which such employee shall be entitled shall include, but not be limited to, (i) an injunction to restrain any adverse or retaliatory action, (ii) reinstatement to the position such officer or employee would have had but for such action, or to an equivalent position, (iii) reinstatement of full benefits and seniority rights including payment of any missed back pay, plus interest and (iv) compensation for any special damages sustained as a result of such action, including litigation costs and reasonable attorneys' fees.~~

~~(4) Notwithstanding the provisions of any other law, rule or regulation, and in addition to any other penalties~~

~~provided in this code or pursuant to any other law, rule or regulation, any person who is convicted of any violation of this section shall be guilty of a misdemeanor and shall be subject to a fine for each employee, independent contractor or other individual working in a workplace at the time such person violated this section, of not less than five thousand dollars for a first violation, not less than five thousand dollars nor more than ten thousand dollars for a second violation, not less than ten thousand dollars nor more than fifteen thousand dollars for a third violation, and not less than fifteen thousand dollars nor more than twenty thousand dollars for a fourth violation and any subsequent violation, or a term of imprisonment not exceeding nine months, or both the applicable fine and imprisonment. The court may impose a separate sentence for each offense, and if imprisonment is imposed, the court may order any of such sentences to be served concurrently or consecutively. Such violator shall also be subject to a civil penalty of not more than five thousand dollars for each employee, independent contractor or~~

~~other individual working in a workplace at the time such person violated this section, to be recovered in a civil action brought in a court of competent jurisdiction or in a proceeding before the environmental control board.~~

~~(5) Any person who is convicted of a violation of this section, or any person directed by rule promulgated by the fire commissioner, shall post a sign in English, Spanish, Korean, Chinese and any other language deemed necessary by the fire commissioner, to be prominently displayed at all workplaces notifying all employees, independent contractors or any other individuals working in such workplace of the prohibitions against locking the doors of or otherwise prohibiting exit from any workplace and employer retaliation established pursuant to this section. Such sign shall be in a form prescribed by the fire commissioner and may contain any other information deemed necessary by the fire commissioner, or as recommended by the police commissioner or the commissioner.~~

~~##Local Law 87-2005.~~



**SUBCHAPTER 4 REGULATION OF OUTDOOR SIGNS

TABLE OF CONTENTS

Art. or Section

Article 1 — Maintenance Permit for Outdoor Signs

- 253 — Permit Required
- 254 — Application
- 255 — Permit Expiration
- 256 — Civil Penalties
- 257 — Construction
- 258 — Exemption

Article 2 — Outdoor Advertising Companies

- 259 — Definitions
- 260 — Registration of Outdoor Advertising Companies
- 261 — Display of Name and Registration Number of Outdoor Advertising Company
- 262 — Criminal and Civil Penalties for Violations by Outdoor Advertising Companies; Other Enforcement
- 263 — Investigations

~~***26*** omitted from section numbers in this column.~~
~~*** Local Law 31-2005; Local Law 14-2001.~~

ARTICLE 1

MAINTENANCE PERMIT FOR OUTDOOR SIGNS

~~§26-253 Permit required.~~

~~***a. The commissioner may, in his or her discretion, when necessary in the public interest, establish a permit requirement for signs maintained in the areas described in this section in accordance with the provisions of this article and the rules of the department. On and after a date to be provided by the rules establishing such a permit requirement, and subject to the provisions of section 26-258 of this code, it shall be unlawful to place or maintain a sign, as defined in section 12-10 of the zoning resolution on any building or premises unless a permit for the maintenance of such sign has been issued by the department pursuant to this article if such sign is within a distance of nine hundred linear feet from and within view of an arterial highway or within a distance of two hundred linear feet from and within view of a public park with an area of one half acre or more.~~

~~***b. Where a sign maintenance permit has been established by the commissioner pursuant to section 26-253 (a) such permit shall be required for all signs maintained in the areas described in section 26-253 (a), and not otherwise excluded under section 26-258, whether or not a permit is required and/or has been issued for the installation, alteration or erection of such sign pursuant to sections 27-147, 27-148 and article sixteen of sub chapter one of title twenty seven of this code.~~

~~*** Local Law 31-2005; Local Law 14-2001.~~

~~e. For the purposes of this section the term arterial highway shall include all highways that are shown on the master plan of arterial highways and major streets as principal routes parkways or toll crossings and that have been designated by the city planning commission as arterial highways to which the provisions of sections 42-55 and 32-66 of the zoning resolution shall apply as shown in appendix C of the zoning resolution.~~

~~***§26-254 Application.~~ Application for a permit or for the renewal of a permit shall be made on forms to be furnished by the department and shall contain such information as the department shall prescribe. Except as otherwise provided in section 26-255, a permit shall remain in effect for a period to be determined by rule and may be renewed. The fee for a permit or for its renewal shall be established by rule. The identification number of the permit shall be displayed on the sign or on the building or premises on which the sign is located or both, in a manner to be provided by rule.

~~*** Local Law 31-2005; Local Law 14-2001.~~

~~§26-255 Permit expiration.~~ A permit issued pursuant to section 26-253 of this code shall expire and be of no further force or effect where:

- (i) in the case of a sign which is accessory to a principal use within the meaning of section 12-10 of the zoning resolution, there has been a discontinuance of the operation of the principal use to which such sign is accessory, or in the event the sign is no longer in the same ownership as such principal use or is no longer operated and maintained substantially for the benefit or convenience of the owners, occupants, employees, customers or visitors of the principal use;
- (ii) in the case of any sign for which a permit has been issued pursuant to section 26-253 of this code, whether or not accessory to a principal use within the meaning of section 12-10 of the zoning resolution, there has been a change in copy which the commissioner has determined renders such sign no longer in compliance with the zoning resolution. The commissioner shall prescribe by rule procedures for the notification to the department concerning changes in copy which have been made on signs for which permits have been issued under section 26-253 of this code. Nothing herein shall be construed as limiting the ability of any person to apply for a new permit pursuant to section 26-254 of this code.

~~§26-256 Civil penalties.~~ a. Any person who places or maintains a sign on a building or premises without an appropriate permit in violation of section 26-253 of this article shall be liable for a civil penalty of, for a first violation, not more than fifteen thousand dollars and, for a second or subsequent violation, not more than twenty five thousand dollars. Each day's continuance shall be a separate and distinct violation. Such civil penalties may be recovered in an action in any court of appropriate jurisdiction or in a proceeding before the environmental control board. Such board shall have the power to impose the civil penalties provided for in this section.

~~Notwithstanding the provisions of section six hundred sixty-six of the charter, a notice of violation issued by the department pursuant to this section shall not be subject to review by the board of standards and appeals.~~

~~**§26-257 Construction.** This article shall not be construed to grant the right to place or maintain a sign on any building or premises where the placement or maintenance of such sign would otherwise be prohibited pursuant to the zoning resolution, the administrative code or any other provision of law. No permit for a sign issued hereunder shall be deemed to constitute permission or authorization to maintain a sign which is unlawful pursuant to any other provisions of law nor shall any permit issued hereunder constitute a defense in an action or proceeding with respect to such an unlawful sign.~~

~~**§26-258 Exemption.** The provisions of this article shall not apply to: (i) signs with a surface area of two hundred square feet or less that are located no higher than three feet above the floor of the second story of the building on which the sign is located; and (ii) signs under the control of an outdoor advertising company and included on a certified list of signs, sign structures and sign locations under the control of such company required to be filed with the department pursuant to subdivision a of section 26-261 of the code.~~

~~****Local Law 31 2005; Local Law 14 2001.*~~

ARTICLE 2 OUTDOOR ADVERTISING COMPANIES

~~**§26-259 Definitions.** As used in this subchapter, the following terms shall have the following meanings:~~

~~*****a.** The term “affiliate” means an outdoor advertising company having a controlling interest in another outdoor advertising company or in which such other outdoor advertising company has a controlling interest. In addition, where a person or entity has controlling interests in two or more outdoor advertising companies, such outdoor advertising companies shall be considered affiliates of each other. A “controlling interest” means actual working control, in whatever manner exercised, including without limitation, control through ownership, management, debt instruments or negative control, as the case may be, as defined in rules of the department.~~

~~*****b.** The term “outdoor advertising company” means a person, corporation, partnership or other business entity that as a part of the regular conduct of its business engages in or, by way of advertising, promotions or other methods, holds itself out as engaging in the outdoor advertising business.~~

~~*****c.** The term “outdoor advertising business” means the business of selling, leasing, marketing, managing, or otherwise either directly or indirectly making space on signs situated on buildings and premises within the city of New York available to others for advertising purposes,~~

~~whether such advertising directs attention to a business, profession, commodity, service or entertainment conducted, sold, or offered on the same or a different zoning lot and whether such sign is classified as an advertising sign pursuant to section 12-10 of the zoning resolution.~~

~~*****d.** The term “under the control of an outdoor advertising company” in reference to a sign, sign structure, or sign location means that space on such sign, sign structure, or at such sign location is sold, leased, marketed, managed or otherwise either directly or indirectly made available to others for any purposes by such outdoor advertising company.~~

~~****Local Law 31 2005; Local Law 14 2001.*~~

~~**e.** The term “sign” means a sign as defined in section 12-10 of the zoning resolution except that such term shall not include any sign subject to regulation by the department of transportation.~~

~~**f.** The term “sign location” means a building or premises on which an outdoor advertising company is entitled to sell, lease, market, manage or otherwise either directly or indirectly make space on signs available to customers, irrespective of whether a sign exists on such building or premises.~~

~~**§26-260 Registration of outdoor advertising companies.**~~

~~**a.** On and after a date to be provided by rule, it shall be unlawful for an outdoor advertising company to engage in the outdoor advertising business or, by way of advertising, promotions or other methods, hold itself out as engaging in the outdoor advertising business unless such company is registered in accordance with this article and the rules of the department. Such rules shall establish a procedure pursuant to which the department may require the single registration of an outdoor advertising company and its affiliates. An outdoor advertising company and its affiliates made subject to single registration shall be considered a single outdoor advertising company for purposes of this article.~~

~~*****b.** Application for registration or the renewal of registration shall be made on forms to be furnished by the department, may be made through electronic means, and shall contain such information as the department shall prescribe. Registration shall remain in force for two years and may be renewed. The fee for such registration and for the renewal of such registration shall be established by rule and may be based on the number of signs in the registered inventory.~~

~~*****c.** Each outdoor advertising company shall post a bond or provide another form of security to the city in an amount to be determined by the department by rule to cover:~~

~~(1) all costs incurred by the city pursuant to section 26-127.3 of this code for painting over, covering, rendering ineffective or for the removal and storage of an illegal sign or sign structure under the control of such outdoor advertising company; and~~

~~(2) all fines or civil penalties imposed against such company pursuant to this article.~~

~~*****d.** The department may revoke, suspend or refuse to renew the registration of an outdoor advertising company or impose fines or other penalties where it is determined by~~

the commissioner, after notice and the opportunity to be heard, that (i) such company has made statements that it knew or should have known are false in any application or certification filed with the department, (ii) such company has failed to comply with subdivision a of section 26-261 of this code or the rules adopted pursuant to its provisions by failing to file a listing of signs, sign structures and sign locations under its control as specified in such section within the time and in the manner required by department rules or by filing an incomplete listing of signs, sign structures and sign locations under its control as specified in such section, (iii) such company has been found liable for or has admitted to violations of the zoning resolution under section 26-262 of this code committed on three or more occasions within a thirty six month period, where such violations relate to the erection, maintenance, attachment, affixing, painting, or representation in any other manner on a building or premises of advertising signs, as defined in section 12-10 of the zoning resolution, at locations where the display of such advertising signs is not permitted under the zoning resolution, or at locations where the display of such advertising signs violate the size, height, or illumination provisions of the zoning resolution, and such signs are located within a distance of nine hundred linear feet from and within view of an arterial highway or within two hundred linear feet from and within view of a public park with an area of one half acre or more, (iv) such company has failed to pay any civil penalties imposed pursuant to section 26-262 or amounts owed to the city pursuant to section 26-127.3 of this code or, (v) such company has violated the department's rules pertaining to outdoor advertising companies. No application for registration by an outdoor advertising company or any affiliate thereof shall be accepted for filing by the department for a period of five years after revocation of or the refusal to renew the registration of such outdoor advertising company pursuant to this subdivision. The department shall not accept or process any applications for permits to install, erect or alter signs pursuant to section 27-147, 27-148 and article sixteen of sub chapter one of title twenty seven of this code or for the maintenance of signs pursuant to section 26-253 where such applications are filed by or where such signs are under the control of an outdoor advertising company or any affiliate thereof after the registration of such outdoor advertising company has been revoked or not renewed or during the term of any period of suspension of such registration. The commissioner may settle any proceeding in which the revocation, suspension or renewal of an outdoor advertising company's registration is at issue upon such terms and conditions as he or she may deem appropriate including but not limited to the agreement of an outdoor advertising company to remove signs along with supporting sign structures as a condition for the dismissal of such proceeding.

~~§§ Local Law 31-2005; Local Law 14-2001.~~

~~***§26-261 Display of name and registration number of outdoor advertising company; location of signs.-~~

~~a. An outdoor advertising company shall provide the department with a listing with the location of signs, sign structures and sign locations under the control of such outdoor advertising company in accordance with the following provisions:~~

~~(1) The listing shall include all signs, sign structures and sign locations located (i) within a distance of nine hundred linear feet from and within view of an arterial highway; or (ii) within a distance of two hundred linear feet from and within view of a public park with an area of one half acre or more.~~

~~(2) In addition to the signs, sign structures and sign locations required to be reported pursuant to paragraph one of this subdivision, the commissioner may, by rule, expand the scope of such listing to include the reporting of other signs, sign structures and sign locations, as specified in such rule.~~

~~(3) The listing shall be in such form, containing such information and filed at such periodic intervals or upon such other conditions, as the department shall prescribe by rule.~~

~~(4) Such listing shall also indicate the permit identification numbers for the erection, alteration or installation of such signs pursuant to section 27-147, 27-148 and article sixteen of sub chapter one of title twenty seven of this code and for the maintenance of such signs pursuant to section 26-253, unless a permit is not required pursuant to such provisions, as well as the name and license number of the master or special sign hanger who hung or erected each such sign.~~

~~(5) Such listing shall be accompanied by (a) a certification by an architect or engineer, co signed by a responsible officer of the outdoor advertising company that all signs reported on such listing are in compliance with the zoning resolution (b) copies of proof that the sign complies with the zoning resolution and a certification by the sign's owner that to the best of the certifier's knowledge and belief the information so provided for such sign is accurate, or (c) a written opinion by the Department, stating that the sign to which the opinion refers complies with the zoning resolution. Notwithstanding any inconsistent provision of this article, where, in accordance with the department's rules, the department renders an opinion, determination or decision relating to whether a sign is non-conforming or whether it is located in proximity to an arterial highway as defined by the zoning resolution, such decision, determination or opinion shall be appealable to the board of standards and appeals in accordance with applicable law. If a timely appeal to such board is taken the department shall not issue a notice of violation with respect to such sign pending a determination of such appeal by such board.~~

~~(6) The commissioner shall make all listings filed pursuant to this subdivision accessible to the public.~~

~~§§ Local Law 31-2005; Local Law 14-2001.~~

~~§26-262 Criminal and civil penalties for violations by outdoor advertising companies; other enforcement.-~~

~~a. (1) Notwithstanding any other provision of law, an outdoor advertising company shall be liable for a civil penalty if a sign under its control has been erected, maintained, attached, affixed, painted on, or in any other manner represented on a building or premises in violation of any provision of the zoning resolution, administrative code or rules adopted pursuant thereto relating to signs.~~

~~(2) It shall be unlawful for an outdoor advertising company to sell, lease, market, manage or otherwise make available to others for advertising purposes space on a sign that has been erected, maintained, attached, affixed, painted on or in any other manner represented on a building or premises in violation of any provision of the zoning resolution, administrative code or rules adopted pursuant thereto or to enter into any agreement for such purpose.~~

~~(3) On and after a date to be provided by rule, it shall be unlawful for an outdoor advertising company to sell or otherwise transfer control of a sign or sign location or of any right of such company to sell, lease, market, manage or otherwise make space on a sign or at a sign location available to others for advertising purposes to an outdoor advertising company that is not registered in accordance with this article and the rules of the department.~~

~~(4) An outdoor advertising company that violates any of the provisions of paragraphs one, two or three of this subdivision shall be subject to a civil penalty of, for a first violation, not more than fifteen thousand dollars and, for a second or subsequent violation, not more than twenty five thousand dollars.~~

~~(5) Notwithstanding any inconsistent provision of law, an outdoor advertising company shall, upon being found guilty, be subject to fines or imprisonment or both pursuant to sections 26-126 or 26-248 of the code if a sign under its control has been erected, maintained, attached, affixed, painted on, or in any other manner represented on a building or premises in violation of any provision of the zoning resolution, administrative code or rules adopted pursuant thereto relating to signs.~~

~~b. On and after a date to be provided by rule, an outdoor advertising company that engages in the outdoor advertising business or, by way of advertisement, promotion or other methods holds itself out as engaging in the outdoor advertising business without registering with the department pursuant to this article, or, after such registration has been revoked or not renewed pursuant to subdivision d of section 26-260 of this code continues to engage in such business beyond a date specified by the commissioner in his or her determination to revoke or not renew, shall be guilty of a misdemeanor subject to a fine not to exceed five thousand dollars or a sentence of imprisonment of not more than one year or both such fine and imprisonment for each offense. In the case of a continuing violation each day's continuance shall be a separate and distinct violation. Such company shall also be liable for a civil penalty of, for a first violation, not more than fifteen thousand dollars and, for a second or subsequent violation, not more than twenty five thousand~~

~~dollars. Each day's continuance shall be a separate and distinct violation.~~

~~e. Civil penalties may be recovered in an action in any court of appropriate jurisdiction or in a proceeding before the environmental control board. Such board shall have the power to impose the civil penalties provided for in this section. Notwithstanding the provisions of section six hundred sixty six of the charter, a notice of violation issued by the department pursuant to this article shall not be subject to review by the board of standards and appeals.~~

~~***d. On and after a date to be provided by rule, it shall be unlawful to erect, maintain, attach, affix, paint on, or in any other manner represent on a building or premises any sign that is under the control of an unregistered outdoor advertising company. In addition to or as an alternative to any other remedies or penalties provided under any other provision of law, the commissioner may commence a proceeding for the removal of such sign or its sign structure or both in accordance with the procedures set forth in section 26-127.3 of this code for the abatement of a nuisance and any such sign and its structure is hereby declared to be a public nuisance pursuant thereto. All of the provisions of section 26-127.3 shall apply to the removal of a sign pursuant to this section except that a sign under the control of an unregistered outdoor advertising company may be removed whether or not it is in compliance with the zoning resolution, the administrative code or rules adopted pursuant thereto, and irrespective of whether it has a surface area greater than two hundred square feet.~~

~~***Local Law 31-2005; Local Law 14-2001.~~

~~e. Notwithstanding any other provision of law to the contrary, an outdoor advertising company, or any affiliate thereof, that has been found guilty of a misdemeanor or liable for a civil penalty pursuant to subdivision b of this section or whose registration has been revoked pursuant to subdivision d of section 26-260 of this code shall be considered ineligible for the award of any city franchise or concession, and shall be prohibited from administering any advertising program on behalf of a city franchisee or concessionaire, for a period of five years following judgment or decision.~~

~~§26-263 Investigations.~~ ~~The department may investigate any matter within the jurisdiction conferred by this article and shall have full power to compel the attendance, examine and take testimony under oath of such persons as it may deem necessary in relation to such investigation, and to require the production of books, accounts, papers and other evidence relevant to such investigation. The department of investigation may, at the request of the commissioner, assist the department in any investigation conducted pursuant to this section.~~



TITLE 27

CONSTRUCTION AND MAINTENANCE

CHAPTER 1

BUILDING CODE

SUBCHAPTER 1

ADMINISTRATION AND ENFORCEMENT

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**				
[100.0]	Art. 1	General Provisions			
[100.1]	101	Title			
[100.2]	102	Purpose			
[100.3]	103	Scope			
[100.4]	104	Interpretation			
[100.5]	105	Effective Date			
[100.6]	106	Enforcement			
[100.7]	107	Variations			
[100.9]	108	Application of References			
[101.0]	Art. 2	Matters Covered			
[101.1]	109	Building Matters Covered			
[101.2]	110	Matters Not Provided For			
[102.0]	Art. 3	Continuation and Change in Use			
[102.1]	111	Continuation of Lawful Existing Use			
[102.2]	112	Change in Occupancy or Use			
[102.3]	113	Continuation of Unlawful Existing Use			
[103.0]	Art. 4	Alteration of Existing Buildings			
[103.0]	114	Alteration of Existing Buildings			
[103.1]	115	Alterations Exceeding Sixty Percent of Building Value			
[103.2]	116	Alterations Between Thirty Percent and Sixty Percent of Building Value			
[103.3]	117	Alterations Under Thirty Percent of Building Value			
[103.4]	118	Alterations Involving Change in Occupancy or Use			
	118.1	Illegal Alterations Involving Change in Occupancy			
[103.5]	119	Alteration Cost: Building Value			
[103.6]	120	Alterations to Multiple Dwellings and Conversions to Multiple Dwellings			
[103.7]	121	Alterations to Residence Buildings			
[103.8]	122	Alterations, Conversions from Seasonal to Year Round Use			
[103.9]	123	Alterations, High Hazard Occupancies			
			123.1		Alterations, Additions, Repairs and Changes in Occupancy or Use Requiring Facilities for People Having Physical Disabilities
			123.2		Provision of Sprinklers in Existing Buildings
			123.3		Definitions
[104.0]	Art. 5	Minor Alterations: Ordinary Repairs			
[104.1]	124	Minor Alterations			
[104.2]	125	Ordinary Repairs			
[104.3]	126	Work Not Constituting Minor Alterations or Ordinary Repairs			
[105.0]	Art. 6	Maintenance			
[105.1]	127	Maintenance Requirements			
[105.2]	128	Owner Responsibility			
[105.3]	129	Exterior Walls and Appurtenances Thereof			
[106.0]	Art. 7	Materials, Assemblies, Forms and Methods of Construction			
[106.1]	130	General Requirements			
[106.2]	131	Acceptance Requirements			
	131.1	Reference Standards			
[106.3]	132	Inspection Requirements			
[106.4]	133	Alternate or Equivalent Materials			
[107.0]	Art. 8	Service Equipment			
[107.1]	134	General Requirements			
[107.2]	135	Acceptance Requirements			
[107.3]	136	Inspection Requirements			
[107.4]	137	Alternate or Equivalent Equipment			
[108.0]	Art. 9	Approval of Plans			
[108.1]	138	Separate Approval of Plans Required			
[108.2]	139	Application for Approval of Plans			
[108.3]	140	Applicant			
	140.1	Registration Requirements			
[108.4]	141	Plans			
[108.5]	142	Applicant's Statement			
[108.6]	143	Examination of Application and Plans			

Title 27 / Subchapter 1

143.1	Examination of Application Plans Submitted by Certain Professionals on Probation by State Board of Regents	[114.5]	176	Exemptions from Permit Requirement
143.2	Professional Certification of Application and Plans	[115.0]	Art. 16	Applications for Sign Permits
[108.7]	144 Approval of Application and Plans	[115.1]	177	General Requirements
[108.8]	145 Conditional Approval of Plans	[115.2]	178	Plans Required
[108.9]	146 Endorsement of Approved Plans	[115.3]	179	Exemptions from Permit Requirements
[109.0]	Art. 10 Permits	[116.0]	Art. 17	Applications for Equipment Work Permits
[109.1]	147 When Permits Required	[116.1]	180	When Equipment Work Permits Required
[109.2]	148 Classification of Permits	[116.2]	181	Application Requirements
[109.3]	149 Separate Permits Required	[116.3]	182	Plans Required
[109.4]	150 Application for Permit Applicant	[116.4]	183	Exemptions from Plan Requirements
[109.5]	151 Applicant	[116.5]	184	Exemptions from Permit Requirement
[109.6]	152 Other Application Requirements		184.1	Alteration and Repair Slip
[109.7]	153 Place of Filing Applications	[117.0]	Art. 18	Applications for Equipment Use Permits
[109.8]	154 Amendments to Applications	[117.1]	185	When Equipment Use Permits Required
[109.9]	155 Time Limitation of Application	[117.2]	186	Application Requirements
[110.0]	Art. 11 Applications for New Building Permits	[117.3]	187	Inspections and Tests
[110.1]	156 General Requirements	[117.4]	188	Temporary Use Permit
[110.2]	157 Plans Required	[117.5]	189	Exemptions from Equipment Use Permit Requirement
[110.3]	158 Datum	[117.6]	190	Duration and Renewal of Permit
[110.4]	159 Additional Information	[118.0]	Art. 19	Issuance of Permits
[110.5]	160 Certification of Performance Bond, License and Insurance Required	[118.1]	191	Approval of Permit Application
[111.0]	Art. 12 Applications for Building Alteration Permits		191.1	List of Permits for Cellular Antenna to be Maintained
[111.1]	161 General Requirements	[118.2]	192	Approval of Application in Part
[111.2]	162 Plans Required	[118.3]	193	Signature to Permit
[112.0]	Art. 13 Applications for Foundation and Earthwork Permits	[118.4]	194	Posting of Permit
[112.1]	163 General Requirements	[118.5]	195	Notice of Commencement of Work
[112.2]	164 Plans Required	[118.6]	196	Revocation of Permit
[112.3]	165 Notice to Adjoining Owners	[118.8]	198	Approval of Plans and Permit Applications for Alteration or Demolition of Single Room Occupancy Multiple Dwellings
[112.4]	166 Protection of Adjoining Properties	[118.9]	198.1	Approval of Plans and Permit Applications Where An Asbestos Project is Performed
[113.0]	Art. 14 Applications for Demolition and Removal Permits	[118.10]	198.2	Conversion, Alteration and Demolition of Single Room
[113.1]	167 General Requirements			
[113.2]	168 Requirement of Certifications			
[113.3]	169 Notice to Adjoining Owners			
[113.4]	170 Protection of Lot and Adjoining Properties			
[113.5]	171 Requirement of Photographs			
[114.0]	Art. 15 Applications for Plumbing Permits			
[114.1]	172 General Requirements			
[114.2]	173 Plans Required			
[114.3]	174 Exemptions from Plan Requirements			
[114.4]	175 Alteration and Repair Slip			

		Occupancy Multiple Dwellings Prohibited
198.3		Relocation of Tenants in Occupancy in Certain Single Room Occupancy Multiple Dwellings
[119.0]	Art. 20	Conditions of Permit
[119.1]	199	Payment of Fees
[119.2]	200	Compliance with Code, Etc.
[119.3]	201	Compliance with Application, Plans, Etc.
[119.4]	202	Adherence to Lot Diagram
[119.5]	203	Compliance with Safety Requirements
[119.6]	204	Builder's pavement
[120.0]	Art. 21	Department Inspections
[120.1]	205	Right of Entry and Inspection
[120.2]	206	Identification of Inspectors
[120.3]	207	General Provisions
[120.4]	208	Preliminary Inspection
[120.5]	209	Inspections During Progress of Work
[120.6]	210	Final Inspection
[120.7]	211	Inspection of Completed Buildings
[120.8]	212	Inspection Reports
[121.0]	Art. 22	Certificates of Occupancy
[121.1]	213	General Provisions
[121.2]	214	New Buildings; Sidewalk Requirements
[121.3]	215	Altered Buildings
[121.4]	216	Existing Buildings
[121.5]	217	Change of Occupancy or Use
[121.6]	218	Temporary Occupancy
[121.7]	219	Applications for Certificates of Occupancy
[121.8]	220	Applicant
[121.9]	221	Statement of Compliance
[121.10]	222	Issuance of Certificates of Occupancy
[121.11]	223	Contents of Certificates
[121.12]	224	Record of Certificates
[122.0]	Art. 23	Posting Buildings
[122.1]	225	Posted Occupancy and Use
[122.2]	226	Replacement of Posted Signs
[123.0]	Art. 24	Stop Work Order
[123.1]	227	Stop Work Notice and Order
[123.2]	228	Unlawful Continuance
[124.0]	Art. 25	Fire Protection Plan
[124.1]	228.1	Applicability
[124.2]	228.2	Scope
[124.3]	228.3	General Requirements
[124.4]	228.4	Retroactivity
[125.0]	Art. 26	Special Filing Requirements
[125.1]	228.5	General Requirements

~~Art. 27~~ ~~Alternative Procedure for Certain Permits~~

228.6	Contract with Not For Profit Corporation
228.7	Not For Profit Corporation
228.8	Examination and Approval of Plans
228.9	Issuance of Permits
228.10	Fees
228.11	Employment Conditions
228.12	Inspection
228.13	Records
228.14	Corruption Prevention Program
228.15	Performance Review by the Commissioner
228.16	Jurisdiction of the Fire Department

~~§[C26-100.1]~~ omitted from section numbers in this column.

~~§[C26-100.2]~~ omitted from section numbers in this column.

ARTICLE 1 GENERAL PROVISIONS

~~§[C26-100.1]~~ 27-101 Title.- This code shall be known and may be cited as the "1968 building code of the city of New York" or the "1968 building code", and is hereinafter referred to as "this code" or "the code".

~~§[C26-100.2]~~ Local Law 33-2007

~~§[C26-100.2]~~ 27-102 Purpose.- The purpose of this code is to provide reasonable minimum requirements and standards, based upon current scientific and engineering knowledge, experience and techniques, and the utilization of modern machinery, equipment, materials, and forms and methods of construction, for the regulation of building construction in the city of New York in the interest of public safety, health and welfare, and with due regard for building construction and maintenance costs.

~~§[C26-100.3]~~ 27-103 Scope. - On and after July 1, 2008 this code shall apply to the minimum requirements and standards for the construction, alteration, repair, occupancy and use of new and existing buildings in the city of New York in accordance with and to the extent provided for by chapter 1 of title 28 of the administrative code and the New York city construction codes. On and after July 1, 2008, administration and enforcement of this code shall be in accordance with title 28 of the administrative code.

~~§[C26-100.4]~~ Local Law 33-2007

~~§[C26-100.4]~~ 27-104 Interpretation.- This code shall be liberally interpreted to secure the beneficial purposes thereof. Any conflict or inconsistency between the requirements of this code and applicable state and federal laws and regulations shall be resolved in favor of the more restrictive requirement.

§[C26-100.5] 27-105 Effective date.- Any work for which an application for a permit was submitted to the department prior to the effective date of this code, (December sixth nineteen hundred sixty-eight), or for which an application for a permit is submitted to the department within a period of twelve months after such date may, however, at the option of the owner, be performed in its entirety in accordance with the requirements of this code, or in accordance with the requirements of the building laws and regulations previously in force in the city of New York, provided that such work is commenced within twelve months after the date of issuance of a permit therefor and is diligently carried on to completion. This section shall not apply to the requirements of article ten of subchapter nineteen of this chapter which shall become effective on December sixth, nineteen hundred sixty-eight.

~~***§[C26-100.6] 27-106 Enforcement.-** This code shall be enforced by the commissioner of buildings, pursuant to the provisions of section six hundred forty three of the New York city charter, as amended, except that the fire commissioner shall also enforce the provisions of this code relating to the approved number of persons in places of assembly (overcrowding), obstruction of aisles, corridors, and exits, the posting and availability for inspection of equipment use permits, and the availability for inspection of certificates of occupancy or other authorization of lawful occupancy, and to the maintenance of installations involving fire alarm equipment and devices, exit and directional signs, emergency lighting, fire preventative and fire extinguishing equipment and devices, refrigerating systems, and storage tanks and auxiliary storage tanks for oil burning equipment, except that the commissioner of small business services, shall enforce all the provisions of this code with respect to buildings under the jurisdiction of the department of small business services. Where the installation of exit and directional signs, emergency lighting and sprinkler and fire alarm protection is required by the fire prevention code, the fire commissioner shall require such installations to be in accordance with the provisions of this code.~~

~~***Local Law 32-2004.**~~

§[C26-100.7] 27-107 Variations.- The requirements and standards prescribed in this code shall be subject to variation in specific cases by the commissioner, or by the board of standards and appeals, under and pursuant to the provisions of paragraph two of subdivision (b) of section six hundred forty-five and section six hundred sixty-six of the charter, as amended.

§[C26-100.9] 27-108 Application of references.- Unless otherwise specifically provided in this code, all references to articles and section numbers, or to provisions not specifically identified by number, shall be construed to refer to articles, sections, or provisions of this code.

ARTICLE 2 MATTERS COVERED

§[C26-101.1] 27-109 Building matters covered.-

The provisions of this code shall cover all matters affecting or relating to buildings, as set forth in section 27-103 of article one of this subchapter, and shall extend to excavation operations, and to all types of buildings and structures and their appurtenant constructions, including vaults, signs, projections, and accessory additions, together with all surface and sub-surface construction within the curb line, including curb cuts and driveways, the coverings thereof and entrances thereto, and the issuance of permits in reference thereto.

§[C26-101.2] 27-110 Matters not provided for.- Any matter or requirement essential for the fire or structural safety of a new or existing building or essential for the safety or health of the occupants or users thereof or the public, and which is not covered by the provisions of this code or other applicable laws and regulations, shall be subject to determination and requirements by the commissioner in specific cases.

ARTICLE 3 CONTINUATION AND CHANGE IN USE

§[C26-102.1] 27-111 Continuation of lawful existing use.-

The lawful occupancy and use of any building, including the use of any service equipment therein, existing on the effective date of this code or thereafter constructed or installed in accordance with prior code requirements, as provided in section 27-105 of article one of this subchapter, may be continued unless a retroactive change is specifically required by the provisions of this code.

§[C26-102.2] 27-112 Change in occupancy or use.-

Changes in the occupancy or use of any building may be made after the effective date of this code, subject to the provisions of section 27-217 of article twenty-two of this subchapter. After a change in occupancy or use has been made in a building, the re-establishment of a prior occupancy or use that would not be lawful in a new building of the same construction class shall be prohibited unless and until all the applicable provisions of this code and other applicable laws and regulations for such re-established occupancy or use shall have been complied with. A change from a use prohibited by the provisions of this code, but which was permitted prior to the effective date of this code, to another use prohibited by the provisions of this code shall be deemed a violation of this code.

§[C26-102.3] 27-113 Continuation of unlawful existing use.-

The continuation of the unlawful occupancy or use of a building after the effective date of this code, contrary to the provisions of this code, shall be deemed a violation of this code.

ARTICLE 4 ALTERATION OF EXISTING BUILDINGS

§[C26-103.0] 27-114 Alteration of existing buildings.-

Subject to the provisions of section 27-105 of article one of this subchapter, and except as otherwise specifically provided by the provisions of this code, the following provisions shall apply to the alteration of existing buildings, whether made voluntarily or as a result of damage, deterioration or other cause, provided, however, that the following alterations shall conform with the requirements of this code regardless of magnitude or cost:

(a) Alterations or additions to existing standpipes, sprinklers or interior fire alarm and signal systems or a change in use or an enlargement to spaces requiring such protection, as provided in subchapter seventeen of this code.

(b) Alterations, replacements or new installations of equipment for heating or storing water, as provided in reference standard RS-16.

(c) Projections beyond the street line, as provided in subchapter four of this code.

(d) Sprinkler, alarm protection, and emergency lighting requirements for places of assembly, as provided in subchapter eight of this code.

[(e) Plumbing fixtures required to be installed in conjunction with any change of use, enlargement or addition to any space classified in occupancy group F-4, a place of assembly, dormitory, public building, public bath, school or workers temporary facility, as provided in table RS 16-5 of section P104.1 of reference standard RS-16.]*

(e)** Interior finish work, as provided in section 27-348.

(f)*** Finish flooring and floor covering, as provided in section 27-351.

(g)[†]The installation or replacement of elevators, as provided in subchapter eighteen of this code.

(h)^{†††}The installation, alteration or replacement of refrigerating systems as provided in reference standard RS 13-6.

**Copy in brackets not enacted but probably intended.*

*** As enacted but "(f)" probably intended.*

**** As enacted but "(g)" probably intended.*

† As enacted but "(h)" probably intended.

††† Local Law 32-2004.

§[C26-103.1] 27-115 Alterations exceeding sixty percent of building value.-

If the cost of making alterations in any twelve-month period shall exceed sixty percent of the value of the building, the entire building shall be made to comply with the requirements of this code, except as provided in section 27-120 of this article.

§[C26-103.2] 27-116 Alterations between thirty percent and sixty percent of building value.-

If the cost of making alterations in any twelve-month period shall be between thirty percent and sixty percent of the value of the building, only those portions of the building altered shall be made to comply with the requirements of this code, except as provided in sections 27-120 and 27-121 of this article.

§[C26-103.3] 27-117 Alterations under thirty percent of building value.-

Except as otherwise provided for in

sections 27-120 and 27-121 of this article, if the cost of making alterations in any twelve month period shall be under thirty percent of the value of the building, those portions of the building altered may, at the option of the owner, be altered in accordance with the requirements of this code, or altered in compliance with the applicable laws in existence prior to December sixth, nineteen hundred sixty-eight, provided the general safety and public welfare are not thereby endangered.

§[C26-103.4] 27-118 Alterations involving change in occupancy or use.-

(a) Except as otherwise provided for in this section, if the alteration of a building or space therein results in a change in the occupancy group classification of the building under the provisions of subchapter three, then the entire building shall be made to comply with the requirements of this code.

(b) Except as otherwise provided for in this section, if the alteration of a space in a building involves a change in the occupancy or use thereof, the alteration work involved in the change shall, except as provided for in this section, be made to comply with the requirements of this code and the remaining portion of the building shall be altered to such an extent as may be necessary to protect the safety and welfare of the occupants.

(c) When, however, the cost of alterations involved in the change of occupancy of an existing building erected prior to December sixth, nineteen hundred sixty-eight or space therein authorizes the alterations to be made in compliance with the applicable laws in existence on such sixth day of December, nineteen hundred sixty-eight, such change in occupancy may similarly be made in compliance with such prior laws, provided the general safety and public welfare are not thereby endangered, and further provided that the alteration work shall effect compliance with all requirements of this code relating to interior finish work, finish flooring and floor covering, sprinklers, interior fire alarms, fire command and communication systems, elevators, smoke detectors, directional signs, emergency lighting and emergency power.

~~§27-118.1 Illegal alterations involving change in occupancy.-~~

~~(a) No person, except in accordance with all requirements of this code, shall convert, knowingly take part or assist in the conversion, or permit the maintenance of the conversion, of a residence which is legally approved for occupancy as a dwelling for one or more families, to a residence for occupancy as a dwelling for more than the legally approved number of families. Any person who shall violate or fail to comply with the provisions of this subdivision shall be liable for a civil penalty which may be recovered in a proceeding before the environmental~~

~~control board pursuant to the provisions of section 26-126.1 of this code. Upon the finding of such violation and the imposition of the civil penalty, the Environmental Control Board shall forward to the Internal Revenue Service, the New York State Department of Taxation and Finance and the New York City Department of Finance the name and address of the respondent, the address of the building or structure with respect to which the violation occurred, and the time period during which the violation was found to have existed.~~

~~(b) Except as otherwise provided by section 42-03 of the zoning resolution and the multiple dwelling law, no person, except in accordance with all requirements of this code, shall convert for residential use or dwelling, knowingly take part or assist in such conversion, or permit the maintenance of such conversion, of any space in a building or other structure part or all of which is legally approved for occupancy for the purpose of industrial or manufacturing use. Any person who shall violate or fail to comply with the provisions of this subdivision shall be liable for a civil penalty which may be recovered in a proceeding before the environmental control board pursuant to the provisions of section 26-126.1 of this code. Upon the finding of such violation and the imposition of the civil penalty, the environmental control board shall forward to the internal revenue service, the New York state department of taxation and finance and the New York city department of finance the name and address of the respondent, the address of the building or structure with respect to which the violation occurred, and the time period during which the violation was found to have existed.~~

~~†† Local Law 37-2007; Local Law 65-1997.~~

§[C26-103.5] 27-119 Alteration cost: building value.- For the purpose of applying the foregoing provisions of this article, the cost of making alterations shall be determined by adding the estimated cost of making the proposed alterations computed as of the time of submitting the permit application, to the actual cost of any and all alterations made in the preceding 12-month period; and the value of the building shall be determined at the option of the applicant on the basis of one and one-quarter times the current assessed valuation of the building, as adjusted by the current State equalization rate, or on the basis of the current replacement cost of the building, provided that satisfactory evidence of current replacement cost is submitted to the commissioner.

§[C26-103.6] 27-120 Alterations to multiple dwelling[s]* and conversions to multiple dwellings.- At the option of the owner, regardless of the cost of the alteration or conversion, an alteration may be made to a multiple dwelling or a building may be converted to a multiple dwelling in accordance with all requirements of this code or in accordance with all applicable laws in existence prior to December sixth, nineteen hundred sixty-eight, provided the general safety and public welfare are not thereby endangered.

**Copy in brackets not enacted but probably intended.*

§[C26-103.7] 27-121 Alterations to residence buildings.- Alterations to one- or two-family residence buildings erected under the provisions of the building code in effect prior to December sixth, nineteen hundred sixty-eight, and damaged by fire or other catastrophe to the extent of less than fifty percent of the value of the building (except as otherwise provided in section 27-297 of article four of subchapter four of this chapter) may be reconstructed in accordance with the provisions of the building code in effect prior to December sixth, nineteen hundred sixty-eight.

§[C26-103.8] 27-122 Alterations involving conversions from seasonal to year round use.-

(a) Buildings converted from seasonal use to year round use shall comply with the minimum building insulation standards as provided in reference standard RS 12-10, energy conservation in new building design, with the exception that the provisions as set forth in opinion 76-16, state of New York, public service commission, dated August thirteenth, nineteen hundred seventy-six, relating to noise control and fire rating shall not apply. The standards set forth in this code relating to noise control and fire rating and other applicable standards shall apply.

(b) All alterations performed in accordance with the requirements of this section shall also be in full compliance with the provisions of subchapter fourteen (inspections) of chapter one of title twenty-six of the administrative code to insure a method of controlled inspection of all converted buildings.

§[C26-103.9] 27-123 Alterations involving high hazard occupancies.- Any building erected prior to the effective date of this code (December sixth, nineteen hundred sixty-eight) and complying with section 27-117 of this article may be utilized for new high hazard occupancies without compliance with article two of subchapter six of this chapter on condition that the building or building section for such high hazard occupancy be provided with an approved one source automatic sprinkler system complying with the provisions of subchapter seventeen for B-1 occupancies regardless of the area thereof. Existing high hazard occupancies in structures erected prior to the effective date of this code and complying with section 27-117 of this article may continue to operate, subject to such fire protection requirements as the fire commissioner shall direct.

****27-123.1 Alterations, additions, repairs and changes in occupancy or use requiring facilities for people having physical disabilities.-** The provisions of subarticle two of article two of subchapter four of

Title 27 / Subchapter 1

chapter one of title twenty-seven of this code shall apply to alterations, additions and repairs made to buildings, as well as to changes in occupancy or use, as set forth below. The provisions of sections 27-115, 27-116, 27-117, 27-118 and 27-120 of this code shall not govern the application of the provisions of such subarticle.

(a) The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to an entire existing building, as if hereafter erected, when the costs of any alterations, additions or repairs, other than ordinary repairs, made within any twelve-month period immediately following the filing of the application exceed fifty percent of the cost of replacement of the building with one of similar floor space, as estimated by the department at the beginning of that twelve-month period. When such estimated costs of alterations, additions or repairs, other than ordinary repairs, do not exceed fifty percent of such replacement cost, then the provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven shall apply to such alterations, additions or repairs, although nothing herein is meant to discourage compliance with the standards set forth in subarticle two of article two of subchapter four of chapter one of title twenty-seven in other portions of buildings described in this sentence.

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(b) The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to an entire existing building, as if hereafter erected, when there is a change in occupancy classification of the building. The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to a space in a building when there is a change in the occupancy type thereof or in how such space is used.

(a) When any work not otherwise required to comply with the provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven is done on an interior accessible route in existing residential buildings, other than in occupancy group J-3, which work involves plumbing fixtures, that work shall be required to comply with section 27-292.8 of this code for the extent of the work being performed, provided such work will not require any structural changes or additional partitions; ordinary repairs and replacement of existing piping shall be exempt from the provisions of this sentence.

(b) Where additions or alterations subject parts of existing systems to loads exceeding those permitted herein, such parts shall be made to comply with this code.

(c) The provisions of subarticle two of article two of suchapter four of chapter one of title twenty-seven of this code and of subdivisions b and c of this section shall not apply to the alteration of existing residential buildings, other than adult residential care facilities, which are classified in occupancy group J-2 and contain no more than three dwelling units or which are classified in occupancy group J-3 and are being altered to contain three dwelling units, and which satisfy the requirements of subdivision (d) of section 27-357 of this code, when the cost of any alterations, additions or repairs, other than ordinary repairs, made within any twelve-month period immediately following the filing of the application do not exceed fifty percent of the cost of replacement of the building with one of similar floor space, as estimated by the department at the beginning of that twelve-month period.

****Local Law 58-1987.**

*** § 27-123.2 Provision of sprinklers in existing buildings.-**

Notwithstanding any provision of law to the contrary, the provisions of section 27-954 of this code shall apply to alterations made to buildings, as well as to changes in occupancy or use, as set forth below:

(a) The provisions of section 27-954 of this code shall apply to an entire existing building that is being altered, when such building is classified in occupancy group J-2 and will have four or more dwelling units upon the completion of the alterations, or is classified in occupancy group J-1, and when the costs of making any alterations to any such J-1 or J-2 building within any twelve-month period exceeds fifty percent of the building value.

(b) The provisions of section 27-954 of this code shall apply to an entire existing building when the occupancy

classification of the building will change to a residential occupancy group other than occupancy group J-2 with not more than three dwelling units or occupancy group J-3.

(c) The provisions of section 27-954 of this code shall apply to any space:

(1) when alterations thereto involve a change in the occupancy or use thereof to a residential occupancy group other than occupancy group J-2 with not more than three dwelling units or occupancy group J-3, or

(2) when the costs of making alterations thereto within any twelve-month period exceeds fifty percent of the value of the space.

(d) For the purposes of this section, the cost of making alterations and the value of any such building or space shall be determined as set forth in section 27-119 of this chapter; provided, however, that for purposes of this section:

(1) the cost of making alterations to a residential building shall be determined based on the aggregate cost of alterations to the residential Portions of such building, and the value of such a building shall be determined based on the aggregate value of the residential portions of the building, exclusive of the value of any non-residential portions of the building; and

(2) the cost of making alterations to residential spaces in a non-residential building shall be determined based on the collective cost of alterations to such spaces, and the value of such residential spaces shall be determined based on the aggregate value of all such spaces in the building, exclusive of the value of any non-residential portions of the building.

(e) When a system of automatic sprinklers is installed in any existing building or space pursuant to this section, such system shall comply with the requirements of this code and any other laws and rules applicable to the occupancy group in which such building or space is classified or in which such building or space would be classified if such building or space were classified under this chapter.

***Local Law 10-1999.**

***§27-123.3 Definition.** For the purposes of this article, the term “existing building” means a building in existence prior to December 6th, 1968 or a building constructed in accordance with the building laws and regulations in force prior to such date in accordance with section 27-105 of this code.

***Local Law33-2007.**

ARTICLE 5 MINOR ALTERATIONS: ORDINARY REPAIRS

~~§[C26-104.1] 27-124 Minor alterations. For the purposes of this code, the term "minor alterations" shall mean minor changes or modifications in a building or any part thereof, excluding additions thereto, that do not~~

in any way affect health or the fire or structural safety of the building. Minor alterations shall not include any of the work described or referred to in section 27-126 of this article, or any other work for which a permit is required under the provisions of articles ten through seventeen of this subchapter.

~~§[C26-104.2] 27-125 Ordinary repairs.~~

For the purposes of this code, the term "ordinary repairs" shall mean replacements or renewals of existing work in a building, or of parts of the service equipment therein, with the same or equivalent materials or equipment parts, that are made in the ordinary course of maintenance and that do not in any way affect health or the fire or structural safety of the building or the safe use and operation of the service equipment therein. Ordinary repairs shall not include any of the work described or referred to in section 27-126 of this article or any other work for which a permit is required under the provisions of articles ten through seventeen of this subchapter.

~~§[C26-104.3] 27-126 Work not constituting minor alterations or ordinary repairs.~~

(a) For the purposes of this code, minor alterations or ordinary repairs shall not include the cutting away of any wall, floor, or roof construction, or any portion thereof; or the removal, cutting, or modification of any beams or structural supports; or the removal, change, or closing of any required means of egress; or the rearrangement or relocation of any parts of the building affecting loading or exit requirements, or light, heat, ventilation, or elevator requirements; nor shall minor alterations or ordinary repairs include additions to, alterations of, or rearrangement, relocation, replacement, repair or removal of any portion of a standpipe or sprinkler system, water distribution system, house sewer, private sewer, or drainage system, including leaders, or any soil, waste or vent pipe, or any gas distribution system, or any other work affecting health or the fire or structural safety of the building.

(b) Minor alterations or ordinary repairs shall include the repair or replacement of any fixture, piping or faucets from the inlet side of a trap to any exposed stop valve.

~~§[C26-105.1] 27-127 Maintenance requirements.~~

ARTICLE 6 MAINTENANCE

All buildings and all parts thereof shall be maintained in a safe condition. All service equipment, means of egress, devices, and safeguards that are required in a building by the provisions of this code or other applicable laws or regulations, or that were required by law when the building was erected, altered, or repaired, shall be maintained in good working order.

~~§[C26-105.2] 27-128 Owner responsibility.~~ The owner shall be responsible at all times for the safe maintenance of the building and its facilities.

~~§[C26-105.3] 27-129 Exterior walls and appurtenances thereof.~~

In order to maintain a building's exterior walls and appurtenances thereof in a safe condition, the following additional requirements shall apply to all existing buildings or buildings hereafter erected which are greater than six stories in height:

~~§[C26-105.4] 27-130 Inspection requirements.~~ A critical examination of an applicable building's exterior walls and appurtenances thereof shall be conducted at periodic intervals as set forth by rule of the commissioner, but such examination shall be conducted at least once every five years. No later than January 1, 2009 the commissioner shall by rule establish staggered inspection cycles for buildings required to comply with this section.

~~§[C26-105.5] 27-131 Local Law 38-2007.~~

(1) The initial examination for any building in existence on February twenty-first, nineteen hundred eighty shall be conducted prior to February twenty-first, nineteen hundred eighty-two and the initial examination for any building thereafter constructed shall be conducted in the fifth year following the erection or installation of any exterior wall and/or enclosures.

(2) Such examination shall be conducted and witnessed by or under the direct supervision of a licensed architect or licensed professional engineer by or on behalf of the owner of the building.

(3) Such examination shall include, in addition to an inspection, a complete review of the most recently prepared report.

(4) Such examination shall also be conducted in accordance with applicable rules promulgated by the commissioner.

~~(b) Notification requirements.~~ Whenever an architect or engineer learns through a critical examination of a building's exterior walls and appurtenances thereof of an unsafe condition prior to the filing of a report with the department of buildings pursuant to subdivision (c) of this section, he or she shall notify the owner and the department of buildings immediately in writing of such condition.

~~(c) Report of examination.~~ Such architect or engineer shall submit a written report certifying the results of such examination to the commissioner, clearly documenting the condition of the exterior walls and appurtenances thereof, as either safe, unsafe or safe with a repair and maintenance program. The report shall include a record of all significant deterioration, unsafe conditions and movement observed as well as a statement concerning the watertightness of the exterior surfaces. Such report must be signed by and bear the professional seal of such architect or engineer.

~~(d) Necessary repairs.~~

~~(1) Unsafe condition.~~

a. Upon the filing of the architect's or engineer's report of an unsafe condition with the commissioner, the owner, his or her agent or the person in charge shall immediately commence such repairs or

Title 27 / Subchapter 1

~~reinforcements and shall undertake such measures as may be required to secure public safety and to make the building's exterior walls or appurtenances thereof conform to the provisions of this code.~~

~~b. All unsafe conditions shall be corrected within thirty days of the filing of the critical examination report.~~

~~c. The architect or engineer shall inspect the premises and file an amended report setting forth the condition of the building within two weeks after~~

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~~repairs to correct the unsafe condition have been completed.~~

~~d. The commissioner may grant an extension of time of up to ninety days to complete the repairs required to correct an unsafe condition upon receipt and review of an initial extension application submitted by the architect or engineer together with such additional documentation as may be prescribed by rule.~~

~~e. The commissioner may grant a further extension of time to complete the repairs required to remove an unsafe condition upon receipt and review of an application for a further extension submitted by the architect or engineer together with such further documentation as may be prescribed by rule.~~

~~(2) Safe condition with a repair and maintenance program. An architect or engineer shall not file a report of a safe condition with a repair and maintenance program for the same building for two consecutive filing periods unless the second such report is accompanied by his or her certification attesting to the correction of all conditions identified in the earlier report as requiring repair.~~

~~(e) Exceptions. The additional requirements imposed by this section shall not be applied to any part of an exterior wall which is less than twelve inches from the exterior wall of an adjacent building.~~

~~(f) Violations. Any person who shall violate, or refuse, or neglect to comply with any provisions of this section shall, upon conviction thereof, be punished by a fine of not more than one thousand dollars, or by imprisonment not exceeding six months, or both; and any such person shall, also, for each offense, be subject to the payment of a penalty in the sum of two hundred fifty dollars for each month there is non compliance, to be recovered in a civil action brought in the name of the commissioner.~~

~~(g) With respect to buildings in existence on March first, nineteen hundred ninety eight, the initial critical examination of an exterior wall which was not subject to such examination under the provisions of paragraph one of subdivision d of this section in effect prior to the effective date of this local law shall be conducted prior to March first, two thousand.~~

~~*Local Law 11-1998.~~

ARTICLE 7 MATERIALS, ASSEMBLIES, FORMS AND METHODS OF CONSTRUCTION

~~§[C26-106.1] 27-130 General requirements. All materials, assemblies, forms, and methods of construction (hereinafter collectively referred to as "material" or "materials") which, in their use, are regulated by the provisions of this code, shall be subject to the requirements for acceptance, as provided in section 27-131 of this article and to the requirements for inspection, as provided in section 27-132 of this article, except as otherwise specifically provided by the provisions of this code. Materials which in their use do not require regulation and control in the interests of public safety, health, and welfare, are not subject to any requirement of~~

~~acceptance, inspection, test, or approval under the provisions of this code.~~

~~*§[C26-106.2] 27-131 Acceptance requirements. The following requirements shall apply to the initial acceptance of all materials which, in their use, are regulated by the provisions of this code:~~

~~(a) Methods of acceptance. No material of any manufacturer or producer shall be acceptable for the use intended unless and until the material shall have been tested for compliance with code requirements under a test method prescribed by the code, or shall have been tested and approved by the commissioner or shall have been previously approved by the board of standards and appeals, unless such approval is amended or repealed by the commissioner.~~

~~(1) Code test method. Whenever the code prescribes a method for testing any material, the material shall be tested in accordance with such test method (a) under the direction of an architect or engineer, or (b) by a testing service or laboratory acceptable to the commissioner. The commissioner may require the witnessing of tests by his or her representative. The test report showing compliance with code requirements and bearing the signature of the architect or engineer, or the signature of an officer of the testing service or laboratory, as the case may be, shall be filed with the department. The commissioner may require a certificate of the manufacturer or producer, certifying that the material tested was and is equivalent to material of the same kind and quality regularly being manufactured by such manufacturer or producer. Upon the filing of the test report, as provided above, the material shall be acceptable for the use intended, subject to the provisions of subdivisions (d) and (e) of this section.~~

~~(2) Commissioner approval. Materials which in their use are regulated by the provisions of this code but cannot satisfy the requirements of paragraph one of this subdivision shall not be acceptable for the use intended unless and until the material shall have been tested and approved for such use by the commissioner. For the purposes of this requirement, all materials legally acceptable prior to July 1, 1991 shall be permitted subject to the provisions of subdivision d of this section.~~

~~(b) List of acceptable laboratories and materials. A current list of all testing services and laboratories acceptable to the commissioner for the purpose of testing materials, as provided in subparagraph (b) of paragraph one of subdivision (a) of this section and a current list of all acceptable materials, shall be maintained by the department and made available for public inspection.~~

~~(e) Certification of accepted materials. All shipments and deliveries of such materials shall be accompanied by a certificate or label certifying that the~~

material shipped or delivered is equivalent to the materials tested and acceptable for use, as provided in this section. Such certificate or label is to be provided (1) by the manufacturer or producer of the material, or (2) by a testing service or laboratory acceptable to the commissioner and regularly engaged by the manufacturer or producer to make periodic inspections and/or tests of the material in the course of manufacture or production. In the case of materials previously approved by the board of standards and appeals, the shipment or delivery of the material shall also be accompanied by a tag or label stating that the material has been approved for use by the board, and containing the calendar number under which the material received board approval.

(d) Retesting of materials. All materials tested and acceptable for use, shall be subject to periodic retesting as determined by the commissioner; and any material which, upon retesting is found not to comply with code requirements or the requirements set forth in the approval of the commissioner shall cease to be acceptable for the use intended. During the period for such retesting, the commissioner may require the use of such material to be restricted or discontinued if necessary to secure safety.

(e) Conflicting test results. Whenever there is evidence of conflicting results in the test of any material, the commissioner shall determine the acceptability of the material and/or the acceptable rating for such material.

**Local Law 49-1991.*

***§27-131.1 Reference Standards.-** The appendix to this chapter of the administrative code, known as the "building code reference standard", is adopted and promulgated and shall be known as the "building code rules" of said chapter; except for reference standards RS4-3, RS7-2, and such portions of RS16 not included in the "List of Referenced National Standards". The commissioner shall be empowered to issue or amend the building code reference standards acting in consultation with the fire commissioner on all issues relating to fire safety.

**Local Law 49-1991.*

§[C26-106.3] 27-132 Inspection requirements. The following requirements shall apply to the inspection of all materials which, in their use, are regulated by the provisions of this code:

(a) Controlled inspection. All such materials which are designated for "controlled inspection" under the provisions of this code shall be inspected and/or tested to verify compliance with code requirements. Unless otherwise specifically provided by code provisions, all required inspections and tests of materials designated for "controlled inspection" shall be made and witnessed by or under the direct supervision of an architect or engineer retained by or on behalf of the owner or lessee, who shall be, or shall be acceptable to, the architect or engineer who prepared or supervised the preparation of the plans; and the architect or engineer by whom, or under whose direct supervision, the required inspections and tests are made

and witnessed shall file with the department signed copies of all required inspection and test reports, together with his or her signed statement that the material and its use or incorporation into the work comply with code requirements, unless the filing of such reports and statements is specifically waived by code provisions. The provisions of section 27-195 of article nineteen of this subchapter relating to notice of commencement of work shall be complied with prior to the commencement of any work requiring controlled inspection.

(b) Semicontrolled inspection. All such materials that are not designated for controlled inspection under the provisions of this code shall be subject to semicontrolled inspection and, as such, shall be inspected and/or tested to verify compliance with code requirements by the person superintending the use of the material or its incorporation into the work, except that all required inspections and tests may, at the option of the owner or lessee, be made and witnessed by or under the direct supervision of an architect or engineer retained by or on behalf of the owner or lessee, who shall be, or shall be acceptable to, the architect or engineer who prepared or supervised the preparation of the plans. The person superintending the use of the material or its incorporation into the work, or the architect or engineer by or under whose direct supervision the required inspections and tests are made and witnessed, as the case may be, shall file with the department signed copies of all required inspection and test reports, together with his or her signed statement that the material and its use or incorporation into the work comply with code requirements, unless the filing of such reports and statement is specifically waived by code provisions.

(c) Off-site inspection. In all cases where code provisions require that the inspection and/or test of materials be made off-site, or prior to actual use or incorporation into the work, the inspector shall mark or cause to be marked for identification all units (or packages of units) of the material inspected; and the reported results of such inspection shall state that the material was so marked for identification.

§[C26-106.4] 27-133 Alternate or equivalent materials. Whenever the code prescribes the use of a particular material, the commissioner may permit the use of any material shown to be equivalent for the use intended, in terms of health, fire, and/or structural safety. Nothing contained in this code shall be construed to require the use of any particular material for the purpose of meeting performance requirements of this code.

ARTICLE 8 SERVICE EQUIPMENT

~~§[C26-107.1] 27-134 General requirements.~~ All service equipment and machinery and devices used in connection therewith (hereinafter collectively referred to as "equipment") which, in their use, are regulated by the provisions of this code, shall be subject to the requirements for acceptance, as provided in section 27-135, and to the requirements for inspection, as provided in section 27-136 of this article, except as otherwise specifically provided by the provisions of this code. Equipment which in its use does not require regulation and control in the interests of public safety, health, and welfare, is not subject to any requirement of acceptance, inspection, test, or approval under the provisions of this code. Elements or appurtenances of equipment or machinery which are in conformity with specifications relating thereto in this code, or which may be designed in their entirety in accordance with accepted engineering design principles based on provisions of this code are not subject to the requirements for acceptance.

~~§[C26-107.2] 27-135 Acceptance requirements.~~ The requirements for acceptance of materials, as provided in section 27-131 of article seven of this subchapter, shall apply to the initial acceptance of all equipment which, in its use, is regulated by the provisions of this code; and for this purpose, the word "equipment" shall be substituted for the words "or materials" wherever those words occur in section 27-131 of article seven of this subchapter.

~~§[C26-107.3] 27-136 Inspection requirements.~~ The requirements for inspection of materials, as provided in section 27-132 of article seven of this subchapter, shall apply to the inspection of all equipment which, in its use, is regulated by the provisions of this code; and for this purpose, the word "equipment" shall be substituted for the words "material" and "materials" wherever those words occur in section 27-132 of article seven of this subchapter.

~~§[C26-107.4] 27-137 Alternate or equivalent equipment.~~ Whenever the code prescribes the use of particular equipment, the commissioner may permit the use of any equipment shown to be equivalent for the use intended, in terms of health, fire and/or structural safety. Nothing contained in this code shall be construed to require the use of any particular equipment for the purpose of meeting performance requirements of this code.

ARTICLE 9 [REPEALED] APPROVAL OF PLANS

~~§[C26-108.1] 27-138 Separate approval of plans required.~~ Whenever plans are required to be submitted in connection with applications for work permits, as provided in articles ten through seventeen of this subchapter, separate application shall be made for the approval of the plans

therefor. The application may be made at or prior to the time of submitting the work permit application.

~~§[C26-108.2] 27-139 Application for approval of plans.~~ Applications for approval of plans shall be made on forms furnished by the department, and shall be accompanied by the required fee. The application shall contain a general description of the proposed work, its location, and such other pertinent information as the commissioner may require. All applications for approval of plans for any new construction, in which plumbing fixtures are to be installed, shall be accompanied by the following:

1. Information as to the availability of a public sewer system;

*2. In the event that a private sewage treatment plant is proposed, evidence of submission of plans for approval of such plant to the department of environmental protection and the department of health as required by law.

(a) the lot diagram showing compliance with the zoning resolution, as provided in paragraph one of subdivision (a) of section 27-157 of article eleven of this subchapter;

(b) the foundation plans, as provided in paragraphs one and seven of subdivision (b) of section 27-157 of article eleven of this subchapter;

(c) the floor and roof plans showing compliance with exit requirements, as provided in paragraph three of subdivision (a) of section 27-157 of article eleven of this subchapter;

(d) the detailed architectural, structural and mechanical drawings, as provided in subdivisions (a) through (c) of section 27-157 of article eleven of this subchapter.

~~*Local Law 65-1996.~~

~~**§[C26-108.3] 27-140 Applicant.~~ Applications for approval of plans shall be made in behalf of the owner or lessee or condominium unit owner or cooperative shareholder by the person who prepared or supervised the preparation of the plans, and shall be accompanied by a signed statement of the owner, condominium board of managers or cooperative board of directors stating that the applicant is authorized to make the application. In the case of applications for approval of plans for the construction or alteration of buildings, for the installation or alteration of plumbing or plumbing systems, or for the installation or alteration of service equipment which involves changes in the structure of the building or requirements for fire protection, light, heat, ventilation, or means of egress, the application shall be made by protection, light, heat, ventilation, or means of egress, the application shall be made by an architect or engineer. The full names and addresses of the owner,

~~including the condominium unit owner or cooperative shareholder, lessee, and applicant, and of the principal officers thereof, if a corporation, shall be set forth in the application.~~

~~***Local Law 72-1991.~~

~~*** §27-140.1 Registration requirements.-~~

~~(a) No person, other than those described in subdivision (c) of this section, may present, submit, furnish or seek approval of applications for approval of plans or remove any documents from the possession of the department, without first having registered with the department his or her name, address and company affiliation on a form to be furnished by the department. Consistent with article twenty three A of the correction law, registration may be denied to any person who has been convicted of a criminal offense relating to bribing or receipt of a bribe, giving or receiving unlawful gratuities, official misconduct, or other corruption-related acts. The commissioner, after due notice and a hearing before the office of administrative trials and hearings, pursuant to section one thousand forty-eight of the charter and rules established thereunder, shall have the power to revoke, suspend or limit the registration of any person upon a finding that such person has willfully or negligently violated the rules of the department or has engaged in any misconduct arising out of his or her business dealings with the department. Misconduct shall be defined by the rules of the commissioner promulgated pursuant to subdivision (d) of this section.~~

~~(b) No person shall use the term "registered with the department of buildings", "registered" or any similar representation in such a manner as to convey the impression that such person is registered with the department of buildings unless such person is registered in accordance with the provisions of this section.~~

~~(c) The following persons are exempt from the provisions of this section:~~

~~(i) the owners of the premises for which the building applications are filed including, in the case of partnerships or corporations, the general partners or the principal officers of the corporation. Principal officers of a corporation shall include the president, vice presidents, secretary and treasurer;~~

~~(ii) the lessees of such premises authorized by the owner to file building applications;~~

~~(iii) condominium unit owners authorized by the condominium board of managers to file building applications;~~

~~(iv) cooperative shareholders authorized by the cooperative board of directors to file building applications;~~

~~(v) registered architects licensed by the New York state department of education;~~

~~(vi) professional engineers licensed by the New York state department of education;~~

~~(vii) attorneys admitted to practice in New York state;~~

~~(viii) master plumbers licensed pursuant to article two of subchapter two of chapter one of title twenty six of this code;~~

~~(ix) master fire suppression piping contractors licensed pursuant to article two of subchapter two of chapter one of title twenty six of this code; and~~

~~(x) master electricians licensed pursuant to subchapter one of chapter three of title twenty seven of this code.~~

~~*(d) The department shall not accept plans or other documents submitted in connection with applications for work permits under articles ten through seventeen of this subchapter by any person representing that he or she is an architect or professional engineer without verifying, by means of lists compiled and made available by the New York state department of education pursuant to paragraph e 1 of subdivision four of section sixty five hundred seven of the education law, that such person meets the qualifications established by law to practice as an architect or professional engineer in New York state.~~

~~*(e) the commissioner shall promulgate rules for the proper and efficient administration and enforcement of this section.~~

~~*Chapter 542 of Laws of 2007.~~

~~***Local Law 72-1991.~~

~~§[C26-108.4] 27-141 Plans.- With each application for approval of plans, there shall be submitted such number of copies of the plans as the commissioner may require. All plans shall comply in form and content with requirements of this code and other applicable laws and regulations.~~

~~§[C26-108.5] 27-142 Applicant's statement.-~~

~~(a) A signed statement of the applicant shall also be submitted with the application, stating that he or she is authorized by the owner to make the application and that, to the best of his or her knowledge and belief, the plans and the work shown thereon comply with the provisions of this code and other applicable laws and regulations. If there are practical difficulties in the way of carrying out the strict letter of the law, the applicant shall set forth the nature of such difficulties in such signed statement.~~

~~(b) In addition to all other requirements of this article, an application for approval of plans for the alteration of an existing building or the construction of a new building shall be accompanied by a signed statement of the applicant certifying either (1) that the building to be altered, or the site of the new building, as the case may be, contains no occupied housing accommodations subject to control under chapter three of title twenty six of the administrative code, or (2) that the owner has notified the city rent agency of his or her intention to file such plans and has complied~~

~~with all requirements imposed by the regulations of such agency as preconditions for such filing.~~

~~§[C26-108.6] 27-143 Examination of application and plans.~~ All applications for approval of plans and all plans submitted in connection therewith, and any amendments thereto, shall be numbered, docketed and examined promptly after their submission. The examination shall be made under the direction of the commissioner for compliance with the provisions of this code and other applicable laws and regulations. The commissioner may at his or her discretion, when the application is submitted by an architect or an engineer,

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designate portions of the examination for limited supervisory check. The personnel employed for examination of plans shall be qualified engineers or architects experienced in building construction and design.

~~***§27-143.1 Examination of application and plans submitted by certain professionals on probation by state board of regents.~~ The department shall examine all portions of any application for approval of plans and all plans submitted in connection therewith, and any amendments thereto when such application, plan or amendment thereto was submitted by any professional engineer or registered architect that was subject to sanction by the board of regents pursuant to section 6511 of the education law that resulted in such professional engineer's or registered architect's placement on probation for the duration of time that such licensee is subject to such probation.

~~***Local Law 3-2007,~~

~~†§27-143.2 Professional certification of application and plans.-~~

a. Definitions. For the purposes of this section, the following terms shall have the following meanings:

i. "Professional certification" or "professionally certify" means the submission to the department of a signed, personal verification made by a professional engineer or registered architect that accompanies an application and/or plans filed with the department for less than full review that attests that such application or plans do not contain any false information and that such application or plans are in compliance with all applicable provisions of law.

ii. "Probation" means a six month period that begins after professional certification privileges that have been suspended or revoked are restored by the commissioner.

b. The commissioner shall suspend, revoke or otherwise condition the professional certification privileges of each professional engineer or registered architect who has been found, after a hearing at the office of administrative trials and hearings pursuant to the department's rules, to have 1) knowingly or negligently professionally certified an application and/or plans that contained false information or were not in compliance with all applicable provisions of law or 2) submitted two professionally certified applications within any twelve month period that either led to revocation of a permit or otherwise demonstrated incompetence or a lack of knowledge of applicable laws. The term "otherwise condition" shall include, but not be limited to, limitations on the permission to professionally certify certain applications, such as, but not limited to, an application for what the department deems to be a type one alteration permit, and additional audits and monitoring of such professional's work.

c. A professional engineer or registered architect who has had his or her professional certification privileges

suspended or revoked in accordance with subdivision b of this section may apply for the restoration of professional certification privileges one year or more after such privileges were suspended or revoked by the department. The department may restore such privileges and, in such case, shall place the professional engineer or registered architect on probation.

d. Any professional engineer or registered architect who has been placed on probation by the department shall be required to attend one or more training or continuing education courses related to compliance with the building code and related laws, rules and regulations, the zoning resolution, or all of these. Such course or courses shall be provided by or approved by the department, as shall be determined by the commissioner.

e. A professional engineer or registered architect whose professional certification privileges have been conditioned on the successful completion of any mandatory training or continuing education courses shall provide proof acceptable to the commissioner of the successful completion of such mandatory training or continuing education courses before the expiration of the time period imposed by the commissioner for compliance.

f. The commissioner shall permanently revoke, without the opportunity of restoration, the professional certification privileges of a professional engineer or registered architect who, while on probation, professionally certifies an application, plans or other document that contains false information or is not in compliance with all applicable provisions of law or who otherwise demonstrates incompetence or a lack of knowledge of applicable laws.

g. Nothing herein shall be construed to limit the commissioner's power, consistent with state and local law, to adopt rules that include additional grounds to limit the filing privileges of or otherwise sanction professional engineers or registered architects who have been determined after a hearing to have knowingly or negligently submitted applications or other documents to the department that contained false information or were not in compliance with all applicable provisions of law or who have otherwise demonstrated incompetence or a lack of knowledge of applicable law or standards.

h. The department shall create and maintain a database of all professional engineers and registered architects whose privileges to professionally certify applications or plans or other documents have been revoked, suspended or otherwise conditioned. Within seven business days of the issuance by the commissioner of a notice or other document revoking, suspending or otherwise conditioning the

~~privilege to certify documents pursuant to this article, the department shall post on its website the name of the professional engineer or registered architect whose privileges have been limited, a description of the limitation, the initial date of the limitation, the restoration date if and when applicable, the addresses of the locations for the applications or permits associated with the limitation, and whether the limitation was imposed after a hearing or a settlement. The department shall, within thirty days, provide information concerning any revocation, suspension or condition with respect to a specific professional engineer or registered architect in the database referred to in this subdivision, and any additional information requested concerning such revocation, suspension or condition, to every person who requests such information from the department.~~

~~#Local Law 4-2007.~~

~~*[C26-108.7] 27-144 Approval of application and plans.- Except as otherwise provided in section 27-198 and section 27-198.1 of article nineteen of this subchapter, applications and plans complying with the provisions of this code and other applicable laws and regulations shall be approved by the commissioner and written notice of approval shall be given the applicant promptly and no later than forty calendar days after the submission thereof, and applications and plans failing to comply with the provisions of this code and other applicable laws and regulations shall be rejected and written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than forty calendar days after the submission thereof, except that on or before the fortieth day, the commissioner may on good cause shown, and upon notification to the applicant, extend such times for an additional twenty days. Whenever an application and accompanying plans have been rejected and are thereafter revised and resubmitted to meet stated grounds of rejection, the revised application and plans shall be approved if they meet the stated grounds of rejection, or shall be rejected if they fail to meet the stated grounds of rejection; and written notice of approval or written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than twenty calendar days after the resubmission thereof.~~

~~*Local Law 76-1985, language juxtaposed per Ch. 907-1985.~~

~~[C26-108.8] 27-145 Conditional approval of plans.- All approvals of plans given prior to the submission of the work permit application shall be conditioned upon and subject to compliance with the requirements of this code and other applicable laws and regulations in effect at the time of submission of the permit application, and shall also be conditioned upon the submission of the work permit application not later than twelve months after the date of notice of plan approval.~~

~~[C26-108.9] 27-146 Endorsement of approved plans.- All plans and amendments thereto, when approved by the~~

~~commissioner, shall be stamped or endorsed approved under the official seal of the department, followed by a notation of the date of plan approval. One set of such approved plans shall be retained in the department office of the borough in which the building premises or equipment is located; and after the issuance of a work permit, a second set of such approved plans shall be retained at the place where the building premises or equipment is located, and shall be open at all times to inspection by the commissioner and his or her authorized representatives until final inspection of the work is completed.~~

ARTICLE 10 [REPEALED] PERMITS

~~[C26-109.1] 27-147 When permits required.-~~

~~(a) No building construction or alteration work, foundation or earthwork, demolition or removal work, or plumbing work shall be commenced, and no signs or service equipment of the types listed in articles sixteen and seventeen of this subchapter shall be erected, installed, altered, repaired, or used, nor shall any service equipment of the types listed in article eighteen of this subchapter be used or operated, unless and until a written permit therefore shall have been issued by the commissioner. The provisions of this section shall not apply, however, to minor alterations and ordinary repairs, as defined and delineated in article five of this subchapter or to work or equipment exempted from permit requirements under the provisions of sections 27-176, 27-179, 27-184 and 27-189 of this subchapter.~~

~~†† (b) The commissioner, in consultation with the fire commissioner, shall establish a procedure, to be implemented within ninety days of the effective date of this section, for notification of the fire department of the issuance of any permit that will result in the issuance of a new or amended certificate of occupancy or other change in the use and occupancy of the premises, provided, however, that in no instance shall the required notice be given more than one business day after the date of the issuance of the permit.~~

~~##Local Law 24-2007.~~

~~[C26-109.2] 27-148 Classification of permits.- For the purposes of this code, permits shall be classified as follows:~~

~~(a) New building permits: for the construction of new buildings, as provided in article eleven of this subchapter.~~

~~(b) Alteration permits:~~ for the alteration of existing buildings, as provided in article twelve of this subchapter.

~~(c) Foundation and earthwork permits:~~ for the construction or alteration of foundations, including earthwork excavation and fill, as provided in article thirteen of this subchapter.

~~(d) Demolition and removal permits:~~ for the demolition or removal of existing buildings, as provided in article fourteen of this subchapter.

~~(e) Plumbing permits:~~ for the installation or alteration of plumbing and plumbing systems including gas piping, as provided in article fifteen of this subchapter.

~~(f) Sign permits:~~ for the erection or alteration of signs and sign installations, as provided in article sixteen of this subchapter.

~~(g) Equipment work permits:~~ for the installation or alteration of service equipment, as provided in article seventeen of this subchapter.

~~(h) Equipment use permits:~~ for the use and operation of service equipment, as provided in article eighteen of this subchapter.

~~§[C26-109.3] 27-149 Separate permits required.~~

Separate permits shall be required, as provided above, except that separate permits for foundations and earthwork, or for the installation or alteration of service equipment, other than fire suppression piping systems, shall not be required whenever plans for such work are included in and form a part of the plans for the construction of new buildings or the alteration of existing buildings.

~~§[C26-109.3] 27-149 Separate permits required.~~

~~§[C26-109.4] 27-150 Application for permit.~~

All applications for permits shall be submitted on forms furnished by the department, and shall be accompanied by the required fee. The application shall contain a general description of the proposed work or equipment, its location, and such other pertinent information as required pursuant to section 27-198.1 or as the commissioner may require.

~~§[C26-109.4] 27-150 Application for permit.~~

~~§[C26-109.5] 27-151 Applicant.~~ Applications for permits shall be made by or in behalf of the owner or lessee of the buildings; and if made by a person other than the owner, the application shall be accompanied by a signed statement of the applicant declaring that he or she is authorized by the owner to make the application. The full names of the owner, lessee, and applicant, and of the principal officers thereof, if a corporation, shall be set forth in the application.

~~§[C26-109.6] 27-152 Other application requirements.~~ In addition to the foregoing general requirements, applications for permits shall be subject to the further

requirements of articles eleven through eighteen of this subchapter, as the same may be applicable.

~~§[C26-109.7] 27-153 Place of filing applications.~~ Except as otherwise provided by rule, applications for permits and accompanying papers and plans shall be filed in the department office in the borough in which the work or equipment is located. Applications shall be numbered and docketed promptly as received; and for purposes of identification and reference, all such papers shall be marked with the block and lot number of the property to which they apply, and with street and house number where possible.

~~§[C26-109.7] 27-153 Place of filing applications.~~

~~§[C26-109.8] 27-154 Amendments to applications.~~

Subject to the limitations of section 27-155 of this article, amendments to permit applications and any accompanying plans and papers may be submitted at any time before final inspection of the work or equipment is completed; and such amendments shall be deemed part of the original permit application and shall be filed therewith.

~~§[C26-109.9] 27-155 Time limitation of application.~~

An application for a permit shall be deemed to have been abandoned twelve months after date of submission, unless such application has been diligently prosecuted after rejection in whole or in part, or a permit shall have been issued under article nineteen of this subchapter except that the commissioner may, for reasonable cause, grant extensions of time for additional twelve month periods.

ARTICLE 11 [REPEALED]
APPLICATIONS FOR NEW BUILDING
PERMITS

~~§[C26-110.1] 27-156 General requirements.~~ All applications for new building permits shall be subject to the requirements of articles nine and ten of this subchapter. In addition, each such application shall set forth the name and business address of the person who is to perform the proposed work, and shall be accompanied by satisfactory evidence of compliance with the provisions of the workers compensation law.

~~§[C26-110.2] 27-157 Plans required.~~ All such applications shall be accompanied by architectural, structural, and mechanical plans, which shall be complete and of sufficient clarity to indicate the nature and extent of the proposed construction work and its compliance with the provisions of this code and other applicable laws and regulations. Composite plans

Title 27 / Subchapter 1

~~showing architectural, structural, and mechanical parts of a building may be submitted provided that a clear understanding of each part is not impaired. The plans may be submitted with the application for the permit or prior thereto, as provided in section 27-138 of article nine of this subchapter; and the same set of plans may be used for several buildings of the same construction, if such buildings are located on adjoining lots under the same ownership, and if permit applications therefore [sic] are filed simultaneously. All such plans shall be drawn to suitable scale and shall be reproduced upon substantial paper, plastic, or cloth, as the commissioner may require; and each plan or drawing shall contain the registration number, seal, signature, and address of the architect or engineer who prepared or supervised the preparation of the plans. Whenever equipment, materials, assemblies, forms, or methods of construction are subject to "controlled inspection", as provided in sections 27-131 and 27-135 of this subchapter, all such equipment, materials, assemblies, forms, or methods of construction shall be listed on the title sheet of the plans, or the sheet immediately following as subject to "controlled inspection" in accordance with code requirements. In no case shall the code be cited or the term "legal" or its equivalent used as a substitute for specific reference to particular code section or standard in order to show compliance with code requirements or other applicable laws or regulations.~~

~~(a) Architectural plans shall contain at least the following data and information:~~

~~(1) Lot diagram showing compliance with the zoning resolution, and indicating the size, height and~~

location of the proposed construction and all existing structures on the site and their distances from lot and street lines, the established grade and existing curb elevations, and final grade elevations of the site shown by contours or spot grades at reasonable intervals. The lot diagram shall be drawn in accordance with an accurate boundary survey, made by a licensed surveyor, which shall be attached to and form part of the lot diagram.

(2) A statement or notation as to the occupancy group or groups that apply to the building and all parts thereof, the construction class of the building, and whether the building is inside or outside of the fire districts.

(3) Floor and roof plans showing compliance with exit requirements, and with sufficient elevations and cross sections to indicate all means of egress, and including the number of stories in all parts of the building.

(4) Detailed drawings necessary to show adequately all architectural elements of the building, including those doors, windows, and interior finish schedules, and other details necessary to substantiate all required fire-protection characteristics.

(a) Structural plans shall contain at least the following data and information except as provided for in section 27-590 of article one of subchapter ten of this chapter:

(1) Foundation plans, floor plans, levels, and sections, showing all structural requirements.

(2) Detailed drawings showing sizes, sections, and locations of members, and such other information as may be required to indicate clearly all structural elements and special structural engineering features.

(3) A tabulation of the vertical live loads, both uniform and concentrated (including allowances of partition loads), used in the design of the several areas and levels of the building. The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted.

(4) Column schedules showing the design load contributed by the framing at any level and the total accumulated design load at each level.

(5) Where trusses are employed, a diagram or table indicating the loads or moments in the various members under the design loading conditions. The requirement for a diagram or table will be waived when the trusses consist of elements selected from load tables or similar data, subject to the requirements for verification in section 27-590 of article one of subchapter ten of this chapter.

(6) Where prestressed members are employed, a schedule or table showing the total prestressing forces and the method and sequence of application.

(7) Foundation plans shall comply with the requirements of subchapter eleven of this chapter and shall show the plan locations, design elevations of the bottoms, and details as to sizes, reinforcements, and construction of all footings, piers, foundation walls, pile groups, and pile caps. The levels of footings of adjacent structures shall be indicated or, if the adjacent structures

are pile supported, this shall be so stated. In addition, there shall be a statement indicating the character and minimum class of the soil strata required for the support of the foundation; the allowable soil pressure used for the design of footings; and the character, class, and presumptive bearing capacity of the bearing stratum to which piling is required to penetrate. The types and design capacities of piling and the records of required borings or test pits shall also be shown.

(b) Mechanical plans shall contain at least the following data and information:

(1) The plumbing, heating, ventilating, refrigeration, and other mechanical work to be performed, so drawn as to conform to the architectural and structural aspects of the building. If desired, plans may be composite plans showing one or more types of systems on each plan, provided that a clear understanding of each system shown is not thereby impaired.

(2) Details for each type of work to be performed, and for each type of equipment to be installed, shall be shown, as provided in sections 27-173 and 27-182 of this subchapter.

(3) Information as to the availability of a public sewer system.

²² (4) In the event a public sewer system is not available, alternate provisions for disposal of storm water and sanitary sewage. If private sewers are to be constructed pursuant to subdivision b of section fourteen hundred three of the New York city charter, a copy of the sewer plan. If a private sewage treatment plant is to be constructed, a copy of plans of the plant approved by the department of health and the department of environmental protection. If an individual on site private sewage disposal system is to be installed, a site and subsoil evaluation indicating that the site and subsoil conditions comply with the applicable law and rules.

²³ *Local Law 65-1996.*

***§[C26-110.3] 27-158 Datum.** All elevations on plans shall be referred to the United States coast and geodetic survey mean sea level datum of nineteen hundred twenty nine (national geodetic vertical datum, NGVD), as provided in section 26-208 of chapter one of title twenty six of the administrative code, as amended. The following table shall be used to convert NGVD to borough datum elevations:

Location:	Add to NGVD to obtain borough datum
Bronx.....	+2.608
Brooklyn.....	+2.547
Manhattan.....	+2.752
Queens.....	+2.725
Statens Island.....	+3.192

²⁴ *Local Law 33-1988.*

~~§[C26-110.4] 27-159 Additional information.~~— In addition to the data and information specified under subdivisions (a) through (e) of section 27-157 of this article, the commissioner may require the submission of computations, test reports, and such other data and information as may be necessary to determine compliance with code provisions and other applicable laws and regulations.

~~***§[C26-110.5] 27-160 Certification of performance bond, license and insurance required.~~

~~*** (a) An applicant for a permit who, pursuant to section 24-526 of the administrative code, is required to construct or repair defects in catch basins or sewers which lie outside of the property shall submit to the department certification from the department of environmental protection that the applicant or owner has provided such department with:~~

~~(1) a performance bond or other security satisfactory to such department and approved as to form by the law department of the city for the full cost, as estimated by such department, of constructing the part of the storm water drainage system for such property which shall lie outside of such property and repairing defects in such construction, if and as required by section 24-526 of the administrative code;~~

~~(2) any license or other written instrument which such department or the law department of the city may reasonably request which gives such department, its agents and contractors and the surety for a performance bond described in paragraph one of this subdivision the legal right to enter private property to perform work described in paragraph one of this subdivision, pursuant to the terms of the performance bond or in accordance with the conditions of acceptance of other security described in paragraph one of this subdivision, and the legal right to connect to, to extend or to discharge storm water into any private sewer authorized as a point of disposal pursuant to section 24-526 of the administrative code, in the event that the owner of property fails to do so, if and as required pursuant to section 24-526 of the administrative code; and~~

~~(3) insurance of a kind and in an amount which such department and the law department of the city deem satisfactory to insure the city fully for all risks of loss, damage to property or injury to or death of persons to whomsoever occurring, arising out of or in connection with the performance of all work described in this section.~~

~~(b) The provisions of this section shall not be construed to abrogate or contravene any contractual obligation of the city to construct storm water drainage systems or parts thereof. The requirements of subdivision (a) of this section shall be inapplicable to an applicant for a new building permit insofar as they relate to any construction work required to be performed by the city pursuant to such a contractual obligation.~~

~~***Note for Excerpts from Local Law 7-1974, see end of Subchapter 1.~~

~~***Local Law 65-1996; Local Law 103-1989.~~

**ARTICLE 12 [REPEALED]
APPLICATIONS FOR BUILDING
ALTERATION PERMITS**

~~§[C26-111.1] 27-161 General requirements.~~— All applications for permits to alter existing buildings shall be subject to the requirements of articles nine and ten of this subchapter and section 27-156 of article eleven of this subchapter.

~~***§[C26-111.2] 27-162 Plans required.~~— All such applications shall be accompanied by such architectural, structural, and mechanical plans as may be necessary to indicate the nature and extent of the proposed alteration work and its compliance with the provisions of this code and other applicable laws and regulations. To the extent necessary, all such applications and plans shall be subject to and shall comply with the requirements of sections 27-157, 27-158, and 27-159 of article eleven of this subchapter. Whenever the proposed alteration work consists of the construction of a substantial horizontal enlargement as defined in subdivision (a) of section P110.2 of reference standard RS-16, the applicant shall submit information as to the availability of a public sewer system pursuant to paragraph three of subdivision (c) of section 27-157 of this code as well as an evaluation of the adequacy of any existing system for the disposal of storm water by any means other than storm or combined sewers, prepared pursuant to paragraph four of subdivision (c) of section 27-157 of this code. The plans may be submitted with the application for the permit or prior thereto, as provided in section 27-138 of article nine of this subchapter.

~~***Local Law 103-1989.~~

**ARTICLE 13 [REPEALED]
APPLICATIONS FOR FOUNDATION AND
EARTHWORK PERMITS**

~~§[C26-112.1] 27-163 General requirements.~~— All applications for foundation and earthwork permits shall be subject to the requirements of articles nine and ten and section 27-156 of article eleven of this subchapter. When the permit sought is solely for earthwork excavation operations, the applicant shall also submit satisfactory evidence that the property is free from any lien for unpaid city taxes, assessments, water rates, bail bonds, or judgments obtained by the city, together with the consent in writing of the mortgagee, if there is any mortgage upon the property, and the consent in writing of the surrogate's court or the supreme court, if the owner of the property is a minor or incompetent.

~~§[C26-112.2] 27-164 Plans required.~~— All such applications shall be accompanied by a lot diagram, as provided in paragraph one of subdivision (a) of section 27-157 of article eleven of this subchapter, and foundation plans, as provided in subdivision (b)

~~of section 27-157 of article eleven of this subchapter, except that when the permit sought is solely for earthwork excavation or fill operations, the applicant shall submit, in lieu of foundation plans, plans showing the exact location, extent, and depth or height of the proposed excavation or fill operation.~~

~~*§[C26-112.3] 27-165 Notice to adjoining owners.~~ No foundation or earthwork permit shall be issued unless and until at least five days prior written notice of the permit application shall have been given by the applicant to the owners of all adjoining lots, buildings and service facilities which may be affected by the proposed foundation work or earthwork operations, except that any foundation or earthwork that is to be done with the use of explosives shall also be subject to the notice requirements set forth in section 27-4038.1 of this code.

~~*Local Law 65-2007.~~

~~§[C26-112.4] 27-166 Protection of adjoining properties.~~ All foundation and earthwork operations shall be performed in accordance with the requirements of subchapters eleven and nineteen of this code; and all lots, buildings and service facilities adjoining the foundation and earthwork areas shall be protected and supported in accordance with the requirements of subchapters eleven and nineteen of this code and subchapter seventeen of chapter one of title twenty-six of the administrative code.

ARTICLE 14 [REPEALED]

APPLICATIONS FOR DEMOLITION AND REMOVAL PERMITS

~~§[C26-113.1] 27-167 General requirements.~~ All applications for demolition or removal permits shall be subject to the requirements of article ten, section 27-156 of article eleven, section 27-198 and section 27-198.1 of article nineteen of this subchapter.

~~§[C26-113.2] 27-168 Requirement of certifications.~~

(a) ~~Prior to the issuance of the permit, all gas, electric, water, steam, and other service lines to the building shall be disconnected and certifications to that effect by the respective utility companies or city agencies having jurisdiction shall be filed with the department; and the applicant shall also file with the department a certification by a licensed exterminator that the building has been treated effectively for rat extermination.~~

(b) ~~In addition to all other requirements of this article, an application for a permit for the demolition or removal of an existing multiple dwelling shall be accompanied by a signed statement of the applicant certifying either (1) that the dwelling contains no occupied housing accommodations subject to control under chapter three of title twenty-six of the administrative code, or (2) that the owner has notified the city rent agency of his or her intention to apply for such permit and has complied with all requirements imposed by the regulations of such agency as preconditions of such application.~~

~~*§[C26-113.3] 27-169 Notice to adjoining owners.~~ No demolition or removal permit shall be issued unless and until at least five days prior written notice of the permit application shall have been given by the applicant to the owners of all adjoining lots, buildings and service facilities which may be affected by the proposed demolition or removal work, except that any demolition or removal work that is to be done with the use of explosives shall also be subject to the notice requirements set forth in section 27-4038.1 of this code.

~~*Local Law 65-2007.~~

~~§[C26-113.4] 27-170 Protection of lot and adjoining properties.~~ All demolition and removal operations shall be performed in accordance with the requirements of subchapter nineteen of this chapter; and after the building has been demolished or removed, the premises shall be maintained free from all unsafe or hazardous conditions by the proper protection of the lot, restoration of grades, and the erection of necessary retaining walls and fences in accordance with the provisions of article three of subchapter eighteen of this chapter.

~~§[C26-113.5] 27-171 Requirement of photographs.~~

(a) ~~Except as otherwise provided herein, all applications for permits for the demolition or removal of existing buildings shall be accompanied by two sets of photographs of the building or buildings to be demolished or removed. Both sets of photographs shall be received by the department on behalf of the landmarks preservation commission and the municipal archives division of the department of records and information services.~~

(b) ~~The commissioner, upon the advice of the commissioner of the department of records and information services and the chairperson of the landmarks preservation commission, shall promulgate such rules and shall prescribe such specifications as may be necessary to carry out the provisions of this section.~~

(c) ~~Where photographs are otherwise required to be submitted to the landmarks preservation commission, applications for demolition or removal permits submitted on behalf of the department of housing preservation and development, shall be exempt from the requirements of this section.~~

(d) ~~Permits authorized pursuant to section 26-243 of the administrative code, shall be exempt from the requirements of this section.~~

ARTICLE 15 [REPEALED]

APPLICATIONS FOR PLUMBING PERMITS

~~§[C26-114.1] 27-172 General requirements.~~ All applications for plumbing permits shall be subject to the requirements of articles nine and ten of this subchapter. In addition, each such application shall set forth the name and business address of the licensed master plumber who is to perform or

~~supervise the proposed work, and shall be accompanied by satisfactory evidence of compliance with the provisions of the workers' compensation law.~~

~~§[C26-114.2] 27-173 Plans required.~~ Except as provided in section 27-174 of this article, all applications for plumbing permits shall be accompanied by plans which shall be complete and of sufficient clarity to indicate the nature and extent of the plumbing work to be performed and its compliance with provisions of this code and other applicable laws and regulations. The plans may be submitted with the application for the permit or prior thereto, as provided in article nine of this subchapter. All plans for plumbing work shall comply with the applicable provisions of section 27-157 of article eleven of this subchapter. In addition, the plans shall contain at least the following data and information:

(a) Single line or diagrammatic plans showing the location, layout, and spacing of all plumbing fixtures, the summation of plumbing loads, the size, location, and material for all building sewers and drains, and the soil, waste, vent, water, and gas distribution piping.

(b) One floor plan for floors with typical layouts; and stack details shown on one drawing, provided that such details are clearly identified as to location and stack number.

(c) A riser diagram showing:

(1) Story heights.

(2) All plumbing fixtures with diagrammatic arrangement of their connections to soil, waste, and vent piping.

(3) All soil, waste, and vent stacks from the point of connection with the building drain to their termination above the roof.

(4) All leader and storm water piping from the point of connection with the building drain to the roof drain.

(5) All water and gas risers.

(d) In the case of plans for new plumbing systems, the relative elevation of the lowest fixture referred to the datum provided in section 27-158 of article eleven of this subchapter and the approximate inside top of the public sewers, and the number, size, and location of all proposed sewer connections and relative location and size of all water mains, leaders, and risers; and the plans shall be accompanied by a statement from the department of environmental protection, giving the minimum water pressure in the main serving the building. When required by the commissioner, such data shall also be included on plans for the alteration of existing plumbing systems.

(e) All appurtenant equipment, including, but not limited to, pumps, ejectors, water tanks, and piping shall be indicated clearly on the plans.

~~§[C26-114.3] 27-174 Exemptions from plan requirements.~~ The submission of plans shall not be required for any of the following:

(a) Plumbing or gas piping alterations requiring a repair slip as provided in section 27-175 of this article.

(b) Plumbing for temporary installations used for exhibition purposes when not designed for sanitary use and not directly connected to a sewerage, water supply, or water distribution system.

(c) Plumbing for temporary installations used in connection with construction operations, other than plumbing for temporary gas installations for which the submission of plans shall be required.

~~§[C26-114.4] 27-175 Alteration and repair slip.~~

(a) An application for a plumbing permit may be treated as an application for an alteration and repair slip where the total cost of the proposed work in the building, as certified by the permit applicant, does not exceed eighteen thousand dollars in any twelve-month period and the proposed work consists of any of the following:

(1) The installation of new plumbing or gas piping, or the rerouting of existing plumbing or gas piping.

(2) The addition of not more than two plumbing fixtures or fixture connections.

(3) The mounting of new plumbing fixtures on existing roughings, other than the mere replacement of existing fixtures constituting a minor alteration or ordinary repair under article five of this subchapter.

(4) The installation or replacement of backflow prevention devices.

(b) Upon the approval of the application, an alteration and repair slip shall be issued in lieu of a plumbing permit, with same force and effect as if a plumbing permit had been issued.

~~§Local Law 51-2001, Local Law 6-1997.~~

~~§[C26-114.5] 27-176 Exemptions from permit requirement.~~

Plumbing permits shall not be required for the installation or alteration of gas service piping or gas meter piping including meters, valves, regulators, and related equipment, when such work is to be performed and serviced and maintained by utility corporations subject to the jurisdiction of the public service commission; nor shall plumbing permits be required for the emergency repair of gas distribution piping when such work is performed by licensed master plumbers or by utility corporations subject to the jurisdiction of the public service commission, in order to alleviate hazardous conditions, provided that a written report describing the details of such repairs shall be filed with the commissioner upon completion of the work.

ARTICLE 16 [REPEALED]

APPLICATIONS FOR SIGN PERMITS

~~§[C26-115.1] 27-177 General requirements.~~ All applications for permits to erect or alter signs or sign installations shall be subject to the requirements of

~~articles nine and ten of this subchapter. In addition, each such application shall set forth the name and business address of the licensed sign hanger who is to perform or supervise the proposed work, and if the sign or sign location is under the control of an outdoor advertising company, as defined in section 26-259 of this code, the name and, where provided by rule, the registration number of such outdoor advertising company. The application shall be accompanied by satisfactory evidence of compliance with the provisions of the workers' compensation law. Each permit shall have an identification number. The changing of copy on a sign not permitted for changeable copy or any structural change of the sign or sign structure shall require a new permit pursuant to this article and sections 27-147 and 27-148 of the code. No permit for the erection, alteration or installation of a sign or sign structure issued pursuant to this article and sections 27-147 and 27-148 of the code shall be deemed to constitute permission or authorization to maintain a sign which would otherwise be illegal without a maintenance permit for an outdoor sign as required pursuant to section 26-253 of the code or which is otherwise illegal pursuant to any other provision of law nor shall any permit issued hereunder constitute a defense in an action or proceeding with respect to such an unlawful sign.~~

~~***Local Law 31-2005; Local Law 14-2001.~~

**~~§§5,6,7,8 Unconsolidated Provisions of Local Law
14-2001 are Repealed per Local Law 31-2005.~~**

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~~***§[C26-115.2] 27-178 Plans required.~~ All such applications shall be accompanied by plans which shall contain at least the following data and information:

(a) A sketch or drawing showing the size and location of the sign or sign installations in relation to the building or premises upon which the sign is or will be erected.

(b) Detail drawings showing the dimensions, materials, and construction of the sign, its supporting members, and the foundation or anchorage thereof.

(c) A tabulation or diagram of all loads and stresses.

(d) Plans for illuminated signs projecting beyond the street line shall be accompanied by a statement from the department of buildings indicating that such department has received an application from a licensed electrician for inspection of such signs.

~~***Local Law 59-1996.~~

~~§[C26-115.3] 27-179 Exemptions from permit requirements.~~ Sign permits shall not be required where the sign is:

(a) Painted directly on the exterior wall surface of a building or on the surface of a fence.

(b) A wall sign of not more than six square feet in area.

(c) A sign erected by employees of a city or other governmental agency, including traffic and other similar signs.

(d) A ground sign advertising the sale or rental of the premises on which it is erected, provided the sign does not exceed twelve square feet in area.

(e) A temporary sign erected during construction work and related thereto.

(f) A temporary sign for special decorative display use for holidays, public demonstrations, or the promotion of civic, welfare or charitable purposes, except that signs that utilize streets or cross streets shall be subject to the requirements of the department of highways.

ARTICLE 17 [REPEALED]

APPLICATIONS FOR EQUIPMENT WORK PERMITS

~~***§[C26-116.1] 27-180 When equipment work permits required.~~ Except as provided in section 27-184 of this article, equipment work permits shall be required for the installation or alteration of the following types of service equipment:

(a) Air conditioning and ventilating systems.

(b) Elevators, escalators, moving walks, and stairways, dumbwaiters, etc.

(c) Fuel burning and fuel oil storage equipment.

(d) Refrigerating systems.

(e) Heating systems.

(f) Boilers.

(g) Fire suppression piping systems.

~~***Local Law 107-1993.~~

~~§[C26-116.2] 27-181 Application requirements.~~ All such applications shall be subject to the applicable requirements of article ten and section 27-156 of this subchapter, and to the applicable requirements of article nine, subdivision (c) of section 27-157 and sections 27-158

and 27-159 of this subchapter whenever plans are required to be submitted in connection with such applications.

~~§[C26-116.3] 27-182 Plans required.~~ Except as provided in section 27-183 and section 27-184.1 applications for equipment work permits shall be accompanied by plans in the following cases and in accordance with the following requirements:

~~*Local Law 6-1997.~~

(a) ~~Air conditioning and ventilating systems.~~ Plans for air conditioning and ventilating systems shall contain at least the following data and information:

(1) The location and sizes of all ducts; the location of all fire dampers, motors, fans, and filters; the type, air capacity, and size of all equipment; and where the plans are not accompanied by structural plans, the operating weight and manner of support of all equipment weighing in excess of one thousand pounds.

(2) The locations of smoke detecting devices.

(3) The location and size of the fresh air intake, the design population, and the index for ventilation for each room or space.

(4) The amount of air to be exhausted or supplied from each outlet for each room or space. In the case of ventilating or exhaust systems for ranges, fryers, ovens, and other similar types of restaurant or bakery equipment, for which a hood is required, the plans shall also show the type of extinguishing system, the location of heat detection devices, nozzles, piping, gas controls, manual and automatic control valves, method of joining ducts, method and location of discharging exhaust from building, the location of break glass controls, and the quantity in cfm designed for each hood.

(b) ~~Elevators, etc.~~ Plans for elevators, escalators, moving walks and stairways, dumbwaiters, and similar equipment shall contain at least the following data and information.

(1) The location of all machinery, switchboards, junction boxes, and reaction points, with loads indicated.

(2) The details of all hoistway conditions including bracket spacing.

(3) The estimated maximum vertical forces on the guide rails on application of the safety device.

(4) In the case of freight elevators for class B or C loading, the horizontal forces on the guide rail faces during loading and unloading; and the estimated maximum horizontal forces in a post wise direction on the guide rail faces on application of the safety device.

(5) The size and weight per foot of any rail reinforcements where provided.

(c) Fuel burning and fuel oil storage equipment. Plans for fuel burning equipment and fuel oil storage equipment shall contain at least the following data and information:

- (1) The kind or grade of fuel to be used.
- (2) The location, arrangement, size, load, and maximum capacity of the burning, storage and fuel pumping equipment.
- (3) The method or means of providing air to the equipment space, showing duct and opening sizes.
- (4) The location, size, and materials for all breechings; the height and size of all chimneys and gas vents; the thickness and type of all insulation materials; and the clearances from combustible walls, partitions, and ceilings.
- (5) Diagrams of all piping, including vent and fill piping for oil systems, and all safety cut off and relief devices and valves in piping.
- (6) Where the alteration or replacement of parts for a fuel oil burning installation does not affect the size of the combustion chamber, the atomization of the fuel, the grade of fuel used, or the maximum capacity of the system, a descriptive statement of the proposed work may be submitted in lieu of plans.

(d) Refrigerating systems. Plans for refrigerating systems shall contain at least the following data and information:

- (1) The location of all machinery; the horsepower of compressors; the type and number of pounds of refrigerant to be used; and the air quantities for, and means of, ventilating the machinery space.
- (2) The location of emergency switches for compressors and for ventilation in the machinery rooms.
- (3) The location of pressure relief piping and any city water connections and water saving devices.
- (4) The tonnage capacity of the machine and the suction and discharge pressures at which the machine is rated.
- (5) The operating weight of the equipment.

(e) Heating systems. Plans for heating systems shall contain at least the following data and information:

- (1) The temperature to be maintained in every room.
- (2) The amount of heat in btu per hour to be provided in every room, and the output capacity in btu per hour of the central heat sources.

(f) Boilers. Plans for boiler installations and boiler alterations shall contain at least the following data and information:

- (1) The btu per hour output capacity and operating weight of each boiler; and the pressure setting of the relief valves.
- (2) Such other data and information as are required to be contained on plans for fuel burning equipment, as hereinabove provided.

***(g) Fire suppression piping systems.** All applications shall include a plot plan to scale indicating the location of the system in relation to the rest of the building.

(1) Standpipe systems. Plans for standpipe systems shall contain at least the following data and information:

(a) The location and size of all risers, cross-connections, hose racks, valves, siamese connections, sources of water supply, piping, and other essential features of the system.

(b) A floor plan for floors that have typical riser locations and no special features within the floor level, with the title of this plan indicating clearly the floors to which the arrangement is applicable.

(c) A riser diagram showing the essential features of the system and indicating the risers, cross-connections, valves, siamese connections, tanks, pumps, sources of water supply, pipe sizes, capacities, floor heights, zone pressures, and other essential data and features of the system.

(d) The available water pressure at the top and bottom floors of each zone, and at each floor where the weight pipe fittings change, shall be shown on the riser diagram. For street pressure fed systems and fire pumps, a statement from the department of environmental protection, giving the minimum water pressure in the main serving the building, shall be supplied.

***(2) Sprinkler systems.** Plans for sprinkler systems, whether automatic or non-automatic, shall contain at least the following data and information:

(e) The location and size of water supplies and the location, spacing, number, and type of sprinklers to be used, with approximate location and size of all feed mains, risers, valves, siamese connections, and other essential features of the system.

(f) A diagram showing the proposed sprinkler system in relation to principal construction features of the building, such as its size, walls, columns, and partitions; and such other information as may be necessary for the evaluation of the system.

(g) The location, number, and type of any electrical or automatic devices to be used in the system.

(h) The available water pressure at the top and bottom floors of each zone shall be shown on the riser diagram. For street pressure fed systems and fire pumps, a statement from the department of environmental protection, giving the minimum water pressure in the main serving the building, shall be supplied.

***(3) Other fire suppression piping systems.** Plans for chemical or gaseous fire suppression piping systems shall contain at least the following data and information:

(a) Type, model number and location of all surface, plenum and duct nozzles; the type, location and surface dimensions of all cooking appliances; the location and type of the automatic fuel shut-off and

~~statement as to type (gas or electric); location and distance of the remote control or manual pull station.~~

~~(a) A statement that board of standards and appeals or department approved grease filters are to be used in any kitchen hood; the dimensions of all hoods and all related ducts.~~

~~(b) The brand name, model and board of standards and appeals or department approval number of the fire suppression piping system; the type of extinguishing agent and number and size of agent containers; size, length, and type of all piping that will be used; number and location of all fusible links or detectors and the temperature setting; type, model number and location of all surface, plenum and duct nozzles.~~

~~(c) For halon systems, the plan should also include type and concentration of the halon, the method of providing power supply to smoke or heat detectors; if reserve supply is being provided, fire rating of partitions and if the area involved is sprinklered, location of all audible/visible alarms within and outside the location involved and the details of construction of the room to contain the halon.~~

~~***Local Law 107-1993.~~

~~§[C26-116.4] 27-183 Exemptions from plan requirements.~~

~~The submission of plans shall not be required in connection with applications for permits to install or alter fuel burning and fuel oil storage equipment under any of the following conditions. However, the commissioner may require the filing of sketches showing compliance with the provisions of this code.~~

~~(a) The equipment is to be used for heating a one or two family dwelling.~~

~~(b) The equipment is fed by gas fuel and is not used with an incinerator.~~

~~(c) The capacity of the equipment does not exceed three hundred fifty thousand btu per hour and the capacity of each of the oil storage tanks for the equipment does not exceed two hundred seventy five gallons, unless the tanks are buried, or are in a multiple dwelling, or in a building adjacent to the line of a subway, or are located above the lowest story of a building, or unless the fuel burning equipment is located above the lowest story of a building.~~

~~§[C26-116.5] 27-184 Exemptions from permit requirement.~~ ~~An equipment work permit shall not be required in any of the following cases:~~

~~(a) Air conditioning and ventilating systems. Where the system is a voluntary system serving only one floor of a building and:~~

~~(1) Does not use lot line windows for the intake or exhaust of air or the mounting of equipment.~~

~~(2) Is not installed in any public hallway, passageway, or stairway.~~

~~(3) Does not in any way reduce the ventilation of any room or space below that required by code provisions.~~

~~(4) Does not penetrate any fire division, roof, floor, or wall (except that a packaged air conditioning unit not exceeding 3 tons rated capacity may be used in windows or in sleeves under windows, provided that health, fire and/or structural safety is not thereby impaired).~~

~~(b) Elevators, etc. Where the equipment consists of a portable elevating device used only for handling materials and located and operated entirely within one story.~~

~~(c) Fuel burning and fuel oil storage equipment. Where the equipment consists of any of the following:~~

~~(1) Portable fuel burning equipment that does not require a chimney or vent connection.~~

~~(2) Portable heaters used in construction work.~~

~~(3) Oil fired heaters having a fuel storage capacity of 6 gallons or less (except that internal combustion engines of any size shall require a permit).~~

~~(d) Refrigerating systems. Where the system:~~

~~*** (1) Has a capacity of twenty five tons or less and uses a Group A1 refrigerant.~~

~~(2) Is to be installed in a vehicle, railroad car, or vessel.~~

~~(3) Uses water or air as the refrigerant.~~

~~(e) Hot water boilers and steam boilers operating at a gauge pressure of not more than fifteen pounds per square inch located in dwellings occupied by less than six families.~~

~~***Local Law 32-2004.~~

~~§ 27-184.1 Alteration and repair slip.~~

~~(a) An application for an equipment work permit for work on an existing combined standpipe or sprinkler system may be treated as an application for an alteration and repair slip where the total cost of the proposed work within the building, as certified by the permit applicant, does not exceed ten thousand dollars in any twelve month period and the proposed work consists of any of the following:~~

~~(1) Replacement of parts required for the operation of a combined standpipe or sprinkler system. In the event of emergency an application for an alteration and repair slip must be filed within twenty four hours after the commencement of the repairs.~~

~~(2) Replacement of sprinkler heads. Provided that orifice sizes, type and deflector position remain the same.~~

~~(3) Changes that do not alter the type of sprinkler system.~~

~~(4) Relocation of piping that does not effect the operation of the sprinkler system.~~

~~(5) Rearrangement of not more than twenty sprinkler heads in areas presently sprinklered in light hazard occupancy which will remain light hazard~~

occupancy, provided that the addition of sprinkler heads in existing systems shall be limited to light hazard occupancy in rooms or spaces not exceeding eight hundred square feet requiring only one head with the maximum spacing allowed by the code, and provided that the number of new heads does not exceed a total of five.

(6) Relocation of combined fire standpipe auxiliary hose sources and cabinets within ten feet of their original location, provided that the existing covered area is not affected and provided that such relocation complies with subchapter seventeen and reference standard RS 17-1.

(b) Notwithstanding any inconsistent provision of this section, an application for an equipment work permit for work on an existing combined standpipe or sprinkler system may not be treated as an application for an alteration and repair slip for any alteration of primary or auxiliary water supplies.

(c) Upon the approval of the application an alteration and repair slip shall be issued in lieu of an equipment work permit, with the same force and effect as if an equipment work permit had been issued.

(d) The submission of plans shall not be required for an alteration and repair slip.

**Local Law 6-1997.*

ARTICLE 18 [REPEALED] APPLICATIONS FOR EQUIPMENT USE PERMITS

~~§[C26-117.1] 27-185 When equipment use permits required.~~ Equipment use permits shall be required for the use and operation of the following types of service equipment:

- (a) Air conditioning and ventilating systems.
- (b) Elevators, escalators, moving walks and stairways, dumbwaiters, etc.
- (c) Fuel burning and fuel oil storage equipment.
- (d) Refrigeration systems.
- (e) Heating systems.
- (f) Boilers.

~~§[C26-117.2] 27-186 Application requirements.~~ All applications for equipment use permits shall be subject to the requirements of article ten of this subchapter.

~~§[C26-117.3] 27-187 Inspections and tests.~~ No equipment use permit shall be issued unless and until the equipment shall have been inspected and tested to determine proper functioning and compliance with the provisions of this code and other applicable laws and regulations. All inspections and tests shall be conducted in accordance with required inspection and test procedures; and signed copies of all required inspection and test reports shall be filed with the department and form part of the papers accompanying the permit application. In the case of heating systems, a signed statement by an architect or engineer shall be submitted with the permit application, stating that the system has been operated and

functions satisfactorily and that, to the best of his or her knowledge and belief, the system will meet code temperature requirements.

~~§[C26-117.4] 27-188 Temporary use permit.~~ The commissioner may, upon request, issue a temporary use permit authorizing partial use and operation of the equipment prior to completion of the installation or alteration work, provided that such partial use and operation may be made safely and without endangering public health, safety and welfare, and further provided that such temporary use permit shall not be issued for a period of more than thirty calendar days, subject to renewal for additional thirty day periods at the discretion of the commissioner. All temporary use permits shall be required to be posted in a conspicuous location in or near the equipment covered by the permit, and shall state the nature and extent of the partial use and operation permitted and indicate clearly that full use and operation of the equipment is not permitted.

~~§[C26-117.5] 27-189 Exemptions from equipment use permit requirement.~~ No equipment use permit shall be required for equipment exempted from the requirement of an equipment work permit under section 27-184 of article seventeen of this subchapter; nor shall an equipment use permit be required for the use and operation of equipment specifically exempted under the provisions of subchapters thirteen and fourteen of this chapter.

~~§[C26-117.6] 27-190 Duration and renewal of permit.~~ Equipment use permits shall be of indefinite duration, subject to the provisions of section 27-196 of article nineteen of this subchapter, except that permits for the use and operation of elevators and similar equipment and boilers shall be limited to a term of one year from the date of issuance of the permit, subject to annual renewal upon application and proof of compliance with the requirements for periodic inspections as prescribed in subchapters fourteen and eighteen of this chapter. Applications for renewal of such permits shall be submitted on forms furnished by the department, not later than thirty calendar days prior to the expiration date of the permit, accompanied by the required fee; and late applications for renewal shall be subject to the payment of an additional fee of one (1) dollar.

ARTICLE 19 [REPEALED] ISSUANCE OF PERMITS

~~§[C26-118.1] 27-191 Approval of permit application.~~ All applications for permits and any accompanying plans and papers, including any amendments thereto, shall be examined promptly after their submission for compliance with the

provisions of this code and other applicable laws and regulations. Except as otherwise provided in section 27-198 of this article, applications complying with the provisions of this code and other applicable laws and regulations shall be approved by the commissioner and the permit issued promptly and not later than forty calendar days after the submission thereof, and applications failing to comply with the requirements of this code and other applicable laws and regulations shall be rejected and written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than forty calendar days after the submission thereof, except that on or before the fortieth day, the commissioner may on good cause shown, and upon notification to the applicant, extend such time for an additional twenty days. Whenever a permit application has been rejected and is thereafter revised and resubmitted to meet stated grounds of rejection, the revised application shall be approved if it meets the stated grounds of rejection, or shall be rejected if it fails to meet the stated grounds of rejection; and the permit shall be issued or written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than 20 calendar days after the resubmission thereof.

*****§27-191.1 List of permits for cellular antenna to be maintained.** The commissioner shall maintain a separate list of alteration permits issued for the erection or placement of antennae used to provide cellular telephone or similar service or any structure related to such service which shall, at a minimum, set forth the name, business address and business telephone number of the applicant, the date of the application, the date the permit was issued, the location for which the permit was issued, including the premises address and the zoning district, whether residential, commercial, or manufacturing, and the number of permits issued for such purpose at the same location since the effective date of this section. Such list shall be made available to the public upon request between regular business hours and shall be available to the public in electronic format on a 24 hour basis on the department's website.

****Local Law 28-2005.*

§[C26-118.2] 27-192 Approval of application in part. The commissioner may approve the application and issue a permit for construction of part of a building, including foundations, before complete plans and specifications for the entire building have been submitted and approved, provided that adequate information and detailed plans or statements have been submitted complying with the provisions of this code and any other applicable laws and regulations, and provided further that the holder of such permit shall proceed with the building operation at his or her own risk and without assurance that a permit for construction of the entire building will thereafter be issued.

§[C26-118.3] 27-193 Signature to permit. Every permit issued by the commissioner shall have his or her signature affixed thereto; but the commissioner may authorize any subordinate to affix such signature.

§[C26-118.4] 27-194 Posting of permit. A permit card bearing the permit number, application number, location of the premises or equipment for which the permit is issued, and

such other information as the commissioner may determine, shall be furnished the applicant in connection with the issuance of the permit; and such permit card shall be posted in a conspicuous place at such location open to public inspection during the entire time of the prosecution of the work or the use and operation of the equipment, or until the expiration of the permit. No such permit card shall be posted or displayed at any location other than the location of the premises or equipment for which the permit was issued.

§[C26-118.5] 27-195 Notice of commencement of work. At least twenty four hours written notice shall be given to the commissioner before the commencement of any work for which a permit has been issued. Before any work is commenced on an item of construction requiring controlled inspection, all persons responsible for such controlled inspection shall be notified in writing at least seventy two hours prior to such commencement.

***§[C26-118.6] 27-196 Expiration of permit.** Except as otherwise provided in section 27-190 of article eighteen of this subchapter, all permits issued by the commissioner shall expire by limitation and become invalid if the permitted work or use is not commenced within twelve months from the date of issuance of the permit or, if commenced, is suspended or abandoned for a period of twelve months thereafter. All permits for work in a special flood hazard area as delineated in reference standard RS4-4 shall expire if the actual start of permanent construction has not occurred within one hundred eighty eight days of the date on which such permit is issued. The commissioner may, however, upon good cause shown, reinstate a work permit at any time within a period of two years from the date of issuance of the original permit, provided that the work shall comply with all the requirements of this code and other applicable laws and regulations in effect at the time application for reinstatement is made, and provided further that the applicant shall pay a renewal fee in accordance with section 26-211 of the code.
**Local Law 38-1990; Local Law 33-1988.*

*****§[C26-118.7] 27-197 Revocation of permit.** The commissioner may, on notice to the applicant, revoke any permit for failure to comply with the provisions of this code or other applicable laws and regulations; or whenever there has been any false statement or any misrepresentation as to a material fact in the application or accompanying plans and papers upon the basis of which the permit was issued; or whenever any permit has been issued in error and conditions are such that a permit should not have been issued. Such notice shall inform the applicant that he or she shall have the right to present to the commissioner or his or her representative within five business days or personal service or ten days of the posting of service by mail information as to why the permit should not be revoked. The commissioner may suspend a permit immediately when the commissioner has determined that an imminent peril to life or property exists and shall at the same time notify the applicant that the permit shall be revoked

and that the applicant has the right to present to the commissioner or his or her representative within five business days of personal service or ten days of the posting of service by mail information as to why the permit should not be revoked.

~~§§ Local Law 11-1988.~~

~~§[C26-118.8] 27-198 Approval of plans and permit applications for alteration or demolition of single room occupancy multiple dwellings.~~

a. ~~For the purposes of this section "single room occupancy multiple dwelling" means either a class A multiple dwelling used in whole or in part as a rooming house or furnished room house or for single room occupancy pursuant to section two hundred forty eight of the multiple dwelling law or containing rooming units, as such term is defined in section 27-2004 of the housing maintenance code or a class B multiple dwelling. Notwithstanding the foregoing provision, the term "single room occupancy multiple dwelling" shall not include:~~

- ~~(1) college or school dormitories;~~
- ~~(2) clubhouses;~~
- ~~(3) luxury hotels, as such term is defined by the commissioner of housing preservation and development;~~
- ~~(4) residences whose occupancy is restricted to an institutional use such as housing intended for use primarily or exclusively by the employees of a single company or institution;~~
- ~~(5) city owned multiple dwellings;~~
- ~~(6) any multiple dwelling containing fewer than nine class B dwelling units used for single room occupancy unless the total number of such units is more than fifty percent of the total number of dwelling units in such multiple dwelling; and~~
- ~~(7) any class A or class B multiple dwelling which is~~

~~(a) The subject of a program approved by the commissioner of housing preservation and development and related to the rehabilitation and preservation of single room occupancy multiple dwellings other than a program of tax abatement or tax exemption including, but not limited to, programs of tax abatement or tax exemption authorized by subchapter two of chapter two of title eleven of the administrative code or section four hundred twenty-one a of the real property tax law, and~~

~~(b) exempted from the provisions of this section by such commissioner.~~

b. ~~(1) The commissioner shall not approve any plans pursuant to article nine of this subchapter, issue an alteration permit pursuant to article twelve of this subchapter or a demolition permit pursuant to article fourteen of this subchapter for a single room occupancy multiple dwelling:~~

~~(a) for the alteration of such dwelling to a class A multiple dwelling to be used in whole or in part for other than single room occupancy purposes or for the demolition of such dwelling, or~~

~~(b) with respect to the addition or removal of kitchen or bathroom facilities in such multiple dwelling or such other types of alteration work as shall be prescribed by regulation of the commissioner of housing preservation and development, in consultation with the commissioner, unless~~

~~(i) the commissioner of housing preservation and development has certified that there has been no harassment of the lawful occupants of such multiple dwelling within the thirty six month period prior to the date of the submission of an application for a certification of no harassment or has issued a waiver of such certification,~~

~~(ii) the applicant has submitted a sworn statement by or on behalf of all the owners, as such term is defined in paragraph forty five of subdivision a of section 27-2004 of the housing maintenance code, of such multiple dwelling that there will be no harassment of the lawful occupants of such multiple dwelling by or on behalf of such owners during the construction period, and~~

~~(iii) the applicant has submitted a plan which provides for the safety and health of the occupants thereof during the construction period.~~

~~(2) Notwithstanding the foregoing provisions, if within the thirty six month period prior to the date of the submission of an application for a certification of no harassment to the commissioner of housing preservation and development, title to a single room occupancy multiple dwelling was vested in the city, the period of time for which the commissioner of housing preservation and development shall certify whether there has been no harassment of the lawful occupants of such multiple dwelling shall commence from the date on which the title to such property was no longer vested in the city.~~

~~(3) An applicant for such plan approval, alteration or demolition permit shall forward a copy of such application to the commissioner of housing preservation and development, together with an application for a certification of no harassment pursuant to section 27-2093 of the housing maintenance code.~~

~~(4) The time period in which the commissioner is required to approve or reject an application, or resubmission thereof, for such plan approval or alteration permit pursuant to section 27-144 or 27-191 of this subchapter shall commence from the date that the commissioner receives either such certification or a waiver thereof, or notice of the denial of such certification or waiver thereof from the commissioner of housing preservation and development and such sworn statement and plan.~~

~~(5) Where the commissioner of housing preservation and development denies the certification required by this section the commissioner shall reject~~

the application for such plan approval, alteration permit or demolition permit.

(6) The commissioner shall be empowered to issue a stop work notice and order with respect to an alteration or demolition permit or rescind such plan approval, alteration or demolition permit at the request of the commissioner of housing preservation and development pursuant to section 27-2093 of the housing maintenance code.

(7) Where the commissioner rejects an application for such plan approval, alteration or demolition permit pursuant to paragraph five of this subdivision or where the commissioner rescinds such plan approval, alteration or demolition permit pursuant to paragraph six of this subdivision, no further application for plan approval, an alteration or demolition permit, for the purposes described in subdivision b of this section, with respect to the alteration or demolition of such multiple dwelling shall be considered by the commissioner for a period of thirty-six months following the date of the denial of the certification of no harassment by the commissioner of housing preservation and development or the date of the rescission of such certification of no harassment by such commissioner.

(8) The provisions of this subdivision shall not apply to repairs, demolition or any other work performed by a city agency or by a contractor pursuant to a contract with a city agency.

~~*(9) The commissioner shall not approve any plans or issue any permits based upon a certification of no harassment issued prior to February second, nineteen hundred eighty-seven unless the commissioner of housing preservation and development issues a supplemental certification that there is no reasonable cause to believe that there has been harassment at the multiple dwelling during the period of time from the date of the issuance of the original certification of no harassment to the date of the application for such a supplemental certification. If the commissioner of housing preservation and development finds that there is reasonable cause to believe that harassment has occurred during such period of time he or she shall suspend the original certification of no harassment pursuant to paragraphs two and three of subdivision f of section 27-2093 of the code.~~

~~*Local Law 9-1987; Local Law 59-1985, language juxtaposed per Ch. 907-1985.~~

~~§[C26-118.9] 27-198.1 Approval of plans and permit applications where an asbestos project is performed.~~**

~~a. The commissioner shall not approve any plans pursuant to article nine of this subchapter except plans for the construction of new buildings unless an asbestos investigator has certified that work to be performed will not constitute an asbestos project or the applicant submits with the application for approval of plans an asbestos inspection report completed in accordance with the provisions of section 24-146.1 of subchapter six of chapter one of title twenty four of the code.~~

~~b. Where the commissioner of environmental protection has by regulation required that, in connection with other work for which a permit but not plans is required under this chapter, that an asbestos investigator certify that the work to be performed will not constitute an asbestos project or that an asbestos inspection report be completed in accordance with the provisions of section 24-146.1 of subchapter six of chapter one of title twenty four of the code, the commissioner shall not issue such permit unless such certification or such report is submitted in connection with the application for such permit.~~

~~c. Where the commissioner of environmental protection has by regulation required that, in connection with work for which an alteration permit or demolition permit is required under this chapter, that an asbestos investigator certify that the work to be performed will not constitute an asbestos project or that the applicant submit with the application for such permit proof that an asbestos removal plan has been approved by the commissioner of environmental protection in accordance with the provisions of section 24-146.1 of subchapter six of chapter one of title twenty four of the code, the commissioner shall not issue such permit unless such certification or proof of such approval has been submitted in connection therewith.~~

~~d. The commissioner shall not issue any permit under this chapter for work which constitutes an asbestos project and for which an asbestos inspection report is required unless the applicant at the time of application for such permit certifies on forms prescribed by the commissioner of environmental protection that he or she is familiar with federal, state and local laws and regulations applicable to asbestos related work.~~

~~e. Whenever proof of approval of an asbestos removal plan is required for plan or permit approval, any requirement for the submission of an asbestos inspection report shall be deemed waived.~~

~~f. For purposes of this section, the terms "asbestos", "asbestos inspection report", "asbestos investigator", "asbestos project" and "asbestos removal plan", shall have the meanings as are ascribed in section 24-146.1 of subchapter six of chapter one of title twenty four of the code.~~

~~**Local Law 80-1986. Not applicable to plans submitted prior to April 1, 1987 or amendments or revisions to such plans submitted prior to March 31, 1988; Local Law 76-1985, language juxtaposed per Ch. 907-1985.~~

~~§[C26-118.10] 27-198.2 Conversion, alteration and demolition of single room occupancy multiple dwellings prohibited.~~**

~~a. Except as otherwise provided in this section and notwithstanding any other provision of law to the contrary, no single room occupancy dwelling unit or~~

~~units or portions thereof (i) shall be altered for or converted to use as apartments, whether such alteration or conversion is effected with or without physical alterations, or (ii) shall be altered for or converted to use other than as single room occupancy dwelling units, whether such alteration or conversion is effected with or without physical alterations, or (iii) shall be altered to add either kitchens or bathrooms if such units lacked either of such facilities as of January ninth, nineteen hundred eighty five or to remove such facilities. No single room occupancy multiple dwelling shall be altered to reduce the number of single room occupancy dwelling units and no single room occupancy multiple dwelling shall be demolished. No single room occupancy multiple dwelling shall be altered to remove kitchens or bathroom facilities which are used for any single room occupancy dwelling unit.~~

~~b. 1. For the purposes of this section the term "single room occupancy multiple dwelling" means a multiple dwelling which is either (i) a class A multiple dwelling which is either used in whole or in part for single room occupancy or as a rooming house or furnished room house pursuant to section two hundred forty eight of the multiple dwelling law or which contains rooming units or (ii) a class B multiple dwelling including, without limitation, hotels, lodging houses, rooming houses, boarding houses and furnished room houses. Notwithstanding the foregoing provision, the term "single room occupancy multiple dwelling" shall not include:~~

~~(a) any multiple dwelling which had a certificate of occupancy as a college or school dormitory on January ninth, nineteen hundred eighty five or if the dwelling had no certificate of occupancy was lawfully used as a college or school dormitory on such date;~~

~~(b) any multiple dwelling which had a certificate of occupancy as a clubhouse on January ninth, nineteen hundred eighty five or if the dwelling had no certificate of occupancy was lawfully used as a clubhouse on such date;~~

~~(c) any multiple dwelling which was a residencee whose occupancy was restricted to an institutional use such as housing intended for use primarily or exclusively by the employees of a single company or institution on January ninth, nineteen hundred eighty five;~~

~~(d) multiple dwellings owned by the city, the state, or any political subdivision thereof;~~

~~(e) hotels in which the rent on October first, nineteen hundred eighty four, exclusive of governmentally assisted rental payments, charged for seventy five percent or more of the total number of occupied individual dwelling units was more than fifty five dollars per day for each unit rented on a daily basis, or more than two hundred fifty dollars per week for each unit rented on a weekly basis or more than eight hundred fifty dollars per month for each unit rented on a monthly basis;~~

~~(f) any class A or class B multiple dwelling in which, on January ninth, nineteen hundred eighty five, either less~~

~~than five dwelling units were rooming units or dwelling units other than apartments or less than ten percent of the total number of dwelling units were rooming units or dwelling units other than apartments;~~

~~(g) any class A or class B multiple dwelling which is (a) the subject of a project or program related to the rehabilitation and preservation of single room occupancy multiple dwellings approved by the commissioner of housing preservation and development other than a program of tax abatement or tax exemption including, but not limited to, programs of tax abatement or tax exemption authorized by subchapter two of chapter two of title eleven of the code or section four hundred twenty one a of the real property tax law, and (b) exempted from the provisions of this section by such commissioner;~~

~~(h) any wood frame multiple dwelling.~~

~~(i) any hotel in which during the twelve month period commencing on January first, nineteen hundred eighty four ninety percent or more of the dwelling units were occupied for less than thirty consecutive days by any one occupant and in which there are no dwelling units subject to regulation pursuant to the rent stabilization law of nineteen hundred sixty nine, as amended, provided however that this provision shall not apply unless an application for exemption is filed with the department of housing preservation and development in such form and containing such information as the department shall prescribe on or before April thirtieth, nineteen hundred eighty seven.~~

~~2. The status of a vacant building as a single room occupancy multiple dwelling shall be determined by its last legal use prior to vacancy.~~

~~3. For the purposes of this section the term "single room occupancy dwelling unit" means a dwelling unit, other than an apartment, in a single room occupancy multiple dwelling.~~

~~4. For the purposes of this section the terms "apartment", "dwelling unit", "owner" and "rooming unit" shall be as defined in the housing maintenance code.~~

~~e. 1. The commissioner shall not approve any plans pursuant to article nine of this subchapter, issue an alteration permit pursuant to article twelve of this subchapter or a demolition permit pursuant to article fourteen of this subchapter for a single room occupancy multiple dwelling:~~

~~(a) for the alteration of such dwelling to a class A multiple dwelling to be used in whole or in part for other than single room occupancy purposes or for the demolition of such dwelling, or~~

~~(b) with respect to the addition or removal of kitchen or bathroom facilities in such multiple~~

~~dwelling prohibited pursuant to subdivision a of this section, or~~

~~(c) with respect to any other alterations or other work prohibited pursuant to subdivision a of this section.~~

~~2. Except as provided in paragraph three of this subdivision, the department shall revoke any such permit or approval granted on or after January ninth, nineteen hundred eighty five.~~

~~3. If demolition of a single room occupancy multiple dwelling has been completed pursuant to a permit issued on or after January ninth, nineteen hundred eighty five and prior to August fifth, nineteen hundred eighty five, the department shall not issue a permit for new construction on the site of such demolished dwelling and shall revoke any such permit for new construction issued on or after January ninth, nineteen hundred eighty five unless the owner makes the payment or provides for replacement units pursuant to subparagraph (a) of paragraph (4) of subdivision d of this section for each single room occupancy dwelling unit which was demolished.~~

~~4. The provisions of this section shall not apply to work done pursuant to any permit issued by the department prior to January ninth, nineteen hundred eighty five.~~

~~a. The provisions of subdivisions a and c shall not apply to a single room occupancy multiple dwelling if:~~

~~1. (a) such multiple dwelling had twenty four or fewer dwelling units on January ninth, nineteen hundred eighty five and~~

~~(i) on January first, nineteen hundred eighty three and on January ninth, nineteen hundred eighty five had seven or fewer occupied single room occupancy dwelling units, excluding any owner occupied single room occupancy dwelling units; or~~

~~(ii) an individual owner with at least a fifty percent fee interest in the multiple dwelling establishes to the satisfaction of the commissioner of the department of housing preservation and development prior to the issuance of any permit by the department of buildings for work which would otherwise be prohibited pursuant to subdivisions a and c of this section that he or she intends to occupy such premises as his or her primary residence for a period of not less than three years after completion of such work; and~~

~~(iii) an application to establish an exemption pursuant to this subparagraph is submitted to the department of housing preservation and development and such application is approved by the department; or~~

~~(a) such multiple dwelling had twenty five or more dwelling units on January ninth, nineteen hundred eighty five and the residential portion of such dwelling has been continuously vacant since January first, nineteen hundred eighty three, an application to establish an exemption pursuant to this subparagraph is submitted to the department of housing preservation and development on or before May twenty ninth, nineteen hundred eighty~~

~~seven and such application is approved by such department; or~~

~~2. such multiple dwelling is within an area for which the department of city planning has issued a special permit prior to January ninth, nineteen hundred eighty five which was conditioned upon a commitment by the developer to provide dwelling units as set forth in such special permit to replace the single room occupancy dwelling units which are lost; or~~

~~3. such multiple dwelling is determined by the department or by the fire department to be an unsafe building and the department determines there is no alternative to demolition; or~~

~~4. (a) (i) Prior to the issuance of a permit for work which would otherwise be prohibited pursuant to subdivisions a and c of this section, the owner of such single room occupancy multiple dwelling complies with the provisions of §27 198.3 of this code and further provides for the replacement of the single room occupancy dwelling units which would be altered, converted or demolished by paying, to the single room occupancy housing development fund company established pursuant to subdivision i of this section for each dwelling unit which would be altered, converted or demolished as a result of the work, forty five thousand dollars or such other amount which the commissioner of housing preservation and development determines by regulation would equal the cost of creating a dwelling unit, other than an apartment, to replace such single room occupancy dwelling unit. No such regulation shall be promulgated before January first, nineteen hundred eighty eight provided, however, that on and after such date such regulation shall be promulgated where the commissioner determines that the cost of creating such a dwelling unit, exceeds forty five thousand dollars. Each regulation shall indicate the manner in which the cost of creating such a dwelling unit was determined. Notwithstanding the foregoing, where fifty percent or more of the dwelling units of such multiple dwelling are occupied as of January twentieth, nineteen hundred eighty seven, the owner of such multiple dwelling shall be required to provided for replacement units pursuant to clause (ii) of this subparagraph for such units occupied as of such date; or~~

~~(ii) Prior to the issuance of a permit for work which would otherwise be prohibited pursuant to subdivisions a and c of this section, the owner replaces the single room occupancy dwelling units which would be altered, converted or demolished as a result of such work elsewhere within the city by providing dwelling units affordable to persons of low and moderate income, under a plan approved by such commissioner which complies with the provisions of §27 198.3 of this code. "Replacement" shall include but not be limited to the acquisition of an existing~~

~~multiple dwelling or the creation of such dwelling units either by the construction of a new multiple dwelling or the substantial rehabilitation of an existing multiple dwelling. "Multiple dwelling" shall include but not be limited to a "single room occupancy multiple dwelling". In the event that an existing multiple dwelling is acquired for the purpose of providing replacement units, such multiple dwelling shall be located in the same or adjacent community board in which the single room occupancy multiple dwelling which is to be altered, converted or demolished is located. Where a replacement Plan is submitted to such commissioner, the commissioner shall give notice to the council member and community board for the community district in which the dwelling units to be provided pursuant to such plan are to be located. Such plan shall provide either for the sale or net lease of the multiple dwelling containing such dwelling units to a not-for-profit organization or for such other form of transfer of ownership, management or possession of such multiple dwelling approved by such commissioner.~~

~~(iii) Notwithstanding the provisions of item (i) or (ii) of this subparagraph, upon the submission of an application for a permit for such work an owner shall make an application for a certification of no harassment or supplemental certification of no harassment pursuant to the provisions of section 27-2093 of this code and if such application is denied by the commissioner of housing preservation and development or a certification is granted and thereafter revoked and the basis for such denial or revocation is predicated in whole or in part on a determination by such commissioner that harassment occurred at such multiple dwelling after January ninth, nineteen hundred eighty five, no permit shall be issued on the basis of any payment made pursuant to item (i) or the provision of dwelling units pursuant to item (ii) and such owner shall be subject to the provisions of section 27-2151 of this code and subdivisions a and c of this section. In addition, the sanctions provided by section 27-198 shall apply and no permit shall be issued for a period of two years following the expiration of the sanction period set forth in section 27-198 unless the owner, prior to the issuance of such permit, makes a payment of twice the amount required by item (i) or provides for twice the number of replacement units required by item (ii) for each single room occupancy dwelling unit which would be demolished, altered or converted as a result of the issuance of such permit. Any payment made or replacement units provided prior to such denial or revocation shall be credited against such required amount or units.~~

~~(b) The amount of the payment required to be made or the number of dwelling units required to be provided pursuant to subparagraph (a) of this paragraph may be reduced in whole or in part by the commissioner of housing preservation and development if such commissioner determines that the owner has established:~~

~~(i) that there is no reasonable possibility that such owner can make a reasonable rate of return unless the property is~~

~~altered or converted in a manner prohibited by subdivisions a and c of this section or demolished; and (ii) that neither the owner nor any prior owner intentionally managed the property to impair the ability to earn such return, and (iii) that the requirement that all single room occupancy dwelling units be replaced would substantially impair the feasibility of redeveloping the property for any other use. Such application shall be made to the commissioner of housing preservation and development in a form and manner and containing such information as the commissioner of housing preservation and development shall prescribe. The term "reasonable rate of return" is defined to mean a net annual return of eight and one half percent of the assessed value of the subject property without recourse to the alteration, conversion or demolition prohibited by subdivisions a and c of this section. If the department of housing preservation and development determines that the assessed value of the subject property has increased as the result of the sale of such property, such department shall disregard the increase in the assessed value resulting from such sale to the extent that such department determines that the amount paid for the property at such sale was in excess of the fair market value of the property on the date of the sale if the property continued to be used for single room occupancy rental housing of the same type and quality after the sale. For the purpose of such determination the property shall be valued subject to the continuation of tenancies existing at the subject property immediately prior to the date of the sale. Notwithstanding the foregoing provision the commissioner shall revoke a determination reducing the payment or the number of replacement dwelling units if the denial or revocation of a certification of no harassment or supplemental certification of no harassment is predicated in whole or in part on a determination by such commissioner that harassment occurred at such multiple dwelling after January ninth, nineteen hundred eighty five.~~

~~e. The department shall not issue a building permit to allow new construction on the site after demolition pursuant to paragraph three of subdivision d of this section unless the owner makes the payment or provides replacement units pursuant to subparagraph (a) of paragraph four of subdivision d of this section for each single room occupancy dwelling unit which is demolished, provided however that if the department of housing preservation and development determines that the conditions which necessitated or significantly contributed to the need for the demolition were not the result of violations of the housing maintenance code which resulted from intentional acts or substantial negligence of an owner or former owner or his or her agent or was the owner of record prior to January ninth, nineteen hundred eighty five and such acts did not occur during the period of his or her ownership, the owner may~~

~~apply for a reduction of the required replacement units pursuant to subparagraph (b) of paragraph four of subdivision d of this section.~~

~~f. Notwithstanding the provisions of section 27-2077 of the code for purposes of this section, rooming units for persons of low and moderate income provided pursuant to paragraph two or four of subdivision d of this section may be created through alterations of apartment units in a class A multiple dwelling.~~

~~g.* i Any person who violates the provisions of this section shall be subject to all of the remedies and penalties provided for in this title except that no civil or criminal penalties shall apply with respect to acts in violation of this section committed prior to August fifth, nineteen hundred eighty five.~~

~~*As enacted but "I" probably intended.*~~

~~2. In addition to any other penalties set forth in this subdivision or in any other provisions of law, any person who violates the provisions of this section following August fifth, nineteen hundred eighty five shall also be liable for a civil penalty in the amount of one hundred fifty thousand dollars for each single room occupancy dwelling unit unlawfully altered, converted or demolished.~~

~~3. An owner who falsely represents an intention to occupy a dwelling in order to obtain a permit pursuant to clause (ii) of subparagraph (a) of paragraph one of subdivision d of this section to do work which would otherwise be prohibited pursuant to subdivisions a and c of this section shall be liable for a civil penalty of fifty thousand dollars for each single room occupancy dwelling unit demolished or converted to use as apartments under such permit.~~

~~4. Such civil penalties shall be recovered by the corporation counsel in an action in any court of competent jurisdiction. A judgement recovered in such an action shall constitute a lien against the premises with respect to which the violation occurred from the time of the filing of a notice of pendency in the office of the clerk of the county in which such premises is situated. A notice of pendency may be filed at the time of the commencement of this action or at any time before final judgement or order.~~

~~5. In addition to any other penalties set forth in this subdivision or in any other provisions of law, the commissioner shall either (i) refuse to issue or shall seek to have revoked the certificate of occupancy of a dwelling which has been altered, converted or demolished after August fifth, nineteen hundred eighty five to reduce the number of single room occupancy dwelling units in violation of this section unless the owner makes the payment or provides replacement units pursuant to subparagraph (a) of paragraph four of subdivision d of this section for each single room occupancy dwelling unit which was unlawfully altered, converted or demolished, provided, however, that such owner shall not be eligible for a reduction in such payment pursuant to subparagraph (b) of paragraph four of subdivision d of this section; or (ii) order any single~~

~~room occupancy multiple dwelling to be restored so that the number of single room occupancy dwelling units is increased up to the number of such units prior to such alteration or conversion.~~

~~h. All applications submitted pursuant to this section shall be accompanied by an affidavit of the owner attesting to the accuracy and truthfulness of the information contained therein and an application fee. The department of housing preservation and development is authorized to establish such reasonable fees as may be appropriate.~~

~~i. The commissioner of housing preservation and development shall establish a single room occupancy housing development fund company pursuant to the provisions of article eleven of the private housing finance law or such other provision of law as may be deemed appropriate by the corporation counsel. Monies paid to the company shall be used for the preservation, acquisition and development of dwelling units for persons of low and moderate income pursuant to applicable provisions of law and a preference in the occupancy of such dwelling units shall be given to individuals who are of low income, are single adults and whose last residence was in a single room occupancy multiple dwelling unit which was altered, demolished or converted. On or before June thirtieth, nineteen hundred eighty eight and annually thereafter the company shall submit a report to the city council and to the mayor describing its activities during the preceding calendar year.~~

~~j. All civil penalties recovered pursuant to any provision of this section shall be single room occupancy housing fund development company established pursuant to subdivision i of this section.~~

~~k. The provisions of this section shall not be construed to alter, affect or amend any of the provisions of the emergency housing rent control act, the emergency tenant protection act of nineteen seventy four or any local laws enacted pursuant thereto, the emergency housing rent control law, the rent stabilization law of nineteen hundred sixty nine and the local hotel stabilization law of nineteen hundred sixty nine.~~

~~l. For the purpose of this section and §27-198.3, "commissioner of housing preservation and development" may also mean such other agency or office of the city, as the mayor may direct.~~

~~**Local Law 9-1987. However, 27-198.2 and 27-198.3 have no force or effect pursuant to Seawall v. New York, 74 N.Y. 2d 92.*~~

~~**§ 27-198.3 Relocation of tenants in occupancy in certain single room occupancy multiple dwellings.**~~

~~a. An owner who, pursuant to either clause (i) or (ii) of subparagraph (a) of paragraph four of subdivision d of section 27-198.2, seeks an exemption from the provisions of subdivisions a and c of such section, shall be required to offer tenants in~~

~~occupancy as of January twentieth, nineteen hundred eighty seven, or thereafter, an opportunity for relocation to a comparable unit at a comparable rent and such comparable unit shall be located in the same borough in which the single room occupancy unit which is to be exempted is located. Any owner subjected to the provisions of subdivisions a and c of such section shall, on or before April first, nineteen hundred eighty seven, submit to the commissioner of housing preservation and development a sworn statement containing a list of tenants in occupancy as of January twentieth, nineteen hundred eighty seven. A "tenant in occupancy" shall be defined as an occupant of a dwelling unit within a single room occupancy multiple dwelling who has lawfully occupied such dwelling unit for thirty consecutive days or longer or who has entered into a lease with respect to such dwelling unit.~~

~~b. On or before April first, nineteen hundred eighty seven, an owner of a single room occupancy multiple dwelling subject to the provisions of subdivisions a and c of section 27-198.2 of this code shall both post in a conspicuous, common area in such multiple dwelling and mail to each occupant on an annual basis thereafter and to each new occupant within ten days of occupancy, a notice, in a form approved by the commissioner of housing preservation and development, setting forth the rights of tenants in occupancy pursuant to this section and other applicable provisions of law. Such owner shall be subject to a civil penalty of one hundred dollars per day for each and every day that such owner fails to mail, or to post such notice after April first, nineteen hundred eighty seven.~~

~~e. The commissioner of housing preservation and development shall not authorize the exemption of any single room occupancy dwelling unit from the prohibitions contained in subdivisions a and c of section 27-198.2 of this code unless the owner of such single room occupancy multiple dwelling shall submit a sworn statement to such commissioner accounting for all vacancies occurring at such multiple dwelling after January twentieth, nineteen hundred eighty seven by submitting to such commissioner a sworn statement by each and every tenant in occupancy at such multiple dwelling, on January twentieth, nineteen hundred eighty seven, or thereafter, who has vacated such multiple dwelling, that such tenant was advised by the owner, prior to vacating such dwelling, of his or her right to remain at such dwelling and his or her right to be offered relocation by such owner pursuant to this section. Where a vacancy has occurred at such multiple dwelling after January twentieth, nineteen hundred eighty seven and the owner does not submit the affidavit of such tenant, the owner shall submit an affidavit to such commissioner stating either that such tenant wrongfully refused to sign such affidavit or, if the owner lacks knowledge of the cause for such vacancy, setting forth the period of such tenant's occupancy at such multiple dwelling, the date of such tenant's vacating of such multiple dwelling and the circumstances thereof. The commissioner shall have the discretion not to accept an affidavit which such~~

~~commissioner has reason to believe is substantially or materially inaccurate.~~

~~d. Where an owner, pursuant to either clause (i) or (ii) of subparagraph four of subdivision d of section 27-198.2, seeks an exemption from the provisions of subdivisions a and c of such section for single room occupancy dwelling units which had tenants in occupancy as of the date of the application for such exemption, such owner shall submit to the commissioner of housing preservation and development a relocation plan for such tenants. If such plan is approved by such commissioner, the owner shall notify such tenants, in a form approved by such commissioner, of their right to elect to accept the offer of relocation pursuant to such plan within the period of ninety days from the date of such notification. A tenant in occupancy who fails to accept such an offer within such ninety day period or rejects such offer shall be deemed to have waived his or her right to relocation pursuant to this section. Upon approval of a relocation plan by such commissioner, the commissioner, shall notify those parties who have registered with the commissioner as being interested in providing tenants in occupancy with alternative offers of relocation.~~

~~*Local Law 9-1987. However, 27-198.2 and 27-198.3 have no force or effect pursuant to Seawall v. New York, 74 N.Y. 2d 92.~~

ARTICLE 20 [REPEALED] CONDITIONS OF PERMIT

~~§[C26-119.1] 27-199 Payment of fees. No permit shall be issued unless and until the required fee or fees therefor, as prescribed in subchapter three of chapter one of title twenty six of the administrative code shall have been paid.~~

~~§[C26-119.2] 27-200 Compliance with code, etc.- Permits shall be deemed to incorporate the provisions [sic] that the applicant, his or her agent, employees, and contractors shall carry out the permitted work or use in accordance with the provisions of this code and other applicable laws and regulations, whether specified or not, except insofar as variations therefrom have been legally permitted or authorized.~~

~~§[C26-119.3] 27-201 Compliance with application, plans, etc.-~~

~~All work shall conform to the approved application and accompanying plans and papers, and any approved amendments thereto.~~

~~§[C26-119.4] 27-202 Adherence to lot diagram.-~~

~~All work shall be located strictly in accordance with the approved lot diagram; and no lot or plot shall be changed, increased or diminished in area from that shown on the approved lot diagram, unless and until a revised diagram showing such changes, accompanied by the necessary statement of the owner or applicant,~~

~~shall have been submitted to and approved by the commissioner.~~

~~§[C26-119.5] 27-203 Compliance with safety requirements.~~
~~All building operations shall be conducted in accordance with and subject to the safety requirements of this code and other applicable laws and regulations, including any order or requirement by the commissioner that the building under construction or alteration be vacated, in whole or in part during the progress of the work and until the issuance of a certificate of occupancy.~~

~~*§[C26-119.6] 27-204 Builder's pavement.~~

~~a. Every permit issued for the construction or alteration of any building shall contain a statement that no certificate of occupancy or letter of completion shall be issued with respect to such building unless the sidewalk in front of or abutting such building, including but not limited to the intersection quadrant for corner property, shall have been installed and paved or repaired by the owner at his or her own cost, in the manner, of the materials, and in accordance with the standard specifications prescribed by the department of transportation pursuant to sections 19-113 and 19-115 of the code except where the commissioner has determined that such sidewalk is not required, unless the owner of such premises furnishes to the department prior to the issuance of a certificate of occupancy or letter of completion security satisfactory to the department that the sidewalk will be installed and paved or repaired within the time specified by the department. Nothing contained in this subdivision shall impair or diminish the power of the commissioner to waive the requirements of this subdivision if he or she shall determine that conditions do not require the construction [sic] of such sidewalks, nor affect the obligations of an owner of property specified under subdivision (a) of section 19-152 of the code, or relieve such owner of any such obligations, or impair or diminish the rights of the city or its agencies to enforce such obligations.~~

~~b. No permit shall be granted for the construction or alteration of any building, unless the owner of such premises has furnished to the department a policy of liability insurance, marked paid, in such amounts as may be fixed by the department. Such policy shall insure, indemnify and save the city harmless from all claims, suits, demands, causes of action and judgments by reason of personal injuries, including death, sustained by any person and from any claims, suits, demands, causes of action and judgments for damages to property, occurring on any sidewalk on, abutting or in front of such premises, including but not limited to the intersection quadrant for corner property, up to the date of issuance of such certificate of occupancy or letter of completion or up to the date on the completion of the installation and pavement of such sidewalk in accordance with the standard specifications and regulations prescribed by the commissioner of the department of transportation pursuant to sections 19-113 and 19-115 of the code, whichever is later. In the event that the owner of the premises~~

~~is covered by a policy of liability insurance, the department may accept a certificate of endorsement extending such policy to include the city within the policy's coverage.~~

~~*Local Law 65-1996.~~

ARTICLE 21 [REPEALED]

DEPARTMENT INSPECTIONS

~~§[C26-120.1] 27-205 Right of entry and inspection.~~
~~The commissioner or his or her authorized representatives, in the discharge of their duties, shall have authority to enter upon and examine and inspect at all reasonable times any building, enclosure, or premises, or any part thereof, or any signs or service equipment attached thereto or contained therein, for the purpose of determining compliance with the provisions of this code and other applicable laws and regulations.~~

~~§[C26-120.2] 27-206 Identification of inspectors.~~
~~Officers and employees of the department, in the discharge of their duties, shall identify themselves by exhibiting the official badge of the department; and other authorized representatives of the commissioner shall identify themselves by producing and exhibiting their authority in writing signed by the commissioner.~~

~~§[C26-120.3] 27-207 General provisions.~~ All examinations and inspections, including all tests in connection therewith, as required by the provisions of this code and other applicable laws and regulations, shall be made and conducted under the direction of the commissioner and in accordance with such inspection and test procedures as may be prescribed by the provisions of this code or other applicable laws and regulations, with the expense of all tests to be borne by the owner or lessee, or the contractor performing the work. The commissioner may accept inspection and test reports from officers and employees of the department and other government agencies. The commissioner may accept signed statements and supporting inspection and test reports filed by architects, engineers or persons superintending construction work and the installation of equipment, under and pursuant to the requirements of sections 27-131, 27-132, 27-135 and 27-136 of this subchapter.

~~§[C26-120.4] 27-208 Preliminary inspection.~~
~~Before the issuance of a work permit, the commissioner may cause an examination and inspection to be made at the site of the proposed work.~~

~~§[C26-120.5] 27-209 Inspections during progress of work.~~ After the issuance of a work permit, inspections shall be made during the progress of the work at such times or at such stages of the work and in such manner as the commissioner shall direct; and such inspections shall include inspection of machinery

and equipment used for hoisting purposes, cableways and rigging purposes. The commissioner may accept signed statements by architects or engineers and supporting inspection and test reports which have been filed with the department covering materials and equipment subject to controlled inspection and semi controlled inspection, as provided under sections 27-132, 27-133, 27-136 and 27-137 of this subchapter, and the work may, unless otherwise specifically provided by code provisions or directed by the commissioner, proceed without any verifying inspections or test by the department, provided that the names and business addresses of such architects or engineers shall have been set forth in the work permit application or filed in writing with the department not later than ten calendar days prior to the commencement of work thereunder.

~~§[C26-120.6] 27-210 Final inspection.~~ Upon completion of the work, and before the issuance of any certificate of occupancy or equipment use permit, a final inspection of the work shall be made by the department, at which the architect, engineer, or other person who supervised or superintended the construction, installation or alteration work shall be present; and any and all failures to comply with the provisions of this code or other applicable laws and regulations shall be noted and the owner or lessee promptly notified thereof in writing.

~~§[C26-120.7] 27-211 Inspection of completed buildings.~~ The commissioner shall cause inspections to be made periodically of completed buildings, and of signs and service equipment installations when so required by the provisions of subchapter four of chapter one of title twenty six, or other applicable laws and regulations.

~~§[C26-120.8] 27-212 Inspection reports.~~ All inspection reports shall be in writing and signed by the inspector, or the responsible individual, or an officer of the inspection service, making the examination of inspection; and a record of all inspections shall be kept by the department.

ARTICLE 22 [REPEALED] CERTIFICATES OF OCCUPANCY

~~*§[C26-121.1] 27-213 General provisions.~~ All certificates of occupancy shall be issued by the commissioner and the issuance thereof shall be subject to the provisions of this section, and to the provisions of subdivision (b) of section six hundred forty five of the New York city charter and article five of subchapter three of chapter one of title twenty six.

~~*Local Law 91-1989.~~

~~§[C26-121.2] 27-214 New buildings; sidewalk requirements.~~

a. Except as permitted under the provisions of section 27-218 of this article, no building hereafter constructed shall be occupied or used, in whole or in part, unless and until a certificate of occupancy shall have been issued

certifying that such building conforms substantially to the approved plans and the provisions of this code and other applicable laws and regulations.

~~***b. (1) No certificate of occupancy or letter of completion shall be issued for any building, completed on or after April twenty third, nineteen hundred sixty three unless the sidewalk in front of or abutting such building, including but not limited to the intersection quadrant for corner property shall have been installed and paved or repaired by the owner at his or her own cost, in the manner, of the materials, and in accordance with the specifications prescribed by the department of transportation pursuant to sections 19-113 and 19-115 of the code, or unless the owner of such premises has furnished to the department security satisfactory to it that such sidewalk will be installed and paved or repaired within the time specified by the department or unless the commissioner waives such requirement where conditions do not require the installation of a sidewalk.~~

~~(2) The commissioner of buildings shall insure that streets are suitably improved in accordance with the standards and specifications of the department of transportation as required by subdivision two of section thirty six of the general city law and shall otherwise carry out the provisions of such subdivision.~~

~~c. No certificate of occupancy or temporary certificate of occupancy (excluding amendments to previously issued certificates of occupancy) shall be issued on or after April first, nineteen hundred eighty seven for any existing building which has not fully complied with all requirements of this code applicable to such existing building.~~

~~***Local Law 65-1996.~~

~~§[C26-121.3] 27-215 Altered buildings.~~ Except as permitted under the provisions of section 27-218 of this article, no building hereafter altered so as to change from one occupancy group to another, either in whole or in part, or so as to affect any existing means of egress, or so as to increase the number of habitable rooms in the building, and no building hereafter altered for which a certificate of occupancy has not theretofore been issued, shall be occupied or used unless and until a certificate of occupancy shall have been issued certifying that the alteration work for which the permit was issued has been completed substantially in accordance with the approved plans and the provisions of this code and other applicable laws and regulations. If the building was not required to be vacated, either in whole or in part, during the course of the alteration work, the occupancy or use of the building shall not continue more than thirty calendar days after completion of the alteration work, unless a certificate of occupancy has been issued, as above provided.

~~**§[C26-121.4] 27-216 Existing buildings.~~ Upon application by the owner of an existing building, and subject to the provisions of section 27-111 of article three of this subchapter, the commissioner shall issue a certificate of occupancy for such building, provided that at the time of issuing such certificate, no notices of violation or other notices or orders affecting the building as they relate to the provisions of this code are pending before the department of buildings, and provided further that it is established to the satisfaction of the commissioner, after inspection and investigation, that the alleged use of the building has heretofore legally existed. The issuance of a certificate of occupancy for any existing building on waterfront property not used in conjunction with and in furtherance of waterfront commerce and/or navigation shall be conditioned upon compliance with the provisions of this code regulating means of egress, and upon the issuance of a certificate of completion by the commissioner of ports and trade, and shall be limited to the uses and purposes certified to therein.

~~*Local Law 14 1989; Local Law 5 1986, language juxtaposed per Ch. 907-1985.~~

~~§[C26-121.5] 27-217 Change of occupancy or use.~~

(a) No change shall be made in the occupancy or use of an existing building which is inconsistent with the last issued certificate of occupancy for such building, or which would bring it under some special provision of this code or other applicable law or regulation, unless a new certificate of occupancy is issued by the commissioner certifying that such building or part thereof conform to all of the applicable provisions of this code and all other applicable laws and regulations for the proposed new occupancy or use.

(b) Except as provided by law, a new certificate of occupancy shall not be required where the change of use is within the same use group as listed in the amended zoning resolution. Where a building exceeds three stories in height and the change does not exceed twenty per cent of the total floor area, an amendment to the existing certificate of occupancy for such new use shall be issued by the commissioner certifying that the proposed new occupancy and use conforms to the provisions of the laws governing building construction and that the proposed use will not be in conflict with any provisions of the labor law, multiple dwelling law or the zoning resolution.

~~*§[C26-121.6] 27-218 Temporary occupancy.~~ The commissioner may, upon request, issue a temporary certificate of occupancy for a part or parts of a building before the entire work covered by the permit shall have been completed, provided that such part or parts may be occupied safely prior to completion of the building and will not endanger public safety, health or welfare, and further provided that the temporary certificate of occupancy shall be issued initially for a period between

ninety and one hundred eighty days, in the case of all buildings classified in occupancy group J-3 or three-family homes, and ninety days for all other buildings subject to renewal for additional ninety day periods at the discretion of the commissioner. When an applicant applies for an initial temporary certificate of occupancy for longer than ninety days, he or she must state the reason necessary for the longer time period.

~~*Local Law 12-1993.~~

~~*§[C26-121.7] 27-219 Applications for certificates of occupancy.~~ All applications for certificates of occupancy shall be submitted on forms furnished by the department. Each application shall be accompanied by an accurate and complete lot survey made by a licensed surveyor showing the location of any new building and/or any extension to an existing building, the elevation of the first tier of beams or the first floor, the finished grades of all open spaces on the lot, the location and controlling grades of watercourses, paved swales and similar above grade methods of storm water disposal when permitted by this code, the locations of all catch basins on the property, the established curb level, and the location of all other structures and impervious surfaces, as defined in subdivision (a) of section P110.2 of reference standard RS-16, on the lot. Such lot survey shall also show the location and boundaries of the lot or plot upon which such buildings and structures are located. The commissioner may waive the requirement of such survey in the case of small sheds, stands, signs, and similar small structures. In addition, prior to the issuance of a certificate of occupancy the department shall confirm by inspection that all work relating to the installation of the part of the storm water drainage system which shall lie outside of such property, if and as required by section 24-526 of this code, has been satisfactorily completed.

~~*Local Law 65-1996; Note: For Excerpts from Local Law 7-1974, see end of Subchapter 1; Local Law 103-1989.~~

~~§[C26-121.8] 27-220 Applicant.~~ The application for a certificate of occupancy shall be made by or in behalf of the owner of the building premises; and if made by a person other than the owner, the application shall be accompanied by a signed statement of the applicant stating that he or she is authorized by the owner to make the application. The full names and addresses of the owner, lessee, and applicant, and of the principal officers thereof, if a corporation shall be stated in the application.

~~§[C26-121.9] 27-221 Statement of compliance.~~ When a certificate of occupancy for a new or altered building is applied for, the application shall be accompanied by a signed statement of the architect, engineer or other person who supervised or superintended

the construction or alteration work, stating that he or she has examined the approved plans and specifications of the building for which the certificate of occupancy is sought, and that, to the best of his or her knowledge and belief, the building has been erected or altered in accordance with the approved plans and specifications and, as erected or altered, complies with the provisions of this code and all other applicable laws and regulations, except insofar as variations or variances therefrom have been legally permitted or authorized, specifying such variations or variances in such required statement.

~~§[C26-121.10] 27-222 Issuance of certificates of occupancy.~~

(a) All applications for certificates of occupancy and accompanying papers shall be examined promptly after their submission. If the building is entitled to the certificate of occupancy applied for, the application shall be approved and the certificate of occupancy issued by the commissioner within ten calendar days after submission of the application. Otherwise, the application shall be rejected and written notice of rejection stating the grounds of rejection, shall be given to the applicant within ten calendar days of the submission of the application. Wherever an application has been rejected and proof is thereafter submitted establishing that the grounds of rejection have been met and that the building is entitled to the certificate of occupancy applied for, the application shall be approved and the certificate of occupancy issued within ten calendar days after submission of such proof.

(b) No certificate of occupancy or temporary certificate of occupancy shall be issued until a fire protection plan, if required under the provisions of article twenty-five, has been filed and accepted.

~~§[C26-121.11] 27-223 Contents of certificates.~~ (c) No certificate of occupancy shall be issued until compliance with such provisions of chapter three of title twenty-seven of this code as may be required in regulations promulgated by the commissioner is certified by the bureau of electrical control. This subdivision shall not apply to temporary certificates of occupancy issued by the commissioner pursuant to section 27-218 of this code.

~~§[C26-121.12] 27-224 Record of certificates.~~ ~~Local Law 73-1988.~~

(d) Any special stipulations and conditions of the building permit.

(e) The occupancy loads in the building and all parts thereof.

(f) The maximum permissible live loads on the several floors of the building.

(g) The occupancy group or groups which apply to all parts of the building.

(h) The maximum permissible live loads on the several floors of the building.

(i) The occupancy loads in the building and all parts thereof.

or a copy thereof shall be available for inspection at the building at all reasonable times.

ARTICLE 23 [REPEALED]

POSTING BUILDINGS

~~§[C26-122.1] 27-225 Posted occupancy and use.~~ All buildings other than buildings classified in occupancy group J shall be posted by the owner with a sign or placard in a form prescribed by the commissioner, which shall be permanently affixed to the structure in a conspicuous location in a public hall or corridor of the building, and which shall state the live loads and the occupant loads in the building and all parts thereof, as provided in subchapters six, eight and nine of this chapter.

~~§[C26-122.2] 27-226 Replacement of posted signs.~~

All posted signs shall be furnished by the owner and shall be of permanent design, shall not be removed or defaced, and if lost, removed or defaced, shall be immediately replaced. The commissioner may inspect or cause to be inspected periodically all existing buildings for compliance with the provisions of this code in regard to posting; and the inspection reports shall specify any violation thereof.

ARTICLE 24 [REPEALED]

STOP WORK ORDER

~~§[C26-123.1] 27-227 Stop Work notice and order.~~ Upon notice from the commissioner, or his or her authorized representatives, that any work at any building or building site is being executed in violation of the provisions of this code or other applicable laws or regulations, or in a dangerous or unsafe manner, such work shall immediately be stopped. The notice shall be given to the owner or lessee of the property involved, or to the agent of either of them, or to the person or persons doing the work, and may be continued in a stop work order issued by the commissioner stating the reasons for the issuance of the order and the conditions under which the work may be resumed.

{Conditions warranting issuance of a stop work order include but are not limited to, failure to have a construction site safety coordinator present in the course of on-going construction at those sites where department rules and regulations requires that a construction site safety coordinator be designated and present; the failure to erect a sidewalk shed (or portions thereof), as required by Section C26-1901.5 of the administrative code, or the removal of a sidewalk shed or portions thereof, when such sidewalk shed is still required pursuant to Section C26-1901.5 of the administrative code.

In addition to the penalties provided for in this title, failure to comply with a stop work order shall be subject to the payment of a penalty in the sum of \$500 for each day there is non-compliance, to be recovered in a civil action brought in the name of the commissioner;

provided, however, this shall not apply to any work performed to remedy an unsafe or hazardous condition.]*

**Copy in brackets not enacted but probably intended.
(§C26-1901.5 referred to is renumbered §27-1021.)*

~~§[C26-123.2] 27-228 Unlawful continuance.~~ No person shall, with knowledge or notice of a stop work order, continue or cause to be continued any work covered by such order, except such work as is directed to be performed to remove the violation or the dangerous or unsafe condition.

ARTICLE 25 [REPEALED]

FIRE PROTECTION PLAN

~~§[C26-124.1] 27-228.1 Applicability.~~ This article shall apply to the following buildings and building sections:

(a) High rise buildings or building sections exceeding seventy-five feet in height.

(b) Buildings or building sections classified in occupancy group A, B, C, D, E or G which are two or more stories in height with over twenty thousand gross square feet per floor or are two or more stories in height with a total building floor area exceeding fifty thousand gross square feet.

(c) Any building containing an assembly use having an occupant load of three hundred or more persons.

(d) Buildings or building sections classified in occupancy group H or J-1 which are two or more stories in height and contain sleeping accommodations for thirty or more persons.

(e) Buildings or building sections classified in occupancy group J-2 which contain thirty or more dwelling units and over ten thousand gross square feet of floor area used for mercantile, assembly, educational or institutional purposes.

(f) Alterations to a building or building section listed in subdivisions (a) through (e) of this section, if the cost of the alterations, computed in accordance with section 27-119, exceeds one million dollars or involves a change of use.

~~§[C26-124.2] 27-228.2 Scope.~~

(a) The plan shall include the following information, where applicable:

(1) Building description: address; block and lot numbers; number of stories; height in feet; occupancy group; construction classification; occupancy load and department of buildings application number.

(2) Key plans showing all floors, exits, corridors, partitions serving as fire separations or fire divisions, locations and ratings or required enclosures, stairs with pressurization, roof access, exit discharges, locations of frontage space.

(3) Descriptions in narrative form of safety systems and features, including:

- a. Communications systems
- b. Alarm systems
- c. Smoke detection equipment
- d. Location of fire command station
- e. Elevator recall
- f. Emergency lighting and power
- g. Standpipes
- h. Sprinklers
- i. Compartmentation
- j. Mechanical ventilation and air conditioning

k. Smoke control systems and equipment

l. Furnishings types and materials

m. Places of assembly

n. Fire department access

o. Other systems, required and voluntary, to be installed

(4) Proof that the fire safety plan, if required, has been filed with the fire department and accepted by that department.

~~§[C26-124.3] 27-228.3 General Requirements.~~ A fire protection plan, as defined in subchapter two shall be filed with the department by a registered architect or licensed professional engineer whose seal and signature shall be on the plan.

~~§[C26-124.4] 27-228.4 Retroactivity.~~ The requirements of this article shall apply to all alterations to, and construction of, buildings listed in section 27-228.1 in progress and not yet completed on March twenty seventh, nineteen hundred eighty four.

ARTICLE 26 SPECIAL FILING REQUIREMENTS

~~**§[C26-125.1] 27-228.5 General requirements.-~~

(a) Owners of all existing buildings which are required to comply with the provisions of subdivision (a) of section 27-353.1 (elevator vestibules), section 27-381 and subdivision (b) of section 27-382 (exit lighting), subdivision (b) of section 27-384 (exit signs), section 27-396.3 (signs in sleeping rooms), section 27-777.2 (ventilation in J-1 buildings), subdivision (b) of section 27-929 (sprinklers, fire alarm systems, fire command and communication systems), paragraph two of subdivision (c) of section 27-989 (elevators in readiness), section 27-996.1 (locks on hoistway doors) and section 27-996.2 (firemen's service) shall file with the department a report on or before April first, nineteen hundred eighty-seven certifying to the installation of the required fire protection systems in accordance with approved plans and appropriate permits prior to such date. Owners of all existing buildings not already subject to the requirements of article nine of subchapter six of this chapter as of January eighth, nineteen hundred seventy-three shall file with the department a report on or before October first, nineteen hundred eighty-five certifying to the installation of stair and elevator signs meeting the requirements of article nine of subchapter six of this chapter prior to such date. Owners of all existing buildings that are required to comply with the provisions of subdivision (c) of section 27-384 (power source of exit signs) shall file with the department, on or before July 1, 2007, a report of an architect or engineer certifying that all required exit and/or directional signs are connected to an emergency power source or to storage battery equipment in compliance with such subdivision except that no such report shall be required to be filed if an owner of a building submits an affidavit to the department, within

ninety days after October 22, 2004 certifying that all required exit and/or directional signs are connected to an emergency power source or to storage battery equipment as required by such subdivision. Such reports shall be on such forms and in such manner as prescribed by the commissioner. Failure to file such report by such dates shall be a violation of this section, which shall be punishable pursuant to section 26-125 of title twenty-six of the administrative code.

(b) (1) Owners of all buildings one hundred feet or more in height required to comply with the provisions of subdivision (a) of section 27-929.1 (sprinklers) shall file with the department on or before July 1, 2019 a final report prepared by an architect or engineer certifying to the

installation of the required sprinklers in accordance with such provisions and, pending the filing of such final report, such owner shall be required to file the following interim reports as described below. Failure to file such final report and/or, where required, such interim reports by the dates indicated or within any extended period of time granted by the commissioner pursuant to paragraph (2) of this subdivision shall be a violation of this section, which shall be punishable pursuant to section 26-125 of the code. Such reports shall be on such forms and in such manner as prescribed by the commissioner and shall be filed as follows:

Unless a final report is filed on or prior to such date, a one year report shall be filed no later than July 1, 2005.	The one year report shall contain an affidavit by the owner of the building acknowledging that sprinklers are required to be installed in such building on or before July 1, 2019 in compliance with subdivision (a) of section 27-929.1 of this code and indicating his or her intention to comply with such requirement.
Unless a final report is filed on or prior to July 1, 2011, a seven year report shall be filed no earlier than January 1, 2011 and no later than July 1, 2011.	Such seven year report shall contain a certification by an architect or engineer of the percentage of the building in which sprinklers have been installed as of the date of such report and an implementation plan prepared by such architect or engineer detailing when and how the remaining portions of the building will be made fully compliant.
Unless a final report is filed on or prior to July 1, 2018, a fourteen year report shall be filed no earlier than January 1, 2018 and no later than July 1, 2018.	Such fourteen year report shall contain a certification by an architect or engineer of the percentage of the building in which sprinklers have been installed as of the date of such report and an implementation plan, prepared by such architect or engineer detailing when and how the remaining portions of the building will be made fully compliant.
Except as otherwise provided in paragraph (2) of this subdivision, a final report shall be filed no later than July 1, 2019.	Such final report shall contain a certification by an architect or engineer that the building is fully compliant.

(2) Where the owner of a building is unable to comply with the requirements of subdivision (a) of section 27-929.1 on or before July 1, 2019 because of undue hardship, and where such owner timely filed all interim reports as required in paragraph (1) of this subdivision and has obtained approval of all required applications, plans and permits relating to the required work, such owner may submit to the department an application for additional time to comply with such requirements. Such application shall be submitted to the department on or before July 1, 2018, along with supporting documents indicating the basis for such claim of undue hardship. The commissioner shall appoint a committee

consisting of employees of the department and the fire department and a representative of the real estate industry to review such application. Such committee shall issue findings and recommendations relating to the application. After reviewing such findings and recommendations, if the commissioner finds that the owner has made a good faith effort to complete the required work and has substantiated his or her claim of undue hardship, the commissioner may grant an extension of time in which to complete the work and submit the final report.

****Local Law 26-2004.**

⌘ARTICLE 27 [REPEALED] ALTERNATIVE PROCEDURE FOR CERTAIN PERMITS

~~27-228.6 Contract with not-for-profit corporation.~~

~~Notwithstanding any other provision of law, the commissioner may enter into a contract with a not for profit corporation described in section 27-228.7 to provide for the examination and approval of plans and the issuance of permits by such corporation on behalf of the department for the~~

~~installation or alteration of plumbing and plumbing systems, including gas piping, as provided in article fifteen of this subchapter, and for the installation or alteration of fire suppression piping systems, as provided in article seventeen of this subchapter. Such contract shall require the not for profit corporation to agree to provide such services in conformity with sections 27-228.8, 27-228.9, 27-228.10, 27-228.11, 27-228.12, 27-228.13 and 27-228.14.~~

~~§§27-228.7 Not for profit corporation.~~ No contract shall be entered into pursuant to this article except with a not for profit corporation, a majority of the members of the board of directors of which are city officials. Such members shall include one person designated by the speaker of the council and officers or employees of the department and the fire department, serving ex officio, and such other persons as provided in the bylaws of such corporation. No such bylaws shall be adopted by such corporation prior to January 18, 1994. For the purposes of this article the term "corporation" shall mean a not for profit corporation as set forth in this section.

~~§§Local Law 109-1993; Local Law 107-1993.~~

27-228.8 Examination and approval of plans.

(a) The corporation shall examine and approve plans in accordance with and in the manner prescribed by the provisions of the charter, the code and the rules of the department relating to the examination and approval of plans by the department, except as hereinafter provided.

(b) Except where authorized by the commissioner, the corporation shall not have the authority to designate

(c) portions of the examination of plans submitted by architects or engineers for limited supervisory check pursuant to section 27-143 of the code.

(d) All plans approved by the corporation shall be endorsed with the official seal of the corporation.

(e) The corporation shall use forms for applications which shall be prescribed by the commissioner.

27-228.9 Issuance of permits.

(a) The corporation shall issue permits in accordance with and in the manner prescribed by the provisions of the charter, the code and the rules of the department relating to the issuance of permits by the department, except as hereinafter provided.

(b) Whenever work which requires a plumbing permit or a fire suppression piping system permit is a part of the construction of a new building or the alteration of an existing building, the corporation shall not issue such plumbing permit or fire suppression piping system permit until after the department has issued a new building permit or a building alteration permit to the applicant. The applicant shall submit to the corporation the final plans, approved by the department, for such new building or alteration and a copy of the new building permit or the building alteration permit issued by the department before the plumbing permit and/or the fire suppression piping system permit may be issued.

(c) The corporation shall act in accordance with guidelines which the commissioner shall establish under which the corporation shall defer the approval of plans or the issuance of permits pending appropriate action by other city agencies.

(d) The corporation shall not have the power to revoke any of the permits issued by the corporation but may recommend revocation to the commissioner. The commissioner may revoke permits issued by the corporation pursuant to section 27-197 of the code.

(e) All determinations of the corporation shall be subject to review by the board of standards and appeals to the same extent and in the same manner as if such determination were made by the department.

(f) All permits issued by the corporation shall bear the signature of the chief operating officer of the corporation.

27-228.10 Fees. The corporation shall collect fees on behalf of the department for permits which the corporation issues. The disposition of such fees shall be governed by the contract between the corporation and the city.

27-228.11 Employment conditions.

(a) The corporation shall require its salaried officers and employees to agree in writing:

(1) to refuse to accept gratuities in the performance of their duties for the corporation;

(2) to be subject to the restrictions set forth in chapter sixty eight of the New York city charter; and

(3) to be subject to the restrictions upon outside work, employment and financial interests set forth in section 26-114 of the code.

(b) The corporation shall require its per diem employees and consultants to agree in writing to refuse to accept gratuities in the performance of their duties for the corporation.

(c) The corporation shall adopt disciplinary and other procedures to ensure compliance with such agreements.

27-228.12 Inspection. With respect to the permits issued by the corporation, the corporation shall perform the inspections described in sections 27-208, 27-209 and 27-210 of the code. For such purpose, employees of the corporation shall be designated as authorized representatives of the commissioner pursuant to section 27-205 with authority to enter upon and examine and inspect at all reasonable times any building.

27-228.13 Records. The corporation shall keep and maintain records relating to the services performed on behalf of the department in a manner and for such period of time as shall be agreed upon between the department and the corporation.

27-228.14 Corruption prevention program. The corporation shall develop and implement a corruption prevention program to detect and punish corrupt conduct by employees in carrying out their duties on behalf of the corporation which shall not be less restrictive than the corruption prevention program for employees of the department. Such program shall provide for the dismissal of employees who are found to be engaged in corrupt activities, including the solicitation and acceptance of gratuities. The corporation shall not commence services pursuant to the contract until a plan for the implementation of such program has been reviewed and approved by the commissioner.

~~27-228.15 Performance review by the commissioner.~~

~~The commissioner shall establish such procedures for the audit, inspection, examination and review of services performed by the corporation on behalf of the department as may be necessary to ensure that the examination and approval of plans, the issuance of permits and conduct of inspections performed by the corporation are carried out in a manner consistent with the provisions of this article.~~

~~proposed drains, sewers and/or other means of storm water disposal, which the environmental protection administration normally require property owners to submit to it prior to the submission of a detailed plan for the construction of such facilities.~~

~~Effective date, May 16, 1974.~~

~~27-228.16 Jurisdiction of the fire department.~~

~~The provisions of this article shall not be construed to affect, alter or amend the jurisdiction of the fire department over the inspection and testing of plumbing and fire suppression piping systems.~~

~~*Local Law 107-1993.~~

~~Footnote: The following §§ 1 and 10 are unconsolidated provisions of Local Law 7 of 1974 (see §27-160)~~

~~Section 1. the council finds that serious flooding and ponding problems exist in areas of the city of New York which are presently without adequate sewers for the disposal of storm water. The council further finds that these flooding and ponding problems endanger human life and cause substantial property damage. As the primary means of reducing these problems, the city of New York currently is engaged in an accelerated sewer construction program, approved by the council, of unprecedented scope. The city is also engaged in an active program of maintaining existing watercourses and other storm water disposal systems, pursuant to orders of the city's Board of Health. It is the expectation of the council that in the next twenty years the city sewer construction program will provide a large network of storm sewers for the areas of the city which presently lack them. In addition, however, the council recognizes that present construction of new buildings and developments without adequate storm water drainage in these unsewered areas is worsening existing flooding and ponding problems, and that the stringent storm drainage requirements for property owners set forth in this local law, which terminate December thirty-first, nineteen hundred ninety three, are necessary as a temporary measure until the city has substantially advanced its accelerated sewer construction program.~~

~~§10. This local law shall take effect thirty days after it shall have become law. Its requirements insofar as they differ from or are additional to those of the administrative code of the city of New York in effect immediately prior to the effective date of this local law shall apply to the construction of all new buildings for which applications for new building permits have been filed on or after such effective date; provided, however, that such new of different requirements shall not apply to the construction of new buildings on specific sites for which schemes for storm water drainage have been approved by the environmental protection administration on or before such effective date if such construction lawfully commences within five years after such approval. A scheme for storm water drainage for the purpose of this section is an undetailed plan which shows the~~

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SUBCHAPTER 2 DEFINITIONS

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**	
[200.0]	Art. 1	General
[200.1]	229	Application of Terms
[200.2]	230	Definitions in Reference Standards
[200.3]	231	Tense, Gender, and Number
[201.0]	Art. 2	Definitions
[201.0]	232	Definitions
[202.0]	Art. 3	Abbreviations
[202.0]	233	Abbreviations

*"C26" omitted from section numbers in this column.

**"27" omitted from section numbers in this column.

ARTICLE 1 GENERAL

§[C26-200.1] 27-229 Application of terms.-

The words and terms listed in this subchapter shall have the meanings given herein. Where terms are not defined they shall have their ordinarily accepted meanings or such as the context may imply.

§[C26-200.2] 27-230 Definitions in reference standards.-

Definitions that appear in any building code reference standard shall apply to the provisions of that reference standard only.

§[C26-200.3] 27-231 Tense, gender, and number.-

Words used in the present tense include the future; words used in the masculine gender include the feminine and neuter; words used in the singular include the plural, and the plural the singular.

*** ARTICLE 2 DEFINITIONS

****Italicized words within definitions are themselves defined elsewhere in this section.*

§[C26-201.0] 27-232 **Definitions.**-Words that are capitalized are defined in this section.

ACCESSORY BUILDING. -A *building*, the *use* or *occupancy* of which is incidental to that of the main *building*.

ACCESSORY USE. -A *use* or *occupancy* incidental to the principal *use* or *occupancy* of a *building*.

†**ACCESSIBLE.** -A building or portion thereof and the accessory public areas thereof are accessible when they comply with subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code and can be approached, entered and used by people having physical disabilities.

†**ACCESSIBLE ROUTE.** -A continuous unobstructed path connecting all accessible spaces and rooms in a building that can be negotiated by all categories of people having physical disabilities. Interior accessible routes may include corridors, doorways, floors, ramps, elevators, lifts and clear floor space adjacent to fixtures. Exterior accessible routes may include parking access aisles, curb ramps, walks, ramps and lifts.

ACCESS STAIR. -A stair between two floors, which does not serve as a *required exit*. (See EXTERIOR STAIR and INTERIOR STAIR).

†**ADAPTABLE DWELLING UNITS.** -Dwelling units which are constructed on an accessible route and equipped as set forth in reference standard RS 4-6, so that they may be converted to be used, with a minimum of structural change, by all categories of people having physical disabilities.

†*Local Law 58-1987.*

ADDITION. An extension or increase in *floor area* or *height* of a *building* that increases its exterior dimensions.

ADJOINING GRADE ELEVATION. - The average elevation of the final *grade* adjoining all exterior *walls* of a *building*, calculated from grade elevations taken at intervals of ten feet around the perimeter of the *building*.

AIR CONDITIONING. -The process by which the temperature, humidity, movement, cleanliness, and odor of air circulated through a space are controlled simultaneously.

AIR-SUPPORTED STRUCTURE. -A *structure* consisting of skin diaphragms made of flexible material, which achieves its shape, support, and stability from internal air pressure.

ALLOWABLE SOIL PRESSURE. -The maximum stress permitted in soil of a given type and under given conditions.

ALLOWABLE STRESS. -The maximum stress permitted at a given point in a structural member under given conditions.

ALTERATIONS. - Any *addition*, or change or modification of a *building*, or the *service equipment* thereof, that affects safety or health and that is not classified as a *minor alteration* or *ordinary repair*. The moving of a *building* from one location or position to another *shall* be deemed an alteration.

AMUSEMENT ATTRACTION. - A game of chance or skill or similar activity in which the public participates as a form of amusement.

AMUSEMENT DEVICE. - A mechanically operated device or *structure*, open to the public, *used* to convey persons in any direction as a form of amusement.

APARTMENT HOUSE. -(See **MULTIPLE DWELLING**.)

††**APPROVED.** -When used in connection with plans, materials and equipment *shall* mean approved by the *commissioner*; when used in connection with materials and equipment, *shall* also mean previously approved by the *board*, unless such approval is amended or repealed by the *commissioner*; otherwise *shall* mean approved by the department or agency indicated by the text.

††*Local Law 49-1991.*

ARCHITECT.-A *person* licensed to practice the profession of architecture under the education law of the state of New York.

AREA OF REFUGE.-A floor area to which egress is made through a *horizontal exit* or *supplemental vertical exit*.

AREAWAY.-A space below *grade*, adjacent to a *building*, open to the outer air and enclosed by walls.

ASSEMBLY SPACE.-Any part of a *place of assembly*, exclusive of a stage, that is occupied by numbers of *persons* during the major period of *occupancy*. Every *tier of seating* shall be considered a separate assembly space.

ATRIUM.-A vertical opening or series of openings within a building connecting three or more floors, which may be covered at the top, and which is used for purposes other than an enclosed stairway, elevator hoistway or utility shaft.

ATTIC.-The space between the ceiling framing of the top most *story* and the underside of the *roof* framing.

AUTOMATIC.-As applied to an *opening protective*, shall mean a door, window, damper, or other device, and its assembly, which is normally open and is designed to close automatically when subjected to a predetermined temperature, rate of temperature rise, or abnormal smoke condition.

AUTOMATIC DRY STANDPIPE SYSTEM.- A *standpipe system* in which all piping is filled with air, either compressed or at atmospheric pressure. Water enters the system through a control valve actuated either automatically by the reduction of air pressure within the system or by the manual activation of a remote control located at each hose station.

AUTOMATIC DRY PIPE SPRINKLER SYSTEM.- A *sprinkler system* in which the piping up to the sprinkler heads is filled with air, either compressed or at atmospheric pressure, with the water supply controlled by a Type A or Type B *dry pipe valve*.

AUTOMATIC FIRE PUMP.-A pump that maintains a *required* water pressure in a fire extinguishing system and which is actuated by a starting device adjusted to cause the pump to operate when the pressure in the system drops below a predetermined pressure, and to stop the pump when the pressure is restored.

AUTOMATIC OPERATION.- As applied to an *elevator*, shall mean operation whereby the starting of the car is effected in response to the momentary actuation of operating devices at the landing, and/or of operating devices in the car identified with the landings, and/or in response to an automatic starting mechanism, and whereby the car is stopped automatically at the landings.

AUTOMATIC WET PIPE SPRINKLER SYSTEM.-A *sprinkler system* in which all piping and sprinkler heads are at all times filled with water under pressure which is immediately discharged when a sprinkler head operates, with the water continuing to flow until the system is shut off.

AUTOMOTIVE LIFT.-A vehicle-lifting device, the purpose of which is to raise an entire vehicle to provide accessibility for under-chassis service.

AUTOMOTIVE REPAIR SHOP.-A *building* or space in which *motor vehicles* are repaired.

AUTOMOTIVE SERVICE STATION.-A *building*, space, or *premises used* for the storage and sale of motor fuels, and which may also have facilities for lubrication, minor repairs, or washing of *motor vehicles*.

BACKFLOW (water supply).-The flow of water or other substances into the distribution pipes of a *potable water* supply from any source other than the intended source.

BALLOON FRAME.-Light timber *construction* in which the exterior *walls* consist of studs that are either continuous through floors or interrupted only by thickness of plates.

BASEMENT.-A *story* partly underground, but having less than one-half its clear height (measured from finished floor to finished ceiling) below the *curb level*; except that where the *curb level* has not been legally established, or where every part of the *building* is set back more than twenty-five feet from a *street line*, the height shall be measured from the *adjoining grade elevation*. (See CELLAR.)

BEARING.-As applied to a wall or *partition*, shall mean supporting any vertical load in addition to its own weight.

BELT-DRIVE MACHINE.-As applied to an *elevator*, shall mean an indirect-drive machine having a single belt or multiple belts as the connecting means.

BOARD.-The board of standards and appeals of the city of New York.

BOARDER (ROOMER, LODGER).- An individual living within a household who pays a consideration for such residence and does not *occupy* such space as an incident of employment therein.

BREEZEWAY.-A *structure* open to the outdoors consisting of a *roof*, roof supports, and floor, connecting a garage or other *accessory building* with a *dwelling*.

BUILDING.-An enclosed *structure* including *service equipment* therein. The term shall be construed as if followed by the phrase "*structure, premises, or part thereof*" unless otherwise indicated by the text.

BUILDING HOUSE DRAIN.-That part of the lowest piping of a *drainage system* that receives the discharge from the soil, waste, and other drainage pipes and conveys it to the *building house sewer* by gravity. The building house drain shall be considered to extend five feet outside the exterior wall of the *building*.

BUILDING HOUSE DRAIN (COMBINED).-A *building house drain* that conveys storm water in combination with *sewage* or other drainage.

BUILDING HOUSE DRAIN (SANITARY).- A *building house drain* that carries *sewage* only.

BUILDING HOUSE DRAIN (STORM).-That part of the lowest piping of a storm *drainage system* that receives clear water drainage from *leaders*, surface run-off, ground water, subsurface water, condensate, cooling water, or other similar storm or clear drainage and conveys it to the *building house storm sewer* by

gravity. The building house storm drain *shall* be considered to extend five feet outside the exterior wall of the *building*.

BUILDING HOUSE SEWER.-That part of the horizontal piping of a drainage system that extends from the end of the *building house drain* and that receives the discharge of the *building house drain* and conveys it to a *public sewer*, *private sewer*, *individual sewage-disposal system*, or other point of disposal.

BUILDING HOUSE SEWER (COMBINED).- A *building house sewer* that conveys *sewage* in combination with storm water and other clear water wastes.

BUILDING HOUSE SEWER (SANITARY).- A *building house sewer* that carries *sewage* only.

BUILDING HOUSE STORM SEWER.-That part of the horizontal piping of a storm *drainage system* that extends from the *building house storm drain* to the public storm sewer, combined sewer, or other point of disposal.

BUILDING SECTION.-A room, floor, group of floors, wing, or any other portion of a *building* contained within *fire divisions*.

BUILDING SUB-HOUSE DRAIN.-That portion of a house *drainage system* that cannot drain by gravity into the *building house sewer*.

BULKHEAD.-An enclosed *structure* on or above the *roof* of any part of a *building*, enclosing a *shaft*, stairway, tank, or *service equipment*, or other space not designed or *used* for human occupancy. (See PENTHOUSE and ROOF STRUCTURE.)

CABARET.-The term cabaret shall mean any room, place or space in which any musical entertainment, singing, dancing or other similar amusement is permitted in connection with an eating and drinking establishment.

CABLEWAY.-A power operated system for moving loads in a generally horizontal direction in which the loads are conveyed on an overhead cable, track or carriage.

CAR DOOR OR GATE.-As applied to an *elevator*, *shall* mean the sliding portion of the car that closes the opening giving access to the car.

CAR DOOR OR GATE SWITCH.-As applied to an *elevator*, *shall* mean an electrical device, the function of which is to prevent operation of the driving machine by the normal operating device unless the car door or gate is in the closed position.

CAR-SWITCH OPERATION.- Operation of an *elevator* wherein the movement and direction of travel of the car are directly and solely under the control of the operator by means of a manually operated car switch or of continuous-pressure buttons in the car.

CASING-OFF.-The elimination of the frictional forces between a portion of a *pile* and the surrounding soil by use of a sleeve between the *pile* and the soil.

CATCH PLATFORM.- A platform or other *construction* projecting from the face of a *building*, supported therefrom, and *used* to intercept the fall of objects and to protect individuals and property from falling debris.

CELLAR.-A story partly or wholly underground, but having one-half or more of its clear height (measured from finished floor to finished ceiling) below the curb level; except that where the curb level has not been legally

established, or where every part of the building is set back more than twenty-five feet from a street line, the height shall be measured from the adjoining grade elevation. Cellars shall not be counted as stories in measuring the height of buildings. (See BASEMENT.)

CERTIFICATE OF OCCUPANCY.- (See article twenty-two of subchapter one of this chapter.)

CHAIN-DRIVE MACHINE.-As applied to an *elevator*, *shall* mean an indirect-drive machine having a chain as the connecting means.

CHARGING CHUTE (INCINERATOR) . - An enclosed vertical passage through which refuse is fed to an incinerator.

CHARGING GATE (INCINERATOR) . - A gate in an incinerator *used* to control the flow of combustion gases into the *charging chute* and the entry of refuse into the combustion chamber.

CHIMNEY.-A vertical enclosure containing one or more *flues used* to remove hot gases from burning fuel, refuse, or from industrial processes.

CHIMNEY CONNECTOR.-A pipe or metal breeching that connects combustion equipment to a *chimney*.

CITY.-The city of New York.

CLOSED SHAFT.-A shaft enclosed at the top.

COATINGS, FIRE-RETARDANT.- A material applied to the surface of a building material to improve its flame spread rating.

COLLECTING SAFE AREA.-A *safe area* that receives occupants from the *assembly space it serves*, as well as from other *safe areas*.

COMMISSIONER.-The commissioner of buildings of the city of New York, or his or her duly authorized representative.

COMPRESSOR (REFRIGERATION).-A machine used for the purpose of compressing a *refrigerant*.

CONCENTRATED LOAD.- A conventional representation of an element of *dead* or *live load* whereby the entire load is assumed to act either at a point or within a limited area.

CONCURRENT LOADS.-Two or more elements of *dead* or *live load* that, for purposes of design, are considered to act simultaneously.

CONSTRUCTION.-Any or all work or operations necessary or incidental to the erection, demolition, assembling, installing, or equipping of buildings, or any alterations and operations incidental thereto. The term "construction" *shall* include land clearing, grading, excavating, and filling. It *shall* also mean the finished product of any such work or operations.

CONSTRUCTION CLASS (GROUP).-The category in which a *building* or space is classified by the provisions of subchapter three of this chapter, based on the *fire-resistance ratings* of its *construction* elements.

CONSOLE LIFT.-A section of the *floor area* of a theater or auditorium that can be raised and lowered.

CONTRACTOR.-A *person* undertaking *construction*.

CONTROLLED INSPECTION.-(See section 27-132 of subchapter one of this chapter.)

CORRIDOR.-An enclosed public passage providing a means of access from rooms or spaces to an *exit*. (See EXIT PASSAGEWAY.)

COURT.-An *inner court* or *outer court*.

CRANE.-A machine for lifting or lowering a load and moving it horizontally which utilizes wire rope and in which the hoisting mechanism is an integral part of the machine.

CROSS AISLE.-An aisle in a *place of assembly* usually parallel to rows of seats, connecting other aisles or an aisle and an exit.

CROSS-CONNECTION (FIRE EXTINGUISHING SYSTEM).- Piping between risers and *siamese connections* in a *standpipe* or *sprinkler system*.

CROSS-CONNECTION (POTABLE WATER SYSTEM).- A physical connection or arrangement between two otherwise separate piping systems, one of which contains *potable water*, and the other of which contains water of questionable safety, or steam, gases, or chemicals whereby there can be a flow from one system to another.

CURB LEVEL.-The legally established level on the curb in *front* of a *building*, measured at the center of such *front*. When a *building* faces on more than one *street*, curb level *shall* mean the average of the legally established levels of the curbs at the center of each *front*.

CURB LINE.-The line coincident with the face of the *street* curb adjacent to the roadway.

DATUM.-(See section 27-158 of subchapter one of this chapter.)

DEAD END.-A portion of a *corridor* in which the travel to an *exit* is in one direction only.

DEAD LOAD.-Materials, equipment, *constructions*, or other elements of weight supported in, on, or by the *building* (including its own weight) that are intended to remain permanently in place.

DECIBEL.-A unit of measurement of the loudness of sound. A division of a logarithmic scale for expressing the ratio of two amounts of power or energy. The number of decibels denoting such a ratio is ten times the logarithm of the ratio.

DELUGE SPRINKLER SYSTEM.-An open head *sprinkler system* without water in the system piping, with the water supply controlled by an automatic valve operated by smoke or heat-responsive devices installed throughout the sprinklered area, and independent of the sprinkler heads.

DEMOLITION.-The dismantling or razing of all or part of a *building*, including all operations incidental thereto.

DEPARTMENT.-The department of buildings of the city of New York.

DERRICK.-An apparatus consisting of a mast or equipment members held at the top by guys or braces, with or without a boom, for use with a hoisting mechanism and operating ropes, for lifting or lowering a load and moving it horizontally.

DRAINAGE SYSTEM.-All the piping within public or private *premises*, which conveys *sewage*, rain water, or other liquid wastes to a legal point of disposal, but shall not

include the mains of public sewer system or private or public sewage-treatment or disposal plant.

DRAFT CURTAIN.- A *noncombustible* curtain suspended in a vertical position from a ceiling for retarding the lateral movement of heated air, gases, and smoke along the ceiling in the event of fire.

DRAFT HOOD.-A device placed in and made part of a *chimney*, *vent connector*, or combustion equipment, to (1) insure the ready escape of the products of combustion in the event of no draft, back-draft, or stoppage beyond the draft hood, (2) prevent a back-draft from entering the equipment, or (3) neutralize the effect of excessive stack action of the *chimney flue* upon the operation of the equipment.

DRY PIPE VALVE.-A valve that automatically controls the water supply to a *sprinkler system* so that the system beyond the valve is normally maintained dry.

DUCT (VENTILATION) . - A pipe, tube, conduit, or an enclosed space within a wall or *structure*, used for conveying air.

DUMBWAITER.-A hoisting and lowering mechanism equipped with a car that moves in guides in a substantially vertical direction, the floor area of which does not exceed nine square feet, whose total inside height whether or not provided with fixed or movable shelves does not exceed four feet, the capacity of which does not exceed five hundred pounds, and that is used exclusively for carrying materials.

DWELLING.-Any *building occupied* in whole or in part as the temporary or permanent home or residence of one or more *families*.

DWELLING UNIT.-One or more rooms in a *dwelling* or building that are arranged, designed, *used* or intended for *use* by one or more *families*.

ELECTRICALLY SUPERVISED.-As applied to a control circuit, *shall* mean that in the event of interruption of the current supply or in the event of a break in the circuit, a specific signal will be given.

ELEVATOR.-A hoisting and lowering mechanism equipped with a car or platform that moves in guides in a substantially vertical direction, and that serves two or more floors of a *building*.

*****ELEVATOR VESTIBULE.**- A room or space enclosed with *noncombustible smoke barrier partitions* with smoke stop doors conforming to subdivision (c) of section 27-371. Except for such *smoke-stop doors*, openings to *elevators* and to *exits* shall be the only other door openings permitted in the enclosing *partitions*.
****Local Law 26-2004.*

EMERGENCY INTERLOCK RELEASE SWITCH.- As applied to an *elevator*, *shall* mean a device to make inoperative, in case of emergency, door or gate electric contacts or door interlocks.

ENGINEER.-A *person* licensed to practice the profession of engineering under the education law of the state of New York.

EQUIVALENT UNIFORM LOAD.- A conventionalized representation of an element of *dead* or *live load*, used for the purposes of design in lieu of the actual *dead* or *live load*.

ESCALATOR.-A power driven, inclined, continuous stairway used for raising or lowering passengers.

EXISTING BUILDING.-A building, whether high rise or low rise:

(1) Which on April first, nineteen hundred eighty-four is complete or under construction, or

(2) For which an application for approval of plans has been filed with the department prior to October first, nineteen hundred eighty-four and construction commenced prior to April first, nineteen hundred eighty-six, provided that those requirements of this code applicable to existing buildings classified in the same occupancy group as the proposed building shall be complied with in accordance with the time limitations set forth in this code.

EXISTING HIGH RISE BUILDING.-A building, classified as a high rise structure:

(1) Which on April first, nineteen hundred eighty-four is complete or under construction, or

(2) For which an application for approval of plans has been filed with the department prior to October first, nineteen hundred eighty-four and construction commenced prior to April first, nineteen hundred eighty-six, provided that those requirements of this code applicable to existing buildings classified in the same occupancy group as the proposed building shall be complied with in accordance with the time limitations set forth in this code.

(1)* **EXISTING OFFICE BUILDING, ONE HUNDRED FEET OR MORE IN HEIGHT.**-An office building one hundred feet or more in height or a building classified in occupancy group E, one hundred feet or more in height:

(1) which on January eighteenth, nineteen hundred seventy-three is complete or under construction, or

(2) for which plans have been filed before January eighteenth, nineteen hundred seventy-three and construction commenced on or before January eighteenth, nineteen hundred seventy-four, or

(3) for which plans are filed on or before January eighteenth, nineteen hundred seventy-four and construction commenced on or before January eighteenth, nineteen hundred seventy-five and further provided that all the requirements for such existing office buildings are fully complied with in the course of construction and before completion.

**As enacted but "(1)" probably intended to be omitted.*

*****EXIT.**- A means of egress from the interior of a *building* to an *open exterior space* which is provided by the use of the following, either singly or in combination: exterior door openings, *vertical exits*, *exit passageways*, *horizontal exits*, *interior stairs*, exterior stairs, fire towers or fire escapes; but not including *access stairs*, aisles, corridor doors or *corridors*.

****Local Law 26-2004.*

EXIT PASSAGEWAY.-A horizontal extension of a *vertical exit*, or a passage leading from a *yard* or *court* to an *open exterior space*.

EXTERIOR SEPARATION.-The shortest distance across an unobstructed outdoor space measured from the furthest projection of the exterior wall of a *building* to an *interior lot line* or to a line halfway between the wall and that of any other *building* on the same lot, or to the centerline of an adjacent *street* or other *public space*.

EXTERIOR STAIR.-A stair open to the outdoor air, that serves as a *required exit*. (See ACCESS STAIR and INTERIOR STAIR.)

FACING.-As applied to a *sign*, *shall* mean the surface of the *sign*, upon, against or through which the message of the *sign* is exhibited.

****FAMILY.**-A single individual; or two or more individuals related by blood or marriage or who are parties to a domestic partnership, and living together and maintaining a common household, with not more than four *boarders*, *roomers* or *lodgers*; or a group of not more than four individuals, not necessarily related by blood, marriage or because they are parties to a domestic partnership, and maintaining a common household.

***Local Law 27-1998.*

FIRE ALARM.- A system, automatic or manual, arranged to give a signal indicating a fire emergency.

FIRE AREA.- A *floor* area enclosed by *fire divisions* and/or exterior walls.

FIRE CANOPY.- A solid horizontal projection, extending beyond the exterior face of a *building* wall, located over a wall opening so as to retard the spread of fire through openings from one *story* to another.

FIRE DISTRICTS.- The geographical territories established under subchapter four of this chapter for the regulation of *occupancy groups* and *construction classes* within such districts.

FIRE DIVISION.- Any construction, vertical, horizontal or otherwise, having the *required fire-resistance rating* and structural stability under fire conditions to provide a fire barrier between adjoining *buildings* or between adjoining or superimposed *fire areas* or *building sections* within the same *building*.

FIRE DOOR.-An *opening protective* in the form of a door and its assembly.

FIRE PROTECTION PLAN.-A report containing a narrative description of the life and fire safety systems and evacuation system for a structure, in accordance with section 27-228.2.

FIRE-PROTECTION RATING.-The time in hours or fractions thereof that an *opening protective* and its assembly will withstand fire exposure as determined by a fire test made in conformity with specified standards of subchapter five of this chapter.

FIRE-RESISTANCE RATING.-The time in hours or fractions thereof that materials or their assemblies will withstand fire exposure as determined by a fire test made in conformity with a specified standard of subchapter five of this chapter.

FIRE RETARDANT TREATED WOOD.-Wood that has been pressure impregnated with chemicals so as to reduce its combustibility.

FIRE SAFETY PLAN.-A description of the fire drill and evacuation procedures for a structure which is required to be submitted to the fire department in accordance with the requirements of section 27-4267 of the administrative code and the regulations of the fire Commissioner.

FIRE SECTION.-A sprinklered area within a *building* that is separated from other areas by *noncombustible* construction having a least a two-hour *fire-resistance rating*.

FIRE SEPARATION.-Any construction, vertical, horizontal, or otherwise, having the *required fire-resistance rating* to provide a fire barrier between adjoining rooms or spaces within a *building*, *building section*, or *fire area*.

FIRESTOP.-A solid or compact, tight closure to retard the spread of flames or hot gases within concealed spaces.

***FIRE SUPPRESSION PIPING SYSTEM.**- Any system including any and all equipment and materials in connection therewith the purpose of which is to control, to contain, to suppress or to extinguish fire.

**Local Law 107-1993.*

FIRE WALL.-A *fire division* in the form of a wall.

FIRE WINDOW.-An *opening protective* in the form of a window and its assembly.

FLAME SPREAD RATING.-The measurement of the comparative rate of propagation of flame over the surface of a material as determined by a fire test made in accordance with a specified standard in subchapter five of this chapter.

FLAMMABLE.-Capable of being easily ignited when exposed to flame, and which burns intensely, or has a rapid rate of flamespread.

FLASH POINT.-The lowest temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the vessel used.

FLOOR AREA.-The projected horizontal area inside of walls, *partitions*, or other enclosing *construction*.

FLOOR AREA (NET).-When used to determine the *occupant load* of a space, *shall* mean the horizontal occupiable area within the space, excluding the thickness of walls, and *partitions*, columns, furred-in spaces, fixed cabinets, equipment, and accessory spaces such as closets, machine and equipment rooms, toilets, stairs, halls, *corridors*, *elevators* and similar unoccupied spaces.

FLUE.-An enclosed passageway in a *chimney* to carry products of combustion to the outer air.

FOLDED PLATE.-An assembly consisting of one or more units, each unit of which is formed by two or more individually planar elements, termed plates, intersecting at angles.

FOOTING.-A *foundation* element consisting of an enlargement of a *foundation pier* or *foundation wall*, wherein the soil materials along the sides of and underlying the element may be visually inspected prior to and during its construction.

FOUNDATION (BUILDING).-A *construction* that transfers *building* loads to the supporting soil.

FOUNDATION PIER.-A *foundation* element consisting of a column embedded into the soil below the lowest floor to the top of a *footing* or *pile cap*. Where a pier bears directly on the soil without intermediate *footings* or *pile caps*, the entire length of the column below the lowest floor level *shall* be considered as a foundation pier. Foundation piers *shall* be limited to piers so constructed that the entire surface of the sides of the pier and the *bearing* material under the lower end of the pier can be visually inspected prior to or during *construction*, but which will be concealed in the final work. Piers below the lowest floor or *basement* level that will be exposed and open to inspection in the final work *shall* be considered as columns. Types of *construction* wherein the sides cannot be visually inspected *shall* be considered as piling.

FOUNDATION WALL.-A wall extending below *grade*.

FRAMEWORK.-As applied to a *sign*, *shall* mean the supports, uprights and bracing of the *sign*.

FRESH AIR.-Outdoor air.

FRONT. - As applied to *building* location on a *lot*, *shall* mean the distance between lines drawn through the most remote points of the *building* perimeter, projected at right angles to a *frontage space*.

FRONTAGE SPACE.-A *street*; or an open space outside of a *building*, not less than thirty feet in any dimension, that is accessible from a *street* by a driveway, lane, or alley at least twenty feet in width, and that is permanently maintained free of all obstructions that might interfere with its use by the fire department.

FRONT YARD.-A *yard* extending along the full length of a *street line*.

GAS DISTRIBUTION PIPING.-All piping from the house side of the *gas meter piping* that distributes gas supplied by a public utility to all fixtures and apparatus used for illumination or fuel in any *building*.

GAS METER PIPING.-The piping from the gas service line valve to the outlet of the meter regulator set or the meter if no regulator is required.

GAS PIPING SYSTEMS.-The gas service piping, meter piping and distribution piping.

GAS SERVICE LINE VALVE.-The valve located at or below grade on the supply side of the meter or service regulator, if a service regulator is required. If a plug type valve is used it shall be constructed so as to prevent the core from being blown out by the pressure of the gas. In addition, it shall be of a type capable of being locked in the off position by the local gas utility.

GAS SERVICE PIPING.-The supply piping from the street main up to and including the gas service line valve.

GRADE.-The finished surface of the ground, either paved or unpaved.

GRADE BEAM.- A beam, at, near, or below *grade*, spanning between footings, *pile caps* or *foundation piers*, and supporting walls or other elements of a *building*.

GRANDSTAND.- A *structure* used to support spectators, either standing or seated, usually outdoors.

GROUND SIGN.- A *sign* supported by uprights or braces in or upon the surface of the ground.

GROUP HOME.- A facility for the care and maintenance of not less than seven nor more than twelve children, operated pursuant to subdivision (c) of section three hundred seventy-four of the social services law, or other provisions of applicable laws, and supervised by the New York state board of social welfare.

****HABITABLE ROOM.**-A residential room or space, having the minimum dimensions required by section 27-751 of article six of subchapter twelve of this chapter in which the ordinary functions of domestic life are carried on, and which includes bedrooms, living rooms, studies, recreation rooms, kitchens, dining rooms and other similar spaces, but does not include closets, halls, stairs, laundry rooms, or bathrooms.

****Chapter 559, Laws of 1995.**

HEIGHT (BUILDINGS).-The vertical distance from the *curb level* to the highest point of the *roof beams* in the case of flat roofs, or to a point at the average height of the gable in the case of roofs having a pitch of more than one foot in four and one-half feet; except that where the *curb level* has not been legally established, or where every part of the building is set back more than twenty-five feet from a *street line*, the height *shall* be measured from the *adjoining grade elevation*.

HEREAFTER.-On or after the effective date of this code.

HERETOFORE.-Before the effective date of this code.

HIGH RISE.-A structure seventy-five feet or more in height.

HOISTWAY.-An enclosed or partly enclosed *shaft* used for the travel of an *elevator*, *dumbwaiter*, platform or bucket.

HOISTWAY DOOR.-As applied to an *elevator* *shall* mean the hinged or sliding portion of a *hoistway* enclosure, which closes the opening giving, access to a landing.

HOISTWAY DOOR INTERLOCK.-A device used to prevent the operation of the driving machine of an *elevator* by the normal operating device unless the *hoistway door* is locked in the closed position, and also used to prevent the opening of the *hoistway door* from the landing side unless the car is within the landing zone and is either stopped or being stopped.

***HOISTING MACHINE.**-A power operated machine used for lifting or lowering a load utilizing a drum and wire rope, excluding elevators. This shall include but not be limited to a crane, derrick and cableway.

**As enacted but this definition probably intended to follow definition of "HIGH RISE".*

HORIZONTAL EXIT.-(See Section 27-373 of article five of subchapter six of this chapter.)

ILLUMINATED SIGN.-A sign designed or arranged to give forth or reflect light from an attached artificial source.

IMPACT LOAD.-A kinetic load of short duration such as that resulting from moving machinery, *elevators*, craneways, vehicles, etc.

INDEPENDENT POLE SCAFFOLD.-A scaffold supported by multiple rows of uprights, and not depending on the *building* for support.

INDIRECT WASTE PIPE.-A drain pipe used to convey liquid wastes which does not connect directly with the *drainage system*, but which discharges into the house *drainage system* through an air break into a *trap*, fixture, receptacle, or interceptor.

INDUSTRIAL LIFT.- A hoisting and lowering mechanism of a nonportable power-operated type for raising or lowering material vertically, operating entirely within one *story* of a *building*.

INDUSTRIAL WASTE.- Liquid, gaseous or solid substances, or a combination thereof, resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resource.

INNER COURT.-Any open area, other than a *yard* or portion thereof, that is unobstructed from its lowest level to the sky and that is bounded by either *building walls*, or *building walls* and one or more *lot lines* other than a *street line* or *building walls*, except for one opening on any open area along an *interior lot line* that has a width of less than thirty feet at any point.

INTERIOR LOT LINE.-A *lot line* other than a *street line*.

INTERIOR STAIR.-A stair within a *building*, that serves as a *required exit*. (See **ACCESS STAIR** and **EXTERIOR STAIR**.)

LAGGING (PILE).-Pieces of timber or other material attached to the sides of *piles* to increase resistance to penetration through soil.

LAMELLA.-*Shell construction* in which the *shell* is formed by a lattice of interlacing members.

LANDING DOOR.-(See **HOISTWAY DOOR**.)

LEADER.-A vertical drainage pipe for conveying storm water from *roof* or gutter drains to a *building house storm drain*, *building house drain (combined)*, or other means of disposal. The leader *shall* include the horizontal pipe to a single *roof drain* or gutter drain.

LESSEE.-The *person* in possession of a *building* under a lease from the owner thereof.

LICENSE.- A *written* document issued by the *commissioner* authorizing a *person* to perform specific acts in or in connection with the *construction* or *alteration* of *buildings*, or the installation, *alteration*, and use and operation of *service equipment* therein.

LIVE LOAD. - All occupants, materials, equipment, *constructions* or other elements of weight supported in, on or by a *building* that will or are likely to be moved or relocated during the expected life of the *building*.

LOAD-BEARING.-(See **BEARING**.)

LOADING RAMP.-A hinged, mechanically operated lifting device *used* for spanning gaps and/or adjusting heights between loading surfaces, or between loading surfaces and carriers.

LODGER.-(See BOARDER.)

LOT.-A portion or parcel of land considered as a unit. A zoning lot.

LOT LINE.-A line dividing one land unit from another, or from a *street* or other public space. A boundary line of a zoning *lot*.

LOW RISE.-A structure less than seventy-five feet in height.

MALL.-An enclosed or roofed area used as a pedestrian circulation space and connecting no more than three stories or portions of stories of a building or buildings housing single and/or multiple tenants.

MANUAL FIRE PUMP.-A pump that feeds water into a fire extinguishing system that must be started by either the building personnel or members of the fire department.

MARQUEE SIGN.-A *sign* placed flat against the front or side fascia of a marquee.

MECHANICAL VENTILATION.-The process of introducing outdoor air into, or removing vitiated air from a *building* by mechanical means. A mechanical ventilating system may include air heating, air cooling, or *air conditioning* components.

MECHANIZED PARKING GARAGE EQUIPMENT.-Special devices in mechanical parking garages that operate in either stationary or horizontal moving hoistways, that are exclusively for the conveying of automobiles, and in which no *persons* are normally stationed on any level other than the receiving level and in which each automobile during the parking process is moved by means of a power driven transfer device, on and off the elevator directly into parking spaces or cubicles.

MEZZANINE.-An intermediate floor between the floor and ceiling of any space. When the total gross *floor area* of all mezzanines occurring in any story exceeds thirty-three and one-third percent of the gross *floor area* of that story such mezzanine shall be considered as a separate story.

MINOR ALTERATIONS.-(See Section 27-124 of article five of subchapter one of this chapter.)

MORTAR (GROUT).-A mixture of cementitious materials, fine-aggregates and water.

MOTOR VEHICLE.-A conveyance propelled by an internal combustion engine and having a fuel storage tank capacity of more than two gallons.

MOVING WALK.-A passenger-carrying device on which *persons* stand or walk, and in which the passenger-carrying surface remains parallel to its direction of motion and is uninterrupted.

MULTIPLE DWELLING.-A building containing three or more *dwelling units*. Multiple dwelling shall not be deemed to include a hospital, school, convent, monastery, asylum or other public institution.

NONAUTOMATIC SPRINKLER SYSTEM.-A *sprinkler system* in which all pipes and sprinkler heads are maintained dry and which is supplied with water through a fire department *siamese connection*.

NONAUTOMATIC STANDPIPE SYSTEM.- A *standpipe system* in which all piping is maintained dry, and which is supplied with water through a fire department *siamese connection*.

NONBEARING.-As applied to a wall or *partition*, *shall* mean one that supports no vertical load other than its own weight.

***NONCOMBUSTIBLE.**-A material which, in the form in which it is used in construction, will not ignite and burn when subjected to fire. However, any material which liberates flammable gas when heated to any temperature up to one thousand three hundred eighty degrees Fahrenheit for five minutes shall not be considered noncombustible. No material shall be considered noncombustible which is subject to increase in combustibility beyond the limits established above, through the effects of age, fabrication or erection techniques, moisture, or other interior or exterior atmospheric conditions.

**Local Law 13-1987.*

NONCURRENT LOADS.-Two or more elements of *dead* or *live* load which, for purposes of design, are considered not to act simultaneously.

NONLOADBEARING.-(See NONBEARING.)

OCCUPANCY.-The purpose or activity for which a *building* or space is *used* or is designed or intended to be *used*.

OCCUPANCY GROUP.-The category in which a building or space is classified by the provisions of subchapter three of this chapter, based on its occupancy or use.

OCCUPANT LOAD.-The number of occupants of a space, floor or *building* for whom exit facilities shall be provided.

OCCUPIABLE ROOM.-A room or space, other than a *habitable room* designed for human *occupancy* or *use*, in which *persons* may remain for a period of time for rest, amusement, treatment, education, dining, shopping, or other similar purposes, or in which occupants are engaged at work.

OCTAVE.-The interval between two sounds having a basic frequency ratio of two. By extension, the octave is the interval [*sic*] between any two frequencies having the ratio 2:1. The standard octave bands are:

		FREQUENCY (CPS)							
Mid-Frequency		63	125	250	500	1000	2000	4000	8000
Approximate Frequency	Lower	45	90	180	355	710	1400	2800	5600
Limits	Upper	90	180	355	710	1400	2800	5600	11120

****OFFICE BUILDING.**-A *building* constructed pursuant to the code in effect prior to December 6, 1968 in which the main use or dominant occupancy is offices or a *building* classified in *occupancy group E*.

***Local Law 26-2004.*

OIL BUFFER.-As applied to an *elevator*, shall mean a buffer using oil as a medium which absorbs and

dissipates the kinetic energy of a descending car or counterweight.

OPEN EXTERIOR SPACE.-A *street* or other *public space*; or a *yard*, *court*, or *plaza* open on one or more sides and unroofed or open on all sides, which provides egress to a street or public space.

OPEN PARKING LOT.-A *lot*, or portion thereof, *used* for the storage or sale of more than four *motor vehicles*, but not *used* for the repair or servicing of such vehicles.

OPEN PARKING STRUCTURE.-A structure open to the outdoors fifty percent or more on two or more sides of *each story*, *used* for the parking of *motor vehicles*.

OPEN SHAFT.-A *shaft* open to the outdoor air at the top.

OPENING PROTECTIVE.-An assembly of materials and accessories, including frames and hardware installed in an opening in a wall, *partition*, floor, ceiling or *roof* to prevent, resist, or retard the passage of flame, smoke or hot gases.

ORDINARY REPAIRS.-(See section 27-125 of this chapter.)

OUTER COURT.-Any open area, other than a *yard* or portion thereof, that is unobstructed from its lowest level to the sky and that, except for an outer court opening upon a *street line*, a *front yard*, or a *rear yard*, is bounded by either *building walls* or *building walls* and one or more *lot lines* other than a *street line*.

OUTRIGGER SCAFFOLD.-A scaffold, the platform of which is built upon supports cantilevering beyond the walls of the *building*.

OUTSIDE GAS SERVICE LINE VALVE.-The valve located on the gas service piping which can be either exposed or buried.

OWNER.-A *person* having legal title to *premises*; a mortgagee or vendee in possession; a trustee in bankruptcy; a receiver or any other *person* having legal ownership or control of *premises*.

PARAPET.-The continuation of an exterior wall, fire wall, or party wall above the roof line.

PARKING TIER.-A general level of parking.

PARTITION.-A vertical unit or assembly of materials that separates one space from another within any *story* of a *building*.

PARTY WALL.-A *fire division* on an interior lot line common to two adjoining buildings.

PENTHOUSE.-An enclosed *structure* on or above the roof of any part of a building, which is designed or used for human occupancy. (See BULKHEAD and ROOF STRUCTURE.)

PERMIT.-A *written* document issued by the *commissioner* authorizing the *construction*, *alteration*, or *demolition* of a *building*, or the installation, *alteration* or *use* and operation of *service equipment* therein.

PERSON.-An individual, partnership, corporation, or other legal entity.

***PHYSICAL DISABILITY.**-Any of the following:

(a) impairment requiring use of a wheelchair; or

(b) impairment causing difficulty or insecurity in walking or climbing stairs or requiring the use of braces, crutches or other artificial supports; or impairment caused by amputation, arthritis, spastic condition or pulmonary, cardiac or other ills rendering the individual semi-ambulatory; or

(c) total or partial impairment of hearing or sight causing insecurity or likelihood of exposure to danger in public places; or

**Local Law 58-1987.*

(d) impairment due to conditions of aging and incoordination. The term "physical handicap" shall have the same meaning as the term "physical disability" and the phrase people having "physical disabilities" shall include those having one or more physical disabilities.

PILE.-A structural element introduced into the ground to transmit loads to lower strata and of such construction that the material underlying the base of the unit or along the sides cannot be visually inspected.

PILE CAR.-A construction encasing the heads of one or more piles which transfers loads to the *pile* or *piles*.

**** PLACE OF ASSEMBLY.**-An enclosed room or space in which seventy-five or more persons gather for religious, recreational, educational, political or social purposes, or for the consumption of food or drink, or for similar group activities or which is designed for use by seventy-five or more persons gathered for any of the above reasons, but excluding such spaces in dwelling units; or an outdoor space in which two hundred or more persons gather for any of the above reasons or which is designed for use by two hundred or more persons gathered for any of the above reasons.

***Local Law 23-1990.*

PLASTIC.-A material that contains as an essential ingredient an organic substance of large molecular weight, is solid in its finished state and, at some stage in its manufacture or its processing into finished articles, can be shaped by flow.

PLASTIC, SLOW BURNING.-A *plastic* having a rate of combustion within the limits of a specified standard of subchapter five of this chapter.

PLATFORM FRAME.-Light timber *construction* in which the exterior walls and bearing walls consist of studs which are interrupted at floors by the entire thickness of the floor *construction*.

PLUMBING.-The practice, materials, and fixtures used in the installation, maintenance, extension, and *alteration* of all piping, fixtures, appliances, equipment, and appurtenances in connection with any of the following: sanitary drainage or storm drainage facilities, the venting system and the public or private water supply systems, within or adjacent to any *building*; also the practice and materials used in the installation, maintenance, extension, or *alteration* of storm water, liquid-waste, or sewerage, and water-supply systems of any *premises* and their connection with any point of public disposal or other acceptable terminal.

PLUMBING FIXTURES.-Installed receptacles, devices, or appliances that are supplied with water or which receive or discharge liquids or liquid-borne wastes.

PLUMBING SYSTEM.- The water-supply and distribution pipes; plumbing fixtures and traps; soil, waste, and vent pipes; *building house drains* and *building house sewers* including their respective connections, devices, and appurtenances within the property lines of the *premises*; and water-treating or water-using equipment.

POLE FOOTING.-A type of *construction* in which a pole embedded in the ground and extending upward to form a column is used for both column and *footing*.

PONDING.-The collection of rainwater.

***POTABLE WATER.**-Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects. Its bacteriological and chemical quality shall conform to the requirements of the department of health and mental hygiene.

***Local Law 22-2002**

POWER-OPERATED SCAFFOLD.-Any form of scaffold that is propelled vertically by the use of power machinery.

PREMISES.-Land, improvements thereon, or any part thereof.

*****PRIMARY ENTRANCE(S).**-

The principal entrance(s) to a building primarily and expressly utilized for day-to-day pedestrian ingress and egress. Side, rear and other entrances solely used for freight and service shall not constitute a primary entrance.

*****Local Law 58-1987.**

PRIVATE GARAGE.-A *building* or enclosed space used for the parking or storage of not more than four *motor vehicles* having fuel storage tanks of twenty-six gallon capacity or less, and in which no repair, body work, or painting of vehicles is conducted, and in which no gasoline, oil, or similar products are dispensed.

PRIVATE SEWER.-A sewer privately owned and controlled by public authority only to the extent provided by law.

PROJECTING SIGN.-A *sign* affixed to an exterior wall of a building and extending more than fifteen inches beyond the wall surface.

PUBLIC AREAS.-Area(s) within a building usually open to or used by the general public, such as lobbies, corridors, waiting rooms, reception rooms, rest rooms, etc.

PUBLIC GARAGE.-A *building* or space used for the parking or storage of *motor vehicles*, other than an *automotive service station*, *automotive repair shop*, *open parking structure*, or *private garage*. Truck loading and shipping areas shall be classified as public garages.

PUBLIC SEWER.-A sewer entirely controlled by public authority.

PUBLIC SPACE.-An open space outside of a *building*, which is dedicated or devoted to public use by lawful mapping or by any other lawful procedure.

PURE TONE.-A soundwave of a single frequency, so called to distinguish it from a complex tone.

REAR LOT LINE.-Any *lot line*, except a *street line*, that is parallel or within forty-five degrees of being

parallel to, and does not intersect any *street line* bounding such *lot*.

REAR YARD.-A *yard* extending for the full length of a *rear lot line*.

REBOUND.-Recovery of displacement due to release or reduction of applied load.

REFRIGERATION.-The process by which heat is absorbed from a substance by expansion or vaporization of a refrigerant.

REQUIRED.-Shall mean required by the provisions of this code.

RETAINING WALL.-A wall designed to prevent the lateral displacement of soil or other materials.

RIGGING LOFT.-A space above a stage, designed and used for the flying and storage of *scenery* and *scenic elements*. A space used for the occasional flying of incidental props during a performance shall not be deemed to constitute a rigging loft.

ROOF.-The topmost slab or deck of a *building*, either flat or sloping, with its supporting members, not including vertical supports.

ROOF COVERING.-The covering applied to the exterior surface of a *roof* for weather resistances, fire resistance, wear, and/or appearance, but not including insulation.

ROOF SIGN.-A *sign* erected and maintained on or above the *roof* of a *building*.

ROOF STRUCTURE.-An unenclosed *structure* on or above the *roof* of any part of a *building*. (See BULKHEAD and PENTHOUSE.)

ROOMER.-(See BOARDER.)

SAFE AREA.-An interior or exterior space that serves as a means of egress by providing a transitional area from, and that also serves as a normal means of entry to, an *assembly space*.

SAFETY (CAR OR COUNTERWEIGHT).- A mechanical device attached to an *elevator* car frame or to an auxiliary frame, or to the counterweight frame, to stop and hold the car or counterweight in case of predetermined overspeed or free fall, or if the hoisting ropes slacken.

SCENERY AND SCENIC ELEMENTS.-Any or all of those devices ordinarily used on a stage in the presentation of a theatrical performance, such as back drops, side tabs, teasers, borders or scrim, rigid flats, set pieces, and all properties, but not including costumes.

SCHOOL.-An elementary school, high school, or college, either public or private.

SEATING SECTION.-An area of seating bounded on all sides by aisles, *cross aisles*, walls or *partitions*.

SELF-CLOSING.-As applied to an *opening protective* shall mean a door, window, damper, or other device, and its assembly that is normally kept in a closed position and that is equipped with an *approved* device to insure immediate closing after having been opened for use.

SELF-RELIEVING CONSTRUCTION.- *Construction* using a type of framing in which the connections are capable of developing a known and dependable moment capacity but which, under larger moments, are capable of rotating (without fracture) an amount sufficient to accommodate the deflection due to the excess of the applied moment over the moment capacity.

SERVICE EQUIPMENT.-Equipment, including all components thereof, which provides sanitation, power, light, heat, cooling, ventilation, air-conditioning, refuse disposal, fire-fighting, transportation, or similar facility for a building which by design becomes a part of the *building*, and which is regulated by the provisions of this code.

SEWAGE.-Any liquid waste containing animal or vegetable matter in suspension or solution, and may include liquids containing chemicals in solution.

SEWAGE DISPOSAL SYSTEM.-A system for the disposal of *sewage* by means of a septic tank, cesspool, or mechanical treatment, all designed for use apart from a *public sewer* to serve a single establishment, *building*, or development.

SEWAGE EJECTOR.-A mechanical device used to pump or eject *sewage*.

SHAFT.-A vertical, inclined, or offset passage, or *hoistway*, penetrating through two or more floors of a *building* or through a floor and *roof*. (See CLOSED SHAFT and OPEN SHAFT.)

SHALL.-As used in this code, is always to be construed as mandatory.

SHELL.-A *structure* consisting of a curved or folded slab whose thickness is small compared to its other dimensions, and which is characterized by its three dimensional load-carrying behavior. The term *shall* include those forms of *construction* that approximate slab surfaces, such as *lamellas* and lattices.

SIAMESE CONNECTION.-A fitting connected to a fire extinguishing system and installed on the outside of a *building*, with two hose inlets for use of the fire department, to furnish or supplement the water supply to the system.

SIDE LOT LINE.-Any *lot line* that is not a *street line* or a *rear lot line*.

SIDEWALK ELEVATOR.-A freight *elevator* that operates between a sidewalk or other area outside of a *building* and floor levels inside the *building* below such area which has no landing opening into the *building* at its upper limit of travel, and which is not used to carry automobiles.

SIDE YARD.-A *yard* extending along a *side lot line* from the *required front yard* (or from the *street line* if no *front yard* is *required*) to the *required rear yard* (or to the *rear lot line* if no *rear yard* is *required*).

SIDEWALK SHED.-A construction over a public sidewalk, used to protect pedestrians from falling objects.

SIGN.-An outdoor *structure*, banner or other device, designed or *used* as an advertisement, or announcement for the information or attraction of the public; consisting of the *framework* and all letters, words, numerals, illustrations,

illumination, decorations, trade marks, emblems, symbols or other figures or characters.

SINGLE POLE SCAFFOLD.-A platform resting on putlogs or crossbeams, the outer ends of which are supported on ledgers secured to a single row of posts or uprights, and the inner ends of which are supported by a wall.

*****SMOKE BARRIER.**- Any continuous *non-combustible construction*, vertical, horizontal, or otherwise, such as a wall, floor, or ceiling assembly, that is designed and constructed to restrict the spread of smoke and constructed in accordance with the provisions of section 27-353.3 of this code.

*****Local Law 26-2004.**

SMOKE-STOP DOOR.-A door or set of doors placed in a *corridor* to restrict the spread of smoke and to retard the spread of fire by reducing draft.

SOIL VENT.-(See STACK VENT.)

SOUND POWER.-The rate at which sound energy is radiated by a source.

SOUND POWER LEVEL.-The ratio, expressed in *decibels*, [*sic*] of the *sound power* of a source to the reference power of ten-thirteen watts.

SOUND PRESSURE LEVEL.-The square ratio, expressed in *decibels*, of a sound pressure to a reference pressure of 0.0002 dynes per square centimeter.

SPANDREL WALL.-That portion of an exterior wall between the top of one opening and the bottom of another in the *story* directly above.

SPARK ARRESTER.-A device to prevent sparks, embers, or other ignited material above a given size from being expelled to the atmosphere from the top of a *chimney*.

SPECIAL WASTE.-Wastes that require special treatment before entry into the normal *plumbing system*.

SPRAY BOOTH.-A compartment in which spraying with any substance is carried on, consisting of at least two sides, a back, and a top.

SPRAYING SPACE OR DIPPING SPACE.-Any portion of a *building* in which the actual work of spraying, dipping, or immersing any article with or into *flammable* substances takes place.

SPRINKLER ALARM.-An apparatus constructed and installed so that a flow of water through the sprinkler system equal to, or greater than, that required for a single automatic sprinkler head will cause an alarm to be given.

SPRINKLER SYSTEM.-A system of piping and sprinkler heads connected to one or more sources of water supply.

STACK.-(See CHIMNEY.)- Also, a general term applying to any vertical line of soil, waste, vent, or inside leader piping. It shall not include vertical fixture and vent branches that do not extend through the *roof* or that pass through not more than two *stories* before being reconnected to the *vent stack* or *stack vent*.

STACK VENT.-The extension of a soil or waste stack above the highest horizontal drain connected to a plumbing *stack*.

STAGE.-An area used in the presentation of a live performance at anytime and includes: the performing area and non-audience areas that are open to the performing area. It may be level or raised with or without scenic elements, and generally is serviced by stage illumination appliances and control panels. For places of assembly classified as occupancy group F-1A or F-1B, the word stage shall be defined in accordance with the definition set forth in sections 27-546 and 27-547 of article three of subchapter eight of this code.

STAGE LIFT.-A movable section of a stage floor, designed to carry scenery between staging areas and the stage, and also *used* to be raised to and temporarily retained at elevations above or below the stage level.

STANDPIPE SYSTEM.-A system of piping, for fire-fighting purposes, consisting of connections to one or more sources of water supply, and serving one or more hose outlets.

STORM DRAIN.-(See BUILDING STORM DRAIN.)

STORM SEWER.-A sewer used for conveying rain water, surface water, condensate, cooling water, or similar clear liquid wastes which do not contain organic materials or compounds subject to decomposition.

STORY.-That portion of a *building* that is between a floor level and the next higher floor level or *roof* above.

STREET.-A thoroughfare dedicated or devoted to public use by legal mapping or other lawful means.

STREET FLOOR.-A floor, usually the principal entrance floor, that is not more than one-half *story* above or below *grade* at the location from which egress is provided to the *street*.

STREET LINE.-A *lot line* separating a *street* from other land.

STREET MAIN.-(See WATER MAIN and GAS SERVICE PIPING.)

STRUCTURE.-An assembly of materials forming *construction* for *occupancy* or *use*, including among others: *buildings*, *stadia*, *tents*, *reviewing stands*, *platforms*, *stagings*, *observation towers*, *radio towers*, *tanks*, *trestles*, *open sheds*, *coal pockets*, *shelters*, *fences*, and *display signs*.

SUBSTRATE.-A surface upon which a finish material is directly applied and which extends completely behind such finish material.

SUMP PIT.-A tank or pit that receives clear liquid wastes that do not contain organic materials or compounds subject to decomposition, located below the normal grade of the gravity system and that must be emptied by mechanical means.

SUMP PUMP.-A mechanical device used to pump the liquid waste from a *sump pit* into the gravity *drainage system*.

SUPPLEMENTAL VERTICAL EXIT.-An enclosed stair, ramp or *escalator* providing means of egress to an area of refuge at another level nearer to the *street floor*.

THIS CODE.-The building code.

TIER OF SEATING.-A general level of seating, such as an orchestra (usually the main tier), a balcony, or gallery.

TRAILER CAMP.-A *lot* or parcel of land used for temporary or permanent *occupancy* by two or more mobile homes or travel trailers.

TRANSFER COLUMN.-A column supported by beams, girders, trusses or similar members and reacting on two or more columns at a lower level.

UNIFORMLY DISTRIBUTED LOAD.- A conventionalized representation of an element of *dead* or *live load* as a load of uniform intensity, distributed over an area.

***USABLE DWELLING UNITS.**-Dwelling units which are accessible, constructed and equipped as set forth in reference standard RS 4-6, so as to be usable by all categories of people having physical disabilities.

**Local Law 58-1987.*

USE (USED).-The purpose for which a *building*, *structure*, or space is *occupied* or utilized, unless otherwise indicated by the text. Use (used) *shall* be construed as if followed by the words "or is intended, arranged, or designed to be used".

VAULT (SIDEWALK).-Any space below the surface of the sidewalk portion of a *street*, that is covered over, except those openings that are used exclusively as places for descending, by means of steps, to the *cellar* or *basement* of any *building*.

VENT (GAS).-A *flue* or *duct*, used to convey the products of combustion from gas-fired equipment to the outdoor air by natural draft.

VENT STACK (PLUMBING).-A vertical vent pipe extending through more than two *stories*, which is then connected to a *stack vent* or is otherwise extended through the *roof*; installed primarily for the purpose of providing circulation of air to and from any part of a *drainage system*.

VENT SYSTEM (COMBUSTION).-A *gas vent* or *chimney*, together with a *vent connector* that forms a continuous unobstructed passageway from gas burning equipment to the outdoor air for the purpose of removing *vent gases*.

VENT SYSTEM (PLUMBING).-A pipe or pipes installed to provide a flow of air to or from a *drainage system* or to provide a circulation of air within such system to protect *trap seals* from siphonage and back pressure.

VERTICAL EXIT.-A stair, ramp, or *escalator* serving as an *exit* from one or more floors above or below the street floor.

WALL SIGN.-A *sign* affixed to the exterior wall of a *building*, no part of which projects more than fifteen inches from the wall surface.

WATER-DISTRIBUTION PIPING.-The pipes in a *building* or *premises* that convey water from the *water service pipe* to the *plumbing fixtures* and other water outlets.

WATER (STREET) MAIN.-A water-supply pipe for public or community use controlled by public authority.

WATER-SERVICE PIPE.-The pipe from the *water (street) main* or other source of water supply to the *building* served.

WATER SUPPLY SYSTEM.-The *water-service pipe*, the *water-distribution piping*, and all of the necessary connecting pipes, fittings, control valves, and appurtenances used for conveying water in a *plumbing system*.

WET STANDPIPE SYSTEM.-A *standpipe system* in which all of the piping is filled with water under pressure that is immediately discharged upon the opening of any hose valve.

WINDING-DRUM MACHINE.-As applied to an *elevator*, shall mean a geared-drive machine in which the hoisting ropes are fastened to and wind on a drum.

WORKERS' HOIST.-A hoisting and lowering mechanism equipped with a car that moves in guides in a substantially vertical direction and that is used primarily for raising and lowering workers to the working levels.

WRITING (WRITTEN).-The term *shall* be construed to include handwriting, typewriting, printing, photo-offset, or any other form of reproduction in legible symbols or characters.

WRITTEN NOTICE.-A notification in *writing* delivered by hand to the *person* or parties intended, or delivered at or sent by mail to the last business address known to the party giving such notice.

YARD.-That portion of a *lot* extending open and unobstructed from the lowest level to the sky along the entire length of a *lot line*.

ZONE.-A vertical division of a *building fire standpipe system* used to establish the water working pressures within the system and also to limit the pressure at the lowest hose outlet in the zone.

ZONING RESOLUTION.-The zoning resolution of the city of New York, adopted December fifteenth, nineteen hundred sixty-one, including all amendments thereto.

ARTICLE 3 ABBREVIATIONS

Abbreviations. §[C26-202.0]27-233

bhp: brake horsepower	I.P.S.: iron pipe size
Btu: British [<i>sic</i>] thermal unit	lb.: pound
C: centigrade	mph: miles per hour
cfm: cubic feet per minute	oz.: ounce
cps: cycles per second	P.C.E.: pyrometric cone equivalent
cu. ft.: cubic feet	pcf: pounds per cubic foot
db: decibel	plf: pounds per linear foot
dia.: diameter	psf: pounds per square foot
F: fahrenheit	psi: pounds per square inch
fpm: feet per minute	psia: pounds per square inch absolute
fps: feet per second	psig: pounds per square inch gauge
fsp: fire standpipe	rpm: revolutions per minute
ft.: foot	sec.: second
gal.: gallon	swp: steam working pressure
gpm: gallons per minute	sq. ft.: square foot
gps: gallons per second	sq. in.: square inch
h.p.: horsepower	sq. yd.: square yard
hr.: hour	STC: sound transmission class
in.: inch	Tag: tagliabue
INR: impact noise rating	wwp: water working pressure

Note—For abbreviation of name of referenced national organizations, see reference standard RS 2-1.

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SUBCHAPTER 3 OCCUPANCY AND CONSTRUCTION CLASSIFICATION

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**				
[300.0]	Art. 1	General	[310.2]	264	Occupancy Group J-1
[300.1]	234	Scope	[310.3]	265	Occupancy Group J-2
[300.2]	235	Reference Standards	[310.4]	266	Occupancy Group J-3
[300.3]	236	Definitions	[311.0]	Art. 12	Occupancy Group K- Miscellaneous
[301.0]	Art. 2	Occupancy Classifications	[311.1]	267	Classification
[301.1]	237	Occupancy Groups	[312.0]	Art. 13	Doubtful Occupancies
[301.2]	238	Classification of Spaces	[312.1]	268	Classification
[301.3]	239	Classification of Buildings	[313.0]	Art. 14	Construction Classifications
[301.4]	240	Separation of Occupancies	[313.1]	269	Construction Classes
[301.5]	241	Classification Tables	[313.2]	270	Classification of Buildings and Spaces
[301.6]	242	Multiple Occupancy or Use	[313.3]	271	Classification Table
[302.0]	Art. 3	Occupancy Group A-High Hazard	[313.4]	272	False Designation
[302.1]	243	Classification	[313.5]	273	Minimum Requirements
[302.2]	244	Location Restrictions	[314.0]	Art. 15	Construction Group I- Noncombustible
[303.0]	Art. 4	Occupancy Group B- Storage	[314.1]	274	Classification
[303.1]	245	Classification	[314.2]	275	Construction Class I-A
[303.2]	246	Occupancy Group B-1	[314.3]	276	Construction Class I-B
[303.3]	247	Occupancy Group B-2	[314.4]	277	Construction Class I-C
[304.0]	Art. 5	Occupancy Group C- Mercantile	[314.5]	278	Construction Class I-D
[304.1]	248	Classification	[314.6]	279	Construction Class I-E
[305.0]	Art. 6	Occupancy Group D- Industrial	[315.0]	Art. 16	Construction Group II- Combustible
[305.1]	249	Classification	[315.1]	280	Classification
[305.2]	250	Occupancy Group D-1	[315.2]	281	Construction Class II-A
[305.3]	251	Occupancy Group D-2	[315.3]	282	Construction Class II-B
[305.4]	252	Location Restrictions	[315.4]	283	Construction Class II-C
[306.0]	Art. 7	Occupancy Group E- Business	[315.5]	284	Construction Class II-D
[306.1]	253	Classification	[315.6]	285	Construction Class II-E
[307.0]	Art. 8	Occupancy Group F- Assembly	[316.0]	Art. 17	Mixed Construction
[307.1]	254	Classification	[316.1]	286	Classification
[307.2]	255	Occupancy Group F-1	[316.2]	287	Restrictions
[307.3]	256	Occupancy Group F-2			
[307.4]	257	Occupancy Group F-3			
[307.5]	258	Occupancy Group F-4			
[308.0]	Art. 9	Occupancy Group G- Educational			
[308.1]	259	Classification			
[309.0]	Art. 10	Occupancy Group H- Institutional			
[309.1]	260	Classification			
[309.2]	261	Occupancy Group H-1			
[309.3]	262	Occupancy Group H-2			
[310.0]	Art. 11	Occupancy Group J- Residential			
[310.1]	263	Classification			

****C26" omitted from section numbers in this column.*

****27" omitted from section numbers in this column.*

LIST OF TABLES

Table No.

3-1	Occupancy Classifications
3-2	Typical Occupancies for Occupancy Classification
3-3	Construction Classes
3-4	Construction Classifications Notes to Table 3-4.

ARTICLE 1 GENERAL

§[C26-300.1] 27-234 Scope.—The provisions of this subchapter shall establish and control the classification of all buildings, and spaces therein, with respect to occupancy group and class of construction.

§[C26-300.2] 27-235 Reference standards.—

Occupancy and construction classifications which appear in the several reference standards of this code shall apply to the provisions of the reference standard only unless otherwise indicated.

§[C26-300.3] 27-236 **Definitions.**-For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

ARTICLE 2 OCCUPANCY CLASSIFICATIONS

§[C26-301.1] 27-237 **Occupancy groups.**-Table 3-1 lists occupancy groups and sub groups that shall be established for classifying buildings and spaces in accordance with the provisions of articles three through twelve of this subchapter.

TABLE 3-1 OCCUPANCY CLASSIFICATIONS

Occupancy Group	Classification	Fire Index
A	High hazard	4
B-1	Storage (moderate hazard)	3
B-2	Storage (low hazard)	2
C	Mercantile	2
D-1	Industrial (moderate hazard)	3
D-2	Industrial (low hazard)	2
E	Business	2
F-1a	Assembly (theaters, etc.)	1
F-1b	Assembly (churches, concert halls, etc.)	1
F-2	Assembly (outdoors)	1
F-3	Assembly (museums, etc.)	1
F-4	Assembly (restaurants, etc.)	1
G	Education	1
H-1	Institutional (restrained)	1
H-2	Institutional (incapacitated)	1
J-1	Residential (hotels, etc.)	1
J-2	Residential (apartment houses, etc.)	1
J-3	Residential (one-and-two-family dwellings)	1
K	Miscellaneous	1

§[C26-301.2] 27-238 **Classification of spaces.**-Every space or room hereafter altered or erected shall, for the purposes of this code, be classified in one of the occupancy groups listed in Table 3-1 according to the occupancy or use of the space or room.

§[C26-301.3] 27-239 **Classification of buildings.**-Every building hereafter erected or altered under the provisions of section 27-115 of article four of subchapter one of this chapter shall, for the purposes of this code, be classified in one of the occupancy groups listed in table 3-1 according to the main use or dominant occupancy of the building. However, at the option of the applicant, subject to the approval of the commissioner, buildings may be classified in any other occupancy group, provided such occupancy group has a higher fire index, as listed in table 3-1, than the fire index of the occupancy group classification of the main use or dominant occupant.

§[C26-301.4] 27-240 **Separation of occupancies.**-Occupancies within buildings shall be separated from one another as follows:

a. Spaces classified in occupancy groups having a higher fire index, as listed in table 3-1, than the fire index of the occupancy group classification of the building, shall be separated from adjoining spaces by construction meeting the fire-resistance rating requirements for fire divisions under the provisions of subdivision (a) of section 27-339 of article five of subchapter five of this chapter. Such occupancies shall, for the purposes of this code, be classified and treated as separate buildings (hereinafter referred to as "building section").

b. Spaces classified in occupancy groups having the same or lower fire index, as listed in table 3-1, than the fire index of the occupancy group classification of the building, shall be separated from adjoining spaces by construction meeting the fire-resistance rating requirements for fire separations under the provisions of subdivision (b) of section 27-339 of article five of subchapter five of this chapter.

§[C26-301.5] 27-241 **Classification tables.**-Table 3-2 and reference standard RS 3-3 list representative

occupancies that shall be used as a basis for classifying buildings and spaces by occupancy.

§[C26-301.6] 27-242 Multiple occupancy or use.- When a building or space is used for multiple purposes, involving different activities at different times, the building or space shall be given a separate occupancy group classification for each of the activities involved. The design and construction of the building or space shall be in accordance with the most restrictive provisions of this code that apply to any of the occupancy group classifications utilized. However, a minor variation of any occupancy or use of a space from technical compliance with a particular space occupancy classification shall not be prohibited if such variation is normally associated with the occupancy classification and no specific danger or hazard is created.

ARTICLE 3 OCCUPANCY GROUP A-HIGH HAZARD

§[C26-302.1] 27-243 Classification.-Buildings and spaces shall be classified in the high hazard occupancy group when they are used for storing, manufacturing, or processing potentially-explosive products or materials, or highly-combustible or highly-flammable products or materials that are likely to burn with extreme rapidity. The high hazard group shall also include: uses that involve storing, processing, or handling any materials that produce explosive dust, or that result in the division of matter into fine particles subject to spontaneous ignition; uses that employ solids or substances that ignite or produce flammable gases on contact with water; and any other uses that constitute a high fire hazard because of the form, character, or volume of the materials involved.

(a) Typical material contents.-Acetylene gas and gases under pressure of fifteen psig or more and in quantities greater than twenty-five hundred cubic feet, including hydrogen, illuminating gas, natural gas, and all other gases subject to explosion; gas piping at pressure levels above fifteen psig regardless of the quantities of gas; celluloid and celluloid products; cotton batting; kerosene; fuel or other oils having a flash point under 200°F (tag closed cup), except five hundred fifty gallons or less in one- and two-family dwellings; refrigerating systems using high hazard refrigerants as defined in subchapter thirteen of this chapter, and except that in buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight the storage of tank trucks or other vehicles, approved by the fire commissioner for the transportation of products having a flash point of over 100°F (tag open cup), and where the product contained in the cargo space of the vehicles is pending delivery, shall only be considered to constitute a high hazard occupancy when the product is stored in quantities greater than forty-five thousand gallons.

**As enacted but “°F” probably intended.*

(b) Typical occupant activities.- **Artificial flower and synthetic leather manufacture; ammunition, explosives, and fireworks manufacture, sales or storage; dry cleaning or dyeing; using or storing gasoline or other combustible solvents as outlined in article six of subchapter seven of this chapter; feather renovating; fruit ripening processes; hydrogenation processes; match manufacture or storage; metal enamelling or japanning; paint and varnish manufacture; paint spraying or dipping, as specified in article three of subchapter seven of this chapter; derivation of petroleum products by application of heat; processing of paper or cardboard in loose form; pyroxylin products manufacture and storage; rag sorting and storage; shoe polish manufacture; straw goods manufacture or broom corn storage; tar, pitch, or resin processing; waste paper sorting, shredding, storage, or baling; cotton waste processes.

***As enacted but “Artificial” probably intended.*

§[C26-302.2] 27-244 Location restrictions.-No space classified in the high hazard occupancy group shall be located above the second story of any building or building section classified in construction group II containing a space classified in occupancy group J-1 or J-2.

ARTICLE 4 OCCUPANCY GROUP B-STORAGE

§[C26-303.1] 27-245 Classification.-Buildings and spaces shall be classified in the storage occupancy group when they are used primarily for storing goods. When the goods stored are highly combustible, flammable, or potentially explosive, the building or space shall meet the requirements for high hazard occupancies when the latter are more restrictive than the corresponding requirements for the storage classification. The storage occupancy group consists of sub groups B-1 and B-2.

§[C26-303.2] 27-246 Occupancy group B-1.-Shall include buildings and spaces used for storing any flammable or combustible materials that is likely to permit the development and propagation of fire with moderate rapidity.

(a) Typical material contents: bags (cloth, burlap, and paper); bamboo and rattan; baskets; belting (canvas and leather); books and paper in rolls or packs; buttons, including cloth-covered, pearl, or bone; boots and shoes; cardboard and cardboard boxes; wearing apparel; cordage; furniture; furs; glue, mucilage, paste, and size; horn and combs other than celluloid; leather enamelling or japanning; linoleum; livestock; lumber; photo-engraving supplies; silk; soap; sugar; tobacco; cigars, cigarettes, and snuff; upholstery and mattresses; wax candles.

***TABLE 3-2 TYPICAL OCCUPANCIES
FOR OCCUPANCY CLASSIFICATION**

Occupancy Group	Designation	Representative Occupancies
HIGH HAZARD	A	Paint shop and storerooms; industrial smoke houses; grain elevators; tanneries with enamelling or japanning; distilleries; sugar, starch, cereal, feed, flour, and grist mills; any space containing gas distribution piping at pressure levels above fifteen psig
STORAGE	B-1	Warehouses; storerooms; freight depots; stables; coal pockets; group 1 public garages**
	B-2	Warehouses; storerooms; private garages; green houses; group 2 public garages**
MERCANTILE	C	Retail stores; shops; sales rooms; markets
INDUSTRIAL	D-1	Baking plants; breweries; automotive repair shops; †foundries; heliports; scenery shops
	D-2	Mechanical and electrical equipment rooms; power plants, and boiler and furnace rooms, except those containing gas distribution piping at pressure levels above fifteen psig; commercial laundries; vocational training shops; laboratories; nonresidential kitchens
BUSINESS	E	Office buildings; banks; civic administration buildings; radio and television stations not classified as places of assembly or as equipment rooms; telephone exchanges; barber and beauty shops; automotive service stations; neighborhood family care centers; medical offices or group medical centers
[ASSEMBLY	F-1a	Theaters; playhouses; opera houses]***
	F-1b	Churches; lecture halls; court rooms; convention halls; concert halls; sports arenas; planetariums; motion picture theaters
	F-2	Grandstands; bleachers; stadiums; drive-in theaters; amusement attractions and devices; bandstands; skating rinks
	F-3	Exhibition halls; galleries; gymnasiums; museums; passenger terminals; bowling alleys; billiard parlors; skating rinks
	F-4	Restaurants; night clubs; cabarets; dance halls; ballrooms; banquet rooms; cafeterias; snack bars; taverns; coffee houses
EDUCATIONAL	G	Schools; academies; universities; libraries
INSTITUTIONAL	H-1	Jails; prisons; reformatories; mental institutions
	H-2	Hospitals; sanitariums; clinics; nursing homes; orphanages; homes for the aged; day nurseries
RESIDENTIAL	J-1	Hotels; motels; lodging houses; rooming houses
	J-2	Apartment houses; apartment hotels; school dormitory buildings
	J-3	One-family and two-family dwellings; rectories; convents; [group homes]***
MISCELLANEOUS	K	Sheds; fences; signs

**This list of occupancies is representative only and is not complete.
See reference standard RS 3-3 for additional listings.
**See article ten of subchapter seven of this chapter.*

****Copy in brackets not enacted but probably intended.*

†As enacted but "foundries" probably intended.

§[C26-303.3] **27-247 Occupancy group B-2.**-Shall include buildings and spaces used for storing noncombustible materials and materials that do not ordinarily burn rapidly.

**ARTICLE 5 OCCUPANCY GROUP C -
MERCANTILE**

§[C26-304.1] **27-248 Classification.**-Buildings and spaces shall be classified in the mercantile occupancy group when they are used for display and sales of goods accessible to public inspection. Highly combustible or flammable goods, such as those made of pyroxylin products, shall be limited to small quantities that do not constitute a high hazard; if not so limited, the occupancy shall meet the requirements for high hazard occupancies when the latter are more restrictive than the corresponding requirements for the mercantile classification.

**ARTICLE 6 OCCUPANCY GROUP D-
INDUSTRIAL**

§[C26-305.1] **27-249 Classification.**-Buildings and spaces shall be classified in the industrial occupancy group when they are used for fabricating, assembling, manufacturing, or processing products, materials, or energy, except that when any products or materials, or other products or materials used in their manufacture are highly combustible, flammable, or explosive, the occupancy shall meet the requirements for high hazard occupancies when the latter are more restrictive than the corresponding requirements for the industrial classification. The industrial occupancy group consists of sub groups D-1 and D-2.

§[C26-305.2] **27-250 Occupancy group D-1.**-Shall include buildings and spaces in which the fabrication, assembly, manufacturing, or processing represents a moderate fire hazard due to the extent and nature of such operations, or to the materials involved.

(a) Typical occupant activities-Canning, including food products and condensed and powdered milk manufacturer; dry cleaning or dyeing using or storing solvents having a flash point between 100°F and 138.2°F (Tag closed-cup); electrolytic processes; glass manufacture, leather tanning and treating, excluding enamelling or japanning; sugar refining; textile milling, including canvas, cotton, cloth, bagging, burlap, carpets, and rugs; upholstering; woodworking; cotton dressmaking; and manufacturing or processing materials such as those outlined in subdivision (a) of section 27-246 of article four of this subchapter.

§[C26-305.3] **27-251 Occupancy group D-2.**-This group shall include buildings and spaces in which the

fabrication, assembly, manufacturing, or processing represents a low fire hazard.

§[C26-305.4] **27-252 Location restrictions.**-No space classified in the industrial group D shall be located above the second story of any building or building section classified in construction group II containing a space classified in occupancy group J-1 or J-2.

ARTICLE 7 OCCUPANCY GROUP E-BUSINESS

§[C26-306.1] **27-253 Classification.**-Buildings and spaces shall be classified in the business occupancy group when they are occupied for transacting business; for rendering professional services; or for performing other commercial services that may incidentally involve the storage of limited quantities of stocks of goods for office use or purposes. Buildings and spaces used for prosecuting public or civic services shall also be classified in this group.

**ARTICLE 8 OCCUPANCY GROUP F-
ASSEMBLY**

*§[C26-307.1] **27-254 Classification.**-Buildings and spaces exclusive of dwelling units shall be classified in the assembly occupancy group when they are designed for use by any number of persons for religious, recreational, political or social purposes, or for the consumption of food or drink or for similar group activities; or when occupied by seventy-five people or more for educational purposes. When such occupancies are enclosed and contain or are designed for use by seventy-five or more persons or are outdoor spaces and contain or are designed for use by two hundred or more persons, they shall comply with the requirements of subchapter eight of this chapter for places of assembly.

**Local Law 23-1990.*

§[C26-307.2] **27-255 Occupancy group F-1.**-Shall include those buildings and spaces in which, during the major period of occupancy, the persons assembled comprise a seated or otherwise passive audience to a performance or presentation, and have their attention focused in a common direction or at a common subject. Occupancy group F-1 consists of two subdivisions F-1a and F-1b.

(a) Occupancy group F-1a.-Includes buildings and spaces in which scenery and scenic elements are used.

(b) Occupancy group F-1b.-Includes buildings and spaces in which scenery and scenic elements are not used.

§[C26-307.3] **27-256 Occupancy group F-2.**-Shall include all outdoor structures and spaces.

§[C26-307.4] **27-257 Occupancy group F-3.**-Shall include buildings and spaces in which the persons assembled are physically active and do not have a common center of attention.

§[C26-307.5] **27-258 Occupancy group F-4.**-Shall include buildings and spaces in which persons assemble for dancing or for the consumption of food or drink, or for any combination of dancing, eating, drinking, or entertainment.

ARTICLE 9 OCCUPANCY GROUP G- EDUCATIONAL

§[C26-308.1] **27-259 Classification.**-Buildings, building sections and spaces shall be classified in the educational occupancy group when persons occupy them for instruction or other educational purposes except those spaces occupied as a place of assembly. These spaces shall be classified in occupancy group F-assembly, under the provisions of article eight of this subchapter. Such buildings, building sections and spaces occupied for instruction and used exclusively by adults may be classified, by the commissioner in occupancy group E-business and if so classified such buildings, building sections and spaces shall comply with the requirements for such classification.

ARTICLE 10 OCCUPANCY GROUP H- INSTITUTIONAL

§[C26-309.1] **27-260 Classification.**-Buildings and spaces shall be classified in the institutional occupancy group when persons suffering from physical limitations because of health or age are harbored therein for care or treatment; when persons are detained therein for penal or correctional purposes; or when the liberty of the inmates is restricted. The institutional occupancy group consists of sub groups H-1 and H-2.

§[C26-309.2] **27-261 Occupancy group H-1.**-Shall include buildings and spaces used for the detention of persons under restraint.

§[C26-309.3] **27-262 Occupancy group H-2.**-Shall include buildings and spaces used for the care or treatment of persons with physical limitations because of health or age. This shall not include medical or dental offices providing services to ambulatory non-hospitalized persons, such as neighborhood family care centers, medical or dental offices, group medical offices, and the like.

ARTICLE 11 OCCUPANCY GROUP J- RESIDENTIAL

§[C26-310.1] **27-263 Classification.**-Buildings and spaces shall be classified in the residential occupancy group when families or households dwell therein, or when sleeping accommodations, with or without dining facilities, are provided therein for individuals. Excluded from this group are those buildings and spaces classified under the institutional occupancy group. The residential occupancy consists of sub groups J-1, J-2, and J-3.

§[C26-310.2] **27-264 Occupancy group J-1.**-Shall include buildings and spaces that are primarily occupied for the shelter and sleeping accommodation of individuals on a day-to-day or week-to-week basis.

§[C26-310.3] **27-265 Occupancy group J-2.**-Shall include buildings with three or more dwelling units that are primarily occupied for the shelter and sleeping accommodation of individuals on a month-to-month or longer-term basis.

§[C26-310.4] **27-266 Occupancy group J-3.**-Shall include buildings occupied as one-family or two-family dwellings, or as convents or rectories.

ARTICLE 12 OCCUPANCY GROUP K- MISCELLANEOUS

§[C26-311.1] **27-267 Classification.**-Structures of a temporary character, and minor occupancies not classified in any other specific occupancy group, shall be classified in the miscellaneous occupancy group. Such structures and occupancies shall be constructed, equipped, and maintained to meet the requirements of this code commensurate with the fire and life hazard incidental to their use. The miscellaneous occupancy group includes all accessory structures such as sheds, fences, and similar constructions.

ARTICLE 13 DOUBTFUL OCCUPANCIES

§[C26-312.1] **27-268 Classification.**-When a building or space is used for an occupancy not specifically provided for in this code, or when its classification is otherwise uncertain, such building or space shall be included in the occupancy group that it most nearly resembles with respect to the existing or proposed life and fire hazard, and it shall be so

classified by the architect or engineer subject to the approval of the commissioner.

ARTICLE 14 CONSTRUCTION CLASSIFICATIONS

§[C26-313.1] 27-269 **Construction classes.**-Table 3-3 lists construction classes that shall be established for classifying buildings and spaces by construction in accordance with the provisions of articles fifteen, sixteen and seventeen of this subchapter.

TABLE 3-3 CONSTRUCTION CLASSES

Construction Group	Class
I-Noncombustible	I-A— (4-hr. protected)
	I-B— (3-hr. protected)
	I-C— (2-hr. protected)
	I-D— (1-hr. protected)
	I-E— (unprotected)
II-Combustible	II-A— (heavy timber)
	II-B— (protected wood joist)
	II-C— (unprotected wood joist)
	II-D— (protected wood frame)
	II-E— (unprotected wood frame)

§[C26-313.2] 27-270 **Classification of buildings and spaces.**-Every building, room, or space hereafter altered or erected shall, for the purposes of this code be classified in one of the construction classes listed in table 3-3.

§[C26-313.3] 27-271 **Classification table.**-The fire-resistance ratings of construction elements in hours listed in table 3-4 shall be used as a basis for classifying buildings and spaces by construction. Fire-resistance ratings shall be based on the test procedures of reference standard RS 3-1 and shall apply to all occupancy groups except as specifically noted. For hazardous occupancies involving an exceptionally high degree of fire risk or an exceptionally high concentration of combustible or flammable contents, the commissioner may increase the requirements of table 3-4.

§[C26-313.4] 27-272 **False designation.**-No building or space shall be designated a given construction class unless it conforms to the minimum requirements for that class; and no building or space shall be posted, used, designated, or advertised as of a given construction class unless it complies with the minimum requirements of this code for that class.

§[C26-313.5] 27-273 **Minimum requirements.**-When a class of construction is utilized which is superior to that required for any particular use, nothing in this code shall be construed to require full compliance with the requirements for the higher class; the designated construction classification of the building or space shall be that of the lesser classification, unless all of the requirements for the higher class are met.

ARTICLE 15 CONSTRUCTION GROUP I- NONCOMBUSTIBLE

§[C26-314.1] 27-274 **Classification.**-Buildings or spaces in noncombustible construction group I are those in which the walls, exitways, shafts, structural members, floors, and roofs are constructed of noncombustible materials and assemblies affording the fire-resistance ratings specified in table 3-4. The noncombustible construction group I consists of classes I-A, I-B, I-C, I-D, and I-E.

§[C26-314.2] 27-275 **Construction class I-A.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of four-hour fire-resistance rating.

§[C26-314.3] 27-276 **Construction class I-B.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of three-hour fire-resistance rating.

§[C26-314.4] 27-277 **Construction class I-C.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of two-hour fire-resistance rating.


§[C26-314.5] 27-278 **Construction class I-D.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of one-hour fire-resistance rating.

§[C26-314.6] 27-279 **Construction class I-E.**-Includes buildings and spaces in which the bearing walls and other major structural elements generally have no fire-resistance rating.

ARTICLE 16 CONSTRUCTION GROUP II- COMBUSTIBLE

§[C26-315.1] 27-280 **Classification.** - Buildings and spaces in combustible construction group II are those in which the walls, partitions, structural members, floors, and roofs are constructed wholly or partly of combustible materials affording the required degree of fire-resistance specified in table 3-4. The combustible construction group II consists of classes II-A, II-B, II-C, II-D, and II-E.

TABLE 3-4

†TABLE 3-4 CONSTRUCTION CLASSIFICATIONS	CONSTRUCTION ELEMENT		CLASS I-A		CLASS I-B		CLASS I-C		CLASS I-D		CLASS I-E	
			Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g
CONSTRUCTION GROUP 1 NONCOMBUSTIBLE	Exterior Walls with an Exterior Separation of	3'-0" or less	Bearing	4	N.P.	3	N.P.	2	N.P.	2	2	N.P.
			Non-bearing ^f	2		2		2		2	2	
		More than 3'-0" but less than 15'-0"	Bearing	4	3 1/3 %	3	3 1/3 %	2	3 1/3 %	2	3 1/3 %	2
			Non-bearing ^f	2	protected	2	protected	2	protected	2	protected	2
		15'-0" or more but less than 30'-0"	Bearing	4	3 1/3 %	3	3 1/3 %	2	3 1/3 %	1	3 1/3 %	0
			Non-bearing ^f	1½		1½		1		1		0
		30'-0" or more	Bearing	4	N.L.	3	N.L.	2	N.L.	1	N.L.	0
			Non-bearing ^f	0		0		0		0		0
		Interior bearing walls and bearing partitions.		4		3		2		1		0 ^{g,i}
		†† Enclosure of vertical exits ^e , exit passageways, hoistways ^m and shafts.		2		2		2		2		2
Required fire-resistance ratings of construction elements in hours, based on the test procedures of reference standard RS 3-1.	Fire divisions and fire separations.		See Article 5									
	Columns ^k , girders, trusses (other than roof trusses) and framing.	Supporting one floor	3		2		1½		1		0 ^{g,i}	
		Supporting more than one floor ^l	4		3		2		1		0 ^{g,i}	
	Structural members supporting a wall.		Same as required fire resistance of wall supported, but not less than rating required for member by the class of construction.									
	Floor construction including beams.		3		2		1½		1		0 ^{g,i}	
	Roof construction, including beams, trusses and framing, including arches, domes, shells, cable supported roofs and roof decks ^h .	15'-0" or less in ht. above floor to lowest member	2		1½		1 ⁱ		1 ⁱ		0 ^{g,i}	
		15'-0" to 20'-0" in ht. above floor to lowest member	2 ^{c,i} or 1 ^{d,i}		1½ ^{c,i} or 1 ^{d,i}		1 ⁱ		1 ⁱ		0 ^{g,i}	
		20'-0" or more in ht. above floor to lowest member	2 ^{c,i} or 0 ^{d,g,i}		1½ ^{c,i} or 0 ^{d,g,i}		1 ^{c,i} or 0 ^{d,g,i}		1 ^{c,i} or 0 ^{d,g,i}		0 ^{g,i}	
	Key:											
	N.P.—Not permitted N.L.—No limit											
	 Noncombustible Materials											

Notes:

^a. The area of openings permitted in exterior walls at any story shall be obtained by multiplying the percentage shown in the table by the exterior separation distance in feet, and then multiplying that product by the square-foot area of the façade of that story. Requirements for protected exterior openings shall not apply to churches. [Protected openings within an exterior separation of 3 ft. 0 inch or less are permitted for buildings classified in Occupancy Groups J-2 and J-3 provided, however said openings do not exceed in total area 10% of the façade of the story in which they are located. The openings however, may not be credited towards meeting any of the mandatory natural light or ventilation requirements of Art. 12* Protection of openings with an exterior separation of 3 ft. to 30 ft. shall not be required for J2 and J3 occupancy groups.]** or to buildings classified in occupancy groups J-2 and J-3*** See section 27-331 of article four of subchapter five of this chapter for additional requirements for exterior walls and exterior wall openings.

^b. Upon special application, the commissioner may permit exterior wall openings to be constructed in excess of the permitted area established by table 3-4 if such openings at the time of their construction are

located at least sixty feet in a direct line from any neighboring building except as otherwise permitted by footnote f. Such additional openings may not, however, be credited toward meeting any of the mandatory natural light or ventilation requirements of subchapter twelve of chapter on of this title. If any neighboring building is later altered or constructed to come within the above distance limitation, the affected exterior openings shall immediately be closed with construction meeting the fire-resistance rating requirements for exterior wall construction of the building in which they are located.

^c. Applies to occupancy groups A,B-1,B-2, and D-1.

^d. Applies to all occupancy groups other than those described in footnote c.

***Now Subchapter 12.**

****Copy in brackets not enacted but probably intended.**

*****Copy from closing brackets to these asterisks enacted but probably intended to be omitted.**

†Local Law 77-1988.

†† Local Law 26-2004.

TABLE 3-4 (continued)

TABLE 3-4 (continued)														
†TABLE 3-4 CONSTRUCTION CLASSIFICATIONS (continued) CONSTRUCTION GROUP II COMBUSTIBLE Required fire-resistance ratings of construction elements in hours, based on the test procedures of reference standard RS 3-1. Key: N.P.—Not permitted N.L.—No limit <div><div></div> Noncombustible Materials</div>	CONSTRUCTION ELEMENT			CLASS II-A		CLASS II-B		CLASS II-C		CLASS II-D		CLASS II-E		
				Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	Rating in Hrs.	Ext. ^{a,b} Open'g	
	Exterior Walls with an Exterior Separation of	3'-0" or less	Bearing	2	N.P.	2	N.P.	2	N.P.	2	N.P.	2	N.P.	
			Non-bearing ^f	2		2		2		2				
		More than 3'-0" but less than 15'-0"	Bearing	2	3 1/3 % protected	2	3 1/3 % protected	2	3 1/3 % protected	1	6 2/3 %	1	6 2/3 %	
			Non-bearing ^f	2	2	2	2	1	1					
		15'-0" or more but less than 30'-0"	Bearing	2	3 1/3 %	2	3 1/3 %	2	3 1/3 %	1	N.L.	0	N.L.	
			Non-bearing ^f	2		2		2		1		0		
		30'-0" or more	Bearing	1	N.L.	1½	N.L.	1½	N.L.	1		0		
			Non-bearing ^f	0		0		0		0		0		
		Interior bearing walls and bearing partitions.			2		1		0		1		0	
		††Enclosure of vertical exits ^e , exit passageways, hoistways ^m and shafts.			2		2		1 ¹		1 ¹		1	
		Fire divisions and fire separations.			See Article 5									
	Columns ^k , girders, trusses (other than roof trusses) and framing.	Supporting one floor	see section 27-623		1		0 or 1 ^j		1		0			
		Supporting more than one floor	see section 27-623		1		0 or 1 ^j		1		0			
	Structural members supporting a wall.			Same as required fire resistance of wall supported, but not less than rating required for member by the class of construction.										
	Floor construction including beams.			see section 27-623		1		0 or 1 ^j		1		0		
	Roof construction including beams, trusses and framing, including arches, domes, shells, cable supported roofs and roof decks ^h .	15'-0" or less in ht. above floor to lowest member	see section 27-623		¾		0		¾		0			
		15'-0" to 20'-0" in ht. above floor to lowest member	see section 27-623		¾		0		¾		0			
		20'-0" or more in ht. above floor to lowest member	see section 27-623		¾		0		¾		0			

††^e See subdivision (i) of section 27-375 of article five of subchapter six of this chapter for additional impact resistance requirements applicable to certain stair enclosures and for certain exceptions to stair enclosure requirements.

^f When two or more buildings are constructed on the same lot, and the combined floor area of the buildings does not exceed the limits established by tables 4-1 and 4-2 for any one of the buildings, no fire-resistance rating shall be required for nonbearing portions of the exterior walls of those buildings facing each other, and there shall be no limitation on the permitted amount of exterior openings.

^g Fire retardant treated wood complying with the requirements of section 27-328 of article three of subchapter five of this chapter may be used.

^h Tabulated ratings apply to buildings over one story in height. In one story buildings roof construction may be of material having 0 hour fire-resistance rating.

ⁱ Materials which are not noncombustible, as defined in subchapter two of chapter one of this title, may be used in nonbearing construction elements if they fall into one of the following categories:

1. Materials having a structural base of noncombustible materials as defined in subchapter two, and having a surface not over one-eighth inch thick which when tested in accordance with the provisions of reference standard RS 3-2 has a flame spread rating not higher than fifty.

2. Materials which when tested in accordance with the provisions of reference standard RS 3-2 have a surface flame spread rating not higher than twenty-five without evidence of continued progressive combustion, and which are of such composition that surfaces which would be exposed by cutting through the material in any way would not have a flame spread rating higher than twenty-five without evidence of continued progressive combustion.

Notes for Table 3-4 (continued)

j. Applies to the construction of the street floor and all construction below the level of the street floor in building or spaces classified in occupancy group J-2 except where the space below the street floor does not exceed five feet in height.

k. Columns supporting the roof of a one-story building shall have the same fire-resistance rating as required for a column supporting one floor in a building of the same construction class.

l. Members supporting loads of not more than two floors or one floor and a roof need not have a fire-resistance rating greater than the floor construction fire-resistance requirement in buildings classified in occupancy groups G, H, and J-2, not including unsprinklered spaces of other occupancies, and in fully sprinklered buildings in occupancy groups E and J-1.

††m. See subdivision (c) of section 27-987 of article one of subchapter eighteen of this chapter for additional impact resistance requirements applicable to certain elevator enclosures.

†† **Local Law 26-2004.**

§[C26-315.2] 27-281 Construction class II-A.-

Includes heavy timber construction in which fire-resistance is attained by limiting the minimum sizes of wood structural members and the minimum thickness and composition of wood floors and roofs; by avoiding concealed spaces under floors and roofs or by providing fire-stopping protection for these spaces; and by using fastenings, construction details, and adhesives for structural members as required by article seven of subchapter ten of this chapter. The minimum dimensions for framing members shall be prescribed in section 27-623 of article seven of subchapter ten of this chapter, except that members which are protected to provide a fire-resistance rating of at least one hour need not comply with this requirement.

§[C26-315.3] 27-282 Construction class II-B.-

Includes buildings and spaces in which the exterior walls, fire walls, exitways, and shaft enclosures are of noncombustible materials having the required fire-resistance ratings; and in which the floors, roofs, and interior framing are wholly or partly of wood of smaller dimensions than required for class II-A construction, or are of other combustible or noncombustible materials, having the required fire-resistance ratings.

§[C26-315.4] 27-283 Construction class II-C.-

Includes buildings and spaces in which the exterior walls, fire walls, exitways, and shaft enclosures are of noncombustible materials having the required fire-resistance ratings; and in which the floors, roofs, and interior framing are wholly or partly of wood of smaller dimensions than required for class II-A construction, or are of other combustible or noncombustible materials having no fire-resistance ratings.

§[C26-315.5] 27-284 Construction class II-D.-

Includes buildings and spaces in which the exterior walls, bearing walls, floors, roofs, and interior framing are generally of wood or other combustible materials having the required fire-resistance ratings.

§[C26-315.6] 27-285 Construction class II-E.-

Includes buildings and spaces in which the exterior walls are generally of wood or other combustible materials having the required fire-resistance ratings, and in which the bearing walls, floors, roofs, and interior framing are of wood or other combustible materials, generally having no fire-resistance ratings.

ARTICLE 17 MIXED CONSTRUCTION

§[C26-316.1] 27-286 Classification.-When two or more classes of construction occur within the same building, the entire building shall be subject to the most restrictive occupancy and size limitations for the classes of construction involved. However, if the occupancies within the different classes of construction are completely separated by construction that meets the fire-resistance rating requirements for fire divisions listed in table 5-2 then each occupancy so separated may, for the purposes of this code, be considered as a separate building ("building section").

§[C26-316.2] 27-287 Restrictions.-In buildings of mixed construction, no structural element shall be supported by construction having a lower fire-resistance rating than that required for the element being supported.



SUBCHAPTER 4 BUILDING LIMITATIONS

TABLE OF CONTENTS

[Sub-Art. Or Sec.]*	Art. Or Sec.**		[404.0]	Art. 5	Limitations Outside the Fire Districts
[400.0]	Art.1	General			
[400.1]	288	Scope	[404.1]	299	Limitations
[400.2]	289	Standards	[404.2]	300	Additions to Existing Buildings
[400.3]	290	Definitions	[405.0]	Art. 6	Area Limitations
[401.0]	Art. 2	Building Access	[405.1]	301	Area Limitations of Buildings
	Sub-Art. 1	Fire Department Access	[405.2]	302	Area limitations of Spaces
[401.1]	291	Frontage	[405.3]	303	Frontage Increase
[401.2]	292	Building Access	[405.4]	304	Existing Excessive Area
	Sub-Art. 2	Facilities for People Having Physical Disabilities	[406.0]	Art. 7	Height Limitations
	292.1	Scope	[406.1]	305	Height Limitations of Buildings
	292.2	Standards	[406.2]	306	Measurement
	292.3	Definitions	[407.0]	Art. 8	General Projection Limitations
	292.4	General Requirements	[407.1]	307	Permissible Projections Beyond the Street Line
	292.5	Accessibility	[407.2]	308	Ramps
	292.6	Waiver of Requirements	[407.3]	309	Special Restrictions
	292.7	Special Requirements of Other City Departments	[407.4]	310	Projections Removable
	292.8	Adaptable Dwelling Units	[407.5]	311	Permission Revocable
	292.9	Usable Dwelling Units	[407.6]	312	Existing Projections
	292.10	Usable Spaces	[408.0]	Art. 9	Permissible Projections Beyond Street Lines
	292.11	Assembly Spaces	[408.1]	313	Projections Above Grade
	292.12	Public Toilet Rooms	[408.2]	314	Projections Below Grade
	292.13	Drinking Fountains	[408.3]	315	Restrictions on Construction and Projections on Certain Streets, Parkways, Boardwalks and Beaches
	292.14	Public Telephones	[409.0]	Art. 10	General Limitations on Occupancy and Construction Within Special Flood Hazard Areas
	292.15	Alarms	[409.1]	316	Permit Restrictions
	292.16	Controls and Operating Mechanisms		316.1	Permit Application Contents
	292.17	Tactile Warnings	[409.2]	317	Occupancy and Construction Restrictions
	292.18	Signage	[409.3]	317.01	Definitions for Special Flood Hazard Areas
	292.19	Parking Spaces	[409.4]	317.02	Exceptions within Special Flood Hazard Areas
	292.20	Passenger Loading Zones			
[402.0]	Art. 3	Fire Districts			
[402.1]	293	Inside Fire Districts			
[402.2]	294	Outside Fire Districts			
[402.3]	295	Mixed Districts			
[403.0]	Art.4	Limitations Inside the Fire Districts			
[403.1]	296	Limitations			
[403.2]	297	Exemptions			
[403.3]	298	Additions to Existing Buildings			

*"C26" omitted from section numbers in this column.

**"27" omitted from section numbers in this column.

LIST OF TABLES

Table No.

- 4-1 Area and Height Limitations for Unsprinklered Buildings and Spaces.
4-2 Area and Height Limitations for Sprinklered Buildings and Spaces.

ARTICLE 1 GENERAL

§[C26-400.1] **27-288 Scope.** - The provisions of this article establish building access requirements; shall regulate the division of the city of New York into fire districts and control the occupancy groups and construction classes permitted therein; shall regulate permissible building areas, height and projections beyond the street line and shall establish special flood hazard areas and a regulatory flood datum in the city of New York and regulate permissible occupancies and construction or other improvement below such flood datum within such flood hazard areas.

§[C26-400.2] **27-289 Standards.** - The provisions of reference standard RS-4 shall be a part of this subchapter.

§[C26-400.3] **27-290 Definitions.** - For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

* ARTICLE 2 BUILDING ACCESS SUBARTICLE 1 FIRE DEPARTMENT ACCESS

§[C26-401.1] **27-291 Frontage.** - Every building, exclusive of accessory buildings, shall have at least eight per cent of the total perimeter of the building fronting directly upon a street or frontage space. For the purposes of this section, building perimeter shall be measured at that story having the maximum enclosed floor area.

§[C26-401.2] **27-292 Building access.** - Provisions shall be made for access by the fire department to every building as follows:

(a) **Above grade.** - Access shall be provided directly from the outdoors to each story below a height of one hundred feet except to the first story or ground floor, by at least one window or readily identifiable access panel within each fifty feet or fraction thereof of horizontal length of every wall that fronts on a street or frontage space. Windows shall be openable or breakable from both the inside and the outside, and shall have a size when open of at least twenty-four inches by thirty-six inches. Panels shall be openable from both the inside and outside and shall have a height when open of forty-eight inches and a width of at least thirty-two inches. The sill of the window or panel shall not be higher than thirty-six inches above the inside floor.

(b) **Below grade.** - Access shall be provided directly from the outdoors to the first basement or cellar story below grade, except as provided in paragraphs two, three and four of this subdivision, within each one hundred feet or fraction thereof of horizontal length of every wall that fronts on a street or frontage space. Such access shall be by stairs, doors, windows or other

means that provide an opening forty-eight inches high and thirty-two inches wide, the sill of which shall not be higher than thirty-six inches above the inside floor. If an areaway is used to provide below grade access, the minimum horizontal dimension shall be at least one-third the depth of the areaway or six feet whichever is less.

(1) Access to additional stories below grade is not mandatory since they are required to be sprinklered as provided in subdivision k of section 27-954 of article four of subchapter seventeen of this chapter.

(2) One- and two-family dwellings need not provide direct access.

(3) Any building classified in occupancy group J-2 not more than three stories in height and with not more than two dwelling units on any story need not provide direct access when such first basement or cellar story is used for dwelling units or for uses accessory to the residential use in the building.

(4) Except as provided in paragraph three of this subdivision, for buildings classified in occupancy group J-1 or J-2 only one direct access from the outdoors to the first basement or cellar story consisting of a stair or door shall be required when such story is used for dwelling units or for uses accessory to the residential use in the building.

(c) **Signs.** - Where wall signs are erected to cover doors or windows of existing buildings, access panels shall be provided as necessary to comply with the requirements of subdivisions (a) and (b) of this section.

(d) **Location.** - Wherever practicable, one access opening in each story shall provide access to a stairway, or where there is no stairway at the exterior wall, one access opening in each story shall be located as close as practicable to a stairway.

(e) **Exemptions.** - The provisions of subdivisions (a) through (d) of this section shall not apply to any story that is completely protected by an automatic sprinkler system conforming to the construction requirements of subchapter seventeen.

**Local Law 58-1987.*

*SUBARTICLE 2 FACILITIES FOR PEOPLE HAVING PHYSICAL DISABILITIES

§27-292.1 **Scope.** - As set forth in this subarticle, buildings shall be provided with accessible routes, usable or adaptable space and accessible elements and facilities to make buildings accessible and usable by, and to establish a safe environment for, all categories of people having physical disabilities.

§27-292.2 **Standards.** - The pertinent provisions of reference standard RS 4-6 shall be part of this subarticle.

§27-292.3 **Definitions.** - For definitions to be used in

the interpretation of this subarticle, see section 27-232 and reference standard RS 4-6.

§27-292.4 General Requirements. -

(a) This subarticle shall apply to all buildings or portions thereof and their accessory areas, except as specified in this subarticle.

(b) The provisions of this subarticle shall be supplemental to and take precedence over less restrictive provisions of this code in the following articles and sections and in their referenced national standards:

(1) Subchapter four, building limitations

a. §27-308 ramps

(2) Subchapter six, means of egress

a. §27-357 (d) building access

b. §27-371 (e) door opening width

c. §27-377 ramps

(3) Subchapter seven, special uses and occupancies

a. Article ten, public garages

b. Article eleven, open parking structures

c. Article thirteen, open parking lots

d. Article fifteen, swimming pools

(4) Subchapter eight, places of assembly

a. §27-531 Seating in assembly spaces

(5) Subchapter sixteen, plumbing and gas piping

a. Reference standard RS-16, paragraph (c) of section P104.1 Facilities for physically handicapped

b. Reference standard RS-16, paragraph (d) of section P104.1 accessibility

(6) Subchapter seventeen, fire alarm, detection and extinguishing equipment

c. Article six, smoke detecting devices

(7) Subchapter eighteen, elevators and conveyors

a. Reference standard RS 18-1

(c) Facilities in existence on the effective date of this subarticle which comply with the requirements of this subarticle or of other provisions of this code relating to the provision of facilities for people with physical disabilities shall not be diminished to less than those which would be required were the building in which the facilities are located hereafter erected.

§27-292.5 Accessibility. -

(a) **Primary entrance(s).** - The primary entrance(s) for buildings shall be accessible, except for buildings classified in occupancy group A, J-3 and/or other spaces which normally are not frequented by the public or employees of the facility.

(b) **Exterior accessible route.** - Except as provided in this subarticle, buildings shall be provided with an exterior accessible route to permit entry at the primary entrance(s) of the building from the following locations:

(1) Public street or sidewalk

(2) Driveways

(3) Parking areas

(4) Passenger loading zones

(5) Transportation stops

(c) **Interior accessible route.** - Except as provided in this subarticle, in buildings having (an) interior route(s) to one or more of the following spaces or facilities, such route(s) shall be (an) interior accessible route(s) from the entrance(s) usable by all categories of people having physical disabilities to adaptable or usable dwelling units and other spaces and facilities on the same premises including but not limited to:

(1) Laundry rooms

(2) Refuse disposal locations

(3) Mailbox areas

(4) Recreational, assembly and tenants' meeting rooms

(5) Storage rooms

(6) Management offices

(7) Stores

(8) Dining areas

(9) Parking areas

Where the only route to one or more of such spaces or facilities is an exterior route, such route shall be accessible.

(d) **Path of travel.** - The path of travel in exterior and interior accessible routes shall provide unobstructed safe access and applicable items in such path of travel shall comply with the requirements set forth in reference standard RS 4-6.

(e) **Elevators.** - Where provided, all elevators shall comply with subchapter eighteen, reference standard RS 18-1, where an interior accessible route is required.

(f) **Assembly occupancies.** - For assembly occupancies having a mezzanine or balcony which provides a similar view as that from the main floor, accessibility to the mezzanine or balcony shall not be required provided toilet rooms are on the main floor.

(g) **Restaurants.** - For restaurants, dining rooms and similar occupancies having the same services on levels other than the main floor, accessibility to such levels shall not be required provided that toilet rooms are on the main floor.

(h) **Storage.** - For buildings in which the intended use is the storage of goods or merchandise, the only requirement shall be accessibility at the primary entrance and an interior accessible route to offices where business may be conducted.

(i) **Non-grade stories of small non-residential buildings.** - The following non-residential buildings or parts thereof are exempt from the provisions of this subarticle concerning requirements for people having physical disabilities, to the extent set forth in subdivisions (1) and (2) of this subsection:

(1) construction of such new buildings the total floor area of which is two thousand five hundred square feet or less;

(2) alterations to such building already existing where the alterations are being made to an above-grade story having a total floor area of two thousand five hundred

square feet or less or to a below-grade story having a total floor area of two thousand square feet or less. Notwithstanding the foregoing, floor areas frequented by the public for assembly, governmental, public utility or health facility purposes shall not be exempted unless equivalent functional accessible facilities are provided on the first story.

****(A)** Where the floor area is more than two thousand five hundred square feet but less than five thousand square feet, a vertical wheelchair lift enclosed in construction having the required fire-resistance rating and connecting not more than two contiguous levels is permitted in lieu of an accessible route as set forth in reference standard RS 4-6.

****(B)** Where the below-grade cumulative floor area is more than two thousand square feet but not more than five thousand square feet, a vertical wheelchair lift enclosed in construction having the required fire-resistance rating and connecting not more than two contiguous levels is permitted in lieu of an accessible route as set forth in reference standard RS 4-6.

****(j) and (k) enacted but (A) and (B) probably intended as subparts of §27-292.5(i)(2)**

***§27-292.6 Waiver of requirements.-**

(1) The commissioner may waive the requirements of this subarticle or of subdivision (d) of section 27-357 of this code for the alteration of existing buildings, and for any new building for which a formal application together with plans required by such application was filed with an agency of the city or with the battery park city authority prior to September first, nineteen hundred eighty-seven, when such application was required by law or regulation to be approved by such agency; provided, however, that such waiver would not significantly adversely affect provisions for health, safety and security and that equally safe and proper alternatives are prescribed and, further, that such waiver is based upon a specific finding that strict compliance with the requirement:

- (a) would create an undue economic burden; or
- (b) would not achieve its intended objective; or
- (c) would be physically or legally impossible; or
- (d) would be unnecessary in light of alternatives which insure the achievement of the intended objective or which, without a loss in the level of safety, achieve the intended objective more efficiently, effectively or economically; or
- (e) would entail a change so slight as to produce a negligible additional benefit consonant with the purposes of this code.

(2) Each application for a waiver under subdivision one of this section shall be made to the commissioner in writing, setting forth each requirement sought to be waived and the specific reason or reasons therefor. The commissioner shall determine, under all of the

circumstances presented by such application, which of such requirements may appropriately be waived. The commissioner shall render such determination in a writing, which shall set forth in detail, the commissioner's findings and conclusions with respect to each requirement sought to be waived. A copy of such written determination shall be forwarded to the applicant. Such written determination shall be filed with the department and shall be available for public inspection.

(3) The mayor's office for the handicapped or its successor agency shall be consulted by and shall advise the commissioner concerning each application for a waiver under this section.

**Local Law 65-1988.*

§27-292.7 Special requirements of other city departments. -

The commissioner upon good cause may waive the requirements of this subarticle for the construction of buildings or spaces, or for the alteration of existing buildings to meet the special requirements of other city departments in regard to any of the following:

- (a) Firehouses
- (b) Correctional facilities
- (c) Cargo handling facilities on the waterfront
- (d) Wholesale food markets

§27-292.8 Adaptable dwelling units. -

(a) General requirements.

(1) Adaptable dwelling units are units that contain habitable rooms, kitchens, kitchenettes and bathrooms in residential buildings other than in occupancy group J-3 which when constructed are on an accessible route (except as set forth in this subdivision) and are constructed and equipped as defined in section 27-232 and as set forth in this subarticle so that they can be converted to be used, with a minimum of structural change, by all categories of people having physical disabilities.

(2) Such units shall be provided with door widths and clear floor spaces for making dwelling units usable as set forth in reference standard RS 4-6 when occupied by people having physical disabilities.

(3) Interior access, floor surfaces, adaptable kitchens, adaptable kitchenettes and adaptable bathrooms in these dwelling units shall comply with the requirements set forth in reference standard RS 4-6.

(4) Where an adaptable dwelling unit occupies two or more stories within itself, accessibility shall only be required at the first story of such dwelling unit provided that:

- a. The second story is accessible from without; or that
- b. Equivalent accessible functional facilities are provided on the first story; or that
- c. The stair within the dwelling unit has a minimum width of three feet.

(b) Number of adaptable dwelling units. -

(1) All dwelling units in buildings with elevators shall

be adaptable unless usable dwelling units are provided in accordance with section 27-292.9.

(2) At least one but not less than twenty-five percent of the total number of dwelling units in buildings without an elevator, which have dwelling units on the ground floor and which contain three or more dwelling units, shall be adaptable, unless usable dwelling units are provided in accordance with section 27-292.9. Such adaptable dwelling unit(s) shall be located on the ground floor. Where determination by percentage results in a number containing a decimal of 0.5 or more, the next higher number shall be used, but such number shall not exceed the number of dwelling units actually proposed for the ground floor.

(c) Adaptable bathrooms, kitchens and kitchenettes.

- Adaptable bathrooms, kitchens and kitchenettes within adaptable dwelling units shall be constructed and equipped in accordance with requirements set forth in reference standard RS 4-6 with respect to the following:

Access doorway or opening

Clear floor space

Floor surface

Bathroom, kitchen and kitchenette facilities and controls capable of being made usable

Space and utilities for usable range, (or cooktop or oven), refrigerator/freezer, (dishwasher if provided).

Such items shall include water closet and toilet paper dispenser, lavatory and removable base cabinet, mirrors, medicine cabinet, bathtub and controls, bathtub and shower enclosure, reinforced areas for grab bars, clearance between opposing base cabinets, counter tops, appliances and walls, adjustable or replaceable sink and removable base cabinet, as well as storage cabinets, drawers and shelves.

(d) Washing machines and clothes dryers within adaptable dwelling units. - Where washing machines and clothes dryers are located within adaptable dwelling units, they shall comply with or be capable of being converted to the requirements set forth in reference standard RS 4-6.

(e) Emergency warning devices within adaptable dwelling units. - Emergency warning devices within adaptable dwelling units shall be capable of being converted to audible and visual indication as required and to conform to the requirements set forth in subchapter seventeen, article six, reference standard RS 17-11, reference standard RS 17-12 and reference standard RS 4-6.

§27-292.9 Usable dwelling units. -

(a) General requirements. -

(1) Usable dwelling units are units in residential buildings in other than occupancy group J-3 which are accessible, constructed and equipped, as defined in section 27-232 and as set forth in this subarticle, so as to be usable by people having physical disabilities. A

usable dwelling unit shall be established by conversion from an adaptable dwelling unit when the unit becomes occupied by a person having a physical disability.

(2) Access, storage, controls, windows, doors, floor surfaces, kitchens, kitchenettes and bathrooms, appliances and emergency warning devices in these units shall comply with the requirements set forth in reference standard RS 4-6.

(b) Number of usable dwelling units. (1) Hotels. - In lieu of the requirements of section 27-292.8 in buildings in occupancy group J-1 having ten or more units, not less than five percent of the total number of units shall be constructed as usable units. In all buildings in occupancy group J-1 there shall be available portable smoke detectors of both audible and visual design. The number of detectors available shall be three percent of the number of sleeping rooms with a minimum of one operational detector per building. Proprietors shall post conspicuously a sign at least three inches in height, at the main desk or other similar station, advising of the availability of such detectors. Such detectors shall have a flash frequency range of sixty to one hundred twenty flashes per minute; and, where the average illuminance with motion present is more than twenty lumens per square foot, the visible signaling appliance shall have an effective intensity rating between one hundred and one thousand candela. Hard wiring of audible/visual detectors into an existing central closed-circuit alarm system shall be permitted in lieu of such portable detectors. Where determination by percentage results in a number containing a decimal of 0.5 or more, the next higher number shall be used. Notwithstanding the foregoing, entrance doors to all dwelling units in occupancy group J-1 having ten or more units, and to all bathrooms in such units, shall be no less than thirty-two inches in width.

(2) Adult residential care facilities.- All units in adult residential care facilities shall be usable. "Adult residential care facility" shall mean a family type home for adults, a shelter for adults, a residence for adults, an enriched housing program or an adult home, which contains three or more dwelling units and which provides board and temporary or long-term residential care and services to adults who, though not requiring continual medical or nursing care, are by reason of physical or other limitations associated with age, physical or mental disabilities or other factors unable or substantially unable to live independently. Such facilities shall be considered to be within occupancy group J-2.

(c) Usable bathrooms, kitchens and kitchenettes. - Usable bathrooms, kitchens and kitchenettes within usable dwelling units shall be constructed and equipped in accordance with requirements set forth in reference standard RS 4-6 with respect to the following:

Access doorway or opening

Clear floor space

Floor surface

Bathroom, kitchen and kitchenette facilities and controls

Space and utilities for usable range, (or cooktop or oven), refrigerator/freezer, (dishwasher if provided).

Such items shall include usable water closet and toilet paper dispenser, lavatory and base cabinet, bathtub and controls, bathtub and shower enclosure, grab bars, clearance between opposing base cabinets, counter tops, appliances and walls, sink and base cabinet.

(d) Washing machines and clothes dryers within usable dwelling units. - Where washing machines and clothes dryers are located within usable dwelling units, they shall comply with or be capable of being converted to the requirements set forth in reference standard RS 4-6.

(e) Emergency warning devices within usable dwelling units. - Emergency warning devices within usable dwelling units shall be capable of being converted to audible and visual indication as required and to conform to the requirements set forth in subchapter seventeen, article six, reference standard RS 17-11, reference standard RS 17-12 and reference standard RS 4-6.

§27-292.10 Usable spaces. -

(a) Functional spaces and rooms.

(1) Except as otherwise provided in section 27-292.5, spaces and rooms intended for general public and occupant use shall be accessible and usable. Such spaces and rooms include but are not necessarily limited to the following:

Mercantile spaces

Industrial spaces

Business spaces

Assembly spaces

Educational spaces

Institutional spaces

Toilet rooms

Bathrooms, bathing facilities, shower rooms.

(2) Doors and floor surfaces in usable spaces shall comply with the requirements set forth in reference standard RS 4-6.

(3) Where seating, tables and/or work stations are provided in usable spaces, at least one and not less than five percent shall comply with the requirements set forth in reference standard RS 4-6.

(b) Toilet rooms. -

(1) The location and number of water closets, urinals and lavatories shall be provided in accordance with the requirements set forth in table RS 16-5.

(2) Except where exempted in subdivision (i) of section 27-292.5 or section 27-292.6, facilities for people having physical disabilities shall be provided in toilet rooms or in a readily accessible location. Where such

toilet room is designed for use by not more than one person at a time and has provision for locking from the inside, such toilet room shall be permitted to be used by either sex.

(3) Where toilet rooms are not accessible by elevator, they shall be located so that people with physical disabilities need not travel more than one story thereto by ramp.

(c) Bathing facilities. -

(1) The location and number of plumbing fixtures shall be provided in accordance with the requirements set forth in table RS 16-5 and in reference standard RS 4-6.

(2) Each required bathing facility shall be accessible and at least one of each type of fixture or accessory that is provided in such bathing facility shall comply with the requirements set forth in table *RS 16-4 and in reference standard RS 4-6.

**As enacted but RS 16-5 probably intended.*

§27-292.11 Assembly spaces. -

(a) Assembly spaces other than places of assembly shall be provided with a minimum of accessible wheelchair viewing positions as follows:

Capacity of Assembly Space	Number of Viewing Positions
1 to 25	Minimum 1
26 to 50	Minimum 2
51 to 74	Minimum 3

(b) Places of assembly shall be provided with accessible wheelchair viewing positions in accordance with subparagraph h of paragraph (1) of subdivision (a) of section 27-531.

(c) Size and placement of wheelchair location, surfaces, access to performing area and listening systems, where required, shall comply with the provisions of reference standard RS 4-6. These positions may be utilized by persons who do not use wheelchairs provided that the positions are delineated on the approved seating plans, the seating is readily removable and the positions are unsold one full working day before the performance.

§27-292.12 Public toilet rooms. - Where public toilet rooms are provided, there shall be at least one water closet stall and lavatory fixture for each sex which is accessible to and usable by people having physical disabilities and complies with the requirements of paragraph (c) of section P104.1 of reference standard RS 16-1 and reference standard RS 4-6.

§27-292.13 Drinking fountains. -

(a) Location and number of drinking fountains shall be provided in accordance with the requirements set forth in table 16-5.

(b) At least one drinking fountain on a story on which drinking fountains are provided shall be accessible and

comply with the requirements set forth in reference standard RS 4-6.

(c) Where outside drinking fountains are provided, at least one shall be accessible and comply with the requirements set forth in reference standard RS 4-6.

§27-292.14 Public telephones. - At each location where public telephones are provided, at least one telephone shall be accessible and usable by people who use wheelchairs and at least one telephone shall be accessible and usable by persons with hearing impairment, and each such accessible telephone shall comply with the requirements set forth in reference standard RS 4-6.

§27-292.15 Alarms. - Where emergency warning systems are provided in spaces used by people having physical disabilities such systems shall comply with the requirements set forth in reference standard RS 4-6. Portable audible/visual smoke detecting devices in existing group J-1 occupancies shall comply with the provisions of paragraph (1) of subdivision (b) of section 27-292.9.

§27-292.16 Controls and operating mechanisms. - Where controls and operating mechanisms for light switches, dispensers, alarms and other similar devices are provided, they shall be accessible and comply with the requirements set forth in reference standard RS 4-6.

§27-292.17 Tactile warnings. - Tactile warnings shall be provided at hazardous locations on floors, doors, stairs, hazardous vehicular areas and pools, and shall comply with applicable requirements as set forth in reference standard RS 4-6.

§27-292.18 Signage. -

(a) Symbols of accessibility shall be provided at the following locations:

Parking spaces designated as reserved for people having physical disabilities

Passenger loading zones

Public toilet and bathing facilities

Drinking fountains

Public telephones

(b) Information and directional signage shall be provided where deemed necessary.

(c) Symbols and characters shall comply with the applicable requirements set forth in reference standard RS 4-6.

§27-292.19 Parking spaces. -

(a) Where parking areas or garages are provided, at least one parking space but not less than five percent of the total number of parking spaces provided shall be suitable for use by people having physical disabilities.

Where determination by percentage results in a number containing a decimal of 0.5 or more, the next higher number shall be used.

(b) Location, space, size and signage for parking spaces suitable for use by people having physical disabilities shall comply with provisions set forth in reference standard RS 4-6.

§27-292.20 Passenger loading zones. - Where passenger loading zones are provided, location and access aisles for at least one vehicle (with respect to multiple dwellings) or zones (with respect to other buildings) shall comply with the requirements set forth in reference standard RS 4-6.

**Local Law 58-1987.*

ARTICLE 3 FIRE DISTRICTS

§[C26-402.1] 27-293 Inside fire districts. - The following city areas are hereby established as being inside the fire districts:

(a) All of the borough of Manhattan.

(b) All of the borough of Bronx.

(c) All of the borough of Brooklyn.

(d) Such portions of the boroughs of Staten Island and Queens as are indicated on the "fire district maps" (reference standards RS 4-1 and RS 4-2).

§[C26-402.2] 27-294 Outside fire districts. - All areas not included inside the fire districts shall be designated as outside fire districts.

§[C26-402.3] 27-295 Mixed districts. - Any building located on the boundary line of a fire district, so that it is both inside and outside the district, shall be of a type of construction required for the fire districts if more than twenty-five per cent of the total floor area of the building is located therein.

ARTICLE 4 LIMITATIONS INSIDE THE FIRE DISTRICTS

§[C26-403.1] 27-296 Limitations. - No buildings in those combinations of construction classes and occupancy groups prohibited by tables 4-1 and 4-2 shall be erected inside the fire districts or shall be moved from outside to inside the fire districts, or from one lot to another inside the fire districts. No building or space classified in occupancy group J-1 or J-2 may be located on a lot containing a building classified in construction group I-E, II-D or II-E.

§[C26-403.2] 27-297 Exemptions. - The following constructions shall be exempt from the provisions of section 27-296 of this article:

(a) **One- or two-family dwellings.** - One- or two-

family detached or semi-detached dwellings of two stories or less in height and two thousand five hundred square feet or less in area located within zoning residence districts [R-2, R3-1, R3-2, R-4 and R-5]* may be constructed or reconstructed of construction groups II-D combustible materials, or if damaged for any cause, only the damaged portions shall be required to be reconstructed to conform to II-D construction. In addition, one-family dwellings located within zoning residence district [R. -1]* anywhere in the city, may be of combustible group II-E construction in conformance with the area and height limits established by tables 4-1 and 4-2.

** Copy in brackets not enacted but probably intended.*

(b) Fences. - Fences not over six feet high may be erected of wood or other combustible material.

(c) Storm enclosures, bay windows, etc. - Storm enclosures, bay windows and similar appendages may be constructed of combustible materials in accordance with the provisions of section 27-336 of article four of subchapter five of this chapter.

(d) Accessory buildings for open parking lots. - Parking lot offices and similar accessory buildings not more than ten feet high and not more than one hundred fifty square feet in area may be constructed of combustible materials when on the same lot or accessory to a lot used for motor vehicle parking, and when located at least six feet from any lot line or building.

(e) Temporary structures. - Temporary platforms, reviewing stands, and similar miscellaneous structures may be constructed of combustible materials and used for a limited period of time, subject to the approval of the commissioner.

(f) Greenhouse. - Greenhouses may be constructed of combustible materials when accessory to a one - or two-family dwelling on the same lot and when located at least six feet from any lot line or building.

(g) Roof structures. - Cooling towers, antenna supports, and other roof structures may be constructed of combustible materials in accordance with the provisions of section 27-338 of subchapter five of this chapter.

(h) Bins, tanks, and towers. - Coal and material bins, water towers, tank structures, and trestles may be constructed of wood planking and timbers of dimensions not less than as required for class II-A construction when not over thirty-five feet high and having an exterior separation of at least thirty feet.

(i) Signs. - Ground signs, wall signs, roof signs, and temporary signs may be constructed of combustible materials within the limitations established in article eighteen of subchapter seven of this chapter.

§[C26-403.3] 27-298 Additions to existing buildings. - No building inside the fire districts may be increased

in area or height to exceed the limitations of tables 4-1 and 4-2. (See Tables 4-1 and 4-2).

ARTICLE 5 LIMITATIONS OUTSIDE THE FIRE DISTRICTS

§[C26-404.1] 27-299 Limitations. - No buildings in those combinations of construction classes and occupancy groups prohibited by tables 4-1 and 4-2 shall be erected outside the fire districts. No building or space classified in occupancy group J-1 or J-2 may be located on a lot containing a building classified in construction group I-E, II-D or II-E. No building classified in construction group I-E, II-D or II-E shall be located on a lot containing a building or space classified in occupancy group J-1 or J-2.

§[C26-404.2] 27-300 Additions to existing buildings. - No building outside of the fire districts may be increased in area or height to exceed the limitations of tables 4-1 and 4-2.

ARTICLE 6 AREA LIMITATIONS

§[C26-405.1] 27-301 Area limitations of buildings. - No building or building section shall be constructed or altered so as to exceed the area limits established by tables 4-1 and 4-2 based on the occupancy group classification of the building or building section, except as these may be specifically modified by other provisions of this code.

§[C26-405.2] 27-302 Area limitations of spaces. - No occupancy within a building or building section shall be constructed or altered so as to exceed in total cumulative area the area limits established by tables 4-1 and 4-2, except as these may be specifically modified by other provisions of this code.

§[C26-405.3] 27-303 Frontage increase. - When a building has more than twenty-five per cent of the total perimeter of the building fronting directly upon a street or frontage space, the tabular areas listed in tables 4-1 and 4-2 may be increased 1.33 per cent for each one per cent of such excess frontage.

§[C26-405.4] 27-304 Existing excessive area. - Any building existing on December sixth, nineteen hundred sixty-eight that exceeds the maximum allowable area permitted under the provisions of this section, may be enlarged if the addition is separated from the existing building by a fire division meeting the requirements of subchapter five of this chapter, and if the additional area does not exceed the limits established by tables 4-1 and 4-2 for the specific occupancy group and construction class.

ARTICLE 7 HEIGHT LIMITATIONS

§[C26-406.1] 27-305 Height limitations of buildings.

- No building or building section shall be constructed or altered so as to exceed the height limits established by tables 4-1 and 4-2 based on the occupancy group classification of the building or building section, except as these may be specifically modified by other provisions of this code.

§[C26-406.2] 27-306 Measurement. - In applying the provisions of this code governing height limits, the following appurtenant structures shall not be included in the height of the building unless the aggregate area of all such structures exceeds thirty-three and one-third percent of the area of the roof of the building upon which they are erected:

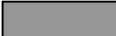
- (a) Roof tanks and their supports.
- (b) Ventilating, air conditioning, and similar building service equipment.
- (c) Roof structures, bulkheads, and penthouses.
- (d) Chimneys.
- (e) Parapet walls four feet or less in height.

***TABLE 4-1 AREA AND HEIGHT LIMITATIONS FOR UNSPRINKLERED BUILDINGS AND SPACES**

Occupancy Group		NONCOMBUSTIBLE CONSTRUCTION GROUP I					COMBUSTIBLE CONSTRUCTION GROUP II				
		Class IA	Class IB	Class IC	Class ID	Class IE	Class IIA	Class IIB	Class IIC	Class IID	Class IIE
HIGH HAZARD A ^e	Area	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
STORAGE B-1	Height	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
	Area	1,000	1,000	1,000	1,000	1,000	1,000	1,000	N. P.	1,000	N. P.
STORAGE B-2 ^b	Height	75'-0"	75'-0"	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)	N. P.	40'-0"(3)	N. P.
	Area	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	2,100
MERCANTILE C	Height	75'-0"	N.L.	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
	Area	7,500	7,500	7,500	7,500	7,500	7,500	7,500	5,600	8,400	2,100
INDUSTRIAL D-1	Height	75'-0"	75'-0"	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)	N. P.	1,400	N. P.
	Area	7,500	7,500	7,500	7,500	3,500	7,500	7,500	N. P.	1,400	N. P.
INDUSTRIAL D-2	Height	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Area	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
BUSINESS E	Height	75'-0" ^{d,f}	75'-0" ^{d,f}	N.L.	75'-0" ^{d,f}	10,500	14,700	14,700	5,600	8,400	2,100
	Area	75'-0" ^{d,f}	75'-0" ^{d,f}	N.L.	75'-0" ^{d,f}	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-1	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	5,600	8,400	2,100
	Area	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-2 ^c	Height	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Area	N.L.	N.L.	N.L.	N.L.	75'-0"(6)	75'-0"(6)	75'-0"(6)	65'-0"(5)	75'-0"(6)	65'-0"(5)
ASSEMBLY F-3	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	5,600	8,400	2,100
	Area	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-4 ^g	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	5,600	8,400	2,100
	Area	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
EDUCATIONAL G	Height	N.L.	75'-0"	N.L.	75'-0"(6)	10,500	14,700	14,700	5,600	8,400	2,100
	Area	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
INSTITUTIONAL H-1	Height	17,500	14,000	10,500	7,000	N.P.	4,200	4,200	N. P.	N. P.	N. P.
	Area	17,500	14,000	10,500	7,000	N.P.	50'-0"(4)	50'-0"(4)	N. P.	N. P.	N. P.
INSTITUTIONAL H-2	Height	N.L.	75'-0"	65'-0"(5)	50'-0"(4)	N.P.	4,200	4,200	N. P.	N. P.	N. P.
	Area	N.L.	75'-0"	65'-0"(5)	50'-0"(4)	N.P.	50'-0"(4)	50'-0"(4)	N. P.	N. P.	N. P.
RESIDENTIAL J-1	Height	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
	Area	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
*RESIDENTIAL J-2 When Constructed Subject to the Requirements of §27-954(t) or Altered Subject to the Requirements of §27-123.2	Height	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
	Area	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
*RESIDENTIAL J-2 When Not Subject to the Requirements of §27-954(t) or Altered Subject to the Requirements of §27-123.2	Height	N.L.	N.L.	75'-0"	75'-0"(6)	N. P.	10,000	10,000	5,600	N. P.	N. P.
	Area	N.L.	N.L.	75'-0"	75'-0"(6)	N. P.	75'-0"(6)	75'-0"(6)	40'-0"(3)	N. P.	N. P.
RESIDENTIAL J-3	Height	N.L.	N.L.	75'-0"	75'-0"(6)	40'-0"(3)	14,700	14,700	5,600	8,400	2,100
	Area	N.L.	N.L.	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)

N.L.— No Limit

N.P.— Not Permitted

 Not Permitted Inside Fire Districts^a

Notes for Table 4-1:

Tabulated areas are given in sq. ft. and establish maximum gross area permitted on any one story within a building or fire area. See section 27-303 and subdivision (e) of section 27-328 for permissible area increases. Tabulated heights are given in feet and number of stories (in parentheses).

^aSee section 27-297 for construction exemptions.

^bSee article eleven of subchapter seven of chapter one of this title for area and height limitations of open parking structures.

^cSee paragraph two of subdivision (b) of section 27-548 for grandstand limitations.

^dSee subdivision (c) of section 27-339 for area limitations for existing office buildings one hundred feet or more in height with mechanical ventilation and/or air-conditioning systems that serve floors other than the floor on which the equipment is located.

^eSpaces in occupancy group A solely due to their containing gas distribution piping at pressure levels above fifteen psig may be unsprinklered and conform with the area and height limitations set forth in table 4-2, provided other fire protection requirements set forth in section 27-404 and subchapters five and seventeen of chapter one of this title are met.

^fSee section 27-954 for area limitations for buildings less than seventy-five ft. in height.

^gSee subdivisions (u) and (v) of section 27-954 for requirements pertaining to F-4 spaces within J-1 buildings, catering establishments and banquet halls with occupant load of three hundred or more persons.

***Local Law 10-1999.**

TABLE 4-2 AREA AND HEIGHT LIMITATIONS FOR SPRINKLERED BUILDINGS AND SPACES

Occupancy Group		NONCOMBUSTIBLE CONSTRUCTION GROUP I					COMBUSTIBLE CONSTRUCTION GROUP II				
		Class IA	Class IB	Class IC	Class ID	Class IE	Class IIA	Class IIB	Class IIC	Class IID	Class IIE
HIGH HAZARD A	Area	N.L.	17,500	14,000	10,500	3,500	7,700	7,700	N.P.	1,400	N.P.
	Height		75'-0"(6)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)		50'-0"(4)	
STORAGE B-1	Area	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height			85'-0"(7)	75'-0"(6)	50'-0"(4)	75'-0"(6)	75'-0"(6)	40'-0"(3)	50'-0"(4)	40'-0"(3)
STORAGE B-2 ^b	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
MERCANTILE C	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
INDUSTRIAL D-1	Area	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height			85'-0"(7)	75'-0"(6)	50'-0"(4)	75'-0"(6)	75'-0"(6)	40'-0"(3)	50'-0"(4)	40'-0"(3)
INDUSTRIAL D-2	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
BUSINESS E	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
ASSEMBLY F-1	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
ASSEMBLY F-2	Area	N.L.	N.L.	N.L.	N.L.	N.L.	N.L.	N.L.	19,600	N.L.	16,100
	Height				85'-0"(7)	N.L.	N.L.	N.L.	75'-0"(6)	N.L.	75'-0"(6)
ASSEMBLY F-3	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	75'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
ASSEMBLY F-4	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	75'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
EDUCATIONAL G	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	75'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
INSTITUTIONAL H-1	Area	N.L.	N.L.	17,500	11,200	7,000	11,200	11,200	3,500	4,000	N.P.
	Height			75'-0"(6)	65'-0"(5)	50'-0"(4)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	
INSTITUTIONAL H-2	Area	N.L.	N.L.	17,500	11,200	7,000	11,200	11,200	3,500	4,000	N.P.
	Height			75'-0"(6)	65'-0"(5)	50'-0"(4)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	
RESIDENTIAL J-1	Area	N.L.	N.L.	N.L.	N.L.	N.P.	N.L.	N.L.	N.P.	N.P.	N.P.
	Height				85'-0"(7)		85'-0"(7)	85'-0"(7)			
RESIDENTIAL J-2	Area	N.L.	N.L.	N.L.	N.L.	N.P.	N.L.	N.L.	12,600	N.P.	N.P.
	Height				85'-0"(7)		85'-0"(7)	85'-0"(7)	50'-0"(4)		
RESIDENTIAL J-3	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height				85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)

N.L. — No Limit

N.P.—Not Permitted

 Not permitted inside Fire Districts^a

Notes for Table 4-2:

Tabulated areas are given in square feet and establish maximum gross area permitted on any one story within a building or fire area. See section 27-303 for permissible area increases. Tabulated heights are given in feet and number of stories (in parentheses).

^a See section 27-297 for construction exemptions.

^b See article eleven of subchapter seven of this chapter for area and height limitations of open parking structures.

**ARTICLE 8 GENERAL PROJECTION
LIMITATIONS**

§[C26-407.1] 27-307 Permissible projections beyond the street line. - No part of a new building, or of any alteration or addition to an existing building, shall be constructed to extend beyond the street line, except as specifically provided in this subchapter.

***§[C26-407.2] 27-308 Ramps.** -

(a) When a building erected prior to December sixth, nineteen hundred sixty-nine is altered to provide access to individuals who use wheelchairs, ramps constructed to provide such access may, with the approval of the commissioner, project beyond the street line for a distance of not more than forty-four inches.

(b) Ramps shall comply with the applicable provisions of reference standard RS 4-6.

**Local Law 58-1987.*

§[C26-407.3] 27-309 Special restrictions. - The provisions of this subchapter shall not authorize any projections beyond the street line on those streets where removal of all, or certain projects has been directed by any action of the board of estimate or the former board of estimate and apportionment, or which has been, or may be, directed by any action of the council or the board of estimate, except those projections that are permitted in conformity with such actions.

§[C26-407.4] 27-310 Projections removable. - All projections permitted beyond the street line by the provisions of this subchapter shall be constructed so that they may be removed at any time without endangering the structural safety or fire safety of the building except that footings as permitted under subdivision (a) of section 27-314 of article nine of this subchapter need not be removable.

§[C26-407.5] 27-311 Permission revocable. - Any permission, expressed or implied, permitting the construction of projections within the area of the street under the provisions of this subchapter shall be revocable by the council or the board of estimate, except footings as permitted under subdivision (a) of section 27-314 of article nine of this subchapter.

§[C26-407.6] 27-312 Existing projections. - Any part of a building that projects beyond a street line on January first, nineteen hundred thirty-eight may be

maintained as constructed until its removal is directed by the council or the board of estimate.

(a) Alterations. -

Alterations to existing projections beyond the street line may be permitted in whole or in part, provided that such alterations conform with the requirements of this subchapter.

**ARTICLE 9 PERMISSIBLE PROJECTIONS
BEYOND STREET LINES**

§[C26-408.1] 27-313 Projections above grade. - Subject to the provisions of article eight of this subchapter the following projections may be constructed, above grade, to project beyond the street line:

(a) Fixed Projections. - Fixed projections are those elements listed below, generally of an architectural character, that form an integral part of the building facade. The aggregate area of all fixed projections constructed to extend beyond the street line shall not exceed ten square feet within any one hundred square feet of wall area, except that a veneer may be applied to the entire facade of a building erected before December sixth, nineteen hundred sixty-eight, if such veneer does not project more than four inches beyond the street line. The area of any fixed projection shall be measured at that vertical plane, parallel to the wall, in which the area of the projection is greatest. This plane of measurement may be at the street line, the line of maximum projection, or any point in between.

(1) **ENTRANCE DETAILS.** - Entrance details, including steps, and doors when fully open, may be constructed to project beyond the street line not more than eighteen inches. Entrance steps that project beyond the street line shall be guarded at each end by railings or check pieces at least three feet high or by other members of the entrance detail providing equivalent protection.

(2) **ARCHITECTURAL DETAILS.** - Details such as cornices, eaves, bases, sills, headers, band course, opening frames, sun control devices, rustications, applied ornament or sculpture, grilles, windows when fully open, air conditioning units, and other similar elements may be constructed to project not more than four inches beyond the street line when less than ten feet above the ground or sidewalk level, and not more than ten inches beyond the street line when more than ten feet above the ground or sidewalk level.

(3) **BALCONIES.** - Balconies, including railings and supporting brackets, no parts of which are less than ten

feet above the ground or sidewalk level, may be constructed to project not more than twenty-two inches beyond the street line. When permitted by the provisions of subchapter six of this chapter, fire escapes that are part of a required exit may be constructed to project not more than four feet six inches beyond the street line provided no part, including any movable ladder or stair, is lower than ten feet above the ground or sidewalk level when not in use.

(4) **MARQUEES.** - Marquees may be erected on public buildings, theaters, hotels, terminals, large department stores, supermarkets, multi-family dwellings, and similar buildings of an essentially public nature, or upon a warehouse or market in an established market area as designated by reference standard RS 4-3, so as to project beyond the street line, but not nearer than two feet to the curb line, provided that no parts of such marquees are less than ten feet above the ground or sidewalk level. Marquees must not be more than two feet to curb lines hereafter established or changed. When measured from top to bottom, marquees shall not be thicker nor shall the fascia be higher than three feet. This dimension shall include all decorations, but shall exclude any tension supports suspending the marquee from the wall. Marquees shall be supported entirely from the building and be constructed of noncombustible materials, except that the roof or any part of the roof may contain skylights complying with the requirements of subdivision (d) of section 27-338 of article four of subchapter five of this chapter. Marquee roofs shall be drained in accordance with the provisions of subchapter sixteen of this chapter. When the occupancy or use of a building with a marquee projecting beyond the street line is changed to occupancy or use for which a marquee is not permitted by this section the marquee shall be removed.

(5) **LIGHT FIXTURES.** - Light fixtures that are supported entirely from the building may be constructed to project not more than two feet beyond the street line, provided no part of the fixture is less than eight feet above the ground or sidewalk level.

(6) **FLAGPOLES.** - Flagpoles that are supported entirely from the building may be constructed to project not more than eighteen feet beyond the street line, but not closer than two feet to the curb line, provided that no part of the flagpole is less than fifteen feet above the ground or sidewalk level.

(7) **WALL SIGNS.** - Wall signs may be constructed to project not more than twelve inches beyond the street line when conforming to the requirements of subchapter seven of this chapter.

(8) **PROJECTING SIGNS.** - Projecting signs may be constructed to project not more than ten feet beyond the street line, but not closer than two feet to the curb line, when conforming to the requirements of subchapter seven of this chapter, and provided that no part of the

sign is less than ten feet above the ground or sidewalk level.

(b) Awnings. - Awnings supported entirely from the building may be constructed to project beyond the street line as follows:

(1) **STORE FRONT AWNINGS.** - Store front awnings may be constructed to project beyond the street line not more than eight feet, provided no part of the awning is less than eight feet above the ground or sidewalk level, except for a flexible valance, which may be not less than seven feet above the ground or sidewalk level, and provided that the awning box or cover does not project more than twelve inches.

(2) **AWNINGS.** - Awnings over windows or doors may be constructed to project beyond the street line not more than five feet, provided that no part of the awning is less than eight feet above the ground or sidewalk level.

(3) **CONSTRUCTION.** - Awnings shall be constructed of a noncombustible frame covered with flameproofed canvas or cloth, slow-burning plastic, sheet metal, or other equivalent material.

(c) Storm enclosures. - Storm enclosures projecting not more than eighteen inches beyond the street line may be permitted during the period between November fifteenth and the following April fifteenth. Such enclosures shall be removed at the end of this period. Construction shall follow the requirements of section 27-336 of subchapter five of this chapter.

(d) Bridges between buildings. - Bridges connecting buildings, and projecting beyond street lines, may be constructed subject to the approval of the board of estimate and the department of highways. Such bridges shall be of a construction class that is at least equal to the higher class of the two buildings connected, and shall otherwise comply with the provisions of this code and other applicable laws and regulations.

(e) Sidewalk cafes. - (1) Enclosures for sidewalk cafes, where permitted by the commissioner of consumer affairs, may be provided beyond the building line, within a street, provided such enclosures are constructed of incombustible material or slow-burning plastic or other material which will not support combustion, and provided the sides of such enclosures do not extend more than eight feet above the sidewalk.

(2) Awnings supported entirely from the building may be placed over sidewalk cafes provided they are at least eight feet clear above the sidewalk and provided they are within the limits specified by the commissioner of consumer affairs. Such awnings shall be supported on metal frames and constructed of canvas treated to render it fire-resistive or other material, which will not support combustion.

(3) No part of any awning, enclosure, fixture or equipment of a sidewalk cafe shall be located beneath a fire-escape so as to obstruct operation of fire-escape

drop ladders or counter-balanced stairs or to obstruct any exit from a building.

(4) a. Removable platforms shall be constructed to provide for a continuous unbroken and level floor without openings or cracks so as to prevent any material or liquid from falling through to the area beneath; no papers, trash or other materials may be permitted to accumulate in the area beneath the floor of the platform.

b. No part of the platform shall obstruct an exit from any building.

c. No part of the platform shall cover a cellar entrance, areaway or other vent, except that an easily removable section, prominently designated, will be permitted if acceptable to the commissioner.

d. No siamese connection or hydrant may be obstructed in any way that would hinder its use by the fire department.

(5) In addition to the requirements specified herein, the commissioner may promulgate such additional regulations necessary to secure safety.

(f) Curb cuts. - The lowering of any curb or the change of grade of any sidewalk for the purpose of providing a driveway across such curb or sidewalk shall be constructed in accordance with the specifications prescribed in section 27-558 of article three of subchapter nine of this chapter or as required by the commissioner. The commissioner shall limit the length of any curb cut for the purpose of providing a driveway across such curb or sidewalk, when in the opinion of the commissioner the actual use or intended use of such driveway would endanger the public. The owner shall maintain every part of such driveway in accordance with the specifications prescribed in section 27-558 of article three of subchapter nine of this chapter. Where the vehicular use of such driveway, in the opinion of the commissioner is dangerous to the public, the commissioner shall order the owner to discontinue use of such driveway and restore the curb and sidewalk as required by the department of transportation. Upon the failure of the owner to comply with such order, the commissioner may inform the commissioner of transportation of such failure to comply and request the cooperation of the commissioner of transportation acting under his or her authority pursuant to section twenty-nine hundred four of the New York city charter in the enforcement of this section.

§[C26-408.2] 27-314 Projections below grade. - Subject to the provisions of article eight of this subchapter the following projections may be constructed below grade to project beyond the street line:

(a) Footings. - Exterior wall and column footings may be constructed to project beyond the street line not more than twelve inches, provided that the top of the footing is not less than eight feet below the ground or

sidewalk level.

(b) Foundation walls. - Foundation walls required to support permitted projections may be constructed to project not more than the permitted projection beyond the street line.

(c) Vaults. - Vaults licensed by the commissioner of transportation may be constructed to project beyond the street line but not beyond the curb line. Vault covers shall be set flush with the sidewalk and surfaced with non-skid material.

(d) Tunnels between buildings. -

Tunnels connecting buildings, and projecting beyond street lines, may be constructed subject to the approval of the board of estimate and the department of transportation. Such tunnels shall comply with the provisions of this code and other applicable laws and regulations.

***§[C26-408.3] 27-315- Restrictions on construction and projections on certain streets, parkways, boardwalks and beaches.** -

Notwithstanding the foregoing provisions of this article, it shall be unlawful to build, erect, make areaways, steps or other projections prohibited by sections 19-131, 19-132, 19-135 of the code.

** Local Law 104-1993.*

*** ARTICLE 10 GENERAL LIMITATIONS ON OCCUPANCY AND CONSTRUCTION WITHIN SPECIAL FLOOD HAZARD AREAS**

§[C26-409.1] 27-316 Permit restrictions. - Within special flood hazard areas, as delineated in reference standard RS 4-4, applications for permits shall be subject to the following:

(a) Permissible uses and other measures to reduce flood losses shall take precedence over any conflicting laws.

(b) Major repairs or alterations shall be with construction materials and utility equipment that are resistant to flood damage, and use construction methods and practices that will minimize flood damage.

(c) New and proposed construction or substantial improvements shall be protected against flood damage, be designed (or modified) and anchored to prevent flotation, collapse, or lateral movements of the structure, use construction materials and utility equipment that are resistant to flood damage, and use construction methods and practices that will minimize flood damage.

(d) New and proposed developments and construction shall minimize flood damage, locate, elevate and construct all public utilities such as gas, sewer, electrical and water systems to minimize or eliminate flood damage, and provide adequate drainage so as to reduce exposure to flood hazards.

(e) New or replacement water supply systems and/or sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems, and discharges from the systems into floodwaters, and require on-site disposal systems to be located so as to avoid impairment of them or contamination from them during flooding.

(f) Subdivision proposals and other proposed new developments and construction shall (i) minimize flood damage, (ii) have all public utilities, such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage, and (iii) provide adequate drainage so as to reduce exposure to flood hazards.

(g) Upon placement of the lowest floor, or flood-proofing by any means, the holder of any permit to which this section applies shall submit to the department a certification of the elevation of the lowest floor, or where applicable of the lowest flood-proofed elevation, in relation to mean sea level. Provided, however, that in areas designated as Zone V in reference RS 4-4, such permit holder shall certify to the department the elevation, in relation to mean sea level, of the bottom of the lowest structural member of the lowest floor. Such certification shall be prepared by a registered architect or licensed professional engineer.

(h) Compliance with the foregoing shall be accomplished in accordance with sections 27-317, 27-317.1, 27-317.2, 27-550, 27-580, 27-652, 27-771, 27-787 and subdivision (aa) of section 27-901 of this title and reference standards RS 4-4 and RS 4-5.

§ 27-316.1 Permit application contents. - Applications for permits for construction within special flood hazard areas, as delineated in reference standard RS 4-4, shall contain the following information:

(a) the elevation in relation to mean sea level of the proposed lowest floor (including basement or cellar);

(b) for non-residential structures, the elevation in relation to mean sea level to which such structure will be flood-proofed;

(c) a certification from a registered architect or licensed professional engineer that heating, ventilation, air conditioning, plumbing, electrical and other services facilities within the structure will be located or constructed so as to prevent water from entering or accumulating within the components during conditions of flooding;

(d) for non-residential structures intended to be floodproofed, a certification from a registered architect or licensed professional engineer that the flood-proofing design and methods of construction of such structure are in accordance with reference standard RS 4-5 and with accepted standards of practice to make such structure watertight, with walls substantially impermeable to the passage of water, and with structural components

having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(e) for structures within Zone V, as delineated in reference standard RS 4-4, a certification from a registered architect or licensed professional engineer that the design and methods of construction of such structure are in accordance with reference standard RS 4-5 and with accepted standards of practice for meeting the requirements of subdivision (f) of section 27-317 of this code; and

(f) a description, where applicable, of the extent to which any watercourse will be altered or relocated as a result of the proposed work.

§[C26-409.2] 27-317 Occupancy and construction restrictions. -

(a) Within special flood hazard areas, as delineated in reference standard RS 4-4, no building in occupancy group classification J1, J2 or J3 shall be constructed or altered so as to have the lowest floor below the base flood elevation.

(b) New construction or substantial improvements of non-residential buildings within special flood hazard areas, as delineated in reference standard RS 4-4, shall have the lowest floor elevated to or above the base flood elevation; or, together with attendant utilities and sanitary facilities, shall be floodproofed up to the level of the base flood elevation, in accordance with the requirement of reference standard RS 4-5. Provided, however, that new construction or substantial improvements of non-residential buildings within area designated as Zone V in reference standard RS 4-4 shall meet the requirements of subdivision (f) of this section.

(c) Any encroachment in the floodway, as delineated in reference standard RS 4-4, including fill, new construction, substantial improvement, or any other development that would result in any increase in flood levels within the community during the occurrence of the base flood discharge, shall be prohibited.

(d) Manufactured homes shall be anchored to resist flotation, collapse or lateral movement and shall be elevated on a permanent foundation to or above the base flood elevation or, when no base flood elevation has been determined, two feet above the highest adjacent grade. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. No park trailers or travel trailers shall be permitted within special flood hazard areas, as delineated in reference standard RS 4-4.

(e) In the case of alterations constituting a substantial improvement to parts of non-residential and non-institutional buildings below the base flood elevation, all parts below the base flood elevation need comply with the applicable requirements of reference standard RS 4-5.

(f) All new construction and substantial improvements

of buildings within Zone V, as delineated in reference standard RS 4-4, shall be performed pursuant to the provisions of RS 4-5. Such construction and improvements shall have the lowest floor elevated on adequately anchored pilings or columns and securely anchored to such piles or columns to prevent flotation, collapse or lateral movement resulting from the simultaneous action of wind and water loads on all building components, and, the lowest portion of the structural members of the lowest floor, other than the pilings or columns, shall be elevated to or above the base flood elevation. For purposes of this subdivision, wind and water loading values shall each have a one percent chance of being equalled or exceeded in any given year (one hundred year mean recurrence interval). In addition:

- (1) The installation of anchoring to anchored pilings or columns shall be subject to controlled inspection.
- (2) The space below the lowest floor shall be free of obstruction or, alternatively, such space shall be constructed with break-away walls of an open lattice type construction, which is intended to collapse under stress from abnormally high tides or wind driven water without jeopardizing the structural support of the building. Such space shall not be used for human habitation.
- (3) The use of fill for structural support of buildings within Zone V shall not be permitted.
- (4) The man-made alteration of sand dunes within Zone V which would increase potential flood damage to buildings shall not be permitted.
- (5) All new construction within Zone V shall be located landward of the reach of mean high tide.
- (g) All new construction and substantial improvements of buildings within Zone A, as delineated in reference standard RS 4-4 shall be performed pursuant to the provisions of reference standard RS 4-5. Where such construction or improvement is not floodproofed, any fully enclosed space below the lowest floor that is subject to flooding, as defined in section 27-317.1 of this code, shall be designed to equalize hydrostatic flood forces on exterior walls automatically (without human intervention) by allowing for the entry and exit of floodwaters. Design for meeting this requirement shall be certified by a registered architect or licensed professional engineer or shall meet or exceed the following minimum criteria:
 - (1) A minimum of two openings, having a total net area of not less than one square inch for every square foot of enclosed space subject to flooding, shall be provided.
 - (2) The bottom of all openings shall be no higher than one foot above grade.
 - (3) Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(h) When used within special flood hazard areas, as delineated in reference standard RS 4-4, breakaway walls shall have a design safe loading resistance of not less than ten and no more than twenty pounds per square foot. Use of a breakaway wall which exceeds a design safe loading resistance of twenty pounds per square foot shall be permitted only if a registered architect or licensed professional engineer certifies that the proposed design meets the following conditions:

- (1) Breakaway wall collapse will result from a water load less than that which would occur during the base flood; and
- (2) the elevated portion of the building and supporting foundation system will not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Maximum wind and water loading values used in this determination shall each have a one percent chance of being equalled or exceeded in any given year (one hundred year mean recurrence interval).

§[C26-409.3] 27-317.1 Definitions for special flood hazard areas. - The following definitions shall supplement the definitions that appear in article two of subchapter two of this chapter and shall apply only to the provisions of article ten of subchapter four of this chapter and to the reference standards contained therein:

AREA OF SPECIAL FLOOD HAZARD. - The land in the flood plain delineated in reference standard RS 4-4 as subject to a one percent or greater chance of flooding in any given year. Such area is designated on the Flood Insurance Rate Map (FIRM) as Zone A, AE, AH, AI-99, V, VE or VI-30. Such area is also known as the base flood plain or one hundred year flood plain.

BASEFLOOD. - The flood having a one percent chance of being equalled or exceeded in any given year.

BASEFLOOD ELEVATION. - The level (in feet) indicated on the Flood Insurance Rate Map (FIRM).

BREAKAWAY WALL. - wall that is not part of the structural support of the building to which it is attached and is intended through its design and construction to collapse under specific later loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

DEVELOPMENT. - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

ELEVATED BUILDING. - A non-basement building (i) constructed, in an area designated as Zone A in reference standard RS 4-4, to have the top of the elevated floor, or in an area designated as Zone V in reference standard RS 4-4, to have the bottom of the

lowest horizontal structural member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the flow of water, and (ii) adequately anchored so that the structural integrity of such building is not impaired during a flood of up to the magnitude of the base flood. In an area designated as Zone A in reference standard RS 4-4, such term also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to permit the unimpeded movement of flood waters. In an area designated as Zone V in reference standard RS 4-4, such term also includes a building otherwise meeting the definition of elevated building in which the lower area is enclosed by means of breakaway walls meeting the standards of subdivision (h) of section 27-317 of this code.

FLOOD OR FLOODING. - A general and temporary condition of partial or complete inundation of normally dry land areas resulting from:

- (1) the overflow of inland or tidal waters; or
- (2) the unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD BOUNDARY AND FLOODWAY MAP (FBFM). - An official map issued by the Federal Emergency Management Agency on which the regulatory floodway along water courses is delineated.

FLOOD HAZARD BOUNDARY MAP (FHBM). - An official map issued by the Federal Emergency Management Agency on which areas of special flood hazard are delineated.

FLOOD INSURANCE RATE MAP (FIRM). - The official map on which the Federal Emergency Management Agency has delineated the areas of special flood hazards. Such map includes the flood boundary and floodway map and the flood hazard boundary map, as defined in this section.

FLOOD PLAIN. - Any land area susceptible to being inundated by water from any source (see "flood or flooding").

FLOOD PROOFING. - Any combination of structural and non-structural additions, changes or adjustments to structures to reduce or eliminate flood damage to real estate, improved real property, water and sanitary utilities, or structures and their contents.

FLOODWAY OR REGULATORY FLOODWAY. - The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

HIGHEST ADJACENT GRADE. - The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

LOWEST FLOOR. - The lowest level including cellar or basement of the lowest enclosed area. For the purpose of this article, an unfinished or flood resistant

enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement, is not considered a structure's lowest floor, provided that such enclosure shall not be built so as to render the structure in violation of the requirements of subdivision (g) of section 27-317 of this code.

MANUFACTURED HOME. - A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to required utilities.

MIXED USE BUILDING. - Any building occupied in part for residential use, with one or more nonresidential uses located on a story below the lowest story occupied entirely by such residential use.

NATIONAL GEODETIC VERTICAL DATUM (NGVD). - A vertical control used as a reference for establishing elevations within the flood plain, as provided in section 27-158 of this code.

NEW CONSTRUCTION. - Buildings for which the "start of construction" commenced on or after November sixteenth, nineteen hundred eighty-three.

SAND DUNES. - Naturally occurring accumulations of sand in ridges or mounds landward of a beach.

START OF CONSTRUCTION. - The date on which the building permits was issued, provided, however, that the actual start of construction, repair, reconstruction, placement or substantial improvement is within one hundred eighty days of such date. "Actual start" means either the first placement of permanent construction of a building on a site, such as pile driving, the pouring of slabs, or footings, or any work beyond the stage of excavation; or, for a building without a cellar, basement or poured footings, the first permanent framing or assembly of such building or any part thereof on its piling or foundations. "Permanent construction" does not include land preparation, such as clearing, grading and filling; nor does it include excavation for a cellar, basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main building.

SUBSTANTIAL IMPROVEMENT. - Any repair, reconstruction, alteration, or improvement of a building, the cost of which equals or exceeds fifty percent of its market value either:

- (1) before the alteration, improvement, or repair is started, or
- (2) if the building has been damaged and is being restored, before such damage occurred.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural parts of the building commences, whether or not that alteration affects the external dimensions of the

building. The term "substantial improvement" does not, however, include either:

- (1) any project for improvement of a building to comply with state or local health, sanitary, or safety code specifications which are solely necessary to assure safe conditions, or
- (2) any alteration of a building designated as worthy of preservation because of historic or architectural importance, or a building within an area so designated by the landmarks preservation commission, or listed on the national register of historic places or state inventory of historic places.

ZONE A. - A symbol used on the flood insurance rate map to designate an area of special flood hazard without velocity (wave action). When not shown on the flood insurance rate map, the water surface elevation may be determined from available data by the registered architect or licensed professional engineer of record.

ZONE V. - A symbol used on the flood insurance rate map to designate an area of special flood hazard with velocity (wave action). When not shown on the flood insurance rate map, the water surface elevation may be determined from available data by the registered architect or licensed professional engineer of record.

§[C26-409.4] 27-317.2 Exceptions within special flood hazard areas. - Mixed use buildings may be constructed within Zone A, as delineated in reference standard RS 4-4, with non-habitable portions below the base flood elevation, provided all of the following conditions are met:

- (a) The building is constructed so as to provide entrance access at or above the base flood elevation.
- (b) The portion of the building and all service equipment below the base flood elevation are floodproofed, in accordance with reference standard RS 4-5.
- (c) No habitable rooms may be located in such cellar or basement.
- (d) A water closet and/or a wash basin may be located in an enclosed space not to exceed four feet by four feet six inches in such cellar or basement, and no roughing therein shall be allowed to accommodate any additional fixtures.
- (e) No accessory kitchens shall be allowed in such cellar or basement; however, one two-compartment laundry tray or similar appliance may be installed outside the water closet compartment.

****(f)** The building permit application filed with the department of buildings or the work permit application filed with the department of ports and trade shall state that:

- (1) The premises is located within the special flood hazard area;
- (2) The cellar or basement is located below the level of the base flood elevation; and

(3) No portion of the cellar or basement may be used for living purposes.

****(g)** A deed restriction noting all of the above is to be recorded in the county clerk's office and the page and liber number indicated on either the building permit application and certificate of occupancy filed with and issued by the department of buildings or the work permit application and the certificate of completion filed with and issued by the department of ports and trade.

****Local Law 14 -1989.**

***Local Law 33-1988.**

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SUBCHAPTER 5 FIRE PROTECTION CONSTRUCTION REQUIREMENTS

TABLE OF CONTENTS

[Sub-Art. Or Sec.]*	Art. or Sec.**	
[500.0]	Art.1	General
[500.1]	318	Scope
[500.2]	319	Standards
[500.3]	320	Definitions
[500.4]	321	Use of Combustibles
[501.0]	Art.2	Fire Protection Test Procedures
[501.1]	322	Test
[502.0]	Art. 3	Fire-Resistance Requirements
[502.1]	323	Requirements for Structural Members and Assemblies
[502.2]	324	Protection of Structural Members
[502.3]	325	Elevators
[502.4]	326	Lintels
[502.5]	327	Ceilings
[502.6]	328	Fire-Retardant Treated Wood
[502.7]	329	Opening Protectives
[502.8]	330	Slow Burning Plastic
[503.0]	Art. 4	Prevention of Exterior Fire Spread
[503.1]	331	Exterior Walls
[503.2]	332	Party Walls
[503.3]	333	Parapets on Exterior Walls
[503.4]	334	Protective Guards
[503.5]	335	Exterior Trim
	335.1	Acoustical and Thermal Insulation
[503.6]	336	Porticos, Porches, etc.
[503.7]	337	Roof Coverings
[503.8]	338	Roof Structures
[504.0]	Art. 5	Prevention of Interior Fire Spread
[504.1]	339	Fire Segregation of Occupancies
[504.2]	340	Fire Divisions
[504.3]	341	Fire Separations
[504.4]	342	Openings in Fire Divisions and Separations
[504.5]	343	Ducts, Pipes and Conduits Through Rated Construction
[504.6]	344	Shafts

[504.7]	345	Firestopping
[504.8]	346	Partitions and Furring
[504.9]	347	Folding Partitions
[504.10]	348	Interior Finish
[504.11]	349	Coatings
[504.12]	350	Ceiling Construction
[504.13]	351	Finish Flooring and Floor Coverings
[504.14]	352	Fireplaces—Repeated
[504.15]	353	Smoke and Heat Venting
[504.16]	353.1	Smoke Protection, Elevators and Escalators
	353.2	Smoke Protection for Elevators in E
		Occupancies
	353.3	Smoke Barrier

LIST OF TABLES

Table No.

5-1	Fire Separations
5-2	Fire Divisions
5-3	Opening Protectives for Fire Divisions and Fire Separations
5-4	Interior Finish Requirements

***“C26” omitted from section numbers in this column.*

****“27” omitted from section numbers in this column.*

ARTICLE 1 GENERAL

§[C26-500.1] **27-318 Scope.** - The provisions of this subchapter shall govern the use and assembly of all materials of construction with respect to fire resistance, flame spread resistance, and smoke and toxic fume limitation. The provisions shall also control the location and function of integral structural and fire protective elements of buildings, and provide for the installation of safeguards against the spread of fire within buildings and between buildings.

§[C26-500.2] **27-319 Standards.** - The provisions of the reference standard RS-5 shall be a part of this subchapter.

§[C26-500.3] **27-320 Definitions.** - For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-500.4] **27-321 Use of combustibles.** - The use of combustible component materials in units or assemblies shall be limited to construction group II, except as hereinafter expressly permitted in construction group I. Combustible aggregates may be integrated with other materials to form a noncombustible material provided that the entire mixture, in the form in which it is to be used in construction, meets the requirement of this code for noncombustibility.

ARTICLE 2 FIRE PROTECTION TEST PROCEDURES

§[C26-501.1] **27-322 Tests.** - Samples of all materials or assemblies of materials required by this code to have a fire-resistance rating, fire-protection rating, or flame spread rating, or required to be noncombustible, fire-retardant treated, or slow burning, shall be tested under the applicable test procedures specified herein, in accordance with the acceptance requirements of section 27-131 of article seven of subchapter one of this chapter. The fire-resistance rating of materials and assemblies listed in reference standard RS 5-1 may be used to determine conformance with the fire resistance requirements of this code. In addition to the performance results, test reports shall give all technical data pertaining to the nature of the constituent materials, such as the physical properties, chemical composition and properties, coefficient of expansion, thicknesses of materials, etc. Except as listed in reference standard RS 5-1, any assembly using a component having a structural base of noncombustible material covered with an integrally manufactured combustible surfacing material, shall be approved for fire-resistance rating.

ARTICLE 3 FIRE-RESISTANCE REQUIREMENTS

§[C26-502.1] **27-323 Requirements for structural members and assemblies.** - The fire-resistance rating of construction assemblies and the protection of structural members shall comply with the requirements of table 3-4, based on the test procedures of reference standard RS 5-2, and their materials or combinations of materials shall be in accordance with the specifications of materials used in the test.

*§[C26-502.2] **27-324 Protection of structural members.** - Columns, girders, trusses, beams, lintels, etc. that are required to be fire protected, and that support only one floor or a roof, and/or a non-bearing wall not more than one story high, shall be individually encased on all sides with materials having the required fire-resistance rating; or shall be protected by a ceiling as specified in section 27-327 of this article having the required fire-resistance rating; or shall be protected by a combination of both a ceiling and individual encasement which, together, provide the required fire-resistance rating. Columns, girders, trusses, beams, lintels, etc. that are required to be fire protected, and that support more than one floor or support a bearing wall or wall more than one story high, shall be individually encased on all sides for their entire length or height with materials having the required fire-resistance rating. Trusses that support only two stories or one story and a roof may be fire protected by an envelope that encompasses the entire truss with materials of the required fire-resistance rating.

(a) **Embedments and enclosures.** - Pipes, wires, conduits, ducts, or other service facilities shall not be embedded in the required fire protection of a structural member that is required to be individually encased; except that pipes, wires, and conduits may be installed in the space between the required fire protection and the structural member protected, provided that where such facilities pierce the required fire protection, the area of the penetrations does not exceed two percent of the area of the fire protection on any one face, the penetrations are closed off with close-fitting metal escutcheons or plates and the concealed space shall be firestopped at each story in accordance with the provisions of section 27-345 of article five of this subchapter.

(b) **Impact protection.** - Where the fire protective covering of a structural member is subject to impact damage from moving vehicles, the handling of merchandise, or other activity, the fire protective covering shall be protected by corner guards or by a substantial jacket of metal or other noncombustible material, to a height adequate to provide full protection. Where applicable, such protection shall be designed in accordance with the requirements of section 27-558 of article three of subchapter nine of this chapter.

(c) **Structural members in cavity walls.** - Where structural members occur within exterior cavity walls,

portions of such structural members facing the exterior need not be individually fire protected if the outer width of the cavity wall provides the required fire-resistance rating and is located not more than two and one-half inches from such structural members, and if all surfaces of the structural members are fire protected from the interior of the building by materials having the required fire-resistance rating.

(d) Prestressing steel. - Minimum covering of prestressing steel shall comply with the requirements of reference standard RS 5-15.

(e) Exterior exposed structural members. - Structural members exposed to the outdoors on buildings that do not exceed two stories or thirty feet in height, which are required by table 3-4 to have a fire-resistance rating not exceeding one hour, need not be protected on any face of the member that has an exterior separation of thirty feet or more, provided the outdoor area within the thirty feet separation distance is not used for storage of materials, or for motor vehicle parking.

(f) Inspection of fire protection. - The installation of all required sprayed-on fire protection of structural members except those encased in concrete shall be subject to the controlled inspection requirements of section 27-132 of article seven of subchapter one of this code.

**** (g) Inspection of existing sprayed-on fire protection during alterations in office spaces and in occupancy group E spaces.** - In office spaces and spaces classified in occupancy group E, where an alteration exposes any required sprayed-on fire protection of structural members, or where, pursuant to an alteration persons are required to enter or access areas in which such sprayed-on fire protection is capable of being observed, the existing required spray-on fire protection shall be subject to the controlled inspection requirements of section 27-132 of this code. Such controlled inspection shall require a determination (i) that the existing sprayed-on fire protection as originally applied or installed complies with the applicable requirements of this code, including those for installation methods, materials, thickness and coverage; and (ii) that, since its original application, the integrity of the existing sprayed-on fire protection has not been compromised, damaged or displaced by the current alteration or by any prior alteration or other event.

**Local Law 34-1988.*

***Local Law 26-2004.*

§[C26-502.3] 27-325 Elevators. - Structural members or car frames for elevators located within shaft enclosures need not be fire protected.

§[C26-502.4] 27-326 Lintels. - Lintels over openings wider than four feet in masonry walls, other than in walls of masonry veneer on wood frame structures, shall be fire protected as required by section 27-324 of this article for structural members, when the full load over the opening is not relieved by a masonry arch of required strength. The members of an assembled metal lintel that support only outer face masonry that is securely bonded or anchored to backing need not be fire protected, provided that the inner members of the assembly support the full load imposed upon the lintel and are fire protected as required for structural members supporting masonry.

(a) Stone lintels. - The use of stone lintels on spans exceeding four feet shall not be permitted unless supplemented by fire protected structural members or masonry arches of the required strength to support the superimposed loads.

§[C26-502.5] 27-327 Ceilings. -

(a) Ceilings that contribute to the required fire-resistance rating of a floor or roof assembly shall be continuous between exterior walls, vertical fire divisions, fire separations, corridor partitions or any other partitions having at least the same fire resistance rating as the ceiling. All such fire-rated partitions shall be constructed as set forth in section 27-340 or subdivision (a) of section 27-341, as appropriate. The concealed space above such ceiling shall be firestopped into areas not exceeding three thousand square feet with materials listed in section 27-345 of this subchapter for the full height of the concealed space. Access to each such concealed space may be through one or more openings, not exceeding nine square feet and protected by self-closing opening protectives having the fire-protection rating required by table 5-3.

(1) Firestopping shall not be required where the structural members within the concealed space are individually protected with materials having the required fire-resistance rating, or where the ceiling is not an essential part of the fire-resistive assembly; nor shall firestopping be required where a concealed space is sprinklered in accordance with the construction requirements of subchapter seventeen of this chapter.

(b) Electrical and other openings in ceilings. - Ceilings required to have a fire-resistance rating may be pierced to accommodate noncombustible electric outlet boxes or recessed lighting fixtures if the aggregate area of such openings does not exceed sixteen square inches in each ninety square feet of ceiling area and the electrical outlet boxes or recessed lighting fixtures are constructed of steel at least .022 inches thick and sealed tightly at the ceiling. Noncombustible pipes, ducts, and additional or larger electrical or other service facilities may pierce ceilings that are required to have a fire-resistance rating only when the type of ceiling to be used has been tested with such types of facilities installed in place and the proportionate area of openings for such facilities to be installed in the ceiling does not exceed the proportionate area of such openings in the assembly tested, and provided no opening is larger than that in the assembly tested. Protection for such openings shall be the same as provided in the test. Duct openings installed in accordance with the foregoing shall be protected by fire dampers complying with the requirements of subchapter thirteen of this chapter.

§[C26-502.6] 27-328 Fire retardant treated wood. -

(a) Material. - Fire retardant treated wood shall be pressure treated with fire retardant chemicals in accordance with reference standards RS 5-3 and RS 5-4. Where used as a structural element or as furring, the material shall have a flame spread rating not greater than twenty-five when tested in accordance with reference standard RS 5-5 when exposed for a period of at least thirty minutes, with no evidence of significant progressive

combustion. Where used as interior finish or trim, the material shall have a flame spread rating that meets the requirements of section 27-348 of this subchapter for the location in which it is used. Subsequent to treatment, material two inches thick or less shall be air dried or kiln dried to an average moisture content of not more than nineteen percent.

(b) Label. - All fire-retardant treated wood shall bear the identification of a testing laboratory or producer certifying to the performance thereof, in accordance with the acceptance requirements of section 27-131 of article seven of subchapter one of this chapter.

(c) Application. - Fire-retardant treated wood may not be used where exposed to the weather or in interior spaces where the relative humidity is normally eighty percent or more. There shall be no fabrication of the material after treatment, such as cutting, shaping, or grooving for splines or ring connectors so as to expose untreated surfaces, except that the material may be cut to length, shaped, or grooved if the exposed surfaces or edges are tightly butted against other material that is noncombustible or that is fire retardant treated, so that no untreated wood is left exposed to danger of ignition. Holes may be bored or cut for plumbing or heating pipes and for electric outlets only if the openings are covered [*sic*] with tightly-fitted noncombustible escutcheons or cover plates. The allowable working stresses of the material shall be ninety percent of the allowable stresses for untreated lumber of like classification.

(d) Where permitted in construction group I- Fire-retardant treated wood may be used in buildings of construction group I in the following cases:

- (1) As permitted by table 3-4.
- (2) For interior non-bearing partitions that are not required to have a fire-resistance rating.
- (3) For interior furring and blocking of exterior walls, furring and blocking of interior walls and partitions, and framing of suspended ceilings provided the furring, blocking, and framing do not affect the integrity, or reduce the fire-resistance rating, of the construction element.
- (4) For interior finish and trim.

(e) Area increase. - Fire-retardant treated wood may be used in construction group II buildings in lieu of untreated wood for wall studs, bearing partition studs, columns, beams, girders, joists, rafters, trusses, sole and cap plates, subflooring and roof decks, and when so used, the area limitations of tables 4-1 and 4-2, for buildings of construction group II, may be increased by thirty-three and one-third percent.

§[C26-502.7] 27-329 Opening protectives. - Opening protectives, including frames, self-closing devices, and hardware, shall be classified as to fire-protection rating in accordance with the test procedures of reference standards RS 5-6 and RS 5-7, and shall be installed, maintained, and operated in accordance with the provisions of reference standard RS 5-8. All opening protectives shall bear the identification of a testing laboratory or agency certifying to the performance rating thereof, in accordance with the acceptance requirements of section 27-131 of subchapter one of this chapter.

§[C26-502.8] 27-330 Slow burning plastic. - Slow burning plastic shall be of a material that burns no faster than two and one-half inches per minute in sheets 0.060 in. thick when tested in accordance with reference standard RS 5-12 or that is not consumed in less than two minutes when tested in accordance with reference standard RS 5-13. The thickness of the plastic material shall be determined by method "B" of reference standard RS 5-14.

ARTICLE 4 PREVENTION OF EXTERIOR FIRE SPREAD

§[C26-503.1] 27-331 Exterior walls. - Exterior walls shall comply with the fire-resistance rating requirements of table 3-4. Where provisions of this code require a space or facility to be enclosed, the construction requirements for the enclosure shall not apply to any exterior wall that forms part of the enclosure.

(a) Openings in exterior walls. - In addition to the requirements of table 3-4 and subchapters six and eight of this chapter, exterior openings above the third floor level of a building or above a height of forty feet, except buildings in occupancy group J-3, open parking structures, and buildings of construction class II-D and II-E, shall have opening protectives when (1) any part of the opening is less than thirty feet distant in a direct unobstructed line not in the same plane, from an opening in another building or from a wood frame building or (2) any part of the opening is above and less than thirty feet in a direct unobstructed line from, any roof construction that has a fire-resistance rating of less than one hour or that has unprotected openings therein within this distance, whether the roof construction is on the same building or on an adjacent building.

(b) Opening protective required ratings. - In a building or space classified in occupancy group A, all opening protectives shall be three-quarter hour (class E) opening protectives meeting the requirements of reference standard RS 5-8. Such protectives shall be fixed self-closing or automatic. Alternatively, these openings may be protected with three-quarter hour (class F) protectives together with outside sprinklers installed in accordance with construction requirements of subchapter seventeen of this chapter. In such cases, there shall be an automatic dry pipe sprinkler head centered over each opening with the orifice directed against the opening. All opening protectives required by table 3-4 or by subdivision (a) above in buildings classified in other than occupancy group A shall be three-quarter hour (class F) openings.

(c) First story openings. - Opening protectives required by table 3-4 may be omitted in show windows or other openings on the lowest story of a building facing on a street or public space.

(d) Nonautomatic protectives. - Required opening protectives in exterior openings, if not self-closing or automatic, shall be kept closed by the occupants at all times when not required for light or ventilation under

the provisions of subchapter twelve of this chapter.

(e) Construction of unprotected openings. - Exterior windows and doors, including their frames and glazing, that are not required by this code to have a fire-protection rating, may be of combustible materials. Below a height of seventy-five feet, slow-burning plastic glazing may be used in windows. Glazing in balcony doors shall comply with the requirements of paragraph four of subdivision (g) of section 27-369 of article five of subchapter six of this chapter.

(f) Vertical separation of openings. - In buildings classified in occupancy groups A, B, C, D and E, exceeding three stories or forty feet in height, openings located vertically above one another in exterior walls except in stairway enclosures, shall be separated by a spandrel wall at least three feet high between the top of one opening and the bottom of the opening immediately above; or each such opening above the lower one shall be protected against fire by an opening protective; or a fire canopy of noncombustible materials, extending out at least two feet horizontally from the wall and at least as long as the width of the lower opening, shall be constructed between the two openings. Spandrels and fire canopies shall be constructed to provide at least the fire-resistance rating required for the exterior wall, but in no event less than one hour.

§[C26-503.2] 27-332 Party walls. - The construction, design, and fire-resistance rating of party walls shall be the same as required by this code for vertical fire divisions. Concealed spaces in cornices and eaves shall be fire-stopped as a continuation of the party wall.

§[C26-503.3] 27-333 Parapets on exterior walls. - Parapets shall be provided on all exterior walls of buildings of construction class II-A, II-B, or II-C that have roof construction of combustible materials.

(a) Exceptions. - A parapet need not be provided on the exterior wall of any building:

- (1) That is less than twenty-two feet high; or
- (2) Whose roof has a pitch of more than twenty degrees to the horizontal and whose overhang, fascia, cornice or gutter is of noncombustible construction, or if of combustible construction is separated from the roof and ceiling construction by construction having the fire-resistance rating required for the exterior wall of the building. Combustible members, excluding roof sheathing and its supporting members, if covered by a class A roof covering and complying with the restrictions as required by section 27-335 of this article, shall not extend through this construction, but shall have at least four inches of solid noncombustible material below, at the sides, and at the ends of such members; or
- (3) That is provided with a fire canopy at, or not more than two feet below the roof level, continuous around that portion of the wall that is without a parapet, constructed as required by subdivision (f) of section 27-

331 of this article.

(b) Construction. - Parapets required under this section shall be of materials and assembly having at least the fire-resistance rating of the wall below, and shall be at least two feet high.

§[C26-503.4] 27-334 Protective guards. - Buildings that are more than twenty-two feet in height and have roofs that are flatter than twenty degrees to the horizontal shall be provided with a parapet not less than three feet six inches high, or be provided with a three foot six inch high railing or fence, or a combination of a parapet and railing or fence which together are not less than three feet six inches high. Railings or fences may be located inward from the face of the exterior wall a distance not exceeding six feet, and shall be of a type that will prevent children from crawling through or over them. Where roofs are used for recreational purposes, wire fencing at least ten feet high shall be constructed. Where ball games are played on roofs the wire fencing shall be extended to provide an overhead closure. Except on buildings of classes II-D or II-E construction, railings or fences shall be of noncombustible material. Railings shall be constructed as required in section 27-558 of article three of subchapter nine of this chapter.

§[C26-503.5] 27-335 Exterior trim. - For the purposes of this section, exterior trim shall be defined as any material, other than door and window frames and sash, that is applied to exterior walls and which, if removed or destroyed, will not reduce the structural stability of the building enclosure, and which is installed so as not to reduce the required fire-resistance rating of the enclosure. Exterior trim shall include cornices, overhanging eaves, fascias, belt courses, pilasters, surrounds, gutters, leaders, half-timber work, shutters, trellises, etc.

(a) Combustible exterior trim:

- (1) May not be used on buildings required to be of construction group 1 except that slow-burning plastics or approved equivalent materials may be used up to a height of twenty-five feet, provided that such trim covers not more than five percent of the surface area of the building enclosure (openings not included), or not more than one thousand square feet.
- (2) May be used to a height of forty feet on buildings of construction class II-A, II-B, and II-C provided that such trim covers not more than ten percent of the surface area of the building enclosure (openings not included), projects not more than eight inches beyond the outside face of the building enclosure, and has an exterior separation of at least fifteen feet measured from the outermost surface of the trim.

EXCEPTION - Cornices, gutters, or overhanging roofs, when permitted, may project up to three feet beyond the outside face of the building enclosure if they are at least eight inches above the topmost opening, are

firestopped as required by section 27-345 of article five of this subchapter and either:

- a. have their combustible structural members protected by soffits and fascias of a material or assembly having at least a one hour fire-resistance rating, or
 - b. have all their combustible members separated from the roof and ceiling construction by construction having the fire-resistance rating required for the exterior wall, with at least four inches of solid noncombustible material below, at the sides, and at the ends of such members;
- (3) May be used to an unlimited extent in buildings of construction classes II-D and II-E on exterior walls that are not required to have a fire-resistance rating.

***§27-335.1 Acoustical and thermal insulation; use in noncombustible construction. -**

(a) Notwithstanding any provision of this code to the contrary, acoustical or thermal insulation, which is not noncombustible, may be used where noncombustible construction is required if:

(1) it satisfactorily passes a test for determining noncombustibility of elementary materials, based on the test procedures of A.S.T.M. E136-65, and, upon exposure to fire will not produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions; or

(2) it has a flame-spread rating not greater than twenty-five, a smoke developed rating not greater than fifty, is without evidence of continued progressive combustion when tested in accordance with the test procedure of reference standard RS 5-5, and upon exposure to fire will not produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions.

(b) Notwithstanding any provision of subdivision a of this section or any other provision of this code to the contrary, acoustical or thermal insulation, which is not noncombustible and which does not meet the requirements of subdivision a of this section, may be used where noncombustible construction is required subject to the approval of the commissioner, and provided it is installed in a composite method of construction, with a minimum of three inches of unpierced masonry or concrete on all sides.

(c) Notwithstanding any provision of subdivision a or b of this section or any other provision of this code to the contrary, thermal insulation, which is not noncombustible and which does not meet the requirements of subdivisions a and b of this section, may be installed in an exterior wall system in any noncombustible construction group, provided that:

(1) such insulation is of a thickness no greater than four inches; provided, additional thickness used exclusively for decorative or leveling purposes shall be permissible, where the area of such additional thickness

does not exceed fifteen percent of the [sic] wall area on any single story;

(2) such insulation has a heat value not in excess of six thousand Btu per square foot;

(3) such insulation is installed in a composite method of construction and is separated from interior spaces by a thermal barrier having at least a one-hour fire resistance rating;

(4) such insulation has a flame spread rating not greater than twenty-five and a smoke developed rating not greater than four hundred fifty, and is covered with, and sealed or joined by, material having a flame spread rating not greater than twenty-five and a smoke developed rating not greater than fifty, when tested in accordance with the procedures of reference standard RS 5-5;

(5) such insulation is installed in a manner which meets the requirements for firestopping set forth in section 27-345;

(6) upon exposure to fire, the exterior wall system and each of its components will not produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions;

(7) the structure on which the exterior wall system is installed meets the requirements of section 27-331 pertaining to minimum horizontal and vertical separation distances; provided, however, that such insulation shall not be used on the exterior surface of a wall of a court or shaft if the horizontal or vertical separation distance between such wall and another wall of such court or shaft is less than twenty feet;

(8) the use of such insulation on soffits or other horizontal areas shall not extend more than three feet beyond the outside face of the building enclosure;

(9) the use of such insulation on buildings having party walls meets the requirements of section 27-332;

(10) such insulation meets the acceptance requirements of section 27-131;

(11) the results of a fire test of a representative portion of the exterior wall system meet the requirements of reference standard RS 5-21;

(12) the edge or face of the assembly containing such insulation is labeled with the following information:

a. the name of a nationally recognized testing laboratory acceptable to the commissioner which has inspected such insulation;

b. the model of the exterior wall assembly for which such insulation is listed by a nationally recognized testing laboratory acceptable to the commissioner;

c. the identity of the manufacturer of such insulation;

d. the flame spread and smoke developed ratings; and

(13) the installation of such insulation shall be subject to controlled inspection to ensure that the installation is fully consistent with the terms of the listing by a nationally recognized testing laboratory acceptable to the

commissioner, acceptance requirements of section 27-131 and the manufacturer's installation recommendations.

(d) The commissioner may, with regard to thermal insulation, the use of which is authorized by this subdivision, establish by regulation training criteria for persons installing such insulation, and prohibit the installation of such insulation by persons not adequately trained. Any person installing such insulation shall certify to the commissioner that the installation is fully consistent with the terms of the listing by a nationally recognized testing laboratory acceptable to the commissioner, acceptance requirements of section 27-131 and the manufacturer's installation recommendations.

(e) Definitions. As used in this section:

(1) "Composite method of construction" shall mean a method of construction in which diverse materials are combined to form an assembly, whether the assembly is prefabricated or fabricated at the site of installation.

(2) "Exterior wall system" shall include the exterior walls of a building and the appurtenances thereof.

**Local Law 13-1987.*

§[C26-503.6] 27-336 Porticos, porches, etc. -

Porticos, entranceways, storm enclosures, bay windows, oriel windows, porches, or similar appendages may be constructed of combustible materials or assemblies on buildings of construction class II-E to an unlimited extent, and on buildings of construction classes II-A, II-B, II-C, and II-D under all of the following conditions:

(a) The building is classified in occupancy group J-2 or J-3.

(b) The building is not more than three stories or forty feet high.

(c) The appendage has an exterior separation on all exposed sides of at least fifteen feet, measured from the outermost surface of the appendage.

(d) The appendage is so constructed that its removal or destruction will not reduce the structural stability or fire resistive integrity of the building.

(e) The vertical surface area of the combustible portions of the appendage, including any exterior trim, is not more than ten percent of the total wall area (windows excluded) of the building.

(f) The appendage has a superficial roof area not exceeding one hundred fifty square feet and is included in the area limitations of table 4-1 and 4-2 for the entire building.

(g) The appendage is not higher than the sills of the second story windows.

(h) The roof of the appendage has a class A roof covering.

(i) The soffit or ceiling covering the combustible roof framing of the appendage has a one hour fire-resistance rating.

(j) The requirements of subdivisions (h) and (i) of this section shall not apply in the case of roofs or awnings over patios or entrance platforms where the area of

vertical exposure of the patios or platforms to the outdoors is equal to at least that of the patio or platform area. Plastic shall be slow burning; canvas or other fabric shall be noncombustible or flameproofed in accordance with the provisions of title fifteen of the administrative code.

§[C26-503.7] 27-337 Roof coverings. -

Roof coverings shall be classified as A, B, or C on the basis of their resistance to exterior fire exposure as listed in reference standard RS 5-9, or as determined by tests made in conformance with reference standard RS 5-10 for those not listed.

(a) **Limitations of use.** - Every roof placed on a building shall be covered with Class A or B roof covering, except Class C roof coverings may be placed on buildings classified in occupancy group J when not more than three stories or forty feet in height, and on buildings permitted by this code to be of Class II-D or II-E construction. The use of roofing having no rating is prohibited, except for replacement to the extent of twenty-five percent of the roof area in any twelve month period.

(b) **Combustible roof decking.** - Unless attached directly to noncombustible framework, all roof coverings shall be applied to a closely fitted deck; except that wood shingles, to the extent permitted in subdivision (a) of this section, may be applied to wood slats.

(c) **Roof insulation.** - Combustible roof insulation may be applied on top of roof decking or slab provided that it is protected with the roof covering applied directly thereto.

§[C26-503.8] 27-338 Roof structures. -

(a) **Construction of penthouses.** - Enclosure walls of penthouses shall comply with the requirements for exterior walls of table 3-4 for the construction class of the building on which they are erected. Roofs of penthouses shall comply with the requirements for roof construction of table 3-4 and section 27-337 of article five of subchapter six of this chapter.

(b) **Construction of bulkheads.** - Bulkheads shall be constructed of noncombustible materials having a one hour fire-resistance rating, except that in buildings of construction class II-E, they may be constructed of combustible materials having a one hour fire-resistance rating.

(c) **Scuttles.** - Scuttles shall be constructed of noncombustible materials, or of combustible materials covered on the top, sides, and edges with noncombustible materials.

(d) **Skylights.** - For the purposes of this section, the term "skylight" shall be construed to include the sash, frames, and glazing of roof monitors and sawtooth roofs.

(1) **SASH AND FRAMES.** - Skylights that are inclined at less than sixty degrees to the horizontal on all buildings of other than construction classes II-D and II-E, shall have sash and frames constructed of noncombustible materials, and their glazing shall be as

prescribed in paragraph two of this subdivision. Skylights that are inclined at greater than sixty degrees to the horizontal shall have sash and frames constructed as required for windows, and their glazing shall be as required for windows. Glass, glass blocks, or plastic used in skylights shall be designed and constructed to withstand the same live loads as required for roofs plus any concentrated live loads required herein.

(2) GLAZING. -

a. Skylights over stairways and shafts. - Skylights placed over stairways and shafts shall be glazed with plain glass not more than one-eighth inch thick or unreinforced plastic not more than three-sixteenths of an inch thick.

b. Skylights over other spaces. - Skylights in all locations other than over stairways and shafts shall be glazed with one-quarter inch wired glass, plain glass, glass block, or plastic of material and installation complying with subparagraph c of this paragraph.

c. Plastic. - Plastic used for the glazing of skylights other than skylights over stairways and shafts shall be slow burning plastic. The aggregate area of skylight openings, other than over stairways and shafts, shall not exceed thirty per cent of the floor area of any room or space sheltered by the roof in which they are located. The edges of plastic, if exposed, shall be protected by metal or other noncombustible material. Skylights in which plastic is used, if on roofs having a pitch of twenty degrees to the horizontal or less, shall be constructed in accordance with the following:

1. The area within the curbs of each skylight shall not exceed five square feet, except that this area may be of any size, limited only by other provisions of this section, if the opening is protected on all sides by a noncombustible railing thirty-six inches in height complying with the provisions of section 27-558 of article three of subchapter nine of this chapter for railings; or the skylight is subdivided into areas of five square feet or less by noncombustible muntins or bars capable of supporting a live load of three hundred pounds at any point; or a noncombustible screen or grid capable of supporting a load of three hundred pounds over any one foot by two foot area as provided above, integral with, or not more than three feet below the skylight, with the wire or bars spaced into areas of five square feet or less (if above the roof, the wires shall be of corrosion resistive metal).

2. There shall be a minimum clear distance of three feet between skylights.

(3) SEPARATION OF SKYLIGHTS FROM STRUCTURES. -

There shall be at least ten feet between a plain glass or plastic skylight and any door in a stair bulkhead located above the roof in which the skylight is located, and at least ten feet between such a skylight and any opening in any roof structure or other wall above the roof not equipped with an opening protective. On buildings up

to one hundred feet in height, there shall be at least ten feet from such a skylight to the outside face of an exterior wall facing on a frontage space.

(4) SCREENS. - Plain glass skylights shall be protected on their underside by noncombustible screens having a mesh not smaller than three-quarters of an inch by three-quarters of an inch nor larger than one inch by one inch of at least No. 12 B. & S. gage [*sic*] wires. The screen shall be installed tight against the roof opening or shall project on all sides for a distance of not less than the distance of the screen below the glass, and shall be of such material and construction so as to support a load of three hundred pounds over any one foot by two foot area. The provisions for wire glass or screen protection shall not apply to glass block skylights.

(e) Greenhouses. - Greenhouses on the roofs of buildings other than buildings of construction class II-D or II-E shall be constructed of noncombustible framework and shall be glazed with plain or wire glass, or slow burning plastic. The floors of greenhouses shall be constructed at least as required for roof construction in table 3-4 for the construction class of the building on which it is located.

(f) Construction of sloping roofs. - Roofs having a slope of more than sixty degrees to the horizontal shall be constructed of material having the same fire-resistance rating as required for an exterior non-bearing wall of the building of which it is a part. When the slope is sixty degrees or less to the horizontal, the sloping roof shall be constructed as required for the roof of the building. Where the back of a false mansard is exposed to the outdoors, the back shall be covered with noncombustible material or with roof coverings as required for the roof of the building.

(g) Dormers. - Roofs of dormers shall be of the same type of construction and have roof covering of the same class as required for the roof of the building on which they are located. The walls of dormers shall be constructed of materials having the same fire resistance rating as required for non-bearing exterior walls of the building on which they are located; except that in buildings of construction classes II-A, II-B, II-C, and II-D, the walls may be constructed of combustible framing provided that the outside face of the framing is protected with noncombustible sheathing and the aggregate area of all such dormer walls, including openings therein, does not exceed twenty percent of the roof area.

(h) Water tanks. -

(1) SUPPORTS. - All water tanks placed in or on a building and having a capacity of more than five hundred gallons shall be supported on noncombustible walls or framing. When such tank is located within the building, above the lowest story, its framing shall be fire protected as required for columns supporting one

floor or the tank shall be located within a room or space that is enclosed with construction having a fire-resistance rating equivalent to that otherwise required for the protection of the framing.

(i) Cooling towers. - Cooling towers shall be constructed of noncombustible materials, except as follows:

(1) Outside the fire districts, when located on a building three stories or forty feet in height or less of construction group I, cooling towers may be constructed of combustible materials provided they are not more than fifteen feet high and do not exceed seven hundred fifty square feet in area.

(2) Outside the fire districts, when located on the ground and not exceeding three stories or forty feet in height or one thousand five hundred square feet in area, cooling towers may be constructed of combustible material provided they are protected by a noncombustible screen, fence, or wall at least twenty feet from the tower and at least seven feet high.

(3) Filling and drift eliminators may be of combustible materials if the towers are provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen.

(4) Filling and drift eliminators may be of combustible materials where the towers are not provided with automatic sprinkler protection, provided all of the following conditions are met:

a. The cooling tower is constructed of noncombustible material;

b. The cooling tower is located on a building in construction group I-A or I-B;

c. The cooling tower and filling and drift eliminators are located at least thirty feet away from any windows or fresh air intakes which are at an elevation above the roof on which the cooling tower is located, whether in the same building or in an adjoining building;

d. The cooling tower is located not less than fifteen feet from the nearest lot line; and

e. The cooling tower is located not less than ten feet from any chimney, except that the distance shall be not less than twenty feet from a chimney venting products of combustion other than from gas or oil fired appliances, whether on the same building or an adjoining building.

(5) In no event shall cooling towers or filling and drift eliminators be constructed of materials that contain asbestos.

(j) Miscellaneous roof structures. - The following roof structures may be constructed of combustible material if less than twelve feet high above the roof: antenna supports; flagpoles; clothes drying frames; duckboarding or platforms that do not cover more than twenty per cent of the roof area at that level.

ARTICLE 5 PREVENTION OF INTERIOR FIRE SPREAD

§[C26-504.1] 27-339 Fire segregation of occupancies.-

(a) Segregation by fire divisions. - When different occupancies are to be segregated by fire divisions under the provisions of section 27-240 of subchapter three of this chapter, the occupancies shall be separated from each other, vertically and horizontally, by fire divisions having at least the fire-resistance ratings listed in table 5-2 for the occupancy groups involved. Every building section shall be constructed of elements having at least the fire-resistance rating of a construction class required for the area and height of the building section as listed in tables 4-1 and 4-2.

(b) Segregation by fire separations. - When different spaces are to be segregated by fire separations under the provisions of section 27-240 of subchapter three of this chapter, the occupancies shall be separated from each other, vertically and horizontally, by fire separations having at least the fire-resistance ratings listed in table 5-1. In buildings of construction group I, fire separations shall be constructed of noncombustible materials.

(c) Compartmentation. - Notwithstanding the provisions of Table 4-1, in existing office buildings one hundred feet or more in height having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, unsprinklered floor areas, more than forty feet above curb level, shall be subdivided by fire separations into spaces or compartments of the size required by paragraphs one through five of this subdivision. Floor area shall be defined as the area within exterior walls and excluding any areas enclosing stairs, corridors, elevators and shafts:

(1) Unless otherwise provided below, all unsprinklered floor areas shall be segregated by one-hour fire separations into spaces or compartments not to exceed seventy-five hundred square feet.

(2) Where the floor area exceeds ten thousand square feet, at least one of the subdividing fire separations shall be of two-hour fire-resistive construction, creating areas of refuge, complying with section 27-372 of article five of subchapter six of this code except that the requirement for an elevator in each area shall not apply.

(3) The floor area or any subdivided area may be increased to not more than fifteen thousand square feet if complete area protection by approved devices for the detection of products of combustion other than heat is provided within such increased area and provided further than*** at least one of the subdividing fire separations shall be of two-hour fire-resistive construction where the floor area exceeds fifteen thousand square feet, creating areas of refuge in the same manner and under the same conditions as provided in two of this subdivision. The activation of any such detectors shall have the same effect as provided in subdivision (f) of section 27-972 of article five of subchapter seventeen of this code.

TABLE 5-1 FIRE SEPARATIONS

Key: Fire-resistance ratings are given in hours. For Table 5-1, read above heavy line. For Table 5-2, read below heavy line.

NR—No Requirement

OCCU-PANCY	A	B-1	B-2	C	D-1	D-2	E	F-1a	F-1b	F-2	F-3	F-4	G	H-1	H-2	J-1	J-2	J-3
A	4	4	4	4	4	4	4 ^c	4	4	4	4	4	4	4	4	4	4	4
B-1	4	3	NR	1 ^{bc}	NR	NR	1 ^{ac}	1 ^c	1 ^c	—	1 ^c	1 ^c	1 ^c	1½ ^c	1½ ^c	1 ^c	1 ^c	1 ^c
B-2	4	3	2	NR	NR	NR	NR	NR	NR	—	NR	NR	NR	NR	NR	NR	NR	NR
C	4	3	2	2	1	NR	NR	NR	NR	—	NR	NR	NR	1	1	1	1	1
D-1	4	3	3	3	3	NR	1 ^a	1	1	—	1	1	1	1½	1½	1	1	1
D-2	4	3	2	2	3	2	NR	NR	NR	—	NR	NR	NR	NR	NR	NR	NR	NR
E	4	3	2	2	3	2	2	NR	NR	—	NR	NR	NR	1 ^a	1 ^a	1 ^a	1 ^a	1 ^a
F-1a	4	3	2	2	3	2	2	2	NR	—	NR	NR	NR	1	1	1	1	1
F-1b	4	3	2	2	3	2	2	2	2	—	NR	NR	NR	1	1	1	1	1
F-2	4	3	2	2	3	2	2	2	2	2	—	—	—	—	—	—	—	—
F-3	4	3	2	2	3	2	2	2	2	2	2	NR	NR	1	1	1	1	1
F-4	4	3	2	2	3	2	2	2	2	2	2	2	NR	1½	1½	1	1	1
G	4	3	2	2	3	2	2	2	2	2	2	2	2	NR	NR	NR	NR	NR
H-1	4	3	2	2	3	2	2	2	2	2	2	2	2	2	NR	1	1	1
H-2	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	1	1	1
J-1	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	NR	NR
J-2	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	NR
J-3	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2

TABLE 5-2 FIRE DIVISIONS**NOTES FOR TABLES 5-1 AND 5-2**

^aAn office, or group of offices, whose use is accessory to an occupancy, and totals four hundred square feet or less in area shall not be required to have a fire separation. Such office, or group of offices, totalling more than four hundred square feet in area shall not be required to have a fire separation if such offices exit directly, without having to pass through the area of the related occupancy.

^bCounters and backbars for the sale of publications, tobacco products, liquors, or candies, or for making of reservations for travel, car rental, or theatre, or otherwise involving similar business and mercantile activities that are accessory to an occupancy and are limited in area to one hundred square feet, within the area of the occupancy, need not comply with the requirements of this table.

^cThe provisions of this table shall not apply to closets seventy-five square feet or less in area.

^dNonresidential kitchens need not be separated by fire separations from adjoining dining spaces, provided:

- (1) The cooking equipment is vented directly to the outdoors, and
- (2) 2* draft curtain of noncombustible material, at least twenty-four inches down from the ceiling, is provided to separate the cooking facilities from dining spaces, and
- (3) Sprinkler heads constructed in accordance with the provisions of subchapter seventeen of this chapter, are provided on the cooking facilities side of the curtain, or any opening between the kitchen and dining space, located within twenty-four inches of the curtain or opening, and spaced not more than forty-eight inches on centers if the opening is more than sixty inches wide. When fire separations are provided double-action doors may be permitted.

^eKitchens having a floor area of fifty-nine square feet or less located within dwelling units shall be separated from adjacent spaces by partitions having a fire-resistance rating of at least one hour except for the entrances thereto which need [not]** comply with section 27-342 of this article. If doors are provided they may be of wood.

^fIn buildings or spaces classified in occupancy group J-1 or J-2 all partitions in dwelling units located in cellars shall have a minimum fire-resistance rating of one hour.

*As enacted; "A" probably intended.

**Copy in brackets not enacted but probably intended.

(4) In existing buildings, existing fire separations of one-hour fire-resistive construction may be accepted in lieu of the fire separation of two hour fire-resistive construction providing all other requirements of paragraphs two and three of this subdivision are complied with.

(5) Regardless of the floor area, no subdivision of the floor area shall be required under this subdivision when complete sprinkler protection is provided in accordance with the construction provisions of subchapter seventeen of this chapter.

(6) Existing office buildings one hundred feet or more in height shall comply with the requirements of this subdivision as follows:

a. Whenever an alteration is performed involving partition changes, compliance with this subdivision shall be required in that portion of the building being altered.

b. At least one-third of the total floor area of the building not in compliance with the requirements of this subdivision on February seventh, nineteen hundred seventy-three, shall comply with such requirements on or before December thirteenth, nineteen hundred eighty-one. Complete plans showing such compliance for the phase of the work to be done shall be filed with, and a permit secured from, the commissioner on or before September thirteenth, nineteen hundred eighty.

c. At least two-thirds of the total floor area of the building not in compliance with the requirements of this subdivision on February seventh, nineteen hundred seventy-three, shall comply with such requirements on or before August seventh, nineteen hundred eighty-four.

d. Full compliance shall be provided on or before February seventh, nineteen hundred eighty-eight.

(7) In existing office buildings one hundred feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraphs one through five of this subdivision and accept alternatives fulfilling the intent of these requirements. Where compliance with the time requirements of paragraph six of this subdivision would cause undue hardship, the commissioner, with the approval of the fire commissioner, may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved, permits obtained and a good faith effort towards completion of the work shall have been made.

****As enacted; "that" probably intended.*

§[C26-504.2] 27-340 Fire divisions. - Fire divisions shall be constructed of noncombustible materials or assembly of noncombustible materials to provide the fire-resistance ratings required by table 5-2. Vertical fire divisions shall be continuous between foundation,

roof, or horizontal fire divisions, and through any concealed space in floor or roof construction. Horizontal fire divisions shall be continuous between exterior walls and/or vertical fire divisions.

(a) When roof construction is combustible on both sides of a vertical fire division, the vertical fire division shall extend through the roof construction to a height of at least four inches above the high point at the roof framing. Decking shall tightly butt the fire division. Above the decking of roofs that are flatter than twenty degrees to the horizontal, blocking shall be constructed to form cants on both sides of the fire division with slopes not steeper than 1:4. Combustible decking shall not extend over the top of the fire division.

(b) Except as required in subdivision (c) of this section, when roof construction is noncombustible on one or both sides of a vertical fire division, the vertical fire division may terminate at the underside of the noncombustible roof construction provided the junction of the wall and roof construction is made smoke tight.

(c) When a vertical fire division is required by table 5-2 to have a fire-resistance rating of three or four hours, and the roof construction has a fire-resistance rating of less than two hours, the fire division shall extend above the roof construction to form a parapet at least three feet high.

(d) Fire divisions shall be so constructed that the removal or collapse of construction on one side will not endanger the support of construction on the other side.

(e) Fire divisions shall be made smoke tight at their junction with exterior walls. In buildings of construction class II-D and II-E, exterior walls shall be constructed of noncombustible materials for a distance of at least eighteen inches on each side of the fire division, or the fire division shall project at least twelve inches through the exterior wall.

(f) Fire divisions may be offset if the construction between the offset divisions, including their supports, has at the same fire-resistance rating as the fire division, with all hollow spaces within the construction firestopped with noncombustible material.

(g) Where combustible members such as joists, beams, or girders bear on, or frame into, vertical fire divisions, such members shall not extend through the wall and shall have at least four inches of solid noncombustible material below, at the sides, and at the ends of each such member.

(h) Chases or recesses shall not be cut into fire divisions so as to reduce their thickness below that required for the fire-resistance rating.

(i) Vertical fire divisions that are hollow shall be firestopped with at least four inches of noncombustible material so as to prevent passage of flame, smoke, or hot gases through the hollow spaces to the story above or below, or to hollow spaces within connecting floor or roof construction.

§[C26-504.3] 27-341 Fire separations. - Fire separations shall be constructed of materials or assembly of materials having at least the fire-resistance ratings required by table 5-1.

(a) Different tenancies. - Different tenant apartments, suites, stores, offices, or other spaces that are not separated from each other by fire divisions, shall be separated from each other by fire separations having at least the fire-resistance rating prescribed in table 5-1, but in no case less than one hour, and shall continue through any concealed spaces of the floor or roof construction above.

§[C26-504.4] 27-342 Openings in fire divisions and separations. - Openings in fire divisions and fire separations that are required to have a fire-resistance rating, shall be protected by opening protectives having the fire-resistance ratings prescribed in table 5-3, shall not exceed the limits in size and area herein prescribed, and shall comply with the provisions of section 27-329 of article three of this subchapter. Door and other openings in enclosures of vertical exits, exit passageways, corridors, and places of assembly shall be protected by opening protectives as required by the provisions of subchapters six and eight of this chapter. When such enclosures also serve as fire divisions or fire separations, openings therein shall be protected as required by the provisions of this subchapter.

**TABLE 5-3 OPENING PROTECTIVES
FOR FIRE DIVISIONS AND FIRE
SEPARATIONS**

Fire-resistance Rating of Fire Division or Fire Separation in which Opening Occurs (hr.)	Fire Protection Rating of Opening Protective
3 or 4	3 hr. (Class A)*
2 or 1 ½	1 ½ hr. (Class B)
1	¾ hr. (Class C)

* **Notes for Table 5-3:**

Shall consist of two one and one-half hour (class B) opening protectives, with one protective installed on each face of a fire division or fire separation.

(a) Size of opening. - In buildings that are not sprinklered no opening through a fire division or fire separation shall exceed one hundred twenty square feet in area, with no dimension greater than twelve feet, and the aggregate width of all openings at any level shall not exceed twenty-five percent of the length of the wall. Where the areas on both sides of a fire division or fire separation are sprinklered in accordance with the construction provisions of subchapter seventeen of this

chapter, the size of the opening may be one hundred fifty square feet in area, with no dimension greater than fifteen feet. In buildings fully sprinklered in compliance with the provisions of subchapter seventeen of this chapter, the size and aggregate width of openings through fire divisions or fire separations shall be unlimited. When a fire division or fire separation serves as a horizontal exit also, it shall have no opening other than door openings not exceeding fifty-six square feet in area, the aggregate width of all openings at any level shall not exceed twenty-five percent of the length of the wall, and shall comply with the provisions of section 27-373 of article five of subchapter six of this chapter.

(b) Conveyor openings. - Where fire doors or shutters are impractical for the protection of conveyor openings in fire divisions or fire separations, a system of water spray nozzles may be used. At least four nozzles shall be provided on each side of the opening so as to give complete coverage of the opening. Nozzles shall be controlled by an automatic valve actuated by a heat detector. Nozzles shall be located at an angle not more than thirty degrees between the centerline of nozzle discharge and a line perpendicular to the plane of the opening. The water discharge rate shall be at least three gallons per square foot per minute. When conveyor openings through floors are protected by this method, the openings shall also be provided with a noncombustible enclosure constructed around the conveyor from the floor up to or slightly beyond the spray nozzles, and draft curtains shall be provided extending twenty-four inches below and around the floor opening.

§[C26-504.5] 27-343 Ducts, pipes and conduits through rated construction. -

(a) Installation of ducts which pass through construction required to have a fire-resistance rating shall comply with the requirements of subchapter thirteen, provided that, notwithstanding the provisions of subchapter thirteen or reference standard RS 13-1, noncombustible ducts which pass through construction required to have a fire-resistance rating of one hour must be provided with fire dampers unless:

- (1) The building is classified in occupancy group C, E, or H-2; and
- (2) Complete sprinkler protection is provided for the floor in accordance with subchapter seventeen; or
- (3) The openings for the ventilation ducts do not exceed three square feet in area; or
- (4) The duct is protected on both sides of the partition for a distance equal to the maximum duct dimension by a sleeve affording one hour fire separation for such horizontal distance.

(b) Noncombustible pipes and conduits. -

Noncombustible pipes and conduits may pass through construction required to have a fire-resistance rating

provided that the space between the pipe or conduit and its sleeve or opening does not exceed one-half inch and is completely packed with mineral wool or equivalent noncombustible material and is closed off by close-fitting metal escutcheons on both sides of the construction; and provided further that the aggregate net area of such openings does not exceed twenty-five square inches in any one hundred square feet of wall or floor area (excluding the areas of openings for sleeves which are firestopped in conformance with this section and section 27-345).

(c) Openings for passage of pipe and ducts whose aggregate net area exceeds twenty-five square inches in any one hundred square feet of wall or floor area (excluding opening for sleeves which are firestopped in conformance with this section and section 27-345) may pierce constructions required to have a fire-resistance rating only when the type of construction to be used has been tested with such types of facilities installed in place and the proportionate area of openings of such facilities to be installed in the construction does not exceed the proportionate area of openings in the assembly tested, and provided no opening is larger than that in the assembly tested. Protection of such openings shall be the same as provided in the test. All openings through hollow fire rated construction shall be sleeved with sheet metal least No. 14 U.S. std. gage thick.

*(d) The installation and proper functioning of required fire dampers shall be subject to the controlled inspection requirements of section 27-132 of this code, except that it shall not be required that the architect or engineer be in the employ of the owner.

**Local Law 26-2004.*

§[C26-504.6] 27-344 Shafts. - The requirements of this section shall apply to all shafts, except that floor openings accommodating a slide pole in a fire house and openings other than for ventilation, chimneys or gas vents in buildings three stories or less in height classified in occupancy group J-3 shall be exempt from these requirements, and except as more restrictive requirements may be specified for chimneys and gas vents in subchapter fifteen of this chapter, stairway enclosures in subchapter six, duct enclosures in subchapter thirteen, elevator, escalator, and dumbwaiter enclosures in subchapter eighteen of this chapter, and except as permitted in reference standard RS 5-18.

(a) Construction. - Shafts shall be enclosed with materials having at least fire-resistance rating required by table 3-4. A shaft that serves the topmost story of a building shall extend through the roof at least thirty-six inches above any combustible roof construction. Where the roof construction is of noncombustible materials, the shaft shall extend through any concealed space within the roof construction and may terminate at the underside of the roof deck. Pipes and ducts penetrating shaft construction shall comply with the requirements of section 27-343 of this article.

(b) Combustible contents. - Shafts shall be kept free of bookshelves or other combustible contents except for stair construction as permitted under subchapter six of this chapter, duct and pipe coverings as permitted under subchapters thirteen and sixteen, and elevator car enclosures as permitted under subchapter eighteen of this chapter.

(c) Openings in shafts. - All shaft openings below the top terminus shall be provided with opening protectives that comply with section 27-329 of this subchapter and table 5-3. In shafts that contain only one opening below the roof terminus, no opening protective need be provided. Openings in elevator and dumbwaiter shafts shall comply only with the requirements of subchapter eighteen of this chapter. Where a window is located in a shaft wall that is an exterior wall and is ten stories or less above grade or three stories or less above a roof, it shall be protected against entrance by a permanently secured grille consisting of 5/8 in. dia. bars, 10 in. o. c. vertically, or by a stationary metal sash window having 1/8 in. thick solid section steel muntins, 8 in. o. c. one way. This protection shall not be required in stair shafts where there is a stair landing or platform not more than three feet directly below the window sill.

(d) Smoke venting of closed shafts. - All closed shafts having an area exceeding four square feet, other than elevator or dumbwaiter shafts, shall be provided with a smoke vent having an area of at least three and one-half percent of the maximum shaft area at any floor, but in no event less than one-half square foot. Elevator and dumbwaiter shaft vents shall comply with the requirements of subchapter eighteen of this chapter. Smoke vents may be windows, louvers, skylights, vent ducts, or similar devices. Vent ducts shall be enclosed by construction having the same fire resistance rating as required for the shaft enclosure. Such vent ducts shall extend vertically, diagonally, or horizontally as provided below.

(1) Through any roof of the building provided the vent opening is at least ten feet from any window, door, outside stairway, or interior lot line. This dimension may be reduced to five feet if the vent duct is extended up to at [sic] least the level of the top of the window or door. A vent that is required to extend above a roof shall extend at least eight inches above a roof assembly constructed of noncombustible materials, and at least thirty-six inches above a roof assembly constructed of combustible materials that are within a horizontal distance of ten feet.

(2) Through an exterior wall of the building, provided there are no openings in the wall within a distance of thirty feet vertically above the vent opening, and within five feet either side of the vent opening. When a side of a shaft is an exterior wall or a wall of a roof bulkhead, the required vent may be a louver or window. Any window or louver located in a shaft wall above a roof constructed of combustible materials shall have its sill at least thirty-six inches above the roof.

(e) Terminus of shaft vents. - Of the total required vent area for shafts, at least one-third shall be clear opening to the

outdoors, either in the form of fixed louvers, ridge vents, or hooded or goosenecked openings. In lieu thereof, skylights or trap doors may be used if constructed and arranged to open automatically by fusible link or other mechanical device when subjected to a temperature of one hundred sixty degrees Fahrenheit or to a rapid rise in temperature at a rate of fifteen to twenty degrees Fahrenheit per minute. The remaining portion of the required vent area may be a window or skylight glazed with plain glass not more than one-eighth inch thick or slow burning plastic.

(f) Machine rooms.- Any compartment containing machinery that communicates with a shaft enclosure shall comply with all requirements for shafts. The required louver or glazing shall not be located in any door leading into such compartment.

§[C26-504.7] 27-345 Firestopping.- Concealed spaces within partitions, walls, floors, roofs, stairs, furring, pipe spaces, column enclosures, etc. that would permit passage of flame, smoke, fumes, or hot gases from one floor to another floor or roof space, or from one concealed area to another, shall be firestopped to form an effective draft barrier, or shall be filled with noncombustible material in accordance with the requirements of this section. Firestopping shall not be required where a concealed space is sprinklered in accordance with the construction provisions of subchapter seventeen of this chapter, or is constructed as a shaft.

(a) Firestopping materials.- In buildings of construction group I, firestopping or fill shall be of noncombustible material that can be shaped, fitted, and permanently secured in position. In buildings of construction group II, firestopping may be of combustible material consisting of wood not less than two inches nominal thickness with tight joints, two layers of one inch nominal thickness assembled so that there are no through joints or of one-half inch exterior type plywood with joints backed, except that noncombustible firestopping shall be used in concealed spaces of fire divisions and where in contact with fireplaces, flues, and chimneys. Noncombustible firestopping may be masonry set in mortar, concrete, three-quarter inch thick mortar or plaster on noncombustible lath, plasterboard at least three-eighths of an inch thick, fire-rated wallboard at least five-eighths of an inch thick, sheet metal at least No. 14 U.S. std. gage thick, solid web metal structural members, asbestos-cement board at least one-quarter of an inch thick, or equivalent rigid noncombustible material. Mineral, slag, or rockwool may be used for firestopping when compacted to a density of at least three and one-half pounds per cubic foot into a confined space of least dimension not more than one-third its second dimension.

(1) The performance of through-penetration fire stops shall be measured and specified according to reference standard RS 5-19.

(2) The commissioner may accept reference standard RS 5-19 test data results from an independent laboratory acceptable to the commissioner pursuant to subdivision (c) of section 27-131, when such data is submitted by a registered architect or licensed professional engineer to justify the usage of fire stops or the details of their installation not specified herein.

(b) Hollow partitions and furred spaces.- All hollow partitions and furred out spaces shall be firestopped at each floor level. Firestops shall be the full thickness of the hollow space or furred out space.

(c) Stairs.- Concealed spaces within stair construction shall be firestopped between stringers at the top and bottom of each flight of stairs so as not to communicate with concealed spaces in the floor, roof or intermediate landing construction.

(d) Ceiling spaces.- Floor or roof assemblies required to have a fire-resistance [*sic*] rating shall have any concealed spaces therein firestopped in accordance with section 27-327 of this subchapter.

(e) Exterior cornices.- Exterior cornices and eaves, constructed of combustible materials or with combustible framing, shall be firestopped at the ends of fire divisions and party walls, and at maximum intervals of twenty feet. If not continuous, they shall have closed ends and at least four inches separation between adjoining sections.

(f) Trim and finish.- Where combustible trim and finish is permitted all hollow spaces shall be firestopped at ten foot intervals or shall be solidly filled with noncombustible materials.

(g) Duct and pipe spaces.- Ducts and pipes enclosed in construction that does not meet the requirements of this code for shaft construction shall be firestopped at every floor level.

(h) Inspection of firestopping.- The installation of all required firestopping shall be subject to the controlled inspection requirements of section 27-132 of article seven of subchapter one of this chapter, except that the architect or engineer need not be retained by the owner. Firestopping shall not be concealed from view until inspected.

§[C26-504.8] 27-346 Partitions and furring.- In buildings of construction group I, partitions and furring shall be constructed of noncombustible materials, except that nonbearing partitions that are not required to have a fire-resistance rating, and furring may be constructed of fire retardant treated wood as provided in subdivision (d) of section 27-328 of article three of this subchapter, and except that such partitions and furring, may be constructed of combustible materials in spaces classified in occupancy group E, J-2, or J-3, provided the following conditions are met:

(a) the space containing the combustible partitions does not exceed five thousand square feet in area within a noncombustible enclosure having a fire-resistance

rating of at least one hour.

(b) the space is in a single tenancy.

(c) glass or slow burning plastic is used for glazing.

§[C26-504.9] 27-347 Folding partitions. -Folding partitions shall not be used as partitions that are required by this code to have a fire-resistance rating.

(a) Construction group I. - In buildings of construction group I, folding partitions may be used if they are constructed of noncombustible materials, or of fire retardant treated wood, or are constructed of noncombustible frame covered with fabric that has a class A interior finish rating. Where partitions of combustible materials are permitted by section 27-346 of this article, folding partitions may also be constructed of combustible materials. Where doors constructed of materials having a class C interior finish rating are permitted by section 27-348 of this article, folding doors may be constructed of combustible materials.

(b) Construction group II. - In buildings of construction group II, folding partitions may be constructed of combustible materials, surfaced with interior finish materials meeting the requirements of section 27-348 of this article.

§[C26-504.10] 27-348 Interior finish. -

(a) Definition. - For the purposes of this section, interior finish shall mean those materials that form the exposed interior surfaces of a building and that are part of or affixed to walls, fixed or folding partitions, ceilings, and other construction elements.

(b) Classification. - Interior finish materials shall be classified in accordance with the surface flame-spread rating obtained as prescribed in the provisions of reference standard RS 5-5. Where an interior finish material is comprised of two or more materials laminated, glued, nailed, or otherwise secured together, the test rating for flame spread shall be based upon the composite of the materials in the form in which it will be used in construction. Interior finish materials shall be grouped in the following classes, in accordance with their surface flame spread characteristics:

Interior Finish Class	Flame Spread Rating
A	0 to 25
B	26 to 75
C	76 to 225
D	Over 225

(c) Requirements. - Interior finishes and exposed structural or construction materials shall have a flame-spread rating not greater than that designated by the class prescribed for the various occupancy groups in

which they are used, as listed in table 5-4. Exceptions to these requirements are:

(1) Finish flooring and floor coverings, which are subject to the requirements of section 27-351.

(2) Wall coverings and coatings that are less than 0.036 in. [*sic*] in total thickness, when applied directly to a noncombustible, or fire-retardant treated wood, substrate.

(3) Exposed structural members and planking in buildings of class II-A construction, which may be left exposed in any room or space, except in exits.

(4) Twenty per cent (20%) of the aggregate wall and ceiling area of any room, space, or corridor required to have a class A or B rating may be finished with materials having a class C rating. This allowance shall include the area of doors, folding partitions, windows, glazing, skylights, luminous ceilings, trim, bases, chair rails, panels, moldings, etc. This exception shall not operate as a waiver of other requirements of this code relating to opening protectives.

(5) When a sprinkler system is provided in any room or space, and is installed in compliance with the construction provisions of subchapter seventeen of this chapter, interior finish materials may be one class higher in flame-spread rating than required by table [*sic*] 5-4.

(d) Smoke density. - No material shall be used for interior finish in the following locations if the material develops smoke in greater density than the rating shown, based upon a test conducted in accordance with the provisions of reference standard RS 5-5. Materials used for interior finish that cover not more than twenty percent of the aggregate wall and ceiling area of any room, space, or corridor shall be exempt from the above requirements.

Location or Occupancy.....	Smoke Developed Rating
Exits, Corridors.....	25
Occupancy groups H-1 and H-2.....	50
Rooms in which the net floor area per occupant is ten square feet, or less.....	100

(e) Toxicity. - No material shall be used in any interior location that, upon exposure to fire will produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions.

(f) Attachment of interior finish. -

(1) To be credited with the same rating, interior finish materials that were applied to a substrate when tested shall be applied at the building to an equivalent substrate.

*TABLE 5-4 INTERIOR FINISH REQUIREMENTS CLASS

Occupancy Group Classification of the Space	Occupancy Group Designation	Exits and Shafts	Corridors ^b	Rooms More Than 1500 Sq. Ft. in Area ^a	Rooms Less Than 1500 Sq. Ft. in Area ^a
High Hazard	A	A	A	B	B
Storage	B-1	A	A	B	C
Storage	B-2	A	B	B ^c	C
Mercantile	C	A	B	B ^c	C
Industrial	D-1	A	A	B	C
Industrial	D-2	A	B	B ^c	C
Business	E	A	B	C	C
Assembly	F-1 ^a	A	B	B	B ^d
Assembly	F-1b	A	B	B ^c	B ^{c, d}
Assembly	F-2	A	B	B ^c	B ^{c, d}
Assembly	F-3	A	B	B ^c	B ^{c, d}
Assembly	F-4	A	B	B ^c	C
Educational	G	A	A	B	C
Institutional	H-1, H-2	A	A	B	B ^d
Residential	J-1, J-2	A	A	B ^e	B ^{e, f}
Residential	J-3	B	D	D	D

NOTES FOR TABLE 5-4:

^a In determining the applicable requirements for rooms or enclosed spaces, the occupancy group classification of the room or enclosed space shall be the governing factor, regardless of the occupancy group classification of the building. For the purposes of this table, the area of a room shall be that floor area contained within enclosing construction in which interior doors or other interior openings represent not more than ten percent of the area of the enclosing construction. Interior doors or windows that are constructed of noncombustible materials and that are self-closing or automatic may be ignored in computing door or opening area. Rooms or spaces that have unprotected openings constituting more than ten percent of the area of enclosing construction shall not be considered as a room. Interior finish requirements for rooms are based upon rooms being enclosed in ceiling high partitions. Partitions, to be considered ceiling high, shall extend up to the floor or roof construction above or to a ceiling having at least a three-quarter hour fire-resistance rating. Partitions that do not comply with this requirement shall not be considered as enclosing the spaces, and the rooms or spaces on both sides thereof shall be considered as one.

^b Rooms or spaces through which it is necessary for occupants of an adjacent room to pass in order to reach the only exit shall, for the purposes of this table, be considered as corridors. Where used in corridors, class B finish material shall not extend more than fifty feet between separations of class A finish material that are at least two feet wide.

^c On the street floor of one-story buildings in construction group II, ceilings, beams, trusses, etc. that are twenty feet or more in height from the floor to their lowest part, may have a class C finish.

^d Class C interior finish may be used in offices, or groups of offices, whose use is accessory to an occupancy, provided such offices are separated from the occupancy, by construction having at least a two hour fire-resistance rating.

^e Class C interior finish may be used in the residential rooms of one- and two-story motels when there is a direct exit from each room to the exterior.

^f Interior finish when used in the following spaces shall be at least class B:

- (1) Kitchens, cooking spaces, and pantries in buildings classified in occupancy groups other than J-2 and J-3.
- (2) Repair and maintenance rooms.
- (3) Boiler rooms and incinerator combustion rooms.

**Superscripts in body of this table (which refer to notes) not enacted but probably intended.*

(2) Interior finish materials shall be cemented or otherwise secured in place in the same manner and with materials equivalent to those used in flame-spread tests conducted in accordance with subdivision (b) of this section for the applicable classification.

(3) Where walls, ceilings, partitions, or other construction elements are required to have a fire-resistance rating or are required to be constructed of

noncombustible materials, and the interior finish is secured to studs or furring, the surface of the interior finish facing the concealed space shall either have a class A rating, shall be applied to a substrate that has a class A rating, or shall have the concealed space completely filled with noncombustible material.

§[C26-504.11] 27-349 Coatings. - Coatings applied in the field by brush or spray shall not be used as flame-spread retardants except on existing surfaces of buildings existing on December sixth, nineteen hundred sixty-eight, and then only with the express permission of, and in a manner directed by, the commissioner.

§[C26-504.12] 27-350 Ceiling construction. - Ceilings that are to be suspended below floor or roof construction by means of a framing system shall consist of supporting hangers, carrying channels and a supporting grid complying with reference standard RS 5-16 or shall have supporting hangers and carrying channels and a supporting grid that can be demonstrated to the satisfaction of the commissioner to be of strength adequate to support the ceiling material. The hangers and supporting grid shall be of noncombustible materials. In buildings of construction group II, every other hanger supported from wood members shall be attached by a through bolt or clinched through nail. Where, in table 3-4, floor or roof construction is required to have a fire-resistance rating, a ceiling having no fire-resistance rating may be suspended below the fire-resistance construction.

(a) Luminous ceilings. - For the purpose of this section, a luminous ceiling shall be defined as a ceiling consisting of translucent, louvered, egg-crated, mesh, or similar light-diffusing material suspended from the ceiling or structural framework. A suspended ceiling containing less than twenty square feet of translucent, louvered, egg-crated, mesh, or similar material in any one hundred square feet of ceiling area shall not be considered a luminous ceiling, and shall be constructed and installed in accordance with department of buildings requirements for lighting fixtures. Luminous ceilings shall, in addition to the requirements of this section, conform to all of the requirements of section 27-348 of this article for interior finish.

**Local Law 59-1996.*

(1) LUMINOUS CEILINGS OF NONCOMBUSTIBLE MATERIAL.- Luminous ceilings constructed of glass and/or metal or other noncombustible materials may be used in any location.

(a) Glass used in luminous ceilings, unless it is wire glass or heat-resistant glass as specified below, shall not weigh more than two psf, nor shall any pane be larger than eight square feet in area. If glass used in luminous ceilings is wire glass, or is heat resistant by reason of having a maximum coefficient of expansion of 36 x 10.7 in. per in. per degree C, the glass may be of any weight and any size, limited only by considerations of structural safety.

(b) Luminous ceilings installed below sprinkler heads shall be constructed of a type of noncombustible louver, mesh, or other open material that will not impede the flow of water from the sprinkler heads over the intended area of coverage. The luminous ceiling shall be constructed so as

to provide access to all heads and valves.

(2) LUMINOUS CEILINGS OF COMBUSTIBLE MATERIAL.- Luminous ceilings constructed of combustible materials shall not be installed in:

a. Any exit or corridor.

b. Any room classified in occupancy group H, or any room leading therefrom as defined in note b of table 5-4.

c. Any room in which the net floor area per occupant is twenty square feet or less, or any room leading therefrom as defined in note b of table 5-4.

d. Luminous ceilings constructed elsewhere than in the spaces listed in subparagraphs a, b, and c above shall be exempt from the provisions of section 27-348 of this article, provided that:

1. The panels of such ceilings are of slow-burning plastic;

2. The panels are installed above or below sprinklers that are constructed in accordance with the provisions of subchapter seventeen of this chapter;

3. No individual plastic panel exceeds ten feet in maximum dimension. Where installed below sprinkler heads, the plastic shall be a material that will fall from its mounting at a temperature at least fifteen degrees lower than the temperature at which the sprinkler heads are designed to operate or are constructed of open material which will not impede the flow of water from the sprinkler heads. Luminous ceilings shall be installed so as to provide ready access to all heads and valves.

(b) Suspension of new ceilings below existing suspended ceilings. - In construction group I a new ceiling may be suspended below not more than one existing suspended ceiling and shall be supported directly from the ceiling carrying channels adjacent to the hangers. In construction group II, an existing suspended ceiling shall be completely removed before a new ceiling may be suspended.

§[C26-504.13] 27-351 Finish flooring and floor coverings. - Finish flooring and floor coverings shall comply with the following:

(a) In buildings or spaces classified in occupancy group A and in all exits except those in buildings of construction group II-E, finish flooring shall be of noncombustible material and except as otherwise provided for stairs in subdivision (h) of section 27-375 of article five of subchapter six of this chapter.

(b) Flooring in buildings or spaces of construction group I. - Except as provided in subdivision (a) of this section combustible finish flooring may be used in buildings or spaces of construction group I when cemented directly to the top surface of noncombustible floor construction, or attached to combustible or noncombustible sleepers. When attached to sleepers, the space between the noncombustible floor construction and the bottom of flooring shall be solidly filled with noncombustible material to within one-quarter inch of the flooring, or the space between the sleepers under the flooring shall be firestopped into areas of not more than twenty square feet, and provided further that no open

spaces shall extend under or through fire divisions or through fire separations. Combustible insulating or sound absorbing boards not more than one-half inch thick and having a flame-spread rating not greater than Class C may be used when attached directly to noncombustible floor construction and covered with finish flooring.

(c) Flooring in buildings or spaces of construction group II. - Except as provided in subdivision (a) of this section, finish flooring in buildings or spaces of construction group II may be of combustible material.

(d) Floor coverings. -

(1) Exits. - Where exits are required under any provision of this code, carpets and carpet assemblies shall not be installed in such exits, except that wool carpeting may be installed in lobby areas, exit passageways and convenience stairs.

(2) Flammability requirements. - The requirements of this subdivision shall apply to carpets and carpet assemblies only when used as a floor covering (for requirements pertaining to carpets and carpet assemblies used as interior finishes, see section 27-348 of this article). For purposes of this subdivision, carpeting assemblies shall include the carpet, its underlay, and adhesives which when tested as a composite shall be representative of the proposed installation.

a. Pill test. - All carpets and underlayments shall pass a methanine pill test in accordance with the requirements of reference standard RS 5-20.

b. Critical radiant flux test. - Carpets and carpet assemblies shall be tested by the method for critical radiant flux in accordance with the requirements of reference standard RS 5-20. The time frame for such test shall be at least a fifteen minute exposure.

1. Carpets and carpet assemblies representative of the actual installation on floors of corridors, shall have a minimum critical radiant flux of 0.5 watts per square centimeter (W/cm^2).

2. Carpets and carpet assemblies representative of the actual installation on floors of general areas shall have a minimum critical radiant flux of $0.4 W/cm^2$.

c. Smoke developed ratings. - Carpets and carpet assemblies representative of the actual installation on floors of corridors or general areas shall be tested for smoke developed ratings in accordance with the requirements of reference standard RS 5-20. The smoke developed ratings in either the flaming or no-flaming mode shall not exceed three hundred within the first four minutes of the test.

d. The manufacturer of the carpets and carpet assemblies shall submit a certificate from an independent laboratory acceptable to the commissioner pursuant to section 27-131, showing the complete test data results, prior to final acceptance. The certification shall state that the material is treated for fire resistance and shall indicate the service life of the treatment or that the material is inherently fire resistant by virtue of its construction, chemical properties and/or composition. Materials which are not inherently fire

resistant may be used only when the certified fire resistant service life exceeds that of the planned service life of the carpets and carpet assemblies with consideration being given to cleaning, traffic, and other conditions of use which may affect the treatment.

***§[C26-504.14] 27-352 Fireplaces. - REPEALED**

**Local Law 80-1989.*

§[C26-504.15] 27-353 Smoke and heat venting. -

(a) Where the floor area of a one-story building classified in occupancy group A, B-1, or D-1 is greater in depth than one hundred feet from a frontage space, that portion beyond one hundred feet shall be provided with roof vents and smoke curtains complying with the requirements of reference standard RS 5-11. Where the effective area of vents are glazed with plain glass or plastic not thicker than one-eighth inch, they need not be provided with automatic opening devices.

(b) Buildings classified in occupancy group E, one hundred feet or more in height, having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, shall be provided with at least one smoke shaft by means of which smoke and heat shall be mechanically vented to the outdoors as provided in reference standard RS 5-17. Buildings that are sprinklered throughout shall be exempt from the smoke shaft requirements.

(c) Existing office buildings, one hundred feet or more in height, having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, shall be provided with at least one smoke shaft by means of which smoke and heat shall be mechanically vented to the outdoors as provided in reference standard RS 5-17, or in lieu of such smoke shaft or shafts, all interior enclosed stairs other than a fire tower or access stairs may be provided with a system of pressurization for fire emergency use. Such pressurization shall be provided by means of a system or systems as provided in reference standard RS 5-18. Such buildings shall comply with the smoke and heat venting requirements herein on or before September thirteenth, nineteen [sic] hundred eighty-two. Complete plans showing such compliance shall be filed with, and a permit secured from, the commissioner on or before September thirteenth, nineteen hundred eighty.

Existing buildings that are sprinklered throughout shall be exempt from the smoke shaft and stair pressurization requirements.

An existing building, which is to be sprinklered throughout, shall be exempt from the smoke shaft and stair pressurization requirements under the following conditions:

(1) the installation proceeds in conformance with a schedule acceptable to the commissioner, setting forth the sequence and corresponding time for installation in the various locations. On or before September thirteenth, nineteen hundred eighty such a schedule, as well as complete plans of the installation, shall be filed with, and a

permit secured from, the commissioner for the phase of the work to be done as required by paragraph two of this subdivision.

(2) at least one-third of the total floor area of the building, including but not limited to the entrance lobby, corridors and elevator landing areas, is sprinklered on or before December thirteenth, nineteen hundred eighty-one.

(3) at least two-thirds of the total floor area of the building is sprinklered on or before December thirteenth, nineteen hundred eighty-two.

(4) the building is sprinklered throughout on or before December thirteenth, nineteen hundred eighty-three.

Where compliance with the time requirements of this subdivision would cause undue hardship, the commissioner, with the approval of the fire commissioner, may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved, permits obtained and a good faith effort towards completion of the work shall have been made.

§[C26-504.16] 27-353.1 Smoke protection for elevators and escalators. -

(a) Elevators.- In existing buildings classified in occupancy group J-1, at every floor above the main entrance floor, all passenger elevators [*sic*] shall open only into elevator vestibules, except for:

(1) Such existing buildings which contain spaces classified in occupancy group C or F and have an automatic sprinkler system protecting all spaces (except boiler rooms) not in occupancy group J-1 and all exits and corridors serving such spaces located on or below the lowest floor containing sleeping rooms as well as all storage closets no matter where located, except that storage closets less than seventy-five square feet may, in the alternative, be provided with smoke detectors which shall be of the central supervisory type connected to an approved central station; or

(2) Such existing buildings, which contain no, spaces in occupancy group C or F, and have either:

a. An automatic sprinkler system protecting all public areas and storage closets; or

b. An automatic sprinkler system protecting all sleeping rooms and storage closets.

c. Notwithstanding subparagraphs a and b of this paragraph, storage closets less than seventy-five square feet may be provided with smoke detectors of the central supervisory type connected to an approved central station.

d. Notwithstanding any other provision of this code, the sprinklers serving the storage closets may be connected with the domestic water supply.

(b) Escalators. - In buildings and existing buildings classified in occupancy group J-1, fire protection for escalators shall be provided by any one of the following methods:

(1) Enclosure in accordance with sections 27-375 and 27-378 if escalator is used as an exit; or

(2) Automatic rolling shutters in accordance with

reference standard RS 18-1; or

(3) Kiosks in accordance with reference standard RS 18-1; or

(4) Where the building section is fully protected by a supervised automatic sprinkler system and the escalator sprinklers are spaced to protect exposed sides of the escalator opening, a noncombustible heat apron constructed to bank heat around the sprinkler heads adjacent to the opening where the bottom edge of the draft curtain is not less than twelve inches below the bottoms of sprinkler heads when heads are in operation, and in no event less than twenty-four inches below the ceiling; or

(5) Spray nozzles in accordance with reference standard RS 18-1.

(c) The requirements of this subdivision shall be complied with on or before April first, nineteen hundred eighty-seven.

***§27-353.2 Smoke protection for elevators in E occupancies.-**

For an elevator in a high rise building where such elevator serves four or more stories that contain space classified in occupancy Group E (office space), inclusive of any lobby or entry level, such elevator shall meet the following requirements at every level served by such elevator (i) for such buildings erected pursuant to new building applications filed on or after October 22, 2004, or (ii) where two or more new elevator shafts are installed in such buildings in existence on October 22, 2004:

(a) Elevator vestibule required.- At every floor above the main entrance floor where the fire command station is located, all elevators shall open into an enclosed elevator vestibule. The elevator vestibule shall be separated from the building occupancy by smoke barriers extending from floor slab to floor slab.

(b) Permitted penetrations.- Penetrations in addition to those permitted in section 27-353.3 (smoke barrier) shall be provided with smoke dampers as defined in reference standard RS 13-1, except that a package pass through or communication opening not exceeding one square foot in area need not be provided with smoke dampers.

(c) Access to exits.- Access to an exit on any floor through the enclosed elevator vestibule shall be permitted if the occupied areas on that floor have access to at least one other required exit that does not require passing through the elevator vestibule.

(d) On floors with a floor area of less than twenty-five hundred square feet, the commissioner may accept an alternative design or construction method that accomplishes the purposes of this section, or, if the commissioner determines that compliance with this section is impracticable in whole or in part, the commissioner may authorize an exemption from the requirements of this section.

***Local Law 26-2004.**

***§27-353.3 Smoke barrier.-** A smoke barrier may or may not have a fire resistance rating. Smoke barriers may have openings that are protected by automatic closing devices, adequate to inhibit movement of smoke through

the opening. The smoke barrier may be constructed of heat-strengthened or tempered glazing or the equivalent and protected by sprinkler heads constructed in accordance with subchapter seventeen of this chapter and installed a maximum of six feet (6'-0") on center on each side of the barrier. If the smoke barrier is constructed of glass, the portions of the smoke barrier located within two feet of the door opening and within five feet of the floor shall be constructed of tempered glass. Glass panels having an area in excess of nine square feet with the bottom edge less than eighteen inches above the floor shall likewise be constructed of tempered glass. Portions of glass smoke barriers shall be marked where required in accordance with the rules of the board of standards and appeals.

**Local Law 26-2004.*



SUBCHAPTER 6 MEANS OF EGRESS

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec. **				
[600.0]	Art. 1	General	[606.2]	384	Power Source
[600.1]	354	Scope	[606.3]	385	Exit Sign Design
[600.2]	355	Definitions	[606.4]	386	Directional Sign Design
[600.3]	356	Inadequate Exits for Existing Structures	[606.5]	387	False Exits
[601.0]	Art. 2	Determination of Exit Requirements	[607.0]	Art. 8	Exit Signs for Existing Buildings
[601.1]	357	Exit Requirements	[607.1]	388	Retroactive Provisions
[601.2]	358	Occupant Load	[607.2]	389	Designation of Required Means of Egress
[601.3]	359	Capacity of Exits	[608.0]	Art. 9	Stair and Elevator Signs
[601.4]	360	Travel Distance	[608.1]	390	Applicability
[602.0]	Art. 3	Location of Exits	[608.2]	391	Signs at Elevator Landings
[602.1]	361	Arrangement	[608.3]	392	Floor Numbering Signs
[602.2]	362	Tenant Spaces	[608.4]	393	Stair and Elevator Identification Signs
[602.3]	363	Remote Location	[608.5]	394	Stair Re-entry Signs in Office Buildings
[602.4]	364	Exit Discharge	[608.6]	395	Materials for Signs
[603.0]	Art. 4	Number of Exits	[608.7]	396	Signs in Existing Buildings
[603.1]	365	Egress from Rooms and Spaces	[609.0]	Art. 10	Signs in Sleeping Rooms
[603.2]	366	Exits from Floors	[609.1]	396.1	Applicability
[603.3]	367	Exit Reduction	[609.2]	396.2	Requirements
[604.0]	Art. 5	Access Requirements and Exit Types	[609.3]	396.3	Retroactive Requirements
[604.1]	368	General	[610.0]	Art. 11	Emergency Power
[604.2]	369	Corridors	[610.1]	396.4	Requirements
[604.3]	370	Exit Passageways	[610.2]	396.5	Registration
[604.4]	371	Doors	[610.3]	396.6	Applicability
[604.5]	372	Area of Refuge			
[604.6]	373	Horizontal Exits			
[604.7]	374	Supplemental Vertical Exits			
[604.8]	375	Interior Stairs			
[604.9]	376	Exterior Stairs			
	376.1	Fire Tower			
[604.10]	377	Ramps			
[604.11]	378	Escalators			
[604.12]	379	Moving Walkways			
[604.13]	380	Fire Escapes			
[605.0]	Art. 6	Exit Lighting			
[605.1]	381	Requirements			
[605.2]	382	Power Source			
[606.0]	Art. 7	Exit Signs and Other Markings			
[606.1]	383	Requirements			
	383.1	Additional Requirements for High Rise Office Buildings and Occupancy Group E High Rise Buildings			

***"C26" omitted from section numbers in this column.*

***"27" omitted from section numbers in this column.*

LIST OF TABLES

Table No.

- 6-1 Determination of Exit and Access Requirements
- 6-2 Occupant Load Requirements Net Area Table
- 6-3 Maximum Occupant load-Spaces with One Door
- 6-4 Maximum Riser Height and Minimum Tread Width

ARTICLE 1 GENERAL

§[C26-600.1] 27-354 Scope. -

The provisions of this subchapter shall control the design, construction, protection, location, arrangement and maintenance of required exit facilities to provide safe means of egress from all buildings hereafter erected, altered or changed in occupancy, except that exit requirements for special uses and occupancies, as provided in subchapters seven and eight of this chapter, shall take precedence over the provisions of this subchapter and except further that buildings in existence on December sixth, nineteen hundred sixty-eight shall comply with the applicable requirements of section 27-356 of this article, section 27-371 of article five of this subchapter and articles eight and nine of this subchapter.

§[C26-600.2] 27-355 **Definitions.** - For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-600.3] 27-356 **Inadequate exits for existing structures.**- Every structure existing on December sixth, nineteen hundred sixty-eight which is not provided with exit facilities as prescribed in this code, and in which the exit facilities are, in the opinion of the commissioner, inadequate for the safety of the occupants, shall be provided with such means of egress or fire protection as the commissioner shall direct.

ARTICLE 2 DETERMINATION OF EXIT REQUIREMENTS

§[C26-601.1] 27-357 **Exit requirements.** -

The determination of exit requirements for a building shall be based upon the occupancy group classification of the building, the number of occupants, the floor area, the travel distance to an exit, and the capacity of the exits, as provided in table 6-1 and herein. Every floor of a building shall be provided with exit facilities for its occupant load. The occupant loads of floors shall not be cumulative for the purpose of designing vertical exits, except where one floor is used by another as a means of egress. Vertical exits provided from any floor above grade may serve simultaneously all floors above grade, and vertical exits provided from any floor below grade may serve simultaneously all floors below grade.

(a) **Mixed occupancy.** - When a building is classified in more than one occupancy group in accordance with the provisions of section 27-239 of article two of subchapter three of this chapter, the exit requirements for the entire building shall be determined on the basis of the occupancy group having the strictest exit requirements, or the exit requirements for each building section shall be determined separately.

(b) **Incidental occupancies.** - When a building contains incidental occupancies classified in occupancy groups other than that under which the building is classified, the exit requirements for the floor on which such occupancies occur shall be based upon those of the occupancy group under which the building is classified; but the access and exit requirements for the incidental occupancy shall be based upon the occupancy group classification of the incidental occupancy.

(c) **Multiple occupancy or use.** - Where a building, floor, or space is used for multiple purposes involving different activities at different times, that occupancy involving the greatest number of occupants shall be used in determining the exit requirements.

*****(d) Building access.** - All buildings classified in other than occupancy groups A, mechanical and electrical

equipment rooms and boiler and furnace rooms of D-2 or J-3 shall have at least one primary entrance accessible to and usable by individuals who use wheelchairs. Such entrance shall provide access to a level that makes elevators available in buildings where elevators are provided. Where ramps are used to comply with this requirement, they shall have a slope not greater than one in twelve and shall otherwise conform to the provisions of section 27-377 and reference standard RS 4-6.

The commissioner may waive the requirements of this section in the alteration of buildings existing on the effective date of this code in accordance with section 27.292† of this code.

****Local Law 58-1987.*

†*As enacted but "27-292" probably intended.*

§[C26-601.2] 27-358 **Occupant load.** -

The number of occupants for whom exit facilities shall be provided shall be established either (1) by the actual number of occupants for whom each occupied space, floor, or building, as the case may be, is designed, or (2) by using the appropriate occupant-area ratios from table 6-2, whichever is larger. The occupant load of any space shall include the occupant load of all spaces that discharge through it in order to gain access to an exit.

(a) **Unlisted occupancies.** - Where data regarding the sq. ft. per person for an occupancy is not listed in table 6-2, the occupant load shall be established by an architect or engineer, subject to the approval of the commissioner.

(b) **Modifications.** -

(1) When the actual occupant load of any space will be significantly lower than that listed in table 6-2, the commissioner may establish a lower basis for the determination of the occupant load.

(2). When a building existing on December sixth, nineteen hundred sixty-eight is altered or changed in occupancy or use so as to require enlarged exit facilities, the commissioner may authorize the alteration or change in occupancy or use without an enlargement of exit facilities, provided the occupant load is limited to that accommodated by the existing exit facilities as determined by the provisions of this code, and the building or space is posted accordingly with a sign. Such signs shall be at least twelve inches in width and sixteen inches in height. The lettering shall be red on a white background. The letters shall be not less than one inch high and the numerals not less than one and one-quarter inches high.

(c) **Nonsimultaneous occupancy.** - The occupant load of toilets, locker rooms, meeting rooms, storage rooms, employee cafeterias, and similar rooms or spaces that are not occupied at the same time as other rooms or spaces on the same floor of a building, may be omitted from the occupant load calculation of the floor on which they are located to the extent that such spaces serve occupied rooms on the same floor.

TABLE 6-1 DETERMINATION OF EXIT AND ACCESS REQUIREMENTS

Occupancy Group of Building or Space	Group Designation	Maximum Travel Distance (ft.) ^a		Capacity Number of Persons per Unit of Width				Corridors ⁱ	
		Unsprinklered	Sprinklered	Doors Openings ^m		Stairs, Escalators ^k	Ramps, ^b Corridors, Exit Passages, ^j Horizontal Exits	Min. Width (in.)	Max. Dead End ^h (length in ft.)
				To Outdoors at Grade	All Other Exit and Corridor Doors				
High Hazard	A	N.P.	150	50	40	30	50	36	N.P.
Storage	B-1 ^c	100	150	75	60	45	75	36	50
	B-2 ^c	125	175	75	60	45	75	36	N.R.
Mercantile	C	150	200	100	80	60	100	36	50
Industrial	D-1	125	175	100	80	60	100	44	50
	D-2	150	200	100	80	60	100	44	50
Business	E	200	300	100	80	60	100	44	50
Assembly*	F	150	200	100	80	60	100	44	30
Educational	G	150	200	100	80	60	100	66 ^e	30 ^d
Institutional	H-1	125	175	50	40	30	50	36	40
	H-2	125	175	30	30	15	30	96 ^f	30 ^g
Residential	J-1	150	200	50	40	30	50	36	40
	J-2	150	200	50	40	30	50	36	40
	J-3	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.

N.P. — Not Permitted

N.R. — No Requirements (except as provided in section 27-375)

*See Table 8-1 for exit and access requirements applying to places of assembly.

****Notes:**^aFor method of measurement, see subdivision (c) of section 27-360 of this article.^bReduce listed capacity of ramps by twenty-five percent when slope exceeds one in ten.^cExcept for public garages. (See article ten of subchapter seven of this chapter.)^dThere shall not be more than one classroom on each side of a corridor between an exit and the end of the corridor (dead end).^eApplies to corridors serving classrooms. Other corridors shall have a minimum width of forty-four inches.^fApplies to corridors serving patients. Other corridors shall have a minimum width of forty-four inches.^gThere shall be no patient bedrooms between an exit and the end of the corridor (dead end).^hSee subdivision (d) of section 27-369 of article five of this subchapter for permissible increase.ⁱSee section 27-369 of article five of this subchapter.^jSee section 27-370 of article five of this subchapter.^kSee section 27-378 of article five of this subchapter.^mWhere a door opening is divided by mullions into two or more doors openings, each such opening shall be measured separately in computing the number of units of exit width.****There is no note l.****§[C26-601.3] 27-359 Capacity of exits. -**

The capacity of exits and access facilities shall be measured in units of width of twenty-two inches, and the number of persons per unit of width shall be determined by the occupancy group classification and type of exit as listed in table 6-1. Fractions of a unit of width less than twelve inches shall not be credited. Where twelve inches or more are added to one or more full units of width, one-half unit of width may be credited.

Where computations of total required width give fractional results, the next larger integral number of exit units or integral number plus one-half, shall be used. A fraction less than one-half may be neglected in cases where such fraction constitutes less than ten per cent of the total required number of units. Notwithstanding any of the above computations, no exit or access facility shall be narrower than the minimum width requirements specified in table 6-1, or elsewhere in this code.

**TABLE 6-2 OCCUPANT LOAD REQUIREMENTS
NET AREA TABLE**

Occupancy	Net Floor Area per Occupant (sq. ft.)
Billiard rooms.....	50
Bowling alleys.....	50
Classrooms.....	20
Dance floors.....	10
Dining spaces (nonresidential).....	12
Exhibition spaces.....	10
Garages and open parking structures..	250
Gymnasiums.....	15
Habitable rooms.....	140
Industrial shops.....	200
In schools.....	30
Institutional sleeping rooms	
Adults.....	75
Children (except as listed below)...	50
Day Care	
a. under 6 mos.....	50
b. 6 mos. *— 2 yrs.....	40
c. 2 yrs. *— 6 yrs.....	30
Institutional staff, all.....	30
Kindergartens.....	35
Kitchens (nonresidential).....	200
Laboratories.....	50
Preparation rooms.....	100
Libraries.....	25
Locker rooms.....	12
Offices.....	100
Passenger terminals or platforms.....	1.5xC
Sales areas (retail).....	
1 st floor or basement.....	25
All other floors.....	50
Seating areas (audience) in all places of assembly	
Fixed seats.....	D
Moveable seats.....	10
Skating rinks.....	15
Stages (See subchapter eight).....	—
Standing room (audience) in all places of assembly.....	4
Storage rooms.....	200

Notes:

C—capacity of all passenger vehicles that can be unloaded simultaneously.

D—designed number of seats or occupants.

*Dash not enacted but probably intended

§[C26-601.4] 27-360 Travel distance. -**(a) General requirement. -**

The maximum travel distance from the most remote point in any room or space to the center of a door opening directly on an open exterior space, a vertical exit, an interior stair, an exit passageway or to a horizontal exit shall not be greater than the limit specified in table 6-1 for the occupancy group classification of the room or space.

(b) Travel distance within dwelling units. -

In buildings classified in occupancy groups J-1 and J-2, the maximum travel distance from the centerline of a door from any habitable room within a dwelling unit either to the centerline of a door opening on a corridor or to the center of a door opening on an exit shall not be greater than forty feet, except that for buildings classified in occupancy group J-2 of construction class I-A, the distance may be increased to fifty feet. Such travel distances shall be included in the maximum travel distance established in subdivision (a) of this section.

(c) Measurement. - Travel distance shall be measured along a natural and unobstructed path of travel. Where the path of travel is over an access stair, it shall be measured along an inclined straight line through the center of the outer edge of each tread.

ARTICLE 3 LOCATION OF EXITS**§[C26-602.1] 27-361 Arrangement. -**

All exits and access facilities shall be located so that they are clearly visible, or their locations clearly indicated, and they shall be kept readily accessible and unobstructed at all times.

§[C26-602.2] 27-362 Tenant spaces. -

When more than one tenant occupies a building or floor area, each tenant shall have direct access to the required number of exits without passing through premises occupied by other tenants, except as permitted for balconies in subdivision (g) of section 27-369 of article five of this subchapter.

***§[C26-602.3] 27-363 Remote location. -**

(a) When more than one exit is required from a floor of a building, each such required exit shall be placed as remote from the others as is practicable. Where this results in a distance between exits exceeding the maximum travel distances required by section 27-357, additional remote vertical exits shall be provided.

(b) In addition to the requirements of subdivision (a) of this section:

(1) For exits serving spaces classified in occupancy groups G or J-2, in no event shall such exits be less than fifteen feet distant from each other.

(2) For exits serving spaces classified in other occupancies, in no event shall such distance be less than thirty feet or one-third the maximum travel distance **[required by section 27-357], whichever is greater.

(c) On any floor containing ten thousand square feet or more in a high rise building classified in occupancy group E (office space), each exit that is required to be remote from another exit shall not share any common walls, floors, ceilings, scissor stair assemblies, or other enclosures.

**Local Law 26-2004.*

***As enacted but "of the floor" probably intended.*

§[C26-602.4] 27-364 Exit discharge. –

All vertical exits shall extend in a continuous enclosure to discharge directly, or by way of a yard, court, or exit passageway, to an open exterior space. When vertical exits serving floors above grade continue in the same enclosure to serve floors below grade, the portion of such vertical exits above grade shall be separated from the portion below grade by construction having at least a one hour fire-resistance rating, with three-quarter hour self-closing doors opening in the direction of exit travel from the floors below grade, except that buildings classified in residential occupancy group J-3 and educational occupancy group G shall be exempt from this requirement.

ARTICLE 4 NUMBER OF EXITS**§[C26-603.1] 27-365 Egress from rooms and spaces. –**

(a) There shall be at least two door openings, remote from each other and leading to exits, from every room or enclosed space in which the total occupant loads exceeds the number of persons listed in table 6-3.

**TABLE 6-3 MAXIMUM OCCUPANT LOAD—
SPACES WITH ONE DOOR
[Max. Occupant Load]****

Occupancy Group Classification	Max. Occupant Load with One Door
A	10
B	50
C	75
D	50
E	75
F	75
G	75
H	15
J	20

****[J] As enacted but this heading probably intended to be omitted.**

(b) Except as otherwise provided for in subdivisions (c) and (d) of this section, in buildings of combustible construction group II exceeding two stories in height there shall be at least two door openings from each J-1 or J-2 dwelling unit which shall be remote from each other. Each door opening shall lead to separate exits either directly or by separate corridors or one door opening shall lead to an exit and the other to a balcony complying with subdivision (g) of section 27-369 of article five of this subchapter.

(c) In buildings or spaces classified in occupancy group J-2 not more than three stories and forty feet in height, occupied by not more than four families on each story and of combustible construction group II there shall be at least two door openings from each J-2 dwelling unit which shall be remote from each other. One door opening shall lead to an exit and the other to a balcony complying with subdivision (g) of section 27-369 of article five of this subchapter.

(d) Buildings not exceeding three stories in height and occupied exclusively by not more than one family on each story without boarders, roomers or lodgers are exempt from the provisions of subdivisions (b) and (c) of this section.

§[C26-603.2] 27-366 Exits from floors. –

1. There shall be at least two independent exits, remote from each other, from every floor of a building, except that only one exit may be provided from floors in:

(a) One and two family dwellings.

(b) Buildings classified in occupancy group J-2 of Noncombustible construction group I or occupancy group E that are not more than sixty feet in height, have a gross area of two thousand square feet or less per floor, and have a maximum travel distance of fifty feet on any floor.

(c) Buildings classified in occupancy group J-1 or J-2 that are not more than two stories and thirty feet in height and have a maximum travel distance of eighty feet and the corridors and stair enclosure are provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter.

(d) Buildings classified in occupancy group J-2 occupied exclusively by not more than one family on each story without boarders, roomers or lodgers and not more than three stories and forty feet in height, and the stair enclosure is provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter and without openings between any garage and the exit passageway.*

(e) Buildings classified in occupancy group J-2 not more than three stories and forty feet in height occupied by not more than four families on each story.**

2. Notwithstanding the exit requirements of this section, in buildings classified in occupancy group J-2 of construction class I-A, one level of an apartment occupying a part of not more than two floors need only be provided with a balcony that complies with subdivision (g) of section 27-369 of article five of this subchapter, provided that, in addition, the stair within such apartment shall be at least two feet six inches in width and terminates not more than twenty feet from a corridor door on the other level that shall provide the required access to at least two independent exits. The center line of such corridor door shall be not more than fifty feet from any room within such apartment.

3. Notwithstanding any other provision of this section, when, within a building, any place of assembly has an occupant load between five hundred and nine hundred ninety-nine persons, there shall be provided at least three independent exits, remote from each other, from each floor; any such place of assembly with an occupant load of one thousand or more persons shall be provided with at least four independent exits, remote from each other, from each floor.

** Editor's Note: Applies to buildings subject to the exceptions of 27-365(d).*

*** Editor's Note: Applies to buildings subject to the restrictions of 27-365(c).*

§[C26-603.3] 27-367 Exit reduction. -

When a floor area has access to areas of refuge that comply with the requirements of section 27-372 of article five of this subchapter; the number of persons for whom vertical exits are to be provided may be reduced to fifty per cent of the occupant load of the floor area when one area of refuge is provided, and may be reduced to thirty-three and one-third percent of the floor area when two areas of refuge are provided. This section shall not be applicable to any new or altered place of assembly, except for such places of assembly in fully sprinklered office buildings which occupy less than twenty per cent of the floor area occupied by the principal use.

ARTICLE 5 ACCESS REQUIREMENTS AND EXIT TYPES

§[C26-604.1] 27-368 General. -

(a) Means of egress shall be provided for all buildings by one or more of the facilities listed below. Access and exit facilities not specifically covered in this section shall not be used to satisfy the exit requirements of this code. Fire escapes shall not be permitted on new construction, with the exception of group homes. Fire escapes may be used as exits on buildings existing on December sixth, nineteen hundred sixty-eight when such buildings are altered, subject to the approval of the commissioner, or as provided in subdivision (b) hereof. Elevators or escalators shall be provided in all new buildings exceeding four stories in height except that buildings or building sections classified in occupancy group H-2 exceeding one story in height and buildings or building sections classified in occupancy group G or J-1 exceeding two stories in height shall be provided with elevators.

(b) In group homes all floors used by children shall have alternate exits remotely located from each other and readily accessible to the occupants. Fire escapes shall be permitted as the second means of egress.

§[C26-604.2] 27-369 Corridors.-

Corridors shall be kept readily accessible and unobstructed at all times. Corridors shall be kept free of combustible contents except that in buildings classified in occupancy groups G, H-1 and H-2, combustible contents may be stored in noncombustible lockers and combustible bulletin boards meeting the requirements of table 5-4 shall be permitted.

(a) Capacity. - The capacity and minimum width of corridors shall be as listed in table 6-1. Width shall be measured in the clear between the narrowest points produced by any projections such as radiators, lockers, drinking fountains, or room or locker door swings, except that such width may be reduced by projections up to eighteen inches wide to the extent of two inches per unit of

exit width if the total area of such projections does not exceed five percent of the area of the wall on which they occur.

(b) Height. - Corridors shall have a clear height of seven feet six inches for at least seventy-five percent of the floor area, with no point less than seven feet in height. No projection below the ceiling shall be located so as to obstruct full view of exit signs.

(c) Length. - Corridors shall be subdivided by smoke barriers, as defined in subchapter two, into the following lengths:

Educational occupancy group G.....	300 ft.
Institutional occupancy groups H-1 and H-2.....	150 ft.
Residential occupancy groups J-1 and J-2.....	150 ft.

Where smoke barriers are penetrated by doors, such doors shall be smoke stop doors in conformance with subdivision (c) of section 27-371 of this article.

(d) Dead ends. - Dead ends in corridors shall not exceed the length listed in Table 6-1, except that in all occupancy groups except occupancy group H, when a corridor is completely enclosed in construction having a two hour fire-resistance rating, with all corridor doors being self-closing and having a fire protection rating of one and one-half hours, the permissible length of dead ends may be increased one hundred percent above the length listed in table 6-1. Dead end distance shall be measured from the centerline of the door opening nearest to the closed end of the corridor to the center of an exit door opening, or the center of that point in the corridor where travel to two or more exits becomes available in two directions.

(e) Changes in level. - Changes in level requiring less than two risers in a corridor shall be by a ramp complying with section 27-377 of this article. Risers and treads shall comply with the requirements of subdivision (e) of section 27-375 of this article.

(f) Exterior corridors. - Exterior corridors shall be roofed, and shall have solid floors drained to prevent accumulations of standing water. Such floors may serve as fire canopies when so constructed. Exterior corridors shall be protected along their outer side by guards or parapets at least three feet six inches high. Openings in guards or parapets shall be of such dimensions as to prevent the passage of a five-inch dia. ball. Where the outer side of an exterior corridor is more than fifty percent enclosed with solid material, it shall be treated as an interior corridor.

(g) Balconies. - Balconies may serve as a means of egress from dwelling units in buildings classified in occupancy group J-2 under the following conditions:

- (1) They shall serve at least two dwelling units.
- (2) They shall be constructed as required for exterior corridors, except that parapets or guards shall not be higher than four feet on the outer side of the balcony.
- (3) The dwelling units served by balconies shall be

separated from each other by construction having at least a two hour fire-resistance rating. Such separation shall extend at least three feet beyond the outside face of the exterior wall of the building, although such projection may be reduced to two feet six inches provided that any window opening on each such balcony served by the fire separation shall be at least two inches from such fire separation for every one inch that such separation is less than thirty-six inches. An opening at least twenty inches wide shall be provided between the end of this separation and the balcony parapet or guard, and the opening shall be maintained free and unobstructed for the full height of the balcony, except that privacy screens openable from either side may be permitted in the opening.

(4) Access from dwelling units to the balconies shall be through doors having glass panels at least two feet wide and four feet high, without muntins, screens, or other obstructions to hinder entry by breaking the glass panels. The doors shall be lockable only from the inside by devices that can be easily released from the outside after breaking the glass. A combination lock or lock required to be opened by a key or removable device or tool shall not be used.

(h) Construction. -

(1) **INTERIOR CORRIDORS. -** Interior corridors shall be completely enclosed within fire separations to provide a minimum fire-resistance rating of one hour except as otherwise provided in subparagraphs a through c of this paragraph:

a. For buildings or spaces classified in occupancy group J-1 or J-2 of combustible construction group II exceeding two stories in height, except for buildings not exceeding three stories in height and occupied exclusively by not more than one family on each story without boarders, roomers or lodgers, corridors shall be enclosed within fire separations providing a minimum fire-resistance rating of two hours.

b. Corridor partitions may be omitted or may be constructed of unrated noncombustible material in buildings in occupancy group H-2 in the following instances: nurses stations not exceeding three hundred fifty square feet in area, waiting spaces, lounges and recreational spaces for patients and visitors which do not exceed five hundred square feet in area, spaces used solely for public telephones, and all other spaces which are completely protected by an automatic wet sprinkler system complying with the construction requirements of subchapter seventeen of this code.

c. Corridor partitions may be omitted in spaces of occupancy group H-1 used for detention of persons under legal restraint.

(2) **EXTERIOR CORRIDORS AND BALCONIES. -** Exterior corridors and balconies shall be constructed of non-combustible materials.

(i) Borrowed lights. - No operable transoms shall be permitted in walls of corridors. In corridors required to

have a one hour fire-resistance rating, fixed one-quarter inch wire glass panels may be installed in not more than twenty percent of the common wall between the corridor and any room or space, provided that no panel exceeds seven hundred twenty square inches in area; however, openings permitted in paragraph three of subdivision (h) of section 27-370 of this article may be permitted provided all of the limitations and requirements specified in that section are complied with, except that openings in corridor walls serving as fire divisions required to have a fire-resistance rating shall be limited to those specified in section 27-342 of article five of subchapter five of this chapter.

(j) Ventilation. - Corridors shall be ventilated in accordance with the requirements of subchapter twelve of this chapter. Corridors shall not be used as open plenums or as ducts to exhaust air from rooms or spaces opening upon them, except as permitted in reference standard RS 13-1.

(k) Interior finish. - The interior finish of corridors shall be in accordance with the requirements of table 5-4.

§[C26-604.3] 27-370 Exit passageways. -

Exit passageways shall be maintained free of obstructions at all times. Not more than fifty percent of the total number of vertical exits provided for a building may be served by a single exit passageway, except as provided in subdivision (h) of section 27-370 of this article.

(a) Capacity. - The capacity of exit passageways shall be as listed in table 6-1.

(b) Width. - The width of an exit passageway serving one vertical exit shall be equal to the width of the vertical exit. The width of an exit passageway serving two or more vertical exits shall be equal to seventy-five percent of the width of all of the vertical exits that it serves. Width shall be measured in the clear between the narrowest points at any projections such as radiators, door swings, or pilasters.

(c) Height. - Exit passageways shall have a clear height of seven feet six inches for at least seventy-five percent of the floor area, with no point less than seven feet in height. No projection below the ceiling shall be located so as to obstruct full view of exit signs.

(d) Changes in level. - Changes in level requiring less than two risers in an exit passageway shall be by a ramp complying with section 27-377 of this article. Risers and treads shall comply with the requirements of subdivision (e) of section 27-375 of this article.

(e) Construction. - The construction of exit passageways shall be as required by table 3-4 for the applicable construction class of the building.

(f) Openings. - No openings other than exit doors shall be permitted in exit passageways, except as provided in subdivision (h) of this section.

(g) Interior finish. - The interior finish of exit passageways shall be in accordance with the requirements of table 5-4.

(h) Street floor lobbies. - Street floor lobbies may be used as exit passageways when they comply with the requirements of subdivisions (a) through (g) of this section subject to the following modifications:

(1) VERTICAL EXITS SERVED. - One hundred percent of the total number of vertical exits provided for a building may be served by a street floor lobby, if egress is provided in two different directions from the discharge points of all vertical exits to open exterior spaces that are remote from each other.

(2) WIDTH. - Street floor lobbies serving as exit passageways shall be increased in width to accommodate the occupant load of all communicating spaces on the lobby floor that exit through them. The capacity per unit of width shall be as listed in table 6-1.

(3) OPENINGS.- Openings between street floor lobbies serving as exit passageways and elevators or communicating spaces shall comply with the following:

a. Doors. -

1. Doors to stairways and elevators, and unsprinklered communicating spaces classified in occupancy group B-2, D-2, F-1 or F-2 shall be self-closing fire doors having a one and one-half hour fire protection rating.

2. Doors to unsprinklered communicating spaces classified in occupancy group G, H or J, or sprinklered communicating spaces classified in occupancy group B-2, D-2, F-1 or F-2 may be either:

(a) self-closing fire doors having a three-quarter hour fire protection rating, or

(b) glass or other noncombustible doors installed in conjunction with automatic fire doors having a one and one-half hour fire protection rating, with sprinkler heads installed over the doors on the room side.

3. No other door openings shall be authorized except as otherwise provided in this section.

b. Other openings. - Other openings to spaces classified in occupancy group C, E, F, G, H or J shall be permitted, provided they have a maximum length of eight feet and a maximum height of eight feet, are glazed by one-quarter inch polished plate glass or equivalent and are protected by automatic fire doors having a one and one-half hour fire protection rating and by automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter over the openings on the room side.

c. Separations and limitations. - Openings permitted by subparagraphs a and b of this paragraph shall not exceed in total length fifty percent of the length of such enclosure wall except where the length of such wall is less than sixteen feet. Adjoining openings shall be separated from each other a minimum of three feet by construction having a two hour fire-resistance rating.

d. Notwithstanding the restrictions in subparagraphs a, b, and c of this paragraph, the following openings may be

authorized:

1. A space classified in occupancy group C, E, F-3 or F-4 within fire separations having a minimum fire-resistance rating of one hour, with an area not exceeding twenty-five hundred square feet, may have an unlimited length of show window under the following conditions:

(a) The maximum depth of show window shall be three feet.

(b) Automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter, shall be provided in the show window display area.

(c) The show window display area shall be protected on all sides, except for the glazed window, by construction having a two hour fire-resistance rating with access provided by means of a fireproof self-closing door having a three-quarter hour fire protection rating.

(d) The show window shall be glazed by one-quarter inch polished plate glass or equivalent.

(e) Glass or other noncombustible doors may be used for entrance to or egress from the space within fire separations when installed in combination with automatic fire doors having a one and one-half hour fire protection rating. Such automatic fire doors shall be located on the room side and shall be held open by approved door-holding devices actuated to release automatically upon the activation of smoke detecting devices, whether of the photoelectric cell or other approved type. In addition, automatic sprinkler heads, complying with the construction requirements of subchapter seventeen of this chapter, shall be provided over the door openings on the room side.

2. A space classified in occupancy group C, E, F-3, or F-4 within fire separations having a minimum fire-resistance rating of one hour, with an area not exceeding three thousand square feet, may have a maximum total length of unprotected openings upon a corridor or exit passageway not exceeding fifty percent of the space frontage along such corridor or exit passageway under the following conditions:

(a) The entire space shall be provided with automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter.

(b) The show window shall be glazed by one-quarter inch polished plate glass or equivalent.

(c) All corridor or exit passageway doors shall be self-closing, noncombustible, and smokeproof.

3. Show windows or other openings of unlimited lengths and heights shall be permitted on any corridor or exit passageway without requirements for fire-resistance doors under the following conditions:

(a) The entire floor area, including the corridors or exit passageways, shall be provided with automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter.

(b) The occupancy of all spaces on the floor shall be limited to occupancy groups C, E, F-3 and F-4.

(c) The widths of the corridors or passageways shall exceed the requirements of table 6-1 or subdivision (b) of this section, whichever is applicable, by at least fifty percent.

(d) All doors opening on the corridors or exit passageways shall be smokeproof, noncombustible, self-closing doors.

(e) Show windows or other openings shall be glazed by one-quarter inch polished plate glass or equivalent.

(f) Each corridor or exit passageway shall be provided with a fresh air intake, a positive smoke exhaust system and smoke detectors which, when activated, shall permit circulation only of fresh air.

(4) OCCUPANCY. - Street floor lobbies serving as exit passageways may be occupied by newsstands, candy and tobacco stands, information booths or similar occupancies, if such stands or booths are constructed of noncombustible materials, or of materials which comply with the requirements of section 27-348 of article five of subchapter five of this chapter for interior finish for exit passageways, provided that such stands or booths:

a. do not occupy more than one hundred square feet or five percent of the net floor area of the lobby, whichever is greater; and

b. do not reduce the required clear width of the lobby at any point; and

c. if constructed of combustible materials are protected by no less than two automatic sprinkler heads. Water for such sprinkler heads may be supplied from the domestic water supply system.

§[C26-604.4] 27-371 Doors. -

Exit doors and doors providing access to exits shall comply with the following:

(a) **Exit doors.** - Doors for required exits shall be self-closing swinging doors with a one and one-half hour fire protection rating, except in occupancy group J-3 buildings and except that:

(1) Exterior street floor exit doors having an exterior separation of more than fifteen feet need not have a fire-protection rating.

(2) Doors into stairs and exit passageways shall have at least a three-quarter hour fire protection rating.

(b) **Corridor doors.** - Doors that provide access to interior corridors required to have a one hour fire-resistance rating shall be self-closing swinging fire doors with a three-quarter hour fire-protection rating, except that in buildings classified in occupancy group G, in which an acceptable interior fire alarm system is installed and in which regular supervised fire drills are held, the doors to rooms or spaces devoted exclusively to non-hazardous uses in occupancy group G need not be fire-rated, provided they are swinging, self-closing one and three-quarter inch solid core wood, and have a

maximum area of seven hundred twenty square inches of one-quarter inch thick wired glass vision panels. Other corridor doors except those provided for in subdivision (d) of section 27-369 of this article, shall be self-closing, swinging, noncombustible or one and three-quarter inch solid core wood doors, except that in buildings classified in occupancy group H-2 the doors need not be self-closing. Noncombustible mail slots having an area not exceeding forty square inches may be provided in corridor doors when the opening is protected by a closure activated by gravity or a spring device so as to keep it closed when not in use. Noncombustible louvers may be installed in corridor doors opening into toilets, service sink closets, and electric closets. Notwithstanding the foregoing restrictions in this subdivision, doors not prohibited by subdivision (d) of this section may open from spaces into corridors when in compliance with all of the provisions of paragraph three of subdivision (h) of section 27-370 of this article.

*** (c) Smoke stop doors.** - Smoke stop doors shall be self-closing, swinging doors of metal, metal covered, or one and three-quarter inch solid core wood with clear wire glass panels having a minimum area of six hundred square inches per door and a maximum area of twelve hundred ninety-six square inches per door, except that in buildings not over two stories high, smoke stop doors may be of one and three-eighths inch solid core wood with clear wire glass panels, unless the doors are also used as horizontal exits in which case they shall comply with the provisions of subdivision (b) of section 27-373 of this article. In addition, smoke stop doors may be constructed of tempered glazing or the equivalent and be protected by sprinkler heads constructed in accordance with subchapter seventeen of this chapter and installed a maximum of six feet (6'-0") on centers on each side of the opening. Smoke stop doors may be double-acting but shall close the opening completely with only such clearance as is reasonably necessary for proper operation. Smoke stop doors shall normally be in the closed position, except that they may be left open if they are arranged to close automatically by an approved device which is actuated by an interior fire alarm system meeting the requirements of subchapter seventeen of this chapter or upon smoke detection. Tempered glass smoke stop doors shall be marked where required in accordance with the rules of the board of standards and appeals.

**Local Law 26-2004.*

(d) **Prohibited doors.** - Vertically sliding doors, rolling shutters, and folding doors shall not be used as exit doors or as corridor doors, except that overhead garage doors may serve as exits from buildings classified in occupancy group J-3, and except that sliding or rolling doors or gates may be used in F-2 places of assembly provided they are kept open when the place of assembly is occupied. Revolving doors may be used only to the extent permitted by subdivision (m) of section 27-371 of this article. Automatic

horizontally sliding fire doors shall be permitted only in horizontal exits in fire divisions required to have a four hour fire-resistance rating as specified in Table 5-3.

(e) Door opening widths.- The capacity of exit and corridor door openings shall be as listed in table 6-1. Door jambs or stops and the door thickness when open shall not reduce the required width by more than three inches for each twenty-two inches of width. The maximum width of any swinging door leaf shall be forty-eight inches. The minimum nominal width of corridor and exit door openings shall be thirty-six inches, except that where a door opening is divided by mullions into two or more door openings, the minimum nominal width of each such opening shall be thirty-two inches. The minimum nominal width of other door openings shall be as follows:

(1) Door openings to all habitable and occupiable rooms. - thirty-two inches.

(2) Door swinging in pairs (no mullion), opening. - forty-eight inches.

(3) Door openings to rooms used by bedridden patients and all single door openings used by patients in buildings classified occupancy group H-2. - forty-four inches.

(4) Door openings to toilet rooms in buildings to which the public has free access shall be thirty-two inches.

(5) Door openings giving access to at least one toilet, lavatory and bathtub or shower in each dwelling unit, in buildings or spaces classified in occupancy group J-1 or J-2, when such dwelling unit is accessible to individuals in wheelchairs [*sic*] - thirty-two inches.

(6) Door openings giving access to all toilets, lavatories and bathtubs or showers serving single room occupancies, which are accessible to individuals in wheelchairs-thirty-two inches.

*(7) Door openings for people having physical disabilities shall additionally comply with the requirements of reference standard RS 4-6.

**Local Law 58-1987.*

(f) Door heights.- The minimum nominal door opening height for exit and corridor doors shall be six feet eight inches. Door jambs, stops, sills, and closers shall not reduce the clear opening to less than six feet six inches.

(g) Door swing.- Exit doors, corridor doors from rooms or spaces classified in high hazard occupancy group A, or from factories as defined in the labor law, and corridor doors from rooms required to have more than one door under the provisions of section 27-365 of article four of this subchapter, shall swing in the direction of exit travel, except:

(1) Doors from rooms of instruction in buildings classified in occupancy group G, having an occupant load of less than seventy-five persons.

(2) Exterior street floor exit doors from lobbies in buildings classified in occupancy groups J-2 and J-3.

(3) Exterior street floor exit doors from spaces in occupancy group C or E not exceeding two thousand square feet in area, and occupied by less than fifty

persons, where the maximum travel distance to a door does not exceed fifty feet.

(h) Floor level. - The floor on both sides of all exit and corridor doors shall be essentially level and at the same elevation for a distance, perpendicular to the door opening, at least equal to the width of the door leaf, except that where doors lead out of a building the floor level inside may be seven and one-half inches higher than the level outside.

(i) Closed doors. - Exit doors and corridor doors shall normally be kept in the closed position, except that corridor doors in buildings classified in occupancy group H-2 shall be exempt from this requirement.

(j) Door and window hardware. - Doors and windows shall be equipped with hardware as follows:

(1) FIRE PROTECTION REQUIREMENTS. -

a. Exit doors and corridors shall be readily openable at all times from the side from which egress is to be made and shall not require a key to operate from that side, except that:

1. Locks may be used in penal and mental institutions and areas, where required for security.

2. Locks may be used in banks, museums, jewelry stores and other places where extra safeguards are required, subject to the approval of the commissioner, and provided the locks are equipped with electrical release devices for remote control in case of emergency.

3. Stairways leading from the top floor to a roof may be provided with locked wire mesh gates openable by key in buildings classified in occupancy group G. The use of a hook and eye closing device on the inside of all doors to roofs shall be permitted.

*b. Doors opening into interior stair enclosures shall not be locked from either side with the following exceptions:

1. Doors may be locked to prevent access to the stair at the street floor.

2. In buildings classified in occupancy group E, less than one hundred feet in height, the doors may be locked on the stair side on each floor above the street floor.

3. In buildings classified in occupancy group E, one hundred feet or more in height, and existing office buildings one hundred feet or more in height, the doors may be locked on the stair side above the street floor except that at intervals of four stories or less, doors shall be openable from the stair side without the use of a key to permit reentry at such floors. In addition, the door on every floor where a keyed switch is required by the provisions of subchapter eighteen of this chapter shall be openable from the stair side without the use of a key to permit reentry at such floors.

4. When a locked door is provided with an automatic fail safe system for opening such door in the event of the activation of any automatic fire detecting device or when any elevator in readiness as provided in section 27-989 of subchapter eighteen of this chapter is activated, such door shall be deemed as openable from

the stair side [*sic*]. The installation of such automatic fail safe system shall comply with the requirements of reference standards RS 17-3A and RS 17-3B, whichever is applicable. Stair reentry signs required under section 27-394 of article nine of this subchapter shall specify that reentry is provided only during fire emergencies.

**Local Law 14-1993.*

c. Latch bolts shall be provided on all exit doors and corridor doors to hold them in a closed position against the pressure of expanding gases except that this requirement shall not apply to doors in stair enclosures in buildings classified in occupancy group G.

(2) SECURITY REQUIREMENTS. - The following provisions shall apply to all buildings erected or altered after December sixth, nineteen hundred sixty-eight that may be classified in residential occupancy group J-2. Existing buildings in such group shall comply with the requirements of article eleven of subchapter two.

a. Building entrance doors and other exterior exit doors shall be equipped with heavy duty lock sets with auxiliary latch bolts to prevent the latch from being manipulated by means other than a key. Latch sets shall have stopwork in the inside cylinder controlled by a master key only. Outside cylinders of main entrance door locks shall be operated by the tenants' key, which shall not be keyed to also open the tenants' apartment door. A light or lights shall be provided at or near the outside of the front entranceway of the building providing not less than five foot candles intensity measured at the floor level for the full width of the entranceway.

b. Doors to dwelling units shall be equipped with a heavy duty latch set and a heavy duty dead bolt operable by a key from the outside and a thumbturn from the inside. Those doors shall also be equipped with a chain guard so as to permit partial opening of the door. Dwelling unit entrance doors shall also be equipped with a viewing device located so as to enable a person on the inside of the entrance door to view a person immediately outside.

c. All openable windows shall be equipped with sash locks designed to be openable from the inside only. Grilles lockable from the inside only may be placed on the inside or outside of windows that are accessible from grade but that do not serve to provide access to exits.

d. Buildings classified in occupancy group J-2 containing eight or more dwelling units shall be provided with an intercommunication system located at the door giving access to the main entrance hall or lobby, consisting of a device or devices for voice communication between the occupant of each dwelling unit and a person outside said door to the main entrance hall or lobby, and permitting such dwelling unit occupant to release the locking mechanism of said door from the dwelling unit.

(k) Panic hardware. -

(1) Exit doors shall be equipped with fire exit bolts when providing an exit from:

a. Buildings classified in occupancy group G, except exit doors opening directly outdoors at grade from rooms having an occupant load of less than seventy-five persons,

b. F-1 places of assembly,

c. F-2, F-3 and F-4 places of assembly having an occupant load exceeding three hundred persons, except places of assembly having doors that are not equipped with locks and are openable at all times.

(2) Fire exit bolts shall be of an approved type, and shall release when a pressure exceeding fifteen pounds is applied to the releasing device in the direction of exit travel. The bars or panels shall extend at least two-thirds of the width of the door and shall be placed at least thirty inches, but not more than forty-four inches above the floor.

(l) Power operated doors. - Power operated doors or power assisted manually operated doors, may be used as exit or corridor doors provided they remain closed in case of power failure but shall be manually operable. No power operated door shall be credited as a required exit unless it swings in the direction of exit travel.

(m) Revolving doors. - Revolving doors shall not be used as exits in buildings classified in occupancy group F-1 or F-2, G, or H; nor shall revolving doors be used in any occupancy as interior doors providing access to exits, at the foot of stairs, or at the head of basement stairs. Where revolving doors are used as exits, they shall comply with the following:

(1) They may provide not more than one unit or exit width for each revolving door and not more than fifty percent of the required exit capacity at any location, provided that the revolving doors are located adjacent to, or within twenty feet, of swinging doors that provide the remaining required exit capacity at that location.

(2) They shall be collapsible, and designed and constructed so that:

a. Each wing is independently supported by a hanger with a corrosion resistant safety release which, when pressure of between sixty to eighty pounds is exerted simultaneously on the wings on opposite sides of the door pivot, the door wings will fold back on themselves in the direction of egress.

b. Each wing is provided with at least one push bar and glazed with at least 7/32 in. plate or tempered glass.

c. The inside diameter of the enclosure is at least six feet six inches.

d. The freely operable maximum rate of revolving speed is controlled so that it is not greater than fifteen rpm.

e. The upper surface of the floor finish within the door enclosure is flush with the adjacent floor area, and permanently secured in place.

(3) The owner shall be responsible at all times for the operation and maintenance of revolving doors, and shall have the doors inspected at intervals not to exceed

six months. All parts of the doors, including the safety releases and speed control mechanism, shall be maintained in good working order. Inspection reports shall be made in writing and kept on file at the premises for at least two years.

(n) Turnstiles. - No turnstile or other device designed to restrict travel shall be placed so as to obstruct any required exit, except that approved turnstiles that turn freely in the direction of exit travel may be used in any occupancy where revolving doors are permitted. Turnstiles shall be not more than thirty-six inches nor less than thirty inches high and shall be of such design as to provide twenty-two inches clear width as the turnstile rotates. Each turnstile may be credited with a capacity of one unit of exit width. Not more than fifty percent of the required exit capacity may be provided by turnstiles at any location. The balance of the required exit capacity shall be provided by swinging doors located within twenty feet of the turnstiles. Turnstiles over thirty-six inches high shall meet the applicable requirements of this code for revolving doors.

§[C26-604.5] 27-372 Area of refuge. -

Areas of refuge shall comply with the following:

(a) Separation. - Areas of refuge shall be separated from the area which they serve by construction having at least a two hour fire-resistance rating.

(b) Floor area. - Areas of refuge shall provide clear public space or space occupied by the same tenant or owner, adequate in size to hold the occupant load it receives from the floor area it serves as computed by the provision of section 27-367 of article four of this subchapter, in addition to its own occupant load, allowing at least three square feet per person, except that in buildings classified in occupancy group H-2 for patient areas only, the allowance shall be at least thirty square feet per person.

(c) Required exits. - Areas of refuge shall be provided with at least one vertical exit. When an area of refuge is located higher than the eleventh floor of a building, the vertical exit shall be supplemented by at least one elevator.

(d) Locking. - Doors providing access to areas of refuge shall be kept unlocked at all times when any floor area served by the area of refuge is occupied.

§[C26-604.6] 27-373 Horizontal exits. -

A horizontal exit to an area of refuge may consist of doors through walls or partitions having at least a two hour fire-resistance rating; of a balcony or exterior vestibule leading around the end of a fire division to another fire area or building; or it may be a bridge or tunnel between two buildings. Horizontal exits shall comply with the following:

(a) Capacity. - The capacity of horizontal exits shall be as listed in table 6-1. Only the widths of doors swinging in the direction of exit travel to the area of refuge shall

be counted.

(b) Door requirements. - Doors shall be swinging, self-closing doors having a fire protection rating of one and one-half hours, except that doors [sic] in fire divisions having a three hour or four hour fire-resistance rating shall have opening protective as required by table 5-3. Each swinging door shall swing in the direction of exit travel, and when travel is in both directions, as when two areas of refuge serve as areas of refuge for each other, at least two door openings shall be provided, the doors of which shall swing in opposite directions. Signs shall be placed over each door on the side from which egress is made, indicating the exit door.

(c) Balconies, bridges and tunnels. -

When serving as horizontal exits, balconies, bridges, and tunnels shall comply with the following:

(1) Their width shall be equal to at least the width of the doors opening on them, but in no case less than three feet eight inches.

(2) They shall be enclosed at each end by doors complying with subdivision (b) of this section.

(3) The floor level at doors shall be the same as that of the building except that the floor level of open balconies or open bridges shall be approximately seven and one-half inches lower.

(4) Where there is a difference in level between the areas connected, the floors of the horizontal exit shall be ramped not more than one inch in ten inches.

(5) Exterior wall openings within thirty feet horizontally of any open bridge or balcony or below any open bridge or balcony shall be provided with opening protectives having a three-quarter hour fire protection rating.

(6) Balconies shall not face or open on yards or courts less than twelve feet wide, and shall be constructed as required for exterior corridors.

(7) Exterior bridges shall be constructed of noncombustible materials. Interior bridges or tunnels shall be constructed of materials providing a two hour fire-resistance rating.

§[C26-604.7] 27-374 Supplemental vertical exits. -

Enclosed interior stairs, ramps, or escalators may provide access to an area of refuge located on a floor nearer to the street floor, when complying with the following:

(a) Limitation. - They shall be supplemental vertical exits serving no other purpose than to connect a floor area with an area of refuge.

(b) Capacity. - The capacity of supplemental vertical exits shall be as listed for stairs in table 6-1.

(c) Construction. - Supplemental vertical exits shall comply with all of the construction requirements for interior stairs as provided in section 27-375 of this article.

(d) Openings. - There shall be no openings in supplemental vertical exit enclosures other than the exit doors and doors leading into the area of refuge.

(e) Identification. - Every supplemental vertical exit shall have a sign at the entrance designating its destination reading, "EXIT TO AREA OF REFUGE ON..... FLOOR."

§§[C26-604.8] 27-375 Interior stairs. - Interior stairs shall comply with the following requirements:

(a) Capacity. - The capacity of interior stairs shall be as listed in table 6-1.

(b) Width. - The width of interior stairs shall be the clear width between walls, grilles, guards, or newel posts. Stair stringers may project into the required width not more than two inches on each side of the stair. No interior stair shall be reduced in width in the direction of exit travel. Interior stairs shall be at least forty-four inches wide except as follows:

(1) Interior stairs may be not less than thirty-six inches wide when serving not more than thirty occupants per stair on any floor in buildings classified in occupancy groups J-1 and J-2, or when serving buildings classified in occupancy group J-3 and exceeding four stories in height, or when serving not more than sixty occupants per stair on any floor in buildings classified in occupancy groups E, B, and D.

(2) Interior stairs may be not less than thirty inches wide when serving mezzanines having an occupant load not exceeding twenty-five persons or when located in buildings classified in occupancy group J-3 not more than three stories in height. Interior stairs in four story buildings classified in occupancy group J-3 shall be a minimum of thirty-three inches in width.

(c) Headroom. - The clear headroom shall be at least seven feet, except that in buildings classified in occupancy groups J-2 and J-3, the minimum clear headroom may be six feet eight inches. Headroom in a flight of stairs shall be measured vertically between two parallel inclined planes, one of which contains the line of the nosing or upper front edge of each tread and extends to its intersection with a landing and the other of which is through any point directly above the first plane that limits the headroom of the stair.

(d) Landings and platforms. - Landings and platforms shall be provided at the head and foot of each flight of stairs, except at the head of basement stairs in one- and two-family dwellings, and shall comply with the following:

(1) The minimum width of landings and platforms perpendicular to the direction of travel shall be equal to at least the width of the stairs except that on a straight-run stair, the distance between risers of upper and lower flights at intermediate landings or platforms need not be more than forty-four inches.

(2) The maximum vertical rise of a single flight of stairs between floors, between landings or platforms, or between a floor and a landing or platform, shall not exceed eight feet in buildings classified in occupancy groups F and H, and twelve feet in all other occupancy groups. No flight of stairs shall have less than two risers.

(3) Landings and platforms shall be enclosed on sides by walls, grilles or guards at least three feet high.

(e) Risers and treads. - Risers and treads shall comply with table 6-4 and with the following:

(1) The sum of two risers plus one tread

exclusive of nosing shall be not less than twenty-four nor more than twenty-five and one-half inches.

(2) Riser height and tread width shall be constant in any flight of stairs from story to story.

(3) Winders shall not be permitted in required exit stairs except in one- and two-family dwellings and except as permitted in subdivision 1 of this section. The width of winder treads when measured eighteen inches from the narrower end shall be at least equal to the width of treads above or below the winding section.

(4) Curving or skewed stairs may be used as exits when the tread and riser relationship is in accordance with table 6-4 when measured at a point eighteen inches in from the narrow end of the tread; and no tread shall be more than three inches narrower or three inches wider at any point than the width established eighteen inches in from the narrow end.

(f) Guards and handrails. - Stairs shall have walls, grilles, or guards at the sides and shall have handrails on both sides, except that stairs less than forty-four inches wide may have a handrail on one side only. Handrails shall provide a finger clearance of one and one-half inches, and shall project not more than three and one half inches into the required stair width.

(1) Stairs more than eighty-eight inches wide shall have intermediate handrails dividing the stairway into widths that maintain the nominal multiples of twenty-two inches, but the widths shall not be greater than eighty-eight inches nor less than forty-four inches.

(2) The height of handrails above the nosing of treads shall be not more than thirty-four inches nor less than thirty inches.

(3) Handrails shall be returned to walls and posts when terminated, except in one and two-family dwellings.

(4) Handrails shall be designed to support loads in compliance with the requirements of subchapter nine of this chapter.

(5) Handrails in all stairs shall be of materials having a flame-spread rating not exceeding one hundred fifty.

(g) Stair doors. - Doors providing access to stairs shall comply with the requirements of subdivision (a) of section 27-342 of article five of subchapter five of this chapter and subdivision (e) of section 27-371 of this article. The swing of stair doors shall not block stairs or stair landings, nor shall any door at any point of its swing reduce the effective width of the landing or stair to less than seventy-five percent of the required width of the landing or stair, or to less than the width of the door opening on them. The width of doors from a stair shall not be less than the number of units of exit width required for the capacity of the stair, but in no case shall the door width be less than required by subdivision (e) of section 27-371 of this article.

(h) Stair construction. -

Risers, treads, stringers, landings, platforms, and guards, exclusive of handrails, shall be built of noncombustible materials except that interior stairs in buildings of construction group II may be built of combustible materials in buildings classified in occupancy group B-

2, C, D or E when the buildings are two stories in height or less, and in buildings classified in occupancy group J-2 or J-3 when the buildings are not more than three stories in height, and in the case of J-2 occupancy group, when occupied by not more than three families. Interior stairs shall have solid treads. All risers shall be closed except as otherwise provided in subdivision (i) of this section. When of combustible construction, the soffit of interior stairs shall be fire protected by material having a minimum fire resistive rating of one hour or five-eighths inches gypsum wall board or equivalent, or the space beneath shall be enclosed without openings by material having a one hour fire resistance rating unless permitted to have open risers by subdivision (I) of this section. Where two separate interior stairs are contained within the same enclosure (so called "scissor stairs"), each stair shall be separated from the other by noncombustible construction having a fire resistance rating equal to that required for the stair enclosure. Stairs, platforms, and landings shall be designed to support all loads in compliance with the requirements of subchapter nine of this chapter. Treads and landings shall be built of or surfaced with nonskid materials.

(i) Stair enclosures. -

(1) Interior stairs shall be enclosed with construction complying with the requirements of Table 3-4 except that:

a. In buildings three stories or less in height excluding those classified in occupancy group J-1 or J-2 combustible construction group II, the enclosing construction may have a one hour fire resistant rating.

b. Stairs in buildings or spaces classified in occupancy group J-3 and not more than three stories in height, need not be enclosed except as otherwise required in subdivision (a) of section 27-341 of article five of subchapter five of this chapter. Stairs may have open risers in one family dwellings and group homes.

c. Unenclosed stairs in buildings classified in assembly occupancy group F may be permitted as provided in subchapter eight of this chapter.

d. Stairs from floors or mezzanines may be unenclosed, with open or closed risers.

e. In buildings classified in occupancy group J-2 occupied exclusively by not more than one family on each story without boarders, roomers or lodgers and not more than three stories in height, the enclosing construction may have a one hour fire-resistance rating which may be constructed of combustible material provided that the stair enclosure is protected with an automatic sprinkler system complying with the construction provisions of subchapter seventeen of this chapter.

f. In buildings classified in occupancy group J-1 or J-2 not more than two stories in height of combustible construction group II, the enclosing construction may have a one hour fire-resistance rating which may be constructed of combustible material; however, where

only one vertical exit is provided the stair enclosure shall be protected throughout with an automatic sprinkler system constructed in accordance with the provisions of subchapter seventeen of this chapter.

g. Except as provided in subparagraphs (a), (e) and (f) of this paragraph, in all buildings or spaces classified in occupancy group J-1 or J-2, the enclosing construction shall be of masonry or an approved equivalent material having at least a two hour fire-resistant rating.

(2) Access stairs connecting not more than two stories which do not serve as a required exit may be constructed without an enclosure in buildings classified in other than occupancy group H-2. Such stairs shall be additional to and shall not obstruct or interfere with required exit facilities. When the first story below grade is served by an interior, unenclosed access stair, it shall be sprinklered in accordance with the construction provisions of subchapter seventeen of this chapter.

(3) The interior finish of interior stair enclosures shall be in accordance with the requirements of table 5-4.

(4) Stair enclosures shall be vented in accordance with the requirements for shafts in subdivision (d) of section 27-344 of article five of subchapter five of this chapter except that stair enclosures for buildings or spaces classified in occupancy group J-1 or J-2 shall be vented as follows:

a. In occupancy group J-2 buildings three stories in height and with not more than one dwelling unit per story or two stories in height with not more than two dwelling units per story, shall be provided with a skylight at least nine square feet in area, glazed with plain glass with a wire screen over and under and provided with fixed or movable ventilators having a minimum open area of forty square inches.

b. In occupancy group J-1 or J-2 buildings two stories in height with more than two dwelling units per story shall be provided with a skylight of at least twenty square feet in area, glazed with plain glass, with a wire screen over and under and provided with fixed or movable ventilators having a minimum open area of forty square inches.

c. In occupancy group J-1 buildings exceeding two stories in height and in occupancy group J-2 buildings three stories in height with more than one dwelling unit per story or exceeding three stories in height shall be provided with a skylight at least twenty square feet in area, glazed with plain glass with a wire screen over and under and provided with fixed or movable ventilators having a minimum open area of one hundred forty-four square inches. In lieu of the skylight and ventilators a window of equal area may be provided with fixed louvers having a minimum open area of one hundred forty-four square inches installed in or immediately adjacent to the window.

(5) When dwelling units are located over a space classified in occupancy group C or E on the street floor, they shall be provided with a separate enclosed interior stair, or with an exterior stair.

*(6) Impact resistance.- Stair enclosures serving occupancy group E spaces (office spaces) in high rise buildings constructed pursuant to applications filed on

or after July 1, 2006 shall comply with rules to be promulgated by the commissioner establishing minimum impact resistance standards. Such rules shall permit compliance with assemblies comprising approved reinforced construction boards affixed onto stud framing. The commissioner shall promulgate such rules on or before January 1, 2006.

**Local Law 26-2004.*

(j) Openings and obstructions to stair enclosures.—No piping of any kind, with the exception of piping required or permitted in subchapter seventeen of this code, shall be permitted within a stair enclosure. No openings of any kind, other than windows, fire department access panels, exit doors and openings specifically authorized in reference standard RS 5-18 shall be permitted within a stair enclosure. Pipes required or permitted by such subchapter seventeen and protected in accordance therewith which do not reduce the required clearances of the enclosure may be permitted. Ducts protected in accordance with the requirements of subchapter thirteen of this chapter, which do not reduce the required clearances of the enclosure, may be permitted. In addition, in buildings in occupancy group J-2, which are three stories or less in height and occupied by not more than two families on each story, a door from an apartment may open directly into a stair, and the door may swing into the apartment.

(k) Roof access. -

(1) Except as otherwise provided for in paragraphs two and three of this subdivision, in buildings or in building sections more than three stories or forty feet high with roofs having a slope of less than twenty degrees, access to the roof shall be provided by at least one interior stair, except that access to setback roof areas may be through a door or window opening to the roof. Interior stairs extending to roofs shall be enclosed in bulkheads of fire-resistant construction meeting the requirements of subchapter five of this chapter.

(2) In buildings or in building sections classified in occupancy group J-1 or J-2 more than two stories in height, except as otherwise provided for in paragraph three of this subdivision, with roofs having a slope of fifteen degrees or less all interior stairs, except those terminating at a level of a setback roof, shall extend to the roof and shall be enclosed in bulkheads of fire-resistive construction meeting the requirements of subchapter five of this chapter. Stairs terminating at the level of a setback shall provide access to the setback roof areas through a door except where the setback is less than four feet in width, measured from the inside of the parapet wall, and less than ten feet in length.

(3) In buildings or in building sections classified in occupancy group J-1 or J-2 two stories in height and in occupancy group J-2 three stories in height with not more than one dwelling unit per story with roofs having a slope of fifteen degrees or less, access to the roof shall be provided through a scuttle at least

twenty-one inches in width and twenty-eight inches in length and shall comply with subdivision (c) of section 27-338 of article four of subchapter five of this chapter. Scuttles shall be located within each stair enclosure with a stationary iron ladder leading thereto.

(l) Spiral stairs. - Spiral stairs may serve as access stairs between two floors or levels in accordance with the provisions of paragraph two of subdivision (i) of this section. Such stairs may not serve as required exits, except that unenclosed spiral stairs when built of noncombustible materials and having a tread length of at least thirty inches may serve as exits from mezzanines or balconies having an occupant load not exceeding twenty-five persons.

TABLE 6-4 MAXIMUM RISER HEIGHT AND MINIMUM TREAD WIDTH

Occupancy Group Classification of Building	Maximum Riser Height (in.)	Minimum Tread ¹ Width (in.)
Residential J-3 (with closed risers)...	8 ¼	9 plus 1 ¼ nosing
Residential J-3 (with open risers)...	8 ¼	9 plus ½ nosing
Residential J-2 (with only three dwelling units).....	8 ¼	9 plus 1 ¼ nosing 9 ½ plus nosing
Assembly F.....	7 ½	10 plus nosing
Institutional H-2.....	7	9 ½ plus nosing
All others ²	7 ¾	9 ½ plus nosing

Notes for Table 6-4:

¹Treads may be undercut a distance equal to the nosing. A nosing shall not be required when tread width is eleven inches or wider.

²The proportions and dimensions of treads and risers may be adjusted in buildings classified in occupancy group G to suit the age of occupants, subject to the approval of the commissioner.

§[C26-604.9] 27-376 Exterior stairs. -

Exterior stairs may be used as exits in lieu of interior stairs provided they comply with all of the requirements for interior stairs, except enclosure, and except as modified below:

(a) Capacity. -The capacity of exterior stairs shall be as listed in Table 6-1.

(b) Height limitation. - No exterior stair shall exceed seventy-five feet or six stories in height.

(c) Construction. - Exterior stairs shall be constructed entirely of non-combustible materials, except that in buildings classified in occupancy groups other than G, F, or H, or construction group II, located outside the fire districts, exterior stairs may be built of combustible materials when the buildings are two stories or thirty feet in height or less and have an occupant load not exceeding forty persons per floor above the street

below. Exterior stairs shall be roofed, and shall be protected along their outer sides as required for exterior corridors in subdivision (f) of section 27-369 of this article. Treads, landings, and platforms shall be solid and unperforated. Risers may be partially open to permit water and snow to drain.

(d) Opening protective. - In buildings four stories or fifty feet in height or more, there shall be no openings in the building walls adjoining exterior stairs other than one-quarter* hour self-closing swinging fire doors, and no openings nearer than ten feet to the stair (measured horizontally) that are not provided with three-quarter hour opening protectives.

(e) Location. - No exterior stair shall be located nearer than ten feet to an interior lot line.

(f) Discharge. - Exterior stairs shall extend continuously to grade.

** As enacted but "three-quarter hour" probably intended.*

*****§27-376.1 Fire tower.** - Fire towers may be used as exits in lieu of interior stairs provided they comply with all of the requirements for interior stairs, except as modified below.

(a) The enclosing walls of fire towers shall be of incombustible materials or assemblies having a fire-resistance rating of at least four hours. Such walls shall be without openings, except for doors serving as means of egress.

(b) At each story served by a fire tower, access to the stairways of such fire tower shall be provided through outside balconies or fireproof vestibules. Such balconies or vestibules shall be at least three feet eight inches in width and shall have unpierced floors of incombustible materials and shall be provided with substantial guard railings at least four feet high, without any openings greater than five inches in width.

(c) Such balconies or vestibules of fire towers shall be level with the floors of the structure and the platforms of the stairs connected by such balconies. Such balconies or vestibules shall be separated from the structure and the stairs by self-closing swinging doors with a one and one-half hour fire protection rating, capable of being opened from both sides without the use of a key or other unlocking device.

(d) Balconies or vestibules of fire towers shall open on a street or yard, or on a court open vertically to the sky for its full height, having a minimum net area of one hundred five square feet and a minimum dimension of seven feet. The opening from the vestibule to the street, yard or court shall have a minimum area of eighteen square feet and a minimum dimension of two feet six inches. It shall be unlawful to leave openings in the court walls surrounding an interior fire tower, other than the openings from the vestibules, within fifteen feet of the balcony, except that self-closing windows with a three-quarter hour fire protection rating may be used if such windows are at least ten feet from the balcony, provided that the area of the court is at least twelve feet by twenty-four feet.

(e) Fire towers shall terminate at grade level and shall exit directly to the street independently of corridors serving other stairways, except when the fire tower terminates in the ground floor corridor outside of the inner vestibule and within ten feet of the building line.

(f) Fire tower stairs shall comply in all other respects with the applicable requirements of section 27-375 of this code.

****Local Law 26-2004.*

§[C26-604.10] 27-377 Ramps. -

Interior or exterior ramps may be used as exits in lieu of interior or exterior stairs provided they comply with the applicable requirements for interior stairs in section 27-375 of this article or exterior stairs in section, 27-376 of this article respectively, and with the following:

(a) Capacity. - The capacity of ramps shall be as listed in Table 6-1.

(b) Maximum grade. - Ramps shall not have a slope steeper than 1 in 8, except that in buildings classified in occupancy group H the slope shall not exceed 1 in 12, and except as provided in subchapter eight of this chapter for places of assembly.

(c) Design. -

(1) **CHANGES IN DIRECTION.** - Ramps shall be straight, with changes in direction being made at level platforms or landings, except that ramps having a slope not greater than 1 in 12 at any place, may be curved.

(2) **LENGTH.** - The sloping portion of ramps shall be at least three feet but not more than thirty feet long between level platforms or landings.

(3) **PLATFORMS.** - Level platforms or landings, at least as wide as the ramp, shall be provided at the bottom, at intermediate levels where required, and at the top of all ramps. Level platforms shall be provided on each side of door openings into or from ramps having a minimum length in the direction of exit travel of three feet, and when a door swings on the platform or landing a minimum length of five feet.

(4) **DOORS.** - Door openings into or from ramps shall comply with the requirements for stairs in subdivision (g) of section 27-375 of this article. No door shall swing over the sloping portion of a ramp.

(5) **GUARDS AND RAILINGS.** - Guards and railings of ramps shall comply with the applicable requirements of subdivision (f) of section 27-375 of this article except that only ramps having a slope steeper than 1 in 12 need comply with the requirements for handrails and intermediate handrails shall not be required.

(6) **SURFACE.** - Interior ramps exceeding a slope of 1 in 10 and all exterior ramps shall be provided with nonslip surfaces.

**** (7) Ramps for people having physical disabilities** shall additionally comply with the requirements of reference standard RS 4-6.

***Local Law 58-1987.*

§[C26-604.11] 27-378 Escalators. -

Escalators may be used as exits in lieu of interior stairs provided they comply with all of the requirements of

subchapter eighteen of this chapter and with the applicable requirements for enclosed interior stairs, except as modified below:

(a) Capacity. - The capacity of escalators as listed in table 6-1 shall be based on the following:

MINIMUM WIDTH (IN.) AT:

Step	Balustrade ¹	Enclosure ²	Units of Exit Width
24	32	52	1 ½
40	48	68	2

Notes:

¹Measured twenty-seven inches above front edge of tread.

²Clear width above handrails.

(b) Acceptable exits. -

Only escalators moving in the direction of exit travel may be credited as exits, except that any escalator may be credited when it is connected to an automatic fire detection system that will cause it to stop simultaneously with the detection of fire. The detection system shall comply with the construction provisions of subchapter seventeen of this chapter. Where an escalator provides exit facilities from only one floor of a building, the automatic detection system shall be located on that floor. Where escalators provide exit facilities from more than one floor, the detection system shall be located on all floors so served, and shall cause escalators on all floors of the section of the building that they serve to stop operating. The stopping mechanism shall operate to bring the escalator to a gradual, rather than an abrupt stop.

(c) Escalators not used as exits. - Escalators that do not serve as exits, and that connect more than two stories of a building, shall be completely enclosed with noncombustible construction having a three-quarter hour fire-resistance rating, except that in buildings completely protected by an automatic sprinkler system complying with the construction requirements of subchapter seventeen of this chapter, such escalators may, alternatively, be protected by one of the methods specified in subchapter eighteen of this chapter.

§[C26-604.12] 27-379 Moving walkways. -

Pedestrian walkways consisting of conveyor belts shall be considered as exit passageways if level, or as ramps if inclined, and shall be acceptable as exits if they comply with the applicable requirements for exit passageways or ramps, and with the following:

(a) Capacity. - The capacity shall be as listed under exit passageways or ramps, as the case may be, in table 6-1.

(b) Acceptable exits. - Only walkways moving in the direction of exit travel may be credited as exits, except that any moving walkway may be credited when it is connected to an automatic fire detection

system that will cause it to stop simultaneously with the detection of fire on the floor it serves. Such detection system shall comply with the construction provisions of subchapter seventeen of this chapter.

(c) Design and construction. - Walkways shall comply with the requirements of subchapter eighteen of this chapter.

(d) Enclosure. - Walkways that do not serve as exits, but are inclined so as to require an opening in any floor, shall be enclosed as required for escalators in subdivision (c) of section 27-378 of this article.

§[C26-604.13] 27-380 Fire escapes. -

Fire escapes constructed on existing buildings when altered or as a second means of egress for group homes as permitted by section 27-368 of this article shall comply with the following:

(a) Capacity. - The capacity of fire escapes shall be as listed in table 6-1 for stairs.

(b) Stairs. - The minimum width of fire escape stairs shall be twenty-two inches. Treads shall have a minimum width of eight inches, exclusive of a required one inch nosing. The maximum height of risers shall be eight inches. No flight of stairs shall exceed twelve feet in height between landings.

(c) Landings. - Landings shall be provided at each story served by fire escapes. The minimum width of landings shall be three feet, and the minimum length shall be four feet six inches. Floor openings in landings shall be at least twenty-two inches by twenty-eight inches.

(d) Handrails and guards. - Handrails having a minimum height of thirty-two inches above the tread nosing shall be provided on both sides of stairs, and guards having a minimum height of thirty-six inches shall be provided on all open sides of landings, openings in guards shall be of such dimensions as to prevent the passage of a five inch dia. ball.

(e) Construction. -

Fire escapes shall be constructed of noncombustible materials adequately protected against deterioration by corrosion or other effects of exposure to the weather, and shall be designed to comply with the requirements of subchapter nine of this chapter.

(f) Access. - Access to fire escapes shall be by doors or windows having a minimum clear opening of twenty-four inches in width and thirty inches in height. Such doors or windows shall have a fire protection rating of three-quarters of an hour except in buildings classified in occupancy group J-2.

(g) Discharge. - The top landing of fire escapes shall be provided with a stair or gooseneck ladder leading to the roof, except that this requirement shall not apply to buildings having a roof pitch of more than twenty degrees. The lowest landing of fire escapes shall be not more than sixteen feet above grade and shall be provided with a stair to grade, which may be counterbalanced.

ARTICLE 6 EXIT LIGHTING

§[C26-605.1] 27-381 Requirements. -

Corridors and exits shall be provided with artificial lighting facilities, except as otherwise permitted by the provisions of subchapter twelve of this chapter, in accordance with the following:

(a) Illumination of at least two foot candles measured at the floor level shall be maintained continuously, during occupancy, in exits and their access facilities for their full length, at changes in direction in and intersections of corridors, balconies, exit passageways, stairs, ramps, escalators, bridges, tunnels, landings, and platforms, and as provided in subchapter eight of this chapter for places of assembly, except that this requirement shall not apply to dwelling units.

(b) In buildings classified in occupancy groups B-1 and B-2, exit lighting need only be maintained when a section of floor is occupied.

(c) Illumination shall be so arranged that the failure of any one light shall not leave any area in darkness.

(d) Phosphorescent materials shall not be used as a method of providing illumination, nor shall battery operated electric lights or portable lamps or lanterns be used as primary sources of lighting.

*(e) (1) Buildings and existing buildings containing an F-4 place of assembly with an occupant load of three hundred or more persons shall install emergency lighting in each vertical exit serving the floor on which the place of assembly is located so as to provide a continuously lighted passage to the exterior of the building. Such lighting shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner.

(2) Existing buildings required to comply with this subdivision shall install the emergency lighting on or before April first, nineteen hundred eighty-seven.

**Local Law 59-1996.*

§[C26-605.2] 27-382 Power source. -

*(a) Where a total of more than four lights is required, exit lighting shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner, provided, however, that in existing buildings, the exit lighting may be on circuits that are separate from the general lighting and power circuits, taken off ahead of the main switch.

(b) Existing high rise buildings classified in occupancy group C, D or H and existing buildings classified in occupancy group E, G or J-1 (except for "residential hotels," as such term is defined by the commissioner pursuant to rules and regulations) shall comply with the requirements of this section on or before April first, nineteen hundred eighty-seven.

**Local Law 59-1996.*

***ARTICLE 7 EXIT SIGNS AND OTHER MARKINGS

***§[C26-606.1] 27-383 Requirements.- (a) Exit signs.-

Except in occupancy groups J-2 and J-3, the location of every exit on every floor and every opening from a room classified in occupancy group J-1 and containing cubicles shall be clearly indicated by exit signs. Such signs shall be placed at an angle with the exit opening if such placement is required for the signs to serve their purpose. In long corridors, in open floor areas, and in all other situations where the location of the exit may not be readily visible or understood, directional signs shall be provided to serve as guides from all portions of the corridor or floor.

(b) Exit path markings in high rise office buildings and in occupancy group E high rise buildings.- On and after July 1, 2006 all high rise office buildings and all high rise buildings classified in occupancy group E shall have exit path markings conforming to this subdivision. This provision shall be retroactive and shall apply to buildings constructed on and after such date and to buildings in existence on such date. All exit path markings required herein shall be of an approved photoluminescent material. The markings shall be washable, non-toxic, non radioactive, and if subjected to fire must be self extinguishing when the flame is removed.

(1) All doors opening to corridors, to an exit, or to an exit passageway, shall be marked with the word "exit".

(2) Within exit stairs, horizontal extensions in exit stairs, horizontal exits, supplemental vertical exits and exit passageways, except within street level lobbies, there shall be directional markings.

(3) Required markings for exit paths shall comply with the technical standards for installation and placement to be set forth in a reference standard. Such reference standard shall be designated RS 6-1 and shall be adopted on or before January 1, 2006.

****Local Law 26-2004.*

****§27-383.1 Additional requirements for high rise office buildings and occupancy group E high rise buildings.-** In high rise office buildings and in occupancy group E high rise buildings:

(a) Illuminated exit signs complying with section 27-386 of this subchapter shall be placed in stairwells with horizontal extensions to indicate the transition from vertical to horizontal direction and at turns along the horizontal path.

(b) A supplementary sign complying with sections 27-394 and 27-395 of this subchapter, except that the lettering and numerals shall be at least one inch high, indicating the location of a recessed re-entry door, shall be securely attached on the wall of the landing that faces the evacuee on the stairs.

(c) In stairs where there is no entry or exiting from such stair for more than four floors, a sign complying with sections 27-394 and 27-395, except that the lettering and numerals shall be at least one inch high, shall be securely attached at the beginning of the descent into such portion of the stair on the wall of the landing that faces the evacuee on

the stairs stating the location of the next re-entry or exiting floor. On each floor within such portion of the stair a sign complying with sections 27-392 and 27-395 shall be securely attached to the wall of the landing that faces the evacuee on the stairs approximately five feet above the floor indicating the floor number.

(d) Signs shall be readily visible from the egress direction.

(e) High rise office buildings and high rise buildings classified in occupancy group E in existence on October 22, 2004 shall comply with this section on or before July 1, 2007. For the purpose of this section, a high rise building shall be deemed to be in existence on October 22, 2004 if on such date it is complete or under construction or where an application for approval of plans was filed with the department prior to such date and construction commenced within two years after such date.

****Local Law 26-2004.**

§[C26-606.2] 27-384 Power source. -

*(a) Where a total of more than four exit and/or directional signs is required, the signs shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner, provided, however, that in existing buildings, the signs may be on circuits that are separate from the general lighting and power circuits, taken off ahead of the main switch.

***Local Law 59-1996.**

(b) Existing high rise buildings classified in occupancy group C, D or H and existing buildings classified in occupancy group E, G or J-1 (except for "residential hotels," as such term is defined by the commissioner pursuant to rules and regulations) shall comply with the requirements of this section on or before April first, nineteen hundred eighty-seven.

******(c) Notwithstanding the foregoing, in the existing buildings required to comply with subdivision (b) of this section, all such existing exit and/or directional signs on circuits taken off ahead of the main switch shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner on or before July 1, 2007.

****Local Law 26-2004.**

§[C26-606.3] 27-385 Exit sign design. -

Exit signs shall read only "exit" and shall be of the externally lighted, internally lighted, or electroluminescent type, except that they may be nonilluminated in buildings not provided with artificial lighting.

(a) The artificial light source on externally lighted signs shall provide a red light, either by the use of an incandescent colored bulb or other visible red light source, so as to provide at least twenty-five foot candles on the exposed face of the sign. Visibility of

the sign shall not be obscured by the location of the light source.

(b) For internally lighted signs, the average initial brightness of the letters shall be at least twenty-five ft. lamberts, and where an illuminated background is used, its average initial brightness shall be at least two hundred fifty ft. lamberts. The light source shall not be modified or changed nor shall lamp life multipliers be used so as to reduce these brightness levels.

(c) The letters of exit signs shall be red. The background of externally lighted signs shall be white. The background of internally lighted signs shall be either stenciled metal with a light gray or white color, or translucent frosted, opal glass, slow-burning plastic, or the plastic edge-glow type with white plastic separators. The letters for internally lighted signs shall be translucent red.

(d) The letters shall be block lettering at least four and one-half inches high with nine-sixteenths inch strokes, except in buildings and spaces classified in occupancy group F and J-1, where they shall be at least eight inches high with the strokes at least three-quarters of an inch wide.

(e) In locations where breakage may occur, exit signs shall be of shock resistant materials, or shall otherwise be protected against breakage.

(f) Except for buildings not provided with artificial lighting and buildings which maintain one or more auxiliary systems for emergency exit lighting in the event of a public utility failure, there shall be either (1) an illuminated exit sign with the background thereon made of an approved phosphorescent material or (2) a material with an opaque text and placed adjacent to or as close as possible to such illuminated sign. The phosphorescent material after exposure to normal lighting conditions shall be capable of remaining visible in total darkness for a period of at least eight hours. The signs shall be washable, non-toxic, non-radioactive and if subjected to fire must be self-extinguishing when the flame is removed.

§[C26-606.4] 27-386 Directional sign design.-

Directional exit signs shall comply with all of the requirements for exit signs in section 27-385 of this article, and shall read "EXIT" with a horizontal arrow or arrows indicating the direction to the exit or exits. However, when the arrow is below the letters, the letters may be three and three-eighths inches high and nine-sixteenths inch strokes, except in buildings and spaces classified in occupancy group F where they shall be at least five inches high with nine-sixteenths inch strokes. The arrow or arrows shall be red.

§[C26-606.5] 27-387 False exits. -

Any door, passageway, stair, or other means of communication that is not an exit or that is not a way to an exit, but is so located as to be mistaken for an exit, shall be identified with a sign reading "NOT AN EXIT," shall be identified by a sign indicating its use or purpose or shall be provided with a directional exit sign.

**ARTICLE 8 EXIT SIGNS FOR EXISTING
BUILDINGS**

§[C26-607.1] 27-388 Retroactive provisions. –

Except as otherwise provided, the provisions of this subchapter are not retroactive except that the provisions of this article and article nine of subchapter six of this chapter for certain existing office buildings are retroactive. Signs required by this article must be installed no later than March sixth, nineteen hundred sixty-nine. Where auxiliary systems for emergency exit lighting are to be provided, the installation must commence no later than May sixth, nineteen hundred sixty-nine.

§C26-60[7.2] 27-389 Designation of required means of egress. -

(a) Except for spaces classified in occupancy J-2 and J-3, the location of each required means of egress on every floor of every structure shall be clearly indicated by exit signs. Such signs shall be placed at an angle with the exit doorway if such placement shall be required for such signs to serve their purpose adequately. These signs shall be of an approved phosphorescent material, which after exposure to normal lighting conditions shall be capable of remaining visible in total darkness for a period of at least eight hours. They shall also be washable, non-toxic, non-radioactive, and if subjected to fire must be self-extinguishing when the flame is removed. Except for illuminated signs, these signs shall have a phosphorescent background and opaque text. Where means of egress were required to be indicated by an illuminated sign, there shall be either (1) an illuminated exit sign with the lettering thereon made of the approved phosphorescent material, or (2) a supplemental exit sign made of the approved phosphorescent material with an opaque text, and placed adjacent to or as close as possible to such illuminated sign.

(b) Except for spaces classified in occupancy groups J-2 and J-3, in long corridors, in open floor areas and in all other situations where the location of the means of egress may not be readily discernible or understood by the occupants, directional signs shall be provided and maintained to serve as guides from all portions of the floor or corridor. These signs shall be of an approved phosphorescent material which after exposure to normal lighting conditions shall be capable of remaining visible in total darkness for a period of at least eight hours. They shall also be washable, non-toxic, non-radioactive, and if subjected to fire must be self-extinguishing when the flame is removed. Except for illuminated signs these signs shall have a phosphorescent background and opaque text. Where a directional sign was required to be illuminated there shall be either (1) an illuminated directional sign with the lettering, indicator, symbol or other device thereon made of the aforesaid phosphorescent material, or (2) a supplemental directional sign with the same lettering, indicator, symbol or device as appears on the illuminated sign, but opaque, on a background made of the aforesaid phosphorescent material and placed adjacent to or as close as possible to such illuminated sign.

(c) Except where otherwise permitted by the provisions of any law, the lettering of exit signs shall be of letters of at least eight inches high.

(d) In those buildings not provided with artificial lighting, in those buildings which maintain one or more auxiliary systems for emergency exit lighting in the event of a public utility failure, and in those buildings for which the installation of one or more such auxiliary systems is commenced on or before August sixth, nineteen hundred sixty-nine, the signs need not be phosphorescent but shall otherwise conform to this section.

ARTICLE 9 STAIR AND ELEVATOR SIGNS

***§[C26-608.1] 27-390 Applicability. -**

This article is applicable to all buildings and existing buildings which have at least one elevator which is subject to periodic inspections pursuant to section 27-998, any existing office building occupied or arranged to be occupied for an occupant load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building.

**Local Law 96-1985, language juxtaposed per Ch. 907-1985.*

§[C26-608.2] 27-391 Signs at elevator landings.-

A sign shall be posted and maintained on every floor at the elevator landing. The sign shall read "IN CASE OF FIRE, USE STAIRS UNLESS OTHERWISE INSTRUCTED." The lettering shall be at least one-half inch block letters in red with white background or as otherwise approved by the commissioner. Such lettering shall be properly spaced to provide good legibility. The sign shall also contain a diagram showing the location where it is posted and the location and letter identification of the stairs on the floor. The sign shall be at least ten inches by twelve inches, located directly above a call button and securely attached to the wall or partition. The top of such sign shall not be above six feet from the floor level. The diagram on such sign may be omitted provided that signs containing such diagram are posted in conspicuous places on the respective floor. In such case, the sign at the elevator landing shall be at least two and one half inches by ten inches and the diagram signs shall be at least eight inches by twelve inches.

§[C26-608.3] 27-392 Floor numbering signs. -

A sign shall be posted and maintained within each stair enclosure on every floor, indicating the number of the floor. The numerals shall be of bold type and at least three inches high. The numerals and background shall be in contrasting colors. The sign shall be securely attached to the stair side of the door.

§[C26-608.4] 27-393 Stair and elevator identification signs. -

Each stair and each bank of elevators shall be identified by an alphabetic letter. A sign indicating the letter of identification for the elevator bank shall be posted and maintained at each elevator landing directly above or as part of the sign specified in section 27-391 of this article. The stair identification sign shall be posted and maintained on the occupancy side of the stair door. The letter on the sign shall be at least three inches high, of bold type and of contrasting color from the background. Such signs shall be securely attached.

§[C26-608.5] 27-394 Stair re-entry signs in office buildings.-

Signs shall be posted and maintained on the stair door at each floor in buildings classified in occupancy group E occupied or arranged to be occupied for an occupant

load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building indicating whether re-entry is provided into the building and the floor where such re-entry is provided. The lettering and numerals of the signs shall be at least one-half inch high of bold type. The lettering and background shall be contrasting colors and the signs shall be securely attached approximately five feet above the floor. The signs shall read as follows and may be either independent or combined with the corresponding sign required by sections 27-392 and 27-393 of this article.

(a) Where no re-entry is provided from the stairs to any floor, the sign shall read "NO RE-ENTRY FROM THIS STAIR" and such sign shall be on the occupancy side of the stair door at each floor. No re-entry sign shall be required on the stair side of the door.

(b) Where re-entry is provided to specified floors:

(1) On the stair side of the door at floors where re-entry is provided, the sign shall read "RE-ENTRY ON THIS FLOOR."

(2) Where no re-entry is provided on that floor, the sign on the stair side of the door shall read "NO RE-ENTRY, NEAREST RE-ENTRY ON THE... AND... FLOORS." The floor numbers of the nearest re-entry below and the nearest re-entry floor above shall be entered in the blank spaces.

§[C26-608.6] 27-395 Materials for signs. -

Signs required by this article shall be of metal or other durable material.

§[C26-608.7] 27-396 Signs in existing buildings. -

(a) Signs installed prior to the enactment of this article may be accepted by the commissioner, provided that such signs will adequately accomplish the intended purpose.

(b) In buildings existing prior to January eighteenth, nineteen hundred seventy-three, the commissioner may modify the requirements as to location of signs where compliance would cause practical difficulty or undue hardship.

(c) All existing buildings not already subject to the requirements of this article as of January eighteenth, nineteen hundred seventy-three shall comply with the requirements of this article on or before October first, nineteen hundred eighty-five.

ARTICLE 10 SIGNS IN SLEEPING ROOMS

§[C26-609.1] 27-396.1 Applicability. -

This article is applicable to buildings and existing buildings classified in occupancy group J-1.

§[C26-609.2] 27-396.2 Requirements. -

All buildings and existing buildings classified in occupancy group J-1 shall post and maintain a sign on the inside of every door opening onto a public corridor giving access to a sleeping room. The sign shall contain a diagram showing the location where it is posted and the location and letter

identification of the exit stairs on the floor. The diagram shall indicate the number of doors opening onto the public corridor which must be passed to reach each exit stair. The sign shall be at least eight inches by ten inches, located on the inside of the door and securely attached thereto. The top of such sign shall not be more than six feet from the floor level. Such sign shall contain such additional information as the fire department may require.

§[C26-609.3] 27-396.3 Retroactive requirements. -

All existing buildings required to comply with the provisions of this article shall post the requisite signs on or before April first, nineteen hundred eighty-seven. Signs installed prior to such date may be accepted by the commissioner, provided that such signs adequately accomplish the intended purpose.

ARTICLE 11 EMERGENCY POWER

§[C26-610.1] 27-396.4 Requirements. -

Where required by this article or any other provision of this code, an emergency power system shall be provided. The emergency power system shall have a power source and fuel supply sufficient to operate the following equipment in accordance with rules and regulations promulgated by the department, where such equipment is required to be provided by this code:

- (a) Fire pumps and booster pumps.
- (b) At least three elevators at one time, with manual transfer to other elevators.
- (c) Alarm systems.
- (d) Communication systems.
- (e) Emergency lighting, if battery packs are not provided.
- (f) Ventilating systems used for smoke venting or control.
- (g) Stair pressurization.

§[C26-610.2] 27-396.5 Registration. -

Emergency power generation equipment shall be registered with the department of environmental protection, bureau of air resources in accordance with the requirements of section 24-109 of title twenty-four of the administrative code.

§[C26-610.3] 27-396.6 Applicability. -

Emergency power systems meeting the requirements of this article shall be provided in the following buildings and building sections:

- (a) High rise buildings and building sections classified in occupancy group C, E, G or H.
- (b) Buildings and building sections classified in occupancy group E or G which do not exceed seventy-five feet in height but have a gross area of over fifteen thousand square feet per floor or a total gross area of one hundred thousand square feet or more.
- (c) Spaces classified in occupancy group F-4 having an occupant load of three hundred or more persons.
- (d) Buildings and building sections classified in occupancy group J-1.
- (e) Buildings and building sections containing an atrium.



**SUBCHAPTER 7
SPECIAL USES AND OCCUPANCIES**

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**				
[700.0]	Art. 1	General			
[700.1]	397	Scope	[706.0]		Art. 7 Heliports
[700.2]	398	Standards	[706.1]	431	Separation of Direct-Fired Dryers
[700.3]	399	Definitions	[706.2]	432	Application
[701.0]	Art. 2	High Hazard Occupancies	[706.3]	433	Classification
[701.1]	400	Application	[706.4]	434	Construction
[701.2]	401	Explosion Hazard and Unlisted Occupancies	[706.5]	435	Limitations
			[706.6]	436	Exits
[701.3]	402	Other Requirements	[706.6]	437	Fire Protection
[701.4]	403	Location	[707.0]		Art. 8 Automotive Service Stations
[701.5]	404	Sprinkler Requirements	[707.1]	438	Application
[701.6]	405	Ventilation of Storage Occupancies	[707.2]	439	Classification
			[707.3]	440	Gasoline and Diesel Oil Motor Vehicle Fuel Storage
[702.0]	Art. 3	Occupancies Involving Spray or Dip Finishing	[707.4]	441	Location of Pumps
[702.1]	406	Application	[707.5]	442	Heating Equipment
[702.2]	407	Classification	[708.0]		Art. 9 Automotive Repair Shops
[702.3]	408	Location of Processes	[708.1]	443	Application
[702.4]	409	Construction	[708.2]	444	Classification
[702.5]	410	Ventilation	[708.3]	445	Volatile Flammables
[702.6]	411	Drying Equipment	[708.4]	446	Ventilation
[702.7]	412	Sprinklers	[708.5]	447	Sprinklers
[703.0]	Art. 4	Uses and Occupancies Involving Radioactive Materials and Radiation-Producing Equipment	[708.6]	448	Heating Equipment
			[708.7]	449	Pits
[703.1]	413	Application	[709.0]		Art. 10 Public Garages
[703.2]	414	City, State, and Federal Regulations	[709.1]	450	Application
[703.3]	415	Laboratories	[709.2]	451	Classification
[703.4]	416	Radiation Machines	[709.3]	452	Construction
[703.5]	417	Storage	[709.4]	453	Group 1 Public Garages in Buildings of Other Occupancy Classification
[704.0]	Art. 5	Boiler and Furnace Rooms	[709.5]	454	Roof Storage of Motor Vehicles
[704.1]	418	Application	[709.6]	455	Sprinklers
[704.2]	419	Enclosure	[709.7]	456	Ventilation
[704.3]	420	Location	[709.8]	457	Exits
[704.4]	421	Clearances	[709.9]	458	Ramps
[704.5]	422	Ash Storage Pits and Bins	[709.10]	459	Heating Equipment
[704.6]	423	Exit Requirements		459.1	Parking Spaces for People Having Physical Disabilities
[704.7]	424	Ventilation	[710.0]		Art. 11 Open Parking Structures
[705.0]	Art. 6	Dry Cleaning Establishments	[710.1]	460	Application
[705.1]	425	Application	[710.2]	461	Height and Area Limitations
[705.2]	426	Classification	[710.3]	462	Construction
[705.3]	427	Construction Requirements	[710.4]	463	Exterior Walls
[705.4]	428	Ventilation	[710.5]	464	Curbs and Bumpers
[705.5]	429	Coin-Operated Units	[710.6]	465	Railings
[705.6]	430	Sprinklers	[710.7]	466	Floor Openings
			[710.8]	467	Motor Fuel Pumps
			[710.9]	468	Mechanical Parking
			[710.10]	469	Exits
			[710.11]	470	Ramps
			[710.12]	471	Elevators
			[710.13]	472	Standpipes

	472.1	Parking Spaces for People Having Physical Disabilities	[717.0]	Art. 18 Fences
[711.0]	Art. 12 Private Garages		[717.1]	509 Permitted Heights
[711.1]	473 Application		[718.0]	Art. 19 Tents and Air-Supported Structures
[711.2]	474 Classification			
[711.3]	475 Attached Garages	[718.1]	510 Location and Height	
[711.4]	476 Connection by Breezeway	[718.2]	511 Separation	
[711.5]	477 Floors	[718.3]	512 Fire Protection	
[711.6]	478 Ventilation	[718.4]	513 Exits	
[712.0]	Art. 13 Open Parking Lots	[718.5]	514 Structural Requirements	
[712.1]	479 Application			
[712.2]	480 Curb Cuts	[718.6]	515 Flame Resistance	
[712.3]	481 Protection of Adjoining Property	[718.7]	516 Pressurization System	
[712.4]	482 Accessory Uses and Occupancies	[718.8]	517 Certificate of Occupancy	
	483 Parking Spaces for People Having Physical Disabilities	[719.0]	Art. 20 Occupancies Involving Storage of Nitric Acid	
[714.0]	Art. 15 Swimming Pools	[719.1]	518 Application	
[714.1]	488 Application	[719.2]	519 Location	
[714.2]	489 Construction	[719.3]	520 Construction Requirements	
[714.3]	490 Dressing Facilities		521 Ventilation	
[714.4]	491 Ventilation and Heating	[719.4]	Art. 21 Atriums	
[714.5]	492 Water Circulation, Water Treatment, and Drainage	[720.0]	521.1 Applicability	
[714.6]	493 Safety Precautions	[720.1]	521.2 Classification	
	493.1 Facilities for People Having Disabilities	[720.2]	521.3 Construction	
		[720.3]	521.4 Fire Protection Equipment	
[715.0]	Art. 16 Radio and Television Towers	[720.4]	521.5 Means of Egress	
[715.1]	494 Application	[720.5]	521.6 Fire Alarm and Communication System	
[715.2]	495 Location and Access	[720.6]		
[715.3]	496 Construction		521.7 Signs	
[715.4]	497 Loads	[720.7]	521.8 Smoke Control	
[716.0]	Art. 17 Outdoor Signs and Display Structures	[720.8]	521.9 Emergency Power	
[716.1]	498 Application	[720.9]		
[716.2]	499 Obstructions	[721.0]	Art. 22 Malls	
[716.3]	500 Ground Signs	[721.1]	521.10 Applicability	
[716.4]	501 Wall Signs	[721.2]	521.11 Classification	
[716.5]	502 Projecting Signs	[721.3]	521.12 Construction-General	
[716.6]	503 Roof Signs	[721.4]	521.13 Fire Protection Equipment	
[716.7]	504 Marquee Signs		521.14 Egress	
[716.8]	505 Illuminated Signs	[721.5]	521.15 Smoke Control	
[716.9]	506 Temporary Signs	[721.6]	521.16 Signs	
[716.10]	507 Use of Combustible Materials	[721.7]		
[716.11]	508 Maintenance and Inspection			
	Art. 17-A Youth Protection Against Tobacco Advertising and Promotion Act			
	508.1 Short Title			
	508.2 Definitions			
	508.3 Tobacco Product Advertisement Restriction			
	508.4 Non-compliant Advertisements to be Removed			
	508.5 Sponsorship of and at Events			
	508.6 Injunctive Relief			
	508.7 Penalties			

*"C26" omitted from section numbers in this column.

*"27" omitted from section numbers in this column.

LIST OF TABLES

Table No.

- 7-1 Height and Area Limitations of Open Parking Structures
- 7-2 Ground Signs and Wall Signs (Noncombustible Materials)
- 7-3 Roof Signs, Projecting Signs, and Marquee Signs (Noncombustible Materials)
- 7-4 Ground Signs and Wall Signs (Combustible Materials)
- 7-5 Roof Signs (Combustible Materials)

ARTICLE 1 GENERAL

§[C26-700.1] 27-397 Scope. -

This subchapter shall apply only to those building types, uses, and occupancies specifically regulated herein, and the requirements of this subchapter shall be in addition to the general requirements of other subchapters of this code governing the size, location, fire protection, means of egress, construction, and service equipment of buildings. Chemical plants, packing plants, refineries, and similar special occupancies may be constructed in accordance with the practices and requirements of the particular industry, subject to the approval of the commissioner.

§[C26-700.2] 27-398 Standards. -

The provisions of reference standard RS-7 shall be a part of this subchapter.

§[C26-700.3] 27-399 Definitions. -

For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

ARTICLE 2 HIGH HAZARD OCCUPANCIES

§[C26-701.1] 27-400 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for high hazard occupancies classified in occupancy group A under the provisions of subchapter three of this chapter.

§[C26-701.2] 27-401 Explosion hazard and unlisted occupancies.- Buildings or spaces of high hazard occupancies that involve explosion hazards or that are not specifically provided for in this code, shall be constructed to provide any necessary additional protection adequate for the hazard involved subject to approval by the commissioner.

§[C26-701.3] 27-402 Other requirements. -

The occupancy and use of high hazard buildings and spaces shall also be subject to the applicable requirements of chapter four of this title.

§[C26-701.4] 27-403 Location. -

High hazard occupancies shall not be located within, or attached to, a building occupied for any other use, unless separated from such other use by noncombustible construction having not less than a four hour fire resistance rating.

§[C26-701.5] 27-404 Sprinkler requirements. -

Sprinkler protection meeting the construction requirements of subchapter seventeen of this chapter shall be installed in all high hazard occupancies. Where the nature of the fire hazard is such that water is not effective as an extinguishing agent, the extinguishing agent to be used,

shall be subject to the approval of the fire commissioner.

§[C26-701.6] 27-405 Ventilation of storage occupancies.-

Rooms or spaces used for the storage of flammable paints, solvents, anesthetic agents, fuel or other oils having a flash point under two hundred degrees Fahrenheit (Tag closed cup) or other inflammable vaporous materials shall be vented to the outdoors by gravity or mechanical means, with independent supply and exhaust openings or ducts. If ventilation is provided by gravity means, the total net free openable area of supply and exhaust openings shall be equal to at least one percent of the floor area of the room, equally divided between supply and exhaust. If ventilation is provided by mechanical means, the system shall be designed to provide at least two air changes per hour. Where there are explosion hazards, see section 27-401 of this article. The construction of all ventilating systems shall be in accordance with the requirements of subchapter thirteen of this chapter.

ARTICLE 3 OCCUPANCIES INVOLVING SPRAY OR DIP FINISHING

§[C26-702.1] 27-406 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for the spraying, dipping, or drying of flammable paints, varnishes, and lacquers or other flammable materials, mixtures, or compounds used for painting, varnishing, staining, or similar purposes.

§[C26-702.2] 27-407 Classification. -

All occupancies involving spray painting, dipping, and drying with flammable materials shall be classified in high hazard occupancy group A.

§[C26-702.3] 27-408 Location of processes. -

Spraying, dipping, or drying processes shall be located in accordance with the requirements of 27-403 of article two of this subchapter.

§[C26-702.4] 27-409 Construction. -

(a) Spray Booths. - Spray booths shall be substantially constructed of noncombustible materials. Panels of polished wired glass at least one-quarter inch thick, not exceeding seven hundred twenty square inches in area and not more than forty-eight inches in any linear dimension, may be used in the sides of spray booths.

(1) Spray booths shall be provided with a mechanical ventilating system meeting the requirements of section 27-410 of this article.

(2) Each spray booth having a frontal area larger than nine square feet shall have a noncombustible deflector or curtain at least six inches deep installed along the upper outer edge of the booth, over the opening, and shall be protected with an automatic sprinkler system. The interior of ducts shall be

protected with sprinklers complying with the construction requirements of subchapter seventeen of this chapter, installed not more than twelve feet apart in horizontal ducts, and the sprinklers shall be accessible through duct access doors.

(b) Dip tanks. - Dip tanks, including their supports and drainboards when provided, shall be of an approved type.

§[C26-702.5] 27-410 Ventilation. -

Spraying or dipping spaces shall be mechanically ventilated during spraying or dipping operations so that the velocity of air is at least one hundred linear feet per minute in the breathing zone of the operator, conveying air toward the exhaust hood. The ventilating system shall be of sufficient capacity to prevent the accumulation of mist or vapors. Air shall be admitted to the spraying or dipping spaces in an amount equal to the capacity of the fan or fans and in a manner that prevents short-circuiting the path of air in the working zone of such spaces. The exhaust fan control shall be interconnected with spray guns so that they cannot be operated without the ventilation system being in operation. Exhaust fans shall, in addition, be arranged to operate independently of spray guns. Ventilation equipment shall be kept in operation for a sufficient length of time after spraying or dipping operations to exhaust all vapors, fumes, or residues of spraying materials from the spray, space dip space,* or drying room.

(a) Ventilating ducts shall run directly to the outer air and be protected with a hood against the weather. Ventilating ducts shall be installed in accordance with the requirements of subchapter thirteen of this chapter, but shall not terminate within ten feet horizontally of any chimney outlet, or within twenty feet of any exit or any opening in an adjoining wall.

(b) Make-up air shall be supplied from a point outside the spraying or dipping space.

(c) The exhaust system from any spraying, dipping or drying space shall not be connected to any other ventilating system or be discharged into a chimney or flue used for the purpose of conveying gases of combustion.

(d) Exhaust fan blades shall be constructed of nonferrous material. Fan blades not coming in direct contact with spraying fumes need not comply with this requirement.

(e) Adequate access doors or panels, tightly fitted, shall be provided to permit inspection and cleaning of ducts.

**As enacted but probably intended to read "spray space, dip space".*

§[C26-702.6] 27-411 Drying equipment. -

Ovens and furnaces operated in connection with spray or dip finishing processes shall be of an approved type.

§[C26-702.7] 27-412 Sprinklers. -

Sprinkler protection shall be provided in all spraying, dipping, or drying spaces using flammable materials in

accordance with the construction requirements of subchapter seventeen of this chapter.

**ARTICLE 4 USES AND OCCUPANCIES INVOLVING
RADIOACTIVE MATERIALS AND
RADIATION-PRODUCING EQUIPMENT**

§[C26-703.1] 27-413 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for radioactive materials and radiation-producing equipment.

§[C26-703.2] 27-414 City, state and federal regulations. -

In addition to the requirements of this section, occupancies involving radioactive materials and radiation-producing equipment shall also comply with applicable requirements of the city health code, relating to radiological hazards, of part thirty-eight of the state industrial code relating to radiation protection, and of title ten of the code of federal regulations relating to atomic energy.

§[C26-703.3] 27-415 Laboratories. -

All laboratories required to register under the requirements of the New York City health code shall comply with the following:

(a) Construction- All buildings in which such laboratories occur shall be of noncombustible group I construction.

(b) Floors - All floors shall comply with the fire-resistance requirements for the class of construction, and provide the degree of radioactive resistance required by applicable city, state, and federal regulations. A finished material shall be applied to provide a continuous nonporous surface, which may be readily removed.

(c) Interior finish. - All insulation of acoustical treatments and interior partitions shall be of noncombustible material. Walls and ceilings shall have nonporous finishes of class A rating.

(d) Sprinkler protection. - Automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter shall be provided, and such protection shall be designed for the type of combustible materials wherever such material is used, and for the radioactive material that may be expected to melt, vaporize, or oxidize under fire conditions. Laboratory equipment susceptible to damage from water or other materials used in the sprinkler system may be shielded by hoods except when the equipment provides a source of combustion. Where sprinkler protection uses water, or small water-spray installations are used to fight small isolated fires, floors shall be provided with drainage so that water may be carried to retention tanks for later disposal as required by the New York city health code when contamination of the water is to be anticipated.

(e) Electrical controls. - Electrical controls and equipment shall be installed in accordance with the

requirements of the electrical code of the city of New York.

(f) Ventilation. - Exhaust air from areas in which radioactive materials are used or stored shall be exhausted to the outdoors in such manner as not to create a health hazard, and shall not be recirculated to other areas of the building. Air pressure in rooms in which radioactive materials are used or stored shall be maintained below the [sic] air pressure of adjoining rooms, so that there is no flow of radioactive gases or dusts into adjoining rooms.

(1) Ducts shall be of sheet steel of not less than No. 16 manufacturers' standard gage [sic] or of other equivalent noncombustible material having a melting point above eighteen hundred degrees Fahrenheit. Exhaust ducts within the building, on the discharge side of the fan, shall be welded airtight. Exhaust ducts within the building, on the suction side of the fan shall have laps in the direction of air flow with smoke-tight joints, and shall be subjected to a smoke test in accordance with the requirements for chimneys in subchapter fifteen of this chapter. Access hatches with tight-closing covers shall be provided for cleaning and for fire-fighting in the exhaust system ducts.

(2) Fume hoods shall be exhausted to the outdoors. Controls for hood fans shall be interlocked so that contaminated air cannot be drawn into any space from a hood where the exhaust fan is not in operation.

(3) Fan equipment other than the impeller and impeller housing shall be located outside the exhaust stream.

(4) When the degree of contamination of the exhaust stream exceeds the concentration limits permitted by the health code, the duct system shall be equipped with devices to decontaminate the air to a safe level before discharging to the outdoor air.

(g) Plumbing. - Drainage lines from sinks used for radioactive wastes shall be without traps, and shall lead to retention tanks when required by the provisions of the New York city health code.

§[C26-703.4] 27-416 Radiation machines.-Radiation machines or particle accelerators, linear accelerators, cyclotrons, synchrotrons, betatrons, or bevatrons shall be located only in buildings of noncombustible group I construction; however, this requirement shall not apply to conventional medical, dental, research, or industrial x-ray machines of less than one million volt capacity.

§[C26-703.5] 27-417 Storage. -

Radioactive materials shall be stored in sealed containers. When required by the commissioner to avoid too concentrated an exposure within any one space, radioactive materials shall be stored in vaults designed in accordance with the radiation shielding or other requirements for the materials to be stored. When any materials are subject to melting, vaporization, or oxidation under fire conditions, the storage vaults shall be constructed of walls having a fire-resistance rating of at

least four hours, and the vaults shall be equipped with automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter and shall be vented through devices to decontaminate the air to a safe level. Doors opening into storage vaults shall meet shielding requirements and have a fire-protection rating of not less than three hours. All bins, shelving, partitions, and pallets in storage vaults shall be of noncombustible materials. Other methods of storage permitted by the health department or the atomic energy commission, such as storage under water, may be used.

ARTICLE 5 BOILER AND FURNACE ROOMS

§[C26-704.1] 27-418 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for the enclosure of boilers, furnaces, and similar fuel-burning, heat-producing equipment.

§[C26-704.2] 27-419 Enclosure. -

Boilers or furnaces hereafter installed in any building, other than replacement boilers and furnaces and boilers or furnaces used to heat one- or two-family dwellings, shall be enclosed and separated from the rest of the building by noncombustible construction having at least a one hour fire-resistance rating, except that:

(a) All boilers carrying more than fifteen psi pressure and having a rating in excess of ten horsepower, shall be located in a room or compartment separated from the rest of the building by noncombustible construction having at least a two hour fire-resistance rating.

(b) Boilers or furnaces located adjacent to, or within, automotive repair shops, public garages (group 1), or any occupancy classified in high hazard occupancy group A shall be located in separate buildings or, in rooms enclosed by noncombustible construction having at least a two hour fire-resistance rating. Entrance to such enclosed rooms shall be from the outdoors, or through an intervening vestibule constructed of materials having a two hour fire-resistance rating. The floor area of such vestibules shall be at least fifty square feet, but not more than seventy-five square feet. Ventilation shall be provided by a louver permanently open to the outdoor air having a net free area of one hundred forty-four square inches, located near the floor. Vestibule doors shall be one and one-half hour self-closing fire doors, with a six inch high sill provided at the door between the vestibule and the boiler room. Both doors shall swing in the direction of the boiler room.

(c) Boilers having a rated gross capacity of less than sixty-seven thousand btu per hour for generating steam shall not be required to be enclosed, except as provided in subdivision (b) of this section.

(d) Electric or fuel-fired space heaters need not be enclosed when they are approved for installation without enclosure and are installed in accordance

with the conditions of approval.

(e) Boilers and furnaces used in conjunction with commercial and industrial processes need not be enclosed, subject to the approval of the commissioner.

§[C26-704.3] 27-420 Location. -

Rooms containing boilers or furnaces, or other equipment of similar or greater explosion hazard, shall not be located within fifty feet of any place of assembly, unless separated from such place of assembly by construction complying with the provisions of section 27-401 of article two of this subchapter.

§[C26-704.4] 27-421 Clearances. -

Enclosing construction for boilers and furnaces shall meet the minimum clearance requirements prescribed in subchapter fourteen of this chapter.

§[C26-704.5] 27-422 Ash storage pits and bins.-

Ash storage pits and bins not located within a boiler room enclosure shall be constructed of two hour fire-resistive construction, except that roofs over ash pits may be constructed of noncombustible materials.

§[C26-704.6] 27-423 Exit requirements. -

In every room containing a boiler, furnace, or incinerator, the maximum travel distance from any point within the room to an exit shall not exceed fifty feet. When two or more exits are so required, only the main exit shall comply with the size and construction requirements of subchapter six of this chapter. The other exit or exits may be noncombustible ladders or stairs leading to exit openings not less than thirty-two inches by forty-eight inches.

§[C26-704.7] 27-424 Ventilation. -

Boiler and furnace rooms shall be ventilated in accordance with the provisions of section 27-807 of article nine of subchapter fourteen of this chapter.

**ARTICLE 6 DRY CLEANING
ESTABLISHMENTS**

§[C26-705.1] 27-425 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for dry cleaning or dry dyeing operations.

§[C26-705.2] 27-426 Classification. -

Dry cleaning and dry dyeing establishments shall be classified as follows:

(a) High hazard.- All establishments employing gasoline or other solvents having a flash point below 100°F (tag. closed-cup).

(b) Moderate hazard. - All establishments employing solvents having a flash point between 100°F and 138.2°F (tag. closed-cup).

(c) Low hazard. - All establishments employing solvents with a flash point higher than 138.2°F (tag. closed-cup).

§[C26-705.3] 27-427 Construction requirements. -

(a) High hazard. - The construction or installation of high hazard dry cleaning establishments shall be prohibited.

(b) Moderate hazard. - Moderate hazard dry cleaning establishments shall meet all of the requirements of this code applicable to industrial occupancy group D-1 buildings. The floor finish in moderate hazard dry cleaning establishments shall be noncombustible and impervious.

(c) Low hazard. -

Low hazard dry cleaning establishments shall meet all of the requirements of this code applicable to industrial occupancy group D-2 buildings.

(d) Equipment.- All dry cleaning machines and equipment shall be of an approved type.

§[C26-705.4] 27-428 Ventilation. -

Mechanical ventilation systems in moderate hazard plants shall be adequate to effect ten complete air changes per hour. Low hazard dry cleaning establishments shall be provided with mechanical ventilation adequate to effect four complete air changes per hour. Ventilating systems shall be arranged in such manner as to prevent solvent vapors from being admitted to the combustion area of any device requiring an open flame. Sufficient make-up air shall be introduced into all parts of the establishment to equal the air exhausted by the dry cleaning units, dryers, and exhaust ventilating system. Such air shall not contain any flammable vapors. Openings or stacks discharging solvent vapor-air mixtures to the outdoors shall be located in accordance with the provisions of subchapter thirteen of this chapter.

§[C26-705.5] 27-429 Coin-operated units-

In coin-operated establishments all dry cleaning units shall be installed in such a manner that the working or maintenance portion of the equipment shall be separated from the front of the units by solid noncombustible partitions. Coin-operated units shall be located within a diked area, all parts of which are impervious to the solvent used in such units. The diked section shall be a four inch curb above the floor. Provisions shall be made for the collection of solvent spillage into tanks of capacity sufficient to contain all of the solvent in the dry cleaning units served, and for return of the solvent to the cleaning units through a closed pipe system. Access doors to the space in back of the units shall be kept closed and locked. Solvent storage tanks and other sources of danger shall be so situated as to be inaccessible to the general public. In addition to the mechanical ventilation required for low hazard dry cleaning establishments, the following mechanical ventilation shall be provided:

(a) All dry cleaning units shall have facilities that create an inward flow of one hundred cubic feet of air per minute into the unit when the loading door is opened.

(b) Emergency ventilation of the space in back of the dry cleaning units shall be provided so that in emergencies a minimum of one air change per minute in the enclosed space will be provided. Emergency ventilation equipment shall be on a circuit that is separate from the general lighting and power circuits, and shall be taken off ahead of the main switchboard, or shall be connected to the emergency lighting power source when such source is provided.

(c) A scavenger duct system shall be provided in the space in back of the units at each unit, and shall be designed to pick up vapor surrounding the equipment near the floor and exhaust it at the rate of one hundred cubic feet per minute. Scavenger ducts shall not be less than five square inches in area.

§[C26-705.6] 27-430 Sprinklers. -

Automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter as required for occupancy group D-1, shall be provided for moderate hazard dry cleaning establishments. In addition, in moderate hazard establishments each dry cleaning unit shall be provided with automatic extinguishing equipment, such as a carbon dioxide system, or a steam jet of not less than three-quarters of an inch at a pressure of fifteen psi.

§[C26-705.7] 27-431 Separation of direct-fired dryers. -

In moderate hazard dry cleaning establishments, direct-fired dryers shall not be used. In low hazard dry cleaning establishments using nonflammable solvents only, direct fired dryers may be used, but such dryers shall not be located within twenty-five feet of a dry cleaning unit unless a noncombustible partition (which may be glazed), equipped with self-closing doors, is provided between the dry cleaning unit and the flame producing device. This partition may provide either complete or partial separation, provided that any partial separation shall be so arranged that the line of air travel around the partition from the cleaning units to the dryer is a minimum of twenty-five feet. Where a solid noncombustible partition is constructed extending to the ceiling and all portions of the enclosure are solid, except for self-closing access doors, and outdoor air for combustion and drying is supplied, the separation may be reduced to fifteen feet.

ARTICLE 7 HELIPORTS

§[C26-706.1] 27-432 Application. -

This section shall apply to the construction, alteration, and use of building roofs, or parts thereof, as heliports.

§[C26-706.2] 27-433 Classification. -

Heliports on building roofs shall be classified in

industrial occupancy group D-1. They shall be separated from all other portions of the building by construction meeting the requirements of table 5-2 for fire divisions.

§[C26-706.3] 27-434 Construction. -

Heliports shall be permitted only on buildings classified in noncombustible construction group I. All heliport construction above the building roof shall be noncombustible. No openings in the roof shall be permitted in the landing area. Roof openings outside the landing area shall be protected from flammable liquid spillage by four inch curbs and shall be surrounded by metal railings at least three feet complying with the requirements of subchapter nine of this chapter. The landing area shall be enclosed with a substantial metal fence or skirt.

§[C26-706.4] 27-435 Limitations. -

No refueling facilities shall be provided, and no major aircraft repair or maintenance facilities shall be provided.

§[C26-706.5] 27-436 Exits. -

At least two means of egress, meeting the requirements of subchapter six of this chapter, shall be provided for each landing area. The exits shall be remote from each other and shall lead to the building stairways.

§[C26-706.6] 27-437 Fire protection. - Heliports shall be provided with fire-foam extinguishing equipment and fire alarm facilities meeting the following requirements:

(a) At least two hose stations housing approved foam generating equipment shall be provided remote from each other and located adjacent to outlets of the building standpipe system or other source of water supply. Hoses shall be provided with nozzles and related equipment for dispensing foam to all portions of the roof.

(b) The building standpipe system or other source of water supply shall be capable at all times of providing two hose streams simultaneously, each of which will afford foam application at a total water rate of at least sixty gallons per minute at a nozzle pressure [*sic*] of seventy-five psi for a period of ten minutes.

(c) A fire alarm system meeting the installation requirements of subchapter seventeen of this chapter shall be provided with a direct connection to the central station of an operating fire alarm company and with a local alarm to all heliport personnel.

ARTICLE 8 AUTOMOTIVE SERVICE STATIONS

§[C26-707.1] 27-438 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces as automotive service stations.

§[C26-707.2] 27-439 Classification. -

Automotive service stations shall be classified in business occupancy group E.

§[C26-707.3] *27-440 Gasoline and diesel oil motor vehicle fuel storage. - All volatile flammable liquids and diesel oil motor vehicle fuel storage tanks shall be installed below ground and vented to the open air except for such above ground [*sic*] installation as may be authorized by the rules of the fire commissioner. The installation and venting of storage tanks shall be in accordance with applications and plans approved by the commissioner and shall also meet the requirements of chapter four of this title and the rules of the fire commissioner. Except as otherwise provided for in chapter four of this title or the rules of the fire commissioner, underground tank installations shall comply with the following:

(a) The top of the tanks shall be at least two feet below finished grade and at least two feet below the level of any cellar or basement floor within ten feet of the tanks.

(b) Tanks shall be supported on foundations complying with subchapter eleven of this chapter.

(c) Tanks shall be located so that the forces from any building foundation and support loads are not transmitted to the tanks. The distance from any part of a tank to the nearest wall of any basement, pit or cellar, or from any property line that may be built upon, shall not be less than three feet.

(d) Tanks shall be covered with a structurally supported reinforced concrete slab at least eight inches thick extending at least twelve inches beyond the horizontal outlines of the tanks and placed over a coverage of suitable clean backfill material.

(e) All concrete shall have a minimum compressive strength of twenty-five hundred pounds per square inch at twenty-eight days.

**Local Law 68-1999.*

§[C26-707.4] 27-441 Location of pumps. -

No gasoline pumps or other mechanical equipment shall be installed so as to permit servicing of motor vehicles standing on a public street. Canopies and supports over pumps and service equipment shall be noncombustible, except that they may be of construction having a one hour fire resistance rating or of heavy timber construction meeting the requirements of section 27-623 of article seven of subchapter ten of this chapter when located more than twenty feet from interior lot lines and from any building or structure.

§[C26-707.5] 27-442 Heating equipment. -

Heat generating equipment for automotive service stations shall be enclosed in accordance with the requirements of section 27-419 of article five of this subchapter.

ARTICLE 9 AUTOMOTIVE REPAIR SHOPS

§[C26-708.1] 27-443 Application. -

This section shall apply to the construction, alteration, and

use of buildings or spaces as automotive repair shops.

§[C26-708.2] 27-444 Classification. -

Automotive repair shops shall be classified in industrial occupancy group D-1.

§[C26-708.3] 27-445 Volatile flammables. -

All volatile flammables shall be stored and handled in accordance with the provisions of chapter four of this title.

§[C26-708.4] 27-446 Ventilation. -

All spaces used for the repair of motor vehicles shall be provided with mechanical ventilation adequate to provide four air changes per hour.

(a) **Exhaust gases.** - Where engines are to be run for test purposes or adjustments, provisions shall be made to collect the exhaust gases from each vehicle and to discharge such gases to the outer air by means of a positively induced draft. The discharge opening from such system shall be located as required by subchapter thirteen of this chapter.

(b) **Pits.** - All pits for inspection or repair shall have mechanical exhaust ventilation taken from near the bottom of the pits. Pit exhaust systems shall be adequate to provide at least four air changes per hour.

§[C26-708.5] 27-447 Sprinklers. -

Automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter shall be provided as required by occupancy group D-1.

§[C26-708.6] 27-448 Heating equipment. -

Heat generating equipment for automotive repair shops shall be enclosed in accordance with the requirements of section 27-419 of article five of this subchapter.

§[C26-708.7] 27-449 Pits. -

All pits shall be provided with two means of egress.

ARTICLE 10 PUBLIC GARAGES

§[C26-709.1] 27-450 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces as public garages. Any areas of such buildings in which gasoline, oil, and similar products are dispensed shall meet the requirements of article eight of this subchapter; any areas in which motor vehicles are repaired shall meet the requirements of article nine of this subchapter; and any areas in which any paint spraying is done shall meet the requirements of article three of this subchapter.

§[C26-709.2] 27-451 Classification. -

Public garages shall be classified according to their specific uses as follows:

(a) Group 1. - Buildings or spaces used for the parking of vehicles having fuel storage tanks in excess of twenty-six gallon capacity; or used for the parking of vehicles of any size, and in which mechanical repair, body work, or painting of vehicles is conducted, or in which gasoline, oil, or similar products are dispensed. Group 1 public garages shall be classified in storage occupancy group B-1.

(b) Group 2. - Buildings or spaces used exclusively for the parking of vehicles having fuel storage tanks of twenty-six gallon capacity or less, and in which no repair, body work or painting of vehicles is conducted, and in which no gasoline, oil, or similar products are dispensed. Group 2 public garages shall be classified in storage occupancy group B-2.

§[C26-709.3] 27-452 Construction. -

The street floor construction of group 1 public garages shall have at least a two hour fire-resistance rating. Where openings are provided in the floor of any public garage, they shall be protected by railings complying with the requirements of subchapters nine and ten of this chapter, with a curb or ramp at least six inches high above the floor. All floors shall be concrete or equivalent noncombustible material. Columns in parking areas shall comply with the provisions of section 27-559 of article three of subchapter nine of this chapter.

§[C26-709.4] 27-453 Group 1 public garages in buildings of other occupancy classification. -

No group 1 public garage shall be located within, or attached to, a building occupied for any other use, unless separated from such other use by construction meeting the requirements of table 5-2 for fire divisions. Elevators, stairways, and exit passageways connecting group 1 garages to other occupancies shall be accessible only through vestibules constructed of materials having a two hour fire-resistance rating. The floor area of such vestibules shall be at least fifty square feet but not more than seventy-five square feet. Ventilation shall be provided by a louver permanently open to the outdoor air having a net free area of one hundred forty-four square inches, located near the floor. Vestibule doors shall be one and one-half hour self-closing fire doors, with a six inch high sill provided at the door between the vestibule and the garage. Both doors shall swing in the direction of the elevators, stairways or exit passageways.

§[C26-709.5] 27-454 Roof storage of motor vehicles.-

Roofs of buildings shall not be used for the parking or storage of motor vehicles unless the building is of class 1-A, 1-B, or 1-C construction, or is an open parking structure. When the roof of a building is used for parking of motor vehicles, it shall be provided with a parapet wall or guard rail at least three feet six inches high, and with curbs or wheel guards of noncombustible

materials of *a least eight inches high. Such guards shall be substantially anchored to prevent any vehicle from striking the parapet wall or guard rail. Guard rails shall comply with the requirements for railings in subchapter nine of this chapter.

**As enacted but "at" probably intended.*

§[C26-709.6] 27-455 Sprinklers. -

(a) Automatic sprinkler protection complying with the construction provisions of article four of subchapter seventeen shall be provided as required for occupancy group B-1 or B-2 respectively, except that in existing buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight, storage of forty-five thousand gallons or less of product having a flash point over one hundred *degrees° F (tag open cup) in the cargo space of tank truck or other vehicles approved for such storage by the fire commissioner, pending delivery, shall not be deemed to require sprinkler protection.

**As enacted but "degrees F" probably intended.*

(b) Smoke detection or thermostatic alarm with central office connection. -A thermostatic alarm system or smoke detection system equipped with a central office connection complying with subchapter seventeen of this code, and reference standard RS 17-3 of the appendix to this code may be provided in lieu of the sprinkler system required under the preceding subdivision in existing buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight, when the storage of fuel oils or other products having a flash point over one hundred degrees F (tag open cup) is twenty-two thousand five hundred gallons or more but not exceeding forty-five thousand gallons in the cargo space of tank trucks or other vehicles approved for such storage by the fire commissioner, pending delivery.

(c) Portable fire fighting appliances, as the fire commissioner may direct, shall be provided in existing buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight, when the storage of fuel oils or other products, having a flash point over one hundred degrees F (tag open cup), in the cargo space of tank trucks or other vehicles approved for such storage by the fire commissioner, pending delivery, is less than twenty-two thousand five hundred gallons.

§[C26-709.7] 27-456 Ventilation. -

Public garages shall be ventilated in accordance with provisions of section 27-766 of article eight of subchapter twelve of this chapter and the following:

(a) Garage spaces above or below grade except as provided in subdivision (e) of this section shall be provided with mechanical ventilation according to one of or a combination of the following methods:

(1) Air exhaust at the rate of not less than one cfm per square foot of total floor area with properly designed means for air inflow.

(2) Air supply at the rate of not less than one cfm per square foot of total floor area with properly designed means for air outflow.

(3) Air exhaust or air supply at a rate sufficient to maintain an average concentration of carbon monoxide not to exceed one hundred parts per one million parts of air for periods longer than one hour and with a maximum concentration at any time not to exceed four hundred parts of carbon monoxide per one million parts of air. The concentration of carbon monoxide shall be determined by periodic tests taken between three and four feet from the floor by means of approved carbon monoxide detector tubes or other equivalent means. This method of mechanical ventilation may be used only if the overall design includes automatic ventilating fan control by means of approved carbon monoxide monitoring devices or by other approved means located so as to provide full protection for the occupancy.

(b) The provisions of section 27-766 of article eight of subchapter twelve of this chapter shall apply.

(c) Air supply shall be taken from an uncontaminated source. Exhaust outlets shall be located in accordance with the requirements of subchapter thirteen with one-half of them located six inches above floor level. In public garages where motor vehicles are parked by mechanical means, the ventilation requirements shall be one-half of those required above.

(d) No automotive service pits shall be installed in floors below the street floor. Pits shall have mechanical exhaust ventilation taken from near the bottom.

(e) Garage spaces above grade provided with natural ventilation having a free openable area of at least five percent of the total floor area of the space and having adjustable openings measuring at least six inches by four inches located within six inches of the floor and at most sixteen feet apart on all outside and court walls need not be provided with mechanical ventilation.

§[C26-709.8] 27-457 Exits. -

Public garages shall be provided with at least two exits from each tier of parking. One of the exits may be a ramp used by motor vehicles, when serving not more than one level below grade. All vertical exits shall have a minimum width of thirty-six inches and shall be enclosed in two hour fire-resistive construction, except as permitted by section 27-458 of article ten of subchapter seven of this chapter. No exit in a group 1 public garage shall have a path of travel through a fuel dispensing area. In group 2 public garages ***occurring in occupancy group J-2 buildings, overhead doors shall be of the automatic self-closing type.

***As enacted but "occurring" probably intended.

(a) **Travel distance.** - No point in any public garage shall be more than one hundred feet from an exit, except that such distance may be increased to one hundred fifty feet when the garage is fully sprinklered.

(b) **Repair and fuel spaces.** - Spaces in group 1 public garages used for the repair of motor vehicles or the dispensing of fuel shall be provided with at least two exits, within the travel distance limitations of subdivision (a) of this section.

(c) **Roof parking.** - When the roof of a building is used for parking, interior vertical exits shall be enclosed in a bulkhead constructed as required by subchapter five of this chapter.

§[C26-709.9] 27-458 Ramps. -

Vehicular ramps in public garages shall not exceed a gradient of one in seven, and their surfaces shall be nonslip. A landing having a minimum length of twenty feet shall be provided at the discharge point at the street level, within the street line. Ramps serving as required exits shall be enclosed in construction having a two hour fire-resistance rating except that openings for motor vehicles at each parking tier may be protected by a water curtain consisting of deluge-type sprinkler heads supplying at least three gallons of water per minute per linear foot of opening.

§[C26-709.10] 27-459 Heating equipment. -

Heat generating equipment for public garages shall be enclosed in accordance with the requirements of section 27-419 of article five of subchapter seven of this chapter.

*§27-459.1 Parking spaces for people having physical disabilities. -

Parking spaces for people having physical disabilities shall comply with the requirements of section 27-292.19 and reference standard RS 4-6.

*Local Law 58-1987.

†As enacted but "disabilities" probably intended.

ARTICLE 11 OPEN PARKING STRUCTURES

§[C26-710.1] 27-460 Application. -

This section shall apply to the construction, alteration, and use of open parking structures. Open parking structures in buildings of other occupancy group classification shall not be permitted unless separated from other occupancies by construction having at least a two hour fire resistance rating.

§[C26-710.2] 27-461 Height and area limitations. -

The height of the top parking surface, and the area per parking tier, shall not exceed the limitations listed in table 7-1.

TABLE 7-1
HEIGHT AND AREA LIMITATION[S] ** OF
OPEN PARKING STRUCTURES

Construction Classification	Maximum Allowable Height (ft.)	Allowable area per Parking Tier (sq. ft.)
1A	Unlimited	Unlimited
1B	Unlimited	Unlimited
1C	100	50,000
1D	100	50,000
1E	75	30,000

**Copy in brackets not enacted but probably intended.

a. The area of an open parking structure having not more than two tiers above grade shall not be limited.

b. Open parking structures of construction class 1C, or 1D exceeding three parking levels may be sixty thousand square feet on any parking level provided they shall have at least fifty percent of their perimeter, fifty percent open.

c. Open parking structures of construction class 1C or 1D, exceeding three parking levels, may be one hundred thousand square feet on any parking level when fifty percent of the perimeter is fifty percent open, and may be one hundred twenty-five thousand square feet on any parking level when seventy-five percent of the perimeter is fifty percent open and may be one hundred fifty thousand square feet on any parking level when one hundred percent of the perimeter is fifty percent open in all aforementioned cases and shall have frontage space on at least two sides, and the horizontal distance on any level to an open exterior wall shall not exceed two hundred feet.

d. Open parking structures of construction class 1E exceeding three parking levels may be fifty thousand square feet on any parking level when fifty percent of the perimeter is fifty percent open and may be sixty-two thousand five hundred square feet on any parking level when seventy-five percent of the perimeter is fifty percent open and may be seventy-five thousand square feet on any parking level when one hundred percent of the perimeter is fifty percent open in all aforementioned cases and shall have frontage space on at least two sides, and the horizontal distance on any level to an open exterior wall shall not exceed two hundred feet.

e. The allowable areas specified in notes b, c and d above shall apply only to open parking structures used exclusively for the parking and storage of passenger vehicles accommodating not more than nine passengers but not including trailers, campers or similar vehicles.

§[C26-710.3] 27-462 Construction. -

All materials used in the construction of open parking structures shall be noncombustible. Columns in parking areas shall comply with the provisions of section 27-559 of article three of subchapter nine of this chapter. Interior finishes shall be class A. The minimum clear height of any parking tier shall be at least six feet six inches.

(a) Below grade.- Any portion of an open parking structure extending below grade shall comply with all of the requirements for public garages as provided in article ten of this subchapter.

§[C26-710.4] 27-463 Exterior walls. -

An exterior enclosure wall shall be required on any side of an open parking structure located within fifteen feet of an interior lot line. Such walls shall be noncombustible construction having at least a two hour fire-resistance rating.

§[C26-710.5] 27-464 Curbs and bumpers. -

Curbs or bumpers of noncombustible materials shall be provided at the perimeter of each parking tier. Such curbs or bumpers shall be at least eight inches high, substantially anchored, and so located that no part of any motor vehicle will contact a wall, partition or railing.

§[C26-710.6] 27-465 Railings. -

Substantial railings or protective guards of noncombustible materials shall be provided at the perimeter of all parking tiers, except where exterior walls are provided, and around all interior floor openings. Such railings or guards shall be at least three feet six inches high, and shall be designed in accordance with the requirements of subchapter nine of this chapter.

§[C26-710.7] 27-466 Floor openings. -

A curb or ramp at least six inches high shall also be provided at all interior floor openings. All floors shall be pitched to provide adequate drainage.

§[C26-710.8] 27-467 Motor fuel pumps. -

Motor fuel pumps and facilities may be provided within an open parking structure as an accessory use. Such facilities shall comply with the requirements for the storage and handling of volatile flammables as provided in chapter four of this title. The area used for such purpose shall be located on the street floor. No pedestrian exit from any parking area shall have a path of travel through any fuel dispensing area.

§[C26-710.9] 27-468 Mechanical parking. -

Open parking structures in which motor vehicles are parked by mechanical means shall comply with the requirements for open parking structures, except that the requirements for means of egress may be modified as provided in section 27-469 of this article.

§[C26-710.10] 27-469 Exits. -

(a) Driver parking. - Open parking structures with driver parking shall be provided with at least two exits from each tier. One of the exits may be a ramp used by motor vehicles, when serving not more than one level below grade. Exit stairs shall have a minimum width of thirty-six inches and may be unenclosed, except that they shall be enclosed in noncombustible construction having at least a two hour fire-resistance rating if the first riser of the stair is more than thirty feet from one of the open exterior walls of the structure. No point on any tier of parking shall be more than one hundred feet from an exit.

(b) Mechanical parking. - Open parking structures with mechanical parking equipment shall be provided with at least one exit from each tier of parking. Such exit may be unenclosed, but shall have a minimum width of thirty-six inches. No point on any tier of parking shall be more than two hundred feet from an exit.

§[C26-710.11] 27-470 Ramps. -

Ramps used for the movement of motor vehicles and as required exits need not be enclosed when serving tiers above grade. Such ramps shall have a gradient not exceeding one in seven, with nonslip surfaces. A landing

having a minimum dimension of twenty feet shall be provided at the discharge point of all ramps at the street level, within the street line. Where a ramp is also used for the parking of motor vehicles, it shall be considered as a parking tier and may not serve as an exit for the occupants of the structure.

§[C26-710.12] 27-471 Elevators. -

Passenger elevators in open parking structures shall comply with the requirements of subchapter eighteen of this chapter, except that hoistways may be enclosed with noncombustible construction.

§[C26-710.13] 27-472 Standpipes.-

Open parking structures shall be provided with standpipe in accordance with the requirements of subchapter seventeen of this chapter.

***§27-472.1 Parking spaces for people having physical disabilities. -** Parking spaces for people having physical disabilities shall comply with the requirements of section 27-292.19 and reference standard RS 4-6.

**Local Law 58-1987.*

ARTICLE 12 PRIVATE GARAGES

§[C26-711.1] 27-473 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces as private garages.

§[C26-711.2] 27-474 Classification. -

Private garages shall be classified in storage occupancy group B-2.

§[C26-711.3] 27-475 Attached garages. -

Private garages attached to, or located above or below, a dwelling shall have walls, partitions, floors, and ceilings separating the garage from the dwelling, having a fire-resistance rating of at least one hour, except that such fire-resistive construction shall not be required between a dwelling and a carport when such carport is open on at least two sides. Any openings to the dwelling in required walls or partitions shall be protected with one and three-quarter inch solid core wood doors or equivalent

§[C26-711.4] 27-476 Connection by breezeway. -

When a breezeway connects a garage with a dwelling, such a breezeway shall be firestopped at all points of connection to the garage.

§[C26-711.5] 27-477 Floors. -

Garage floors shall be of concrete or equivalent noncombustible material that will not absorb flammable liquids. The sills of all door openings connecting a garage with a dwelling shall be raised at least four inches above the garage floor.

§[C26-711.6] 27-478 Ventilation. -

No air used for heating, cooling, or ventilation shall be circulated through garages to dwellings.

ARTICLE 13 OPEN PARKING LOTS

§[C26-712.1] 27-479 Application. -

This section shall apply to the construction, alteration, and use of open parking lots. Open parking lots shall be unobstructed and free of other uses. All driveways and open spaces used for the parking or storage of motor vehicles shall be surfaced with concrete asphalt, or equivalent durable, dustless material.

§[C26-712.2] 27-480 Curb cuts. -For the purpose of this section, a curb cut shall be defined as the total length of cut curb, including splays.

(a) For street frontages of one hundred feet or less, the amount of cut curb shall not exceed sixty percent of the frontage of the lot. No single curb cut shall exceed thirty feet in length, and there shall not be more than two curb cuts on any street frontage of one hundred feet or less. The minimum distance between two curb cuts shall be five feet.

(b) For additional street frontage over one hundred feet there may be an additional curb cut for each fifty feet of frontage.

(c) No curb cut shall commence within eight feet of a side lot line, except that on lots with street frontages of fifty feet or less, or on corner lots, the curb cut may commence two feet six inches from the side lot line.

(d) The distance of curb cuts from the intersection of street lines shall comply with the zoning resolution.

(e) Notwithstanding any of the above computations, no curb cut shall be less than ten feet.

§[C26-712.3] 27-481 Protection of adjoining property. -

(a) Curbs and bumpers. - Open parking lots shall be completely separated from adjoining land by curbs or bumpers of concrete, masonry, steel, heavy timber, or other similar and equally substantial materials, securely anchored so as to stop motor vehicles. Curbs and bumpers shall be at least eight inches high and eight inches wide. The only openings permitted in required curbs and bumpers shall be for drainage and for motor vehicle entrances and exits, and at pedestrian entrances.

**** (b) Drainage. -** Where the surface paving of an open parking lot is non-porous, such lot shall be drained as required by subdivisions (b), (c) or (d) of section P110.2 of reference standard RS-16, as applicable. An asphaltic concrete surface, not to exceed one and one-half inches in thickness after compaction, shall be considered a porous surface provided such surface will pass an amount of water equivalent to one-half inch of rainfall per hour and provided such surface is underlaid by permeable soil, except that whenever an off-street

parking facility is constructed in connection with the construction of a new building, or whenever such parking facility falls within the definition of a substantial horizontal enlargement as set forth in subdivision (a) of section P110.2 of reference standard RS-16, all storm water falling or coming to rest on such parking facility shall be disposed of as provided in section P110.2 of reference standard RS-16.

*** Local Law 103-1989.*

§[C26-712.4] 27-482 Accessory uses and occupancies. - Parking lot offices, attendant shelters, storage facilities, and similar structures used in conjunction with open parking lots may be provided for accessory use, but shall comply with all of the provisions of this code applicable to the specific use or occupancy.

Motor vehicle fuel pumps. - Fuel pumps for the servicing of motor vehicles may be provided for accessory use in conjunction with open parking lots when complying with the requirements for the storage and handling of volatile flammables as provided in chapter four of this title. Fuel pumps shall be at least thirty feet from any parking space or interior lot line.

***§27-483 Parking spaces for people having physical disabilities. -** Parking spaces for people having physical disabilities shall comply with the requirements of section 27-292.19 and reference standard RS-4-6.

** Local Law 58-1987.*

ARTICLE 15 SWIMMING POOLS

§[C26-714.1] 27-488 Application. -

This section shall apply to the construction, alteration and use of all indoor and outdoor pools intended for swimming or bathing purposes, except for pools that have less than eighteen inches in depth of water at every point. Pools above grade having a maximum water depth of forty-eight inches above grade and an area not exceeding five hundred square feet that are accessory to J-3 occupancies and that are privately used for noncommercial purposes shall be exempt from the provisions of this subchapter except that such pools shall comply with the requirements of section 27-493 of this article. All pools not exempt from the provisions of this subchapter shall comply with the applicable provisions of subchapter sixteen of this chapter. No building permit shall be required for pools exempted by this section.

Regardless of any contrary provision, any pool existing on January first, nineteen hundred sixty-nine, which is accessory to J-3 occupancies, and that is privately used for noncommercial purposes shall be exempt from the provisions of this subchapter except that such pools shall comply with the requirements of section 27-493 of this article.

§[C26-714.2] 27-489 Construction. -

Pools shall be constructed so as to be water tight and easily cleaned. They shall be built of nonabsorbent materials with smooth surfaces and shall be free of open cracks and open joints.

(a) Walls. - The walls of pools shall be vertical for at least the top two feet six inches below the normal water level. The junctions between the side walls and the bottom shall be coved. A pool overflow shall be provided meeting the requirements of reference standard RS-16.

(b) Bottom slopes.- The bottom of any portion of a pool where the water is less than five feet six inches deep shall have a maximum slope of one foot vertically for every fifteen feet horizontally.

(c) Ladders.- There shall be a ladder or steps with handrails at the deep end and at the shallow end of every pool. Ladders and steps shall have nonslip treads.

(d) Walkways.- Every pool shall have a walkway at least five feet wide around its entire perimeter. The walkway shall have a nonslip surface and be so constructed that it does not drain into the pool.

(e) Hand-holds. - Every pool shall be constructed so that either the overflow gutter, if provided, or the top of the side walls afford a continuous hand-hold for bathers.

(f) Markings.- Permanent markings showing the depth of the shallow end, break points, diving depth, and deep end shall be provided so as to be visible from both inside and outside the pool.

(g)Spectator area. - Areas exclusively intended for spectators shall meet the applicable requirements of subchapter eight of this chapter for places of assembly.

(h)Diving boards and towers.- Diving towers shall be rigidly constructed and permanently anchored. The depth of the water below a diving board shall be at least eight feet six inches for boards one meter (3.28 ft.) or less above the water. For diving boards more than one meter and not more than three meters (9 ft. 10 in.) above the water, the depth below the board shall be at least twelve feet. For diving boards or platforms more than three meters above the water, the depth below the board shall be at least sixteen feet. Indoor pools shall provide at least twelve feet overhead clearance above all diving boards.

§[C26-714.3] 27-490 Dressing facilities. -

Toilet rooms, shower rooms, and indoor dressing areas shall be constructed of nonabsorbent materials with smooth-finish walls and partitions. Floors shall have a nonslip surface impervious to moisture, free of cracks or open joints, and sloped to drains. The junctions between the side walls and floors shall be covered. Individual dressing rooms or cubicles within indoor dressing areas shall be excluded from the above requirements. Cabanas and dressing rooms that are not a part of any other occupancy shall also be excluded.

Toilets and Showers.- Toilets, lavatories, and showers, including piping, shall be provided in accordance with the requirements of subchapter sixteen of this chapter.

§[C26-714.4] 27-491 Ventilation and heating. -

Indoor pools, dressing rooms, toilets, and shower rooms shall be ventilated in accordance with the requirements of subchapter twelve of this chapter. Unless used only between May first and October thirty-first, such spaces shall be heated in accordance with the requirements of subchapter twelve of this chapter.

§[C26-714.5] 27-492 Water circulation, water treatment, and drainage. -

The supply, circulation, treatment, and drainage of water for pools shall meet the requirements of subchapter sixteen of this chapter and the health code.

§[C26-714.6] 27-493 Safety precautions. -

(a) No overhead electrical conductors shall be installed within fifteen feet of any swimming pool. All metal fences, enclosures, or railings that might become electrically charged as a result of contact with broken overhead conductors or from any other cause near, or adjacent to, a swimming pool shall be grounded in accordance with the provisions of lightning protection in the electrical code of the city of New York.

(b) Every outdoor swimming pool, fish pond, or other pool greater than eighteen inches deep at any point shall be protected by an enclosure, barrier or other means adequate to make such pool inaccessible to small children which including gates thereto shall be at least four feet high above the adjacent ground.

All gates shall be self-latching with latches located at least four feet high above the ground or otherwise made inaccessible to small children from the outside.

***§27-493.1 Facilities for people having disabilities. -**

Facilities for people having physical disabilities shall comply with the requirements of subarticle two of article two of subchapter four and of subchapter sixteen.

**Local Law 58-1987.*

**ARTICLE 16 RADIO AND TELEVISION
TOWERS**

§[C26-715.1] 27-494 Application. -

This section shall apply to the construction, alteration, and use of radio and television towers on buildings. Radio and television receiving antennas more than twenty feet high above a roof shall be deemed to be such towers and shall be subject to the requirements of this section.

§[C26-715.2] 27-495 Location and access. -

Towers shall be so located, and equipped with ladders or other devices, as to be readily accessible for inspection purposes. No guy wire or other accessories shall cross or encroach upon any street or pass over any electric power line.

§[C26-715.3] 27-496 Construction. -

Towers located on the roofs of buildings shall be constructed of noncombustible materials. Isolated towers less than one hundred feet high and supported directly from the ground may, when located outside of the fire districts, be constructed of timber meeting the requirements of construction class II-A. All towers shall be grounded for lightning protection in accordance with the provisions of the electrical code of the city of New York.

§[C26-715.4] 27-497 Loads. -

Towers shall be designed in accordance with the load requirements of subchapter nine of this chapter.

**ARTICLE 17 OUTDOOR SIGNS AND DISPLAY
STRUCTURES**

§[C26-716.1] 27-498 Application. -

This section shall apply to the construction, alteration, and use of all outdoor signs and display structures, together with their appurtenant and auxiliary devices.

(a) No sign may be hung or attached upon or on the outside of any building unless such work is performed by or under the supervision of a licensed sign hanger.

(b) No sign shall be erected until a permit therefor has been obtained from the commissioner in accordance with the provisions of article two of subchapter eleven of this chapter.

§[C26-716.2] 27-499 Obstructions. - No sign shall be erected so as to obstruct free ingress to, or egress from, a required door, window, stairs, or other required exits, or be placed so as to prevent free passage from one part of a roof to any other part. No sign shall be attached in any manner to a fire escape or exterior stair, or placed so as to interfere with any opening for light or ventilation required under the provisions of subchapter twelve of this chapter.

§[C26-716.3] 27-500 Ground signs. -

(a) **Location.** -No part of a ground sign shall be erected so as to project beyond the street line, except as specifically permitted by the provisions of subchapter four of this chapter.

(b) **Material** -Inside the fire districts, ground signs shall be constructed entirely of noncombustible materials, except as permitted in sections 27-506 and 27-507 of this article. Outside the fire districts, the structure of ground signs exceeding twenty-five hundred square feet in facing or display area shall be constructed of noncombustible materials, and the facing of such signs shall be noncombustible, except as permitted in sections 27-506 and 27-507 of this article. The bottom of the facing of all ground signs shall be at least thirty inches above the ground, which space may be filled with open lattice work or decorative trim.

(c) Support. -Ground signs shall be constructed and anchored to resist loads acting in any direction on the sign, in accordance with the provisions of subchapter nine of this chapter.

(1) Anchors and supports shall be designed for safe bearing loads on the soil and for an effective resistance to pullout amounting to a force twenty-five percent greater than the required resistance to overturning. Anchors and supports shall penetrate to a depth of at least four feet.

(2) Whenever anchors or supports consist of wood embedded in the soil, the wood shall be treated under pressure as specified in subchapter eleven of this chapter before erection. This requirement shall not apply to signs, which are not to remain in place for more than six months.

(3) Members furnishing structural support for signs shall be designed in accordance with the requirements of subchapter ten of this chapter, and shall be of adequate thickness to meet the corrosion conditions.

§[C26-716.4] 27-501 Wall signs. -

(a) Limitations. - Wall signs shall not extend beyond the top or ends of the wall surface on which they are placed unless meeting all the requirements of this code regulating roof signs, projecting signs, or ground signs as the case may be. Wall signs shall not project beyond street lines except as permitted in subchapter four of this chapter.

(b) Materials. -Inside the fire districts, wall signs shall be constructed entirely of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article. Outside the fire districts, the framework of wall signs exceeding five hundred square feet in facing or display area shall be constructed of noncombustible materials, and the facing of such signs shall be noncombustible except as permitted in sections 27-506 and 27-507 of this article.

(c) Supports. -Wall signs shall be constructed and supported to resist loads acting in any direction on the sign in accordance with the provisions of subchapter nine of this chapter. Attachment shall be by means of metal anchors, bolts, or similar devices. Wooden blocks or anchorage with wood used in connection with screws or nails shall not be used, except in the case of wall signs attached to buildings having walls of wood.

(d) Fire department access. -Wall signs that are, or have been, erected to cover doors or windows required by this code for fire department access to existing buildings shall be provided with access panels as required by section 27-292 of article two of subchapter four of this chapter. Existing wall signs shall be altered or otherwise arranged to comply with this requirement on or before December sixth, nineteen hundred seventy.

§[C26-716.5] 27-502 Projecting signs. -

(a) Location. -Projecting signs, other than temporary signs, shall not be constructed on those streets and avenues listed in reference standard RS 7-2, and shall not be

constructed to project beyond the street line except as permitted in subchapter four of this chapter.

(b) Limitations. -Projecting signs whose width when measured at a plane parallel to the building wall, does not exceed two feet may extend not more than five feet above the main roof level of the building to which they are attached; except that for buildings thirty-five feet high or less, such projecting signs may be erected to a maximum height of forty feet above grade but in no case to a height of more than fifteen feet above the main roof level.

(c) Materials. -All projecting signs shall be constructed of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article.

(d) Supports. -Projecting signs shall be constructed and supported to resist loads acting in any direction on the sign in accordance with the provisions of subchapter nine of this chapter. Attachment shall be by means of metal anchors, bolts, supports, chains, wire ropes, rods, or other similar devices. No staples or nails shall be used to secure any projecting sign to any building. Turnbuckles or other equivalent means of adjustment shall be placed in all chains, wire ropes, or rods supporting or bracing projecting signs. All chains, wire ropes, or rods, and their attachments, shall be galvanized or of corrosion-resistant material, and no such supports shall be attached to an unbraced parapet wall.

§[C26-716.6] 27-503 Roof signs. -

(a) Location. -Roof signs shall be set back a minimum of six feet from the face of the walls of the building on which they are erected.

(b) Materials. -Inside the fire districts, roof signs shall be constructed entirely of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article. Outside the fire districts, the framework of roof signs exceeding fifteen hundred square feet in facing or display area or having any part more than sixty-five feet above grade shall be constructed of noncombustible materials, and the facing of such signs shall be noncombustible, except as permitted in sections 27-506 and 27-507 of this article.

(c) Supports. -Roof signs shall be constructed and anchored to resist loads acting in any direction on the sign in accordance with the provisions of subchapter nine of this chapter. Such signs shall be so constructed as to leave a clear space of at least seven feet between the roof and the lowest part of the sign, and at least five feet between the vertical supports thereof.

§[C26-716.7] 27-504 Marquee signs. -

(a) Limitations. -No part of a marquee sign shall project above or below the marquee fascia, except that in the case of theaters licensed under the provisions of subchapters one and three of chapter two of title twenty of the administrative code, marquee signs may project not more than eight feet above nor more than one foot below the fascia, provided that the total height of such

signs does not exceed nine feet and the lowest part of such signs is at least ten feet above the ground or sidewalk level. Marquee signs may extend the full length of the marquee on all sides, but in no case shall they project beyond the ends of the marquee.

(b) Materials. -All marquee signs shall be constructed of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article.

(c) Supports. -Construction and anchorage of marquee signs shall conform to the requirements for projecting signs under subdivision (d) of section 27-502 of this article.

§[C26-716.8] 27-505 Illuminated signs. -

General. -All ground signs, wall signs, roof signs, projecting signs, and marquee signs may be lighted by internal or external sources when complying with the following requirements:

(1)ILLUMINATION. - No sign shall be illuminated by other than electrical means. All wiring and accessory electrical equipment shall conform to the provisions of the electrical code of the city of New York.

(2)MATERIALS. -Every illuminated sign shall be constructed of noncombustible materials except as permitted in section 27-507 of this article.

(3)PERMISSIBLE PROJECTIONS.-Lighting reflectors may project beyond the top or face of all signs, provided that every part of such reflector is at least ten feet above the ground or sidewalk level. In no case shall such reflectors project beyond a vertical plane two feet inside the curb line. Reflectors shall be constructed, attached, and maintained so that they shall not be, or become, a hazard to the public.

§[C26-716.9] 27-506 Temporary signs. -

(a) Materials. -Temporary signs not more than five hundred square feet in area may be constructed of combustible materials. Temporary signs more than one hundred square feet in area shall be made of rigid materials with rigid frames. Temporary signs shall be securely attached to their supports, and shall be removed as soon as they are torn or damaged, but in no case later than thirty days after their erection.

(b) Limitations. -Temporary signs of combustible materials shall not extend more than one foot over, or into, a street, except that when permitted by the department of transportation, temporary banners or signs of combustible materials may be suspended from buildings or poles to extend across streets, and except that temporary signs of combustible materials constructed without a frame may be attached flat against, or suspended from the fascia of a canopy or marquee, provided that the lowest part of any such sign is at least nine feet above the ground or sidewalk level.

§[C26-716.10] 27-507 Use of combustible materials. -

(a) General. -In all signs required to be constructed of noncombustible materials under the provisions of this code, wood or other materials of combustible characteristics similar to wood may be used for moldings, cappings, trim, nailing blocks, letters, latticing, and other purely ornamental features.

(b) Slow-burning plastics. -Slow-burning plastics may be used in sign construction subject to the following conditions and requirements.

(1) If all parts of the sign other than the letters and decorations are made from noncombustible materials, the display surface or sign facing may be made of slow-burning plastic, or may be occupied or covered by letters and decorations made from, or faced with, slow-burning plastics not exceeding a total area calculated from the values given in tables 7-2 and 7-3.

**TABLE 7-2 GROUND SIGNS AND WALL SIGNS
(NONCOMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
150 sq. ft. or less	100 per cent of display surface area
Over 150 sq. ft. but not over 2,000 sq. ft.	150 sq. ft. plus 50 per cent of the difference between 150 sq. ft. and the area of the display surface
Over 2,000 sq. ft.	Not over 1,050 sq. ft. without permission of the commissioner

**TABLE 7-3 ROOF SIGNS, PROJECTING SIGNS,
AND MARQUEE SIGNS
(NONCOMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
150 sq. ft. or less	100 per cent of display surface area
Over 150 sq. ft. but not over 2,000 sq. ft.	150 sq. ft. plus 25 per cent of the difference between 150 sq. ft. and the area of the display surface
Over 2,000 sq. ft.	Not more than 575 sq. ft. without permission of the commissioner

(2) If combustible materials are permitted in the framework, moldings, cappings, trim, nailing blocks, latticing or other parts of the sign, the display surface or sign facing may be occupied or covered by letters and decorations made from or faced with slow-burning plastics not exceeding a total area calculated from the values given in tables 7-4 and 7-5.

**TABLE 7-4 GROUND SIGNS AND WALL SIGNS
(COMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
300 sq. ft. or less	50 per cent of display surface area
Over 300 sq. ft. but not over 2,000 sq. ft.	150 sq. ft. plus 25 per cent of the difference between 150 sq. ft. and the total area of the display surface
Over 2,000 sq. ft.	Not more than 575 sq. ft. without permission of the commissioner

**TABLE 7-5
ROOF SIGNS (COMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
1,000 sq. ft. or less	25 per cent of display surface area
Over 1,000 sq. ft. but not over 2,000 sq. ft.	250 sq. ft. plus 10 per cent of the difference between 1,000 sq. ft. and the total area of the display surface
Over 2,000 sq. ft.	Not more than 350 sq. ft. without permission of the commissioner

§[C26-716.11] 27-508 Maintenance and inspection.-

(a) Maintenance. -All signs, together with all supports, braces, guys, and anchors, shall be kept in good repair at all times, and when not adequately galvanized or constructed of corrosion-resistant materials, shall be painted periodically to prevent corrosion. It shall be the duty and responsibility of the owner or lessee of every sign to maintain the immediate premises occupied by the sign in a safe, clean, sanitary, and inoffensive condition and free and clear of all obnoxious substances.

(b) Annual inspection. - Every sign for which a permit is required shall be inspected at least once in every calendar year.

*** ARTICLE 17-A****YOUTH PROTECTION AGAINST TOBACCO
ADVERTISING AND PROMOTION ACT****§ 27-508.1 Short title. -**

This article shall be known and may be cited as the "Youth Protection Against Tobacco Advertising and Promotion Act."

§ 27-508.2 Definitions. -

For the purposes of this article, the following terms shall be defined as follows:

a. "Amusement arcade" means any enclosed business establishment, open to the public, whose primary purpose is the operation of coin-operated amusement devices within the meaning of subchapter three of chapter two of title 20 of this code.

b. "Child day care center" means (I) any child care arrangement, public, private or parochial child care center, school-age child care program, day nursery school, kindergarten, play school or other similar school or service operating pursuant to authorization, license or permit of the city or state, (ii) any facility that provides child care services as defined in section four hundred ten-p of the New York State social services law, or (iii) any child day care center as defined in section three hundred ninety of the New York State social services law. The definition of "child day care center" applies whether or not care is given for compensation but does not include child day care centers located in private dwellings and multiple dwelling units.

c. "Cigarette" means any product which consists of (i) any roll of tobacco wrapped in paper or in any substance not containing tobacco or (ii) any roll of tobacco wrapped in any substance containing tobacco which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling is offered for use or purchase by consumers as a cigarette described in (i) of this subdivision.

d. "Cigarette tobacco" means any product that consists of loose tobacco and is intended for use by consumers in a cigarette.

e. "Multiple dwelling" means any building or structure that may lawfully be occupied as the residence or home of three or more families living independently of each other.

f. "Multiple dwelling unit" means any unit of residential accommodation in a multiple dwelling.

g. "Person" means any natural person, partnership, co-partnership, firm, company, corporation, limited liability corporation, agency as defined in section eleven-hundred fifty of the New York City charter, association, joint stock association or other legal entity.

h. "Playground" means any outdoor premises or grounds owned or lawfully operated by or on behalf of, the board of education, the department of parks and recreation, or any public, private or parochial school, any child day care center or any youth center, which contains any device, structure or implement, fixed or portable, used or intended to be used by persons under the age of eighteen for recreational or athletic purposes including, but not limited to, play equipment such as a sliding board swing, jungle gym, sandbox, climbing bar, wading pool, obstacle course, swimming pool, see-saw, baseball diamond, athletic field, or basketball court.

i. "Private dwelling" means any building or structure or portion thereof that may lawfully be occupied for residential purposes by not more than two families,

including the grounds of such building or structure.

j. "School building" means any building or structure or any portion thereof, owned, occupied by, or under the custody or control of any public, private or parochial institution and lawfully used for the primary purpose of providing educational instruction to students at or below the twelfth grade level.

k. "Smokeless tobacco" means any product that consists of cut, ground, powdered, or leaf tobacco that is intended to be placed by the consumer in an oral cavity.

l. "Tobacco product" means a cigarette, smokeless tobacco or cigarette tobacco.

m. "Tobacco product advertisement" means any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any brand of tobacco product, or any combination thereof, the purpose or effect of which is to promote the use or sale of a tobacco product through such means as, but not limited to, the identification of a brand of a tobacco product, a trademark of a tobacco product or a trade name associated exclusively with a tobacco product.

n. "Tobacco product promotion" means (i) any item or service marketed, licensed, sold or distributed, whether indoors or outdoors, which is not a tobacco product but which bears the brand of a tobacco product, a trademark of a tobacco product or a trade name associated exclusively with a tobacco product, alone or in conjunction with any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with those used for any brand of a tobacco product, or (ii) any gift or item other than a tobacco product offered or caused to be offered to any person purchasing a tobacco product in consideration of the purchase thereof, or to any person in consideration of furnishing evidence, such as credits, proofs-of-purchase, or coupons, of such purchase; provided, however, that a tobacco product promotion shall not include any gift or item provided through the exchange or redemption through the mail of any such credits, proofs-of-purchase, coupons or other evidence of the purchase of a tobacco product.

o. "Youth center" means any building or structure or portion thereof, lawfully occupied by any person for the primary purpose of operating a trade school (including those conducting after-school, vocational, remedial, tutorial, educational assistance programs) or an indoor recreational center (including recreational, cultural, physical fitness, or sports programs) for persons under the age of eighteen years, and which has been certified as such to the department in accordance with the procedure to be set by

the department. Such certification shall be accepted by the department but nothing in this subdivision shall prevent the commissioner from removing a certified youth center from consideration as a youth center if she or he determines it does not meet the criteria of a youth center.

§ 27-508.3 Tobacco product advertisement restriction. -

a. It shall be unlawful for any person to place, cause to be placed, to maintain or to cause to be maintained, a tobacco product advertisement within one thousand feet, in any direction, of any school building, playground, child day care center, amusement arcade or youth center, in any outdoor area including, but not limited to, billboards, roofs and sides of buildings, rolling shutters or gates, any enclosures into which rolling shutters or gates retract, water tanks and towers and free-standing signboards; provided, however, that any tobacco product advertisement on an awning projecting from the outside of a premises as of July 1, 1997 where tobacco products are sold or offered for sale may be retained until two years from the effective date of this law.

b. It shall be unlawful for any person to place, cause to be placed, to maintain, or cause to be maintained, a tobacco product advertisement in the interior of a building or structure which is within one thousand feet, in any direction, of any school building, playground, child day care center, amusement arcade or youth center, when such advertisement is within five feet of any exterior window or any door which is used for entry or egress by the public to the building or structure; provided, however, that tobacco product advertisements may be placed or maintained in the interior of any such premises where such advertisements are (I) parallel to the street and face inward, or (ii) affixed to a wall panel or similar fixture that is perpendicular to the street regardless of whether such advertisements are illuminated or not illuminated.

c. Nothing in this section shall prevent a person from placing, causing to be placed, maintaining, or causing to be maintained, a single sign, poster, placard or label no larger than six square feet and containing only black text, in any language, not exceeding eight inches in height on a white background stating "TOBACCO PRODUCTS SOLD HERE" or such words translated into any language, within ten feet of an entrance to the premises where tobacco products are sold or offered for sale.

d. Nothing in this section shall prevent a tobacco product manufacturer, distributor or retailer from placing, causing to be placed, maintaining, or causing to be maintained, its corporate or other business name on a building or structure, in any location, where such building or structure or a portion thereof is owned, operated or leased by such manufacturer, distributor or retailer and that building or structure is the principal place of business of such manufacturer, distributor or retailer in the city of New York; provided, however, that the corporate or other

business name of such manufacturer, distributor or retailer is registered or filed in the United States or such manufacturer, distributor or retailer is authorized to do business in any state, and the corporate or business name of such manufacturer, distributor or retailer does not include any brand name or trademark of a tobacco product, alone or in conjunction with any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any brand of a tobacco product.

e. This section shall not apply to any tobacco product advertisement on a motor vehicle. Nothing in this subdivision shall be construed to authorize the placement of a tobacco product advertisement in a location where such placement is otherwise prohibited by the rules of the department of transportation or other applicable law.

§ 27-508.4 Non-compliant advertisements to be removed.-

The owner, operator or lessee of any location or premises where a tobacco product advertisement is prohibited or restricted pursuant to the requirements of section 27-508.3 of this article shall have thirty days from the effective date of the local law that added this section to remove any non-compliant tobacco product advertisements.

§ 27-508.5 Sponsorship of and at events. -

Nothing in this article shall prevent a tobacco products manufacturer, distributor, or retailer who sponsors, in whole or in part, any athletic, musical, artistic, or cultural event, or team or entry in a competition or exhibition in any location from displaying or causing to be displayed the corporate or other business name of such sponsor; provided, however, that the corporate or other business name of such sponsor is registered or filed in the United States or such sponsor is authorized to do business in any state, and the corporate or other business name of such sponsor does not include any brand name or trademark of a tobacco product, alone or in conjunction with any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any brand of a tobacco product.

**Local Law 3-1998.*

*****§27-508.6 Injunctive relief. -**

Whenever any person has engaged in any act or practice which constitutes a violation of any provision of this article or of chapter thirteen of title eleven of this code, or of subchapter one of chapter two of title twenty of this code, or of any rule promulgated thereunder, the

city may make application to a court of competent jurisdiction for an order enjoining such act or practice.

****Local Law 2-2000; Local Law 3-1998.*

****§27-508.7 Penalties. -**

Notwithstanding the provisions of sections 26-122, 26-125 and 26-248 of this code, a violation of this article shall not subject any person to liability for a criminal offense.

***Local Law 10 -1998.*

ARTICLE 18 FENCES

§[C26-717.1] 27-509 Permitted heights. -

In other than residence districts as established by the zoning resolution, fences may be erected throughout the city to a maximum height of ten feet. In residence districts, no fences, whether of masonry, steel, wood, or any other materials shall be erected to a height of more than six feet above the ground, except that fences used in conjunction with nonresidence buildings and public playgrounds, excluding buildings accessory to dwellings, may be erected to a height of fifteen feet. Higher fences may be permitted by the commissioner where required for the enclosure of public playgrounds, school yards, parks, and similar public facilities.

ARTICLE 19 TENTS AND AIR-SUPPORTED STRUCTURES

§[C26-718.1] 27-510 Location and height. -

Tents or air-supported structures may be erected inside or outside of the fire districts provided they are not more than one story high above the ground, or above a roof that meets the requirements of subchapter five of this chapter for fire divisions.

§[C26-718.2] 27-511 Separation. -

No tent or air-supported structure shall be erected closer than twenty feet to any interior lot line nor closer than thirty feet in any direction to an unprotected opening, required exterior stairway or corridor, or required exit door, on the same level or above the level of the tent or air-supported structure. A tent or air-supported structure may abut another building on the same lot if there are no unprotected openings or exits above or within thirty feet as above stipulated, if there is no door between them that is a required exit, and if the exterior wall separating them meets the requirements of subchapter five of this chapter for fire divisions.

Exceptions. - Requirements for separation from other buildings on the site shall be waived where a tent or air-supported structure is used for on-site temporary shelter for construction work, or incidental fabrication of construction elements to be used on the site of construction.

§[C26-718.3] 27-512 Fire protection. -

The ground enclosed by a tent or air-supported structure, and the ground for a distance of at least ten feet outside of same, shall be cleared and maintained clear of all combustible material or vegetation. No open flame of any kind shall be employed within the structure, or closer than twenty feet to any part of the enclosure fabric. Fire extinguishing facilities shall be provided in accordance with the requirements of chapter four of this title.

§[C26-718.4] 27-513 Exits. -

Notwithstanding any other requirements of subchapters six and eight of this chapter, travel distance to an exit from any point within a tent or air-supported structure shall not exceed seventy-five feet. Exit doors in air-supported structures shall close automatically against normal operational pressures. Opening force at the edge of such doors shall not exceed fifteen pounds, with the structure at operational pressure. Exit doors shall be located in frames so constructed that they will remain operative and support the weight of the structure in a state of total collapse.

§[C26-718.5] 27-514 Structural requirements. -

(a) Tents. - Tents shall be guyed, supported, and braced to withstand a wind pressure of ten pounds per square foot of projected area of the tent. The poles and their supporting guys, stays, stakes, fastenings, etc. shall be of sufficient strength and attached so as to resist wind pressure of twenty psf of projected area of the tent.

(b) Air-supported structures. -

(1) Air-supported structures shall be anchored to the ground or supporting structure by either ballast distributed, and adequate to resist the inflation lift load, the aerodynamic lift load, and the drag (shear) load due to wind impact. The latter factors shall be based on a wind velocity of at least seventy miles per hour, and an estimated stagnation of not less than $0.5q$ for structures on grade whose height is equal to, or less than, the width of the structure. For greater heights, or for elevated structures, increased anchorage shall be provided, justified by analytical and/or experimental data.

(2) The skin of the structure shall be of such strength, and the joints so constructed, as to provide a minimum dead load strip tensile strength at seventy degrees F of four times the seventy mph design load (inflation and aerodynamic loading). The joints shall provide a dead load strip tensile strength of one hundred sixty degrees F of twice the seventy mph design load (i.e., a factor of safety of four and two respectively). In addition, the material shall provide a trapezoidal tear strength of at least fifteen percent of the maximum design tensile load. Material and joint strengths shall be so certified by the manufacturer, justified by analytical and/or experimental data.

§[C26-718.6] 27-515 Flame resistance. -

(a) Tents. - All materials used for tents shall be

treated to be flameproofed and shall remain flameproofed in accordance with chapter four of this title.

(b) Air-supported structures. All fabrics that have a base fabric weight of 6.4 oz. per square yard or less or that are used to enclose spaces classified in occupancy group C, E, F, G, H or J shall have an extinction time of not more than two seconds when tested under the small scale test method of reference standard RS 7-3. All other fabrics shall have a flame extinction time of not over one minute and/or a flame spread of not over one inch per minute when tested in accordance with the provisions of reference standard RS 7-4.

§[C26-718.7] 27-516 Pressurization system. -

Air-supported structures shall be inflated and shall remain inflated during all periods of occupancy to a minimum differential pressure of 0.88 in. and a maximum differential pressure of 1.50 in. of water. Ventilation flow per occupant, either through vents or anticipated leakage, shall comply with the requirements of subchapter twelve of this chapter.

Occupied spaces. - Where the net floor area per occupant is one hundred fifty square feet or less, the structure shall be provided with at least two blowers, each of which shall have adequate capacity to maintain the required inflation pressure. In addition, an auxiliary engine-generator set capable of powering one blower, or a supplementary blower powered by an internal combustion engine, either of which shall have the capacity to run continuously for four hours, shall be located outside the structure, shall be weather protected, and shall be arranged to automatically operate the blower within twenty seconds upon failure of the normal source. Heat shall be provided from a source outside the structure so arranged as to prevent the spread of fire to the structure. The temperature within the air-supported structure shall be maintained at the temperature required by subchapter twelve of this chapter, but not less than fifty degrees Fahrenheit during periods of snowfall.

§[C26-718.8] 27-517 Certificate of occupancy. -

Certificates of occupancy for tents or air-supported structures shall be issued for a period not exceeding one year, and such certificates may be renewed for one year periods thereafter if the tent or air-supported structure complies with all laws, rules and regulations in effect at the time of request for renewal.

ARTICLE 20 OCCUPANCIES INVOLVING STORAGE OF NITRIC ACID

§[C26-719.1] 27-518 Application.- This article shall apply to the construction, alteration and use of buildings or spaces wherein nitric acid is stored.

§[C26-719.2] 27-519 Location. -

Carboys containing nitric acid shall be stored in storage vaults.

§[C26-719.3] 27-520 Construction requirements. -

(a) Vaults shall be constructed of incombustible acid-resistant material with a fire resistance of at least one hour.

(b) Doors opening into such storage vaults shall be self-closing, noncombustible fire doors with a fire-protection rating of at least three-quarters of an hour.

(c) Vault floors shall be constructed of acid-resistant brick, concrete treated with sodium silicate or other acid-proof material and shall incorporate a dike constructed of the same material, whose height shall be adequate to contain the acid plus the neutralizing substance that would be necessary to neutralize said acid plus six inches.

(d) The floor shall be provided with a valved drain, which shall be connected to the drainage system in accordance with the requirements of subchapter sixteen of this chapter.

§[C26-719.4] 27-521 Ventilation. -

Mechanical ventilation systems for storage vaults shall be adequate to effect ten complete air changes per hr. Exhaust shall be taken from within twelve inches above the level of the top of the dike. The exhaust system shall be independent of exhaust systems serving other parts of the building and the openings to the outdoors shall be located in accordance with the provisions of subchapter thirteen of this chapter for system conveying vapors.

ARTICLE 21 ATRIUMS

§[C26-720.1] 27-521.1 Applicability. -

This article shall apply to the construction, alteration and use of atriums.

§[C26-720.2] 27-521.2 Classification.- An atrium shall be classified in occupancy group F-3.

§[C26-720.3] 27-521.3 Construction. -

(a) Atriums may be constructed only in buildings in noncombustible construction groups 1-A, 1-B and 1-C.

(b) An atrium shall be fully enclosed except that openings of any size into the two lowest levels of an atrium shall be permitted if such openings are provided with opening protectives having a fire-resistance rating of at least one and one-half hours or are provided with sprinklers no more than six feet apart.

(c) The minimum horizontal clear dimension of an atrium shall be forty feet, provided, however that this dimension can be reduced to twenty feet where sprinkler spacing on the occupied side adjacent to glass panels authorized by subdivision (d) of this section is no more than four feet or the minimum atrium area is twelve hundred square feet.

(d) Atrium enclosing walls shall be of at least two hour fire-resistant construction or of glass that is wired, laminated, or tempered and is provided with sprinklers on the occupied side spaced no more than six feet apart, except

as otherwise permitted by subdivision (c) of this section.

§[C26-720.4] 27-521.4 Fire protection equipment. -

(a) Smoke detectors. - In all spaces opening onto an atrium, a smoke detecting system shall be installed in accordance with the requirements of reference standard RS 17-5E.

(b) Standpipes. - At least one standpipe outlet in addition to a riser or risers within required stairways, shall be installed in every atrium.

(c) Sprinklers. -

(1) Every story or mezzanine within an atrium that overhangs another story or mezzanine within fifty feet shall have the overhang sprinklered in accordance with section 27-956 of article four of subchapter seventeen of this chapter, except that atrium ceilings less than fifty feet above the atrium floor but more than thirty feet above the floor may alternatively be provided with smoke detectors, which shall be of the central supervisory type connected to an approved central station. Every room or space opening onto the atrium shall be sprinklered, no matter where located.

(2) Except as otherwise permitted by subdivision (c) of section 27-521.3 of this article, at glass panels permitted by subdivision (d) of such section, sprinklers on the occupied side at all levels shall be spaced six feet apart parallel to the glass and that distance away from the glass panels so as to insure complete glass wetting upon activation. No obstructions to such wetting capability shall be permitted.

(3) Every sprinkler system for an atrium shall be provided with sources of water supply in accordance with article four of subchapter seventeen of this chapter.

§[C26-720.5] 27-521.5 Means of egress. -

(a) No vertical exits shall discharge into an atrium at any level.

(b) Atrium corridors shall have a width equal to or greater than one hundred fifty per cent of that required by either table 6-1 of subchapter six or table 8-1 of subchapter eight, as applicable.

(c) An unenclosed path of travel to a required exit shall be permitted, except that access to one of the required vertical exits shall be only through an enclosed passageway or corridor conforming to the requirements for exits of subchapter six.

§[C26-720.6] 27-521.6 Fire alarm and communication system. -

An interior fire alarm and communication system shall be installed in accordance with the requirements of reference standard RS 17-3.

§[C26-720.7] 27-521.7 Signs. -

Atriums shall be provided with all signs required by articles seven and nine of subchapter six of this chapter, regardless of the occupant load of the atrium.

§[C26-720.8] 27-521.8 Smoke control. -

(a) In all atriums there shall be provided a system of mechanical ventilation of sufficient capacity to exhaust at least six air changes per hour of the combined volumes of the atrium and all spaces with an open connection to the atrium, or 1 cfm/sq. ft. from all such spaces, whichever is greater, using either dedicated fan equipment or the building ventilation system arranged to shut down automatically, with manual override capability. Make-up air shall be supplied at the lowest level of an atrium at a rate equal to seventy-five percent of exhaust.

(b) All atriums shall have a gravity ventilation system equipped with remote manual controls to remove smoke if the mechanical exhaust system fails.

(c) A ventilation system serving an atrium shall not be interconnected with any other system serving another space.

(d) Ventilation systems supplying occupied spaces shall not be interconnected with the general atrium supply.

§[C26-720.9] 27-521.9 Emergency power. -

All atriums shall be provided with an emergency power system meeting the requirements of article eleven of subchapter six of this chapter.

ARTICLE 22 MALLS

§[C26-721.1] 27-521.10 Applicability. - This article shall apply to the construction, alteration and use of malls.

§[C26-721.2] 27-521.11 Classification. -

A mall shall be classified in occupancy group C.

§[C26-721.3] 27-521.12 Construction; General. -

(a) A mall may be constructed only in buildings in noncombustible construction groups I-A, I-B and I-C.

(b) The minimum horizontal clear dimension at any level in a mall shall be twenty feet.

(c) Where different tenancies have openings to a mall the tenancies shall be separated in accordance with section 27-341 of article five of subchapter five of this chapter.

(d) All openings between a mall and other spaces shall be provided with a noncombustible draft curtain that shall extend downward a minimum of twenty-four inches below the lowest ceiling adjacent to such draft curtain or shall meet the requirements of clause three of subparagraph d of paragraph three of subdivision (h) of section 27-370 of article five of subchapter six of this chapter relating to show windows.

§[C26-721.4] 27-521.13 Fire protection equipment. -

(a) Smoke detectors. - Smoke detectors meeting the specifications of section 27-981 of article six of subchapter seventeen shall be located at the ceiling and adjacent to each return air intake.

(b) Standpipes. - At least one standpipe outlet shall be installed in every mall.

(c) Sprinklers. - An automatic wet sprinkler system shall be installed in every mall.

(1) All spaces with openings between such spaces and a mall shall be fully sprinklered in accordance with subchapter seventeen of this chapter and reference standard RS 17-2 regardless of floor area or occupancy classification.

§[C26-721.5] 27-521.14 Egress. - The exits for a mall shall be of sufficient capacity to accommodate the aggregate occupant load of the mall and all spaces opening onto the mall.

§[C26-721.6] 27-521.15 Smoke control. -

(a) In all malls there shall be provided a system of mechanical ventilation of sufficient capacity to exhaust at least six air changes per hour of the combined volumes of the mall and all spaces with an open connection to the mall, or 1 cfm/sq. ft. from all such spaces, whichever is greater, using either dedicated fan equipment or the building ventilation system arranged to shut down automatically, with manual override capability. Make-up air shall be supplied at the lowest level of a mall at a rate equal to seventy-five per cent of exhaust.

(b) All malls shall have a gravity ventilation system equipped with remote manual controls to remove smoke if the mechanical exhaust system fails.

(c) A ventilation system serving a mall shall not be interconnected with any other system serving another space.

(d) Ventilation systems supplying occupied spaces shall not be interconnected with the general mall supply.

§[C26-721.7] 27-521.16 Signs. -

Malls shall be provided with all signs required by articles seven and nine of subchapter six of this chapter, regardless of occupant load of the mall.



SUBCHAPTER 8 PLACES OF ASSEMBLY

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**	
[800.0]	Art. 1	General
[800.1]	522	Scope
[800.2]	523	Definitions
[800.3]	524	Tents and Air Supported Structures
[801.0]	Art. 2	Basic Requirements
[801.1]	525	General
	525.1	Place of Assembly Permit
[801.2]	526	Location
[801.3]	527	Posted Capacity
[801.4]	528	Approved Seating Plans
[801.5]	529	Enclosure and Interior Finish
[801.6]	530	Means of Egress
[801.7]	531	Seating in Assembly Spaces
[801.8]	532	Aisles and Cross Aisles
[801.9]	533	Travel Distance
[801.10]	534	Exit Openings
[801.11]	535	Safe Areas
[801.12]	536	Corridors
[801.13]	537	Exit Passageways
[801.14]	538	Vertical Exits
[801.15]	539	Open Exterior Spaces
[801.16]	540	Exit Lighting
[801.17]	541	Exit Signs
[801.18]	542	Emergency Lighting
[801.19]	543	Light Projection Sources
[801.20]	544	Motion Picture Screen
[802.0]	Art. 3	F-1 Places of Assembly
[802.1]	545	General
[802.2]	546	F-1a Places of Assembly
[802.3]	547	F-1b Places of Assembly
[803.0]	Art. 4	F-2 Places of Assembly
[803.1]	548	General
[804.0]	Art. 5	F-3 and F-4 Places of Assembly
[804.1]	549	General

*"C26" omitted from section numbers in this column.

**"27" omitted from section numbers in this column.

LIST OF TABLES

Table No.

8-1 Determination of Exit and Access Requirements

ARTICLE 1 GENERAL

***§[C26-800.1] 27-522 Scope. -

The provisions of this subchapter shall control the design and construction of places of assembly as defined in subchapter two of this chapter. For specific classifications of assembly occupancies, see article eight of subchapter three of this chapter. For place of assembly permit requirements, see section 27-525.1 of article two of this subchapter.

****Local Law 23-1990.*

§[C26-800.2] 27-523 Definitions. -

For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-800.3] 27-524 Tents and air supported structures.-

Places of assembly enclosed by tents or air supported structures shall comply with the provisions of this subchapter regulating indoor places of assembly, and with the provisions of article nineteen of subchapter seven of this chapter.

ARTICLE 2 BASIC REQUIREMENTS

§[C26-801.1] 27-525 General. -

The provisions of this article shall apply to all places of assembly, in addition to the specific requirements of articles three through five of this subchapter for the several categories of places of assembly.

**§27-525.1 Place of assembly permit. -

a. It shall be unlawful to use or occupy any building or premises or part thereof as a place of assembly unless and until a permit therefor shall have been issued by the department. The permit shall be for a term of one year.

b. The application for such permit and such permit shall be in a form prescribed by the commissioner.

c. The annual fee for a permit issued pursuant to this section shall be the amount provided for in paragraph seven of subdivision a of section 26-214 of the code. An application for such permit or renewal thereof shall be accompanied by the annual fee, except as otherwise provided in section 26-210 of the code.

d. The permit issued pursuant to this section shall be posted in a conspicuous place in the place of assembly, which is covered by such permit.

e. In the case of a permittee that is an establishment that offers for sale food and/or beverages for on-premises consumption, but not including establishments operated by a not-for-profit corporation, and employs or uses the services of a security guard, as that term is defined in subdivision six of section eighty nine-f of the general business law, such permittee shall comply with the provisions of article 7-A of the

general business law, shall obtain proof that such security guard is registered pursuant to article 7-A of the general business law, shall maintain such proof in a readily available location, in accordance with rules promulgated by the commissioner during all hours in which such place of assembly is open to the public, shall maintain a roster of all security guards working at any given time when such place of assembly is open to the public, and shall require each security guard to maintain on his or her person proof of registration at all times when on the premises.

f. For purposes of this section, there shall be a rebuttable presumption that a person employed or whose services are retained at a place of assembly whose job functions include (1) the monitoring or guarding of the entrance or exit of such place of assembly to manage ingress and egress to such place of assembly for security purposes during the hours of operation of such establishment and/or (2) protection of such place of assembly from disorderly or other unlawful conduct by such patrons is a security guard provided, however, that such rebuttable presumption shall not apply to the owner of such establishment as described in subdivision e of this section that has received a place of assembly permit.

g. Notwithstanding any provision of this chapter, only the permittee shall be liable for violations of this section that relate to a permittee's obligations regarding security guards.

h. In addition to employees of the department, employees of the police department and the department of consumer affairs shall have the authority to enforce the provisions of this section regarding security guards.

i. The enforcement agency shall report any violation of the provisions of this section relating to security guards to the state liquor authority if the permittee holds a license pursuant to the alcoholic beverage control law.

***Local Law 35-2006; Local Law 23-1990.*

§[C26-801.2] 27-526 Location. –

No place of assembly shall be located within two hundred fifty feet of any occupancy containing explosive contents.

§[C26-801.3] 27-527 Posted capacity. -

Signs shall be posted in all assembly spaces, indicating the number of persons who may legally occupy the space. Signs shall not be required where seating is fixed in place in accordance with an approved seating plan and no provision is made for standee spaces. Such signs, where required, shall read as follows:

**OCCUPANCY BY MORE THAN _____ PERSONS
IS DANGEROUS AND UNLAWFUL**

Public Assembly License No _____ Commissioner,
(where applicable) Dept. of Buildings, City of New

When a space is occupied for multiple purposes involving different occupant loads the sign shall read as follows:

OCCUPANCY BY MORE THAN

(number) _____ PERSONS AS _____ (type of occupancy) _____
OR BY

(number) _____ PERSONS AS _____ (type of occupancy) _____
OR BY

(number) _____ PERSONS AS _____ (type of occupancy) _____
IS DANGEROUS AND UNLAWFUL

Public Assembly License No _____ Commissioner,
(where applicable) Dept. of Buildings, City of New York

Signs shall be at least twelve inches wide and sixteen inches high. The lettering shall be red on a white background. The letters shall be at least one inch high and the numerals at least one and one-quarter inches high. Signs shall be framed under a transparent protective cover, and permanently mounted in a location that is conspicuously visible to a person entering the space. Signs shall be lighted by artificial illumination at all times during occupancy to maintain at least five foot candles on the surface of the sign.

§[C26-801.4] 27-528 Approved seating plans. -

In every place of assembly providing seating, copies of approved seating plans and approved alternate seating plans shall be kept on the premises. The plans shall be readily available for inspection, and shall provide the following information:

(a) For assembly spaces:

(1) The location of each seat of each tier of seating, along with the number of occupants of each seating section.

(2) The location and number of standees for each standee area.

(3) The total number of occupants of each tier and of the assembly space.

(4) The location and classification of all exits.

(b) For safe areas:

(1) The furniture and equipment arrangement and location.

(2) The number of occupants to be accommodated.

(c) For stage areas:

(1) The maximum number of occupants, including audience seating on the stage.

(2) Any conditions limiting the use of the stage area.

(3) The location of all exits.

These plans shall not be smaller in size than required for one-eighth inch scale plans.

§[C26-801.5] 27-529 Enclosure and interior finish. -

Places of assembly shall be separated from adjoining occupancies by construction meeting the requirements of table 5-1 or table 5-2, whichever may apply. The interior finish of places of assembly shall meet the requirements of table 5-4.

§[C26-801.6] 27-530 Means of egress. -

Places of assembly shall be provided with exit facilities meeting all of the requirements of this subchapter and all of the requirements of subchapter six of this chapter. A place of assembly located in a building classified in another occupancy group shall comply with the exit requirements of this subchapter, but may use the exit facilities of the building of which it is a part as a means of egress from the building.

§[C26-801.7] 27-531 Seating in assembly spaces. -

All seating in assembly spaces shall conform to the following:

(a) Seating arrangements.- Except as otherwise provided in this subchapter, all seating shall be arranged in rows to provide for orderly egress.

(1) CHAIR SEATING. - Seating patterns employing individual chairs shall comply with the following:

a. Assembly spaces in which the net floor area, exclusive of stage area, is less than eight square feet per person shall be provided with chairs that are rigidly anchored to the construction or fixed in place by devices that prevent movement in any direction, except that not more than twelve movable chairs may be provided in a box or loge if such box or loge is separated from the main seating pattern by railings or other permanent construction and has an area of at least five square feet per chair.

b. In assembly spaces where the net floor area, exclusive of stage area, is between eight and twelve square feet per person, movable chairs may be used provided all chairs in a row between aisles are fastened or ganged together to preserve the integrity of the row. Not more than twelve chairs shall be used in any row between aisles.

c. In assembly spaces where net floor area, exclusive of stage area, is more than twelve square feet per person, individual movable chairs may be used.

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Not more than twelve chairs shall be used in any row between aisles.

d. All chairs placed on stepped platforms less than four feet wide shall be anchored or fixed in place.

e. The minimum distance between centerlines of chairs in the same row shall be nineteen inches.

f. The spacing between the back of one chair in any row and any part of the chair in the row behind it, including arm blocks, when the seat is in the lift-up position for automatic operation or in the horizontal position for nonlift-up or nonautomatic operation, when measured horizontally between plumb lines, shall be at least twelve inches, and this spacing shall be increased for any of the following reasons:

1. Where a difference in floor level occurs between any two rows, the spacing shall be increased as follows:

Difference in Level (in.)	Increase in Space (in)
6-10, plus any fraction of an inch..	1
11-16, plus any fraction of an inch	2
17-22, plus any fraction of an inch	3
23 and over.....	4

2. Where it is necessary from any location to pass more than seven chairs to reach the nearest aisle, spacing shall be increased one-quarter of an inch for each chair in excess of seven.

g. Not more than eight chairs shall be provided in any row of seating having access to only one aisle except as provided below for bleacher and platform seating.

^{*}h. Performance viewing positions shall be provided for persons who use wheelchairs in accordance with the following schedule.

^{*}*Local Law 58-1987.*

Capacity of Assembly Space	Number of Viewing Positions
75 to 100.....	.....minimum 4
101 to 150.....	.....minimum 5
151 to 200.....	.....minimum 6
201 to 300.....	.....7
301 to 400.....	.....8
401 to 500.....	.....9
501 to 1000.....	2 percent of total
Over 1000.....	20 plus 1 for each 100 over 1000

These positions shall be located so as not to interfere with egress from any row of seats and shall be reachable by means of ramps and/or elevators. Steps shall not be allowed in line of travel from the main approach entry to the designated locations. Size and placement of wheelchair locations, surfaces, access to

performing area and listening systems where required, shall comply with the provisions of reference standard RS 4-6. These positions may be utilized by persons who do not use wheelchairs provided that the positions are delineated on the approved seating plans, the seating is readily removable and the positions are unsold one full working day before the performance.

(2) BLEACHER SEATING. - Fixed or folding bleachers shall comply with the following:

a. For the purpose of determining occupant load, individual seat space width shall be assumed to be eighteen inches. There shall be a space of at least fourteen and one-half inches between the back edge of each seat and the front edge of the seat immediately behind it when measured between plumb lines.

b. The width of footboards and seat boards shall be at least nine and one-half inches. Where wider seat boards are provided, the space between seats may be reduced by an amount equivalent to the increase in width.

c. Sections having not more than ten consecutive rows of seating shall not require aisles. Where there are more than ten consecutive rows, aisles shall be provided at the ends of seat rows, the minimum spacing between seat rows shall be increased to sixteen inches and the required space between seat rows shall be increased by one-quarter of an inch for each seat in excess of seven that it is necessary to pass to reach an aisle. Cross aisles shall be provided at the bottom of each section of seating.

d. Bleacher seating shall be constructed to comply with the requirements of subchapters nine and ten of this chapter

(3) PLATFORM SEATING. - Stepped platforms used for seating without chairs shall comply with the following:

a. For the purpose of determining occupant load, individual seat space width shall be assumed to be eighteen inches.

b. Platforms shall be at least twenty-eight inches deep from front to back.

c. Platform depth shall be increased one-quarter of an inch for each seat in excess of seven that it is necessary to pass to reach an aisle.

d. Aisles complying with section 27-532 of this article shall be provided when the height between levels of platform seating exceeds eight inches

(4) BENCH SEATING. - Bench or pew seating, with or without backs, may be used when complying with the applicable requirements for chair seating in [sic] paragraph one of this subdivision. For the purpose of determining occupant load, individual seat space width shall be assumed to be eighteen inches.

(5) TABLE AND CHAIR SEATING. - Tables and chairs shall be so arranged that the distance from any chair at any table by way of a path between tables and chairs is not greater than eighteen feet to an aisle

leading to an exit. The width of the path shall be at least eighteen inches, except that it may be reduced by one inch for each one foot that the distance to the aisle is less than eighteen feet but may not be reduced to less than twelve inches. Chairs, when placed with the front edge of the seat on a line with the edge of the table, shall not protrude into the path. Booths containing up to eight seats may be used, provided they open directly on an aisle.

(6) COUNTER SEATING. - Counters at which food or beverages are consumed shall be attached to the floor. Fixed or movable chairs or stools may be provided. The number of occupants shall be determined on the basis of one occupant for each eighteen inches of counter length. The width of aisles bordering counters shall be measured excluding a depth of eighteen inches for chair or stool spaces.

(7) STANDEE AREAS. - Standee areas may be permitted within assembly spaces provided each standee space has a minimum width of twenty-two inches and a minimum depth of twenty-one inches. Standee areas shall not encroach on the required exit facilities and shall be separated from the space to be left clear for passage by tape, ribbon or other easily broken material, supported by lightweight posts fixed in stationary sockets, so constructed and placed as to not constitute an obstruction in case of panic or emergency.

(8) PROTECTIVE GUARDS. - Protective guards shall be provided for seating and standee areas as follows:

a. A protective guard at least thirty inches high above the floor shall be provided along the fascia of all balconies, loges, and boxes, except that the guard shall be at least thirty-six inches high at the bottom of stepped aisles. When rails or other parts of such guards are designed with ledges more than two and one-half inches wide, the top surface of the ledges shall slope down toward the seating area at an angle of at least thirty degrees from the horizontal. The guards shall provide an unperforated curb or toeguard at least twelve inches high above the level of the floor of the balcony, loge, or box.

b. A protective guard at least thirty inches high above the floor shall be provided at cross aisles where fixed seat backs of any adjacent lower level do not project at least twenty-four inches above the cross aisle level.

c. A protective guard at least eighteen inches high above the floor shall be provided along the front edge of any stepped platform where fixed seat backs of the adjacent lower level do not project at least eighteen inches above the stepped platform level.

d. A protective guard at least twenty-six inches high above seat level shall be provided at the open ends of bleacher seating, extending from the front of the third row of seats to the back of the

highest row of seats, and continuously along the rear of the seating, except where the seating is adjacent to a wall.

e. Guards shall be designed to meet the load requirements for railings in subchapter nine of this chapter.

§[C26-801.8] 27-532 Aisles and cross aisles. -

Assembly spaces shall be served by aisles, cross aisles, or other unobstructed floor areas providing access to exits, except as permitted for bleacher seating in paragraph two of subdivision (a) of section 27-531 of this article.

(a) The capacity of aisles and cross aisles shall be adequate to serve all persons for whom they provide a primary path of travel to an exit. (See section 27-533 of this article.)

(1) CAPACITY. - The capacity of aisles and cross aisles shall be as listed in table 8-1. The unit of exit width shall be twenty-two inches. Seats or other facilities shall not project into an aisle or cross aisle so as to reduce the width of the aisle or cross aisle more than one inch per unit of exit width.

(2) MINIMUM WIDTH. - Aisles and cross aisles shall have a minimum width of forty-four inches except that the width may be at least thirty-six inches under any one or more of the following conditions:

a. In any assembly space having a total of not more than three hundred occupants.

b. When not more than the number of persons permitted for one unit of exit width is served.

c. At the narrowest point when a tapered aisle is permitted under paragraph three of this subdivision.

d. When an aisle parallels and is alongside an enclosure wall or partition that is provided with exit doors spaced not more than sixteen feet on centers, provided such aisle serves only the rows of seats adjacent to it

(3) TAPERED AISLES. - Tapered aisles shall be used where egress is provided only at one end of the aisle, except that uniform aisles may be used when their width for the entire length will accommodate eighty percent of the total occupant load served by the aisle. Tapered aisles shall be widened gradually so that their width at the point of discharge provides for the entire occupant load of the aisle.

(4) UNIFORM AISLES. - Aisles of uniform width shall be used where egress is provided at both ends of an aisle by either cross aisles or exit doors. The width of uniform aisles shall not be less than required for sixty percent of the total occupant load served by the aisles.

(5) AISLE WIDTH AT OPENINGS. - When an aisle or cross aisle discharges directly into exit openings, a space shall be provided in front of such openings that is at least as wide as such openings and at least as deep as the width of the aisle or cross aisle.

(6) CROSS AISLES. - Cross aisles, at any point shall not be closer than twelve feet to a stage area

using scenery or scenic elements. Steppings shall not be permitted in cross aisles.

(7) **AISSLE GRADIENTS AND STEPPINGS.** - The floors of aisles shall have a gradient of not more than one in eight. Where differences in levels require a greater gradient, steps shall be used, complying with the following:

a. When one riser only is used between levels of platforms, its height shall not exceed eight inches, and where more than one riser is used, none shall exceed seven and three-quarter inches.

b. No riser shall be less than four inches high.

c. No riser shall vary from the height of the riser immediately above or below except that risers that are separated by a tread of seventeen inches or more may vary up to one-quarter inch.

d. The width of treads of intermediate steps between platform levels shall be at least nine and one-half inches, but not more than ten and one-half inches, exclusive of nosings.

e. Treads at the level of platforms and seventeen inches or more in width may slope not more than one-quarter inch in twelve inches.

f. No steps shall be used to enter a row of seats from an aisle unless an unobstructed floor space of at least seven square feet is provided at the level of the aisle, between the aisle and the steps.

g. Each step in an aisle shall be marked along its nosing with a permanent contrasting color stripe, and shall be provided with a step light.

h. The line of risers of aisle steppings shall deviate no more than twenty degrees from a line perpendicular to the centerline of the aisle.

(8) **STEPPED AISLE LANDINGS.** - Stepped aisles shall

be provided with landings at exit openings, and shall have a length equal to at least the width of the aisle and a slope of not more than one in twelve.

(9) **LIGHTING.** - Aisles and cross aisles shall be provided at all times with at least one-half foot candle of artificial illumination by electrical means.

(10) **VOMITORIES.** - Vomitories within assembly spaces shall comply with all of the requirements for aisles, and shall have a clear ceiling height of at least seven feet.

§[C26-801.9] 27-533 Travel distance. -

At least one exit opening shall be available from every attached seat or standee space in an assembly space, or from the most remote point in the space when movable seats are provided or, when no seats are provided, within the primary travel distance limitation listed in table 8-1. In addition, an alternate exit opening shall be available from every attached seat or standee space, or from the most remote point when attached seats are not provided within the secondary travel distance limitation listed in

table 8-1. Such alternate exit openings may serve to satisfy the requirements for primary travel distance for other seats or locations. Exit openings satisfying the primary and secondary travel distance requirements for any one seat or location shall be separated from each other by a distance of at least twenty-five feet.

(a) Travel distance shall be the measured distance along centerlines of paths of travel to the centerline of the exit opening, as adjusted by penalties for multi-directional or stepped travel as provided below.

(1) No path of travel shall be permitted through rows of seating other than the first leg of travel from a seat to an aisle.

(2) The first thirty-five feet of a primary path of travel and a secondary path of travel may be common to each other except that this distance may be increased to fifty feet in F-2 places of assembly.

(3) Not more than three changes in direction of travel shall be permitted in the path of travel to an exit opening. A change in direction shall be deemed to occur when it is necessary to change direction by a forty-five degrees or greater angle, measured from the preceding line of travel, except that it shall not be considered as a change in direction when it is necessary in an aisle or cross aisle to travel in another direction not more than seven feet.

(4) Travel distance shall be the sum of the distances of all segments of travel to the exit, computed as follows:

Segment	Length
First leg of travel	Measured distance
Second leg of travel after first change in direction	Measured distance
Third leg of travel after second change in direction	1.25 times measured distance
Fourth leg of travel after third change in direction	1.40 times measured distance
Any leg of travel with four or more steps	1.25 times length of segment as computed above

§[C26-801.10] 27-534 Exit openings. -

Exit openings from assembly spaces shall comply with the following:

(a) **Capacity.** - The capacity of exit openings shall be listed as in table 8-1, based on the number of occupants for whom the opening satisfies the primary travel distance requirement.

(b) **Width.** - Exit openings shall be at least thirty-six inches wide for single doors and at least sixty-six inches but not more than eighty-eight inches wide for doors swinging in pairs, except that in assembly spaces having an occupant load of over three hundred persons, single door openings shall be at least forty-four inches wide.

TABLE 8-1 DETERMINATION OF EXIT AND ACCESS REQUIREMENTS

Occupancy Group Classification	Maximum Travel Distance Within Assembly Space (ft.) ^a		Capacity (number of persons per unit of width)				
			Aisle and Cross Aisle ^e	Doors or Openings		Stairs and Escalators	Ramps, Corridors, Safe Areas, Exit Passageways
	Primary	Secondary		From Assembly Space	From Safe Area		
F-1a ^b	85	125	80	50	100	60	80
F-1b ^c	100	125	90	80	125	80	100
F2	175	250	400	400	500	320	425
F3	100 ^d	125 ^d	90	80	125	80	100
F4	85 ^d	125 ^d	80	50	100	60	80

Notes:

^a See section 27-533. When an exit opening from an assembly space discharges into corridor that does not meet the requirements of this code for a safe area, the travel distance shall include the distance within the corridor to an exit.

^b See paragraph four of subdivision (b) of section 27-546 for stages.

^c See paragraph three of subdivision (b) of section 27-547 for stages.

^d In place of assembly completely equipped with automatic sprinklers, this distance may be increased fifty percent.

^e See section 27-532.

* *Bracket not enacted but probably intended.*

(c) Classification. - Exit openings from assembly spaces shall be classified as follows:

Class 1.- Exit openings that are used for normal entry to the assembly space, and that open directly to a safe area or to an open exterior space.

Class 2.-Exit openings that are not used for normal entry to the assembly space, and that open directly to a safe area or to an open exterior space.

Class 3.-Exit openings that open from the assembly space into corridors, exit passageways, or vertical exits.

(d) Distribution of classes. - The required exit capacity from F-2 places of assembly, and from all other assembly spaces in which the net floor area, exclusive of stage area, is twelve square feet or more per person may be provided by exit openings of any class. The required exit capacity from assembly spaces in which the net floor area, exclusive of stage area, is less than twelve square feet per person shall be distributed so that exit openings of each class are provided to comply with the following requirements:

1. For assembly spaces in which the mean floor level is not more than fifteen feet above or below the adjoining grade elevation, the exit capacity shall be distributed as follows:

Class 1- not less than forty percent

Class 2- not more than sixty percent

Class 3- not more than forty percent

2. For assembly spaces in which the mean floor

level is more than fifteen feet, but not more than thirty feet, above or below the adjoining grade elevation, the exit capacity shall be distributed as follows:

Class 1 - not less than sixty percent

Class 3 - not more than forty percent

3. For assembly spaces in which the mean floor level is more than thirty feet above or below the adjoining grade elevation, the exit capacity shall be distributed as follows:

Class 1- not less than one hundred percent

(e) Location. - No exit opening shall be closer than twelve feet to any part of a stage using scenery or scenic elements. All exit openings shall be clearly identifiable and shall not be disguised as part of a wall or covered in any way to obscure them from view. Where, because of the configuration of the assembly space enclosure, an exit opening is not visible from all seats using it as a means of egress, directional exit signs shall be placed on the enclosure alongside the exit opening to indicate its location. These signs shall be in addition to those required over the exit opening.

(f) Locking. - No exit door shall be locked so as to prevent egress from an assembly space while it is occupied.

§[C26-801.11] 27-535 Safe areas. –

Safe areas shall comply with the following:

(a) When provided to serve class one or class two exit openings safe areas shall be separated from assembly spaces by noncombustible construction having a two hour fire-resistance rating, and shall serve as transition areas in the line and direction of exit travel. They shall serve for normal entry to the assembly space and may be used as corridors, lobbies, or lounges. No room or space classified in occupancy group A, B-1, D-1, or D-2 shall open upon a safe area. Safe areas shall be at a level not more than six feet above or below the level at which egress is made from the assembly space, except that a separate safe area shall not be required for any assembly space having an occupant load of less than one hundred fifty persons and which is served by a safe area of another assembly space, when such safe area is in the direction of egress. Ventilating systems for safe areas shall not be connected to systems serving any other spaces, unless separated from such systems by fire dampers actuated by smoke detectors meeting the construction requirements of subchapter thirteen of this chapter.

(1) COLLECTING SAFE AREAS. -

Places of assembly having more than one assembly space may have a collecting safe area that receives the occupant load discharged into it by other safe areas. Collecting safe areas shall be located within six feet above or below the assembly space nearest to grade.

(2) OCCUPANT LOAD. - The occupant load of a safe area shall be the aggregate occupant load of all exit openings discharging directly into it. The occupant load of a collecting safe area shall be the aggregate occupant load of all exit openings discharging directly into it, plus fifty percent of the occupant load of other safe areas discharging into it.

(3) DIMENSIONS.- Except as provided in subdivision four of this section, the clear unobstructed floor area of each safe area shall be sufficient to accommodate the total occupant load of the safe area on the basis of two square feet per person, not including space occupied by furniture or equipment. The minimum dimension of such unobstructed space shall be eight feet. The width of the unobstructed space shall be measured at right angles to the direction of travel to an exit and shall not be less than required for the occupant load, on the basis of the exit capacity listed in table 8-1. The height of safe areas shall be at least eight feet at all points.

(4) SAFE AREAS NEAR GRADE. - When a safe area provides egress to an open exterior space, either directly or through a vestibule, the safe area need not provide the floor area required by subdivision three of this section when the level of discharge from the safe area to the open exterior space is not more than four feet above or below the grade of the open exterior space.

(5) RAMPS AND STEPS. - Ramps in safe areas shall have a gradient of not more than one in twelve, except that when not exceeding six feet in length, the gradient may be not greater than one in ten. Steps in safe areas shall comply with the following requirements:

a. No riser shall be less than six inches nor more than seven and one-half inches high.

b. No riser shall vary in height from the riser immediately above or below it.

c. Treads in flights of steps shall be at least ten and one-half inches wide exclusive of nosing, and, except as provided in paragraph d of this subdivision, the sum of two risers plus the width of one tread shall be at least twenty-four inches but not more than twenty-five and one-half inches.

d. No change in levels shall have less than three risers, except that where the intervening tread is between twenty-eight inches and thirty-six inches, two risers may be used when the edge of each tread is marked by a contrasting color stripe.

e. Where exit openings from an assembly space are above or below the level of the safe area, a platform shall be provided at the same level as that of the exit opening. The platform shall be at least one foot wider on each side than the exit opening, and shall extend a minimum of six feet in the direction of exit travel. The sides of such platforms, and of steps or ramps leading from them, shall be protected by guards at least three feet high.

(6) EXITS FROM SAFE AREAS. - The capacity of exits from safe areas shall be as listed in table 8-1.

Exit openings from safe areas shall discharge into exit types as provided in subchapter six of this chapter.

(7) DOOR HARDWARE. - Doors from safe areas or from exits from safe areas opening directly to the outdoors and furnished with locks shall be equipped with fire exit bolts complying with the requirements of paragraph two of subdivision (k) of section 27-371 of subchapter six of this chapter.

§[C26-801.12] 27-536 Corridors. -

Corridors shall comply with all of the requirements of subchapter six of this chapter, except as modified below:

(a) Capacity. - The capacity of corridors shall be as listed in table 8-1.

(b) Changes in level. - Changes in level requiring less than three risers in a corridor shall be by a ramp having a slope not greater than one in ten.

§[C26-801.13] 27-537 Exit passageways. –

Exit passageways shall comply with all of the requirements of subchapter six of this chapter, except as modified below:

(a) Capacity. - The capacity of exit passageways shall be as listed in table 8-1.

(b) Changes in level. - Changes in level requiring less than three risers in an exit passageway shall be by a ramp having a slope not greater than one in ten.

§[C26-801.14] 27-538 Vertical exits. –

Stairs, escalators and ramps shall comply with all of the requirements of subchapter six of this chapter, except as modified below:

(a) Capacity. - The capacity of stairs, escalators or ramps shall be as listed in table 8-1.

(b) Width. - The minimum width of stairs shall be at least forty-four inches, except that where the total occupant load is not more than permitted for one unit of exit width, the minimum width may be thirty-six inches.

(c) Unenclosed vertical exits. -

Vertical exits leading directly from one safe area to another, or leading from a safe area directly to an open exterior space, need not be enclosed.

(d) Ramp slope. - Ramps serving as vertical exits shall not have a slope greater than one in ten.

§[C26-801.15] 27-539 Open exterior spaces. -

(a) Capacity. - Open exterior spaces shall be adequate in width and area to accommodate the accumulated occupant load of all exits discharging into them on the basis of two square feet per person.

(b) Minimum dimensions. - The minimum dimensions of open exterior spaces shall be twenty feet, except that when the principal entrance to the place of assembly is from an open exterior space, the minimum dimension of this space shall be thirty feet. No open exterior space shall have less than four hundred square feet of floor area, and floor area shall be measured exclusive of the following:

1. The area immediately outside any exit door from the place of assembly for a distance perpendicular to the exit doors of ten feet for the full width of the exit opening.

2. The area of steps, platforms, stairs, or ramps within or leading to or from the space.

3. The area of obstructions such as shrubs, trees, fixed furniture, signs, sculptures, pools, and similar obstructions to occupancy or exit travel.

(c) Above or below grade. - When an open exterior space is more than fifteen feet above or below the grade of the street or public space to which it discharges, its required area shall be increased by one-third.

(d) Egress from open exterior spaces. -

Exterior exit passageways, ramps, or steps leading from open exterior spaces shall be not less in width than required for the occupant load of all exits discharging into the open exterior space. The width of such exit passageways shall be based on the capacities listed in table 8-1, but in no case less than ten feet. Ramps and steps shall comply with the requirements of paragraph (e) of subdivision five of section 27-535 of this article.

§[C26-801.16] 27-540 Exit lighting. - In addition to the requirements of subchapter six of this chapter, lighting shall be provided in the following areas:

(a) Safe areas. - Safe areas shall be artificially

lighted by electrical means at all times during occupancy of a place of assembly so as to provide illumination of at least five foot candles at the level of the floor and on the surface of all stairs, steps, ramps, and escalators within the safe area.

(b) Open exterior spaces. -Yards or courts which serve as open exterior spaces shall be artificially lighted by electrical means at all times between sunset and sunrise during occupancy of a place of assembly so as to provide illumination of at least five foot candles at the level of the floor over at least the required area.

§[C26-801.17] 27-541 Exit signs. -

Signs meeting the requirements of subchapter six of this chapter and subdivision (e) of section 27-534 of this article shall be provided in all assembly spaces to indicate the location of exits and, where necessary, the direction to the exits. All exit or directional signs shall be placed so that they are clearly visible from all parts of the assembly spaces, and the bottom of all signs shall be at least seven feet above floor level. Signs shall be of the internally lighted type in all assembly spaces where the general illumination is reduced to less than five foot candles during a performance or during occupancy. Signs shall be lighted at all times during occupancy.

§[C26-801.18] 27-542 Emergency lighting. -

All assembly spaces shall be provided with emergency lighting facilities sufficient to provide at least five foot candles of illumination at the floor level. Such lighting shall be on circuits that are separate from the general lighting and power circuits, either taken off ahead of the main switch or connected to a separate emergency lighting power source, and be arranged to operate automatically in the event of failure of the normal lighting system. The provisions of this section shall apply retroactively to all existing places of assembly that are or would be classified in occupancy groups F-3 and F-4 or are changed to such classification under this code, in accordance with the following schedule and specifications:

1. Cabarets, dance halls, night clubs, and taverns having an occupant load exceeding one hundred fifty persons shall complete the installation required by this section on or before April twelfth, nineteen hundred seventy-nine.

2. Cabarets, dance halls, night clubs, and taverns having an occupant load of one hundred fifty persons or less shall complete such installation on or before July twelfth, nineteen hundred seventy-nine.

3. Spaces occupied exclusively as restaurants shall complete such installation on or before October twelfth, nineteen hundred seventy-nine.

4. All other spaces in occupancy groups F-3 and F-4 shall complete such installation on or before January twelfth, nineteen hundred eighty.

5. The wiring shall conform with the electrical code of the city of New York, and have the same protection as specified for wiring in reference standard RS 17-3, RS 17-3A or 17-3B.

6. Storage battery equipment may be used as the sole source of energy provided it conforms with the provisions of section four of reference standard RS 17-3 or consists of two battery packs listed by an acceptable testing laboratory or conforms with nationally accepted standards for such source of emergency energy.

§[C26-801.19] 27-543 Light projection sources. –

Motion picture projection and other light projection sources shall comply with the following:

(a) Film. – The projection, use or storage of film having a nitrocellulose base (commonly known as nitrate film) shall not be permitted except under conditions specified in special permits when issued by the fire department. Safety film meeting the specifications and test standards of reference standard RS 8-1 may be projected, used or stored.

(b) Projection machines. – Projection machines shall meet the requirements of the electrical code of the city of New York. The lamp housing of projection machines using carbon-arc or other light sources that emit gaseous discharge shall be equipped with, or connected to a mechanical ventilation system of adequate capacity to exhaust the products of combustion through ducts directly to the outdoors. Such duct systems shall comply with the requirements of subchapter thirteen of this chapter. When more than one projection machine or other facility employing a carbon-arc or similar light source is used, all may be vented by the same duct system if the capacity is adequate for all facilities so connected.

(c) Other light source facilities. – All devices, such as spotlights, that employ a carbon-arc or other light source that emits gaseous discharge shall be vented directly as required in subdivision (b) of this section, unless the space in which such devices are located is mechanically ventilated and provides at least two thousand cubic feet of room volume for each device.

(d) Light or projection rooms or booths. –

When enclosed, rooms or booths used for the projection of motion picture film or the manipulating of lights shall be built of noncombustible materials, and shall provide a clear working space of at least two feet around the projection apparatus. Such rooms or booths shall be provided with vents opening to a mechanically ventilated area or the outdoors, adequate in size to supply the make-up air required. The rooms or booths shall be provided with at least one noncombustible or metal clad door at least two feet by

six feet opening in the direction of exit travel, and no point within the room, booth, or gallery shall be more than fifty feet from a door opening into a corridor or space that provides access to an exit at a distance not greater than seventy-five feet.

§[C26-801.20] 27-544 Motion picture screens. –

Motion picture screens shall be noncombustible, or have a flame spread rating not over twenty-five, or be of materials that have been rendered flameproof in accordance with the provisions of chapter four of this title. The construction supporting screens shall be noncombustible, and shall comply with the stage rigging requirements of subchapter nine and with the provisions of subchapter ten of this chapter.

ARTICLE 3 F-1 PLACES OF ASSEMBLY

§[C26-802.1] 27-545 General. –

The provisions of this section shall apply to all places of assembly classified in occupancy group F-1 under the provisions of subchapter three of this chapter.

§[C26-802.2] 27-546 F-1a places of assembly. –

F-1a places of assembly shall comply with all of the requirements of article two of subchapter eight of this chapter, and with the following:

(a) Construction in seating areas. –

(1) Scenery or scenic elements may be placed in seating sections of F-1a assembly spaces if such elements:

a. Are noncombustible, or of materials that have been rendered flameproof in accordance with the provisions of chapter four of this title, or have a flame spread rating of twenty-five or less.

b. Are adequately braced or secured.

c. Do not obstruct the required visibility of, or paths of travel to, exit openings.

(2) Platforms or runways for performances, to accommodate the operation of cameras, electronic equipment, or motion picture projection machines not using carbon-arc or other light source that emits a gaseous discharge may be constructed in seating sections, provided such platforms or runways comply with the requirements of paragraph one of subdivision (a) of this section.

(b) Stage requirements. –

(1) DEFINITION. –

For the purposes of this section the stage in an F-1a place of assembly shall include the performing area and all other nonaudience areas that are used in the presentation of a performance and that are open to the performing area. The performing area shall be that area between the outer edge of the stage apron and the furthestmost up-stage acting boundary, the width being the maximum stage opening to the audience.

(2) STAGE FLOOR CONSTRUCTION. -

The floor construction of stages shall provide fire-resistance ratings complying with the requirements of section 27-240 of article two of subchapter three of this chapter and table 3-4 except as follows:

a. Any portion of the stage floor used for passing scenery and scenic elements to a lower level may consist of heavy timber construction supporting tight fitting traps of at least three inch nominal solid wood or of equivalent materials in terms of fire-resistance, strength, and stiffness properties.

b. Stage lifts shall comply with the provisions of subchapter eighteen of this chapter. Any portion of the stage floor that is equipped with stage lifts shall be of noncombustible construction. Joints between lift platforms and adjacent floors shall be tightly fitted.

c. Finish flooring shall comply with the provisions of section 27-351 of article five of subchapter five of this chapter.

(3) AREAS BELOW THE STAGE. -

When the stage floor is equipped with traps or stage lifts, the room or space below the stage into which the traps or lifts open shall be completely enclosed by construction having at least the fire-resistance rating required for the stage floor, and such room or space shall not be used as a workshop or storage area. Storage shall not be deemed to include the location in this area of scenery or scenic elements used during a performance. However, no combustible material that has a flamespread rating greater than twenty-five or that has not been rendered flameproof in accordance with chapter four of this title may be stored in this location at any time. Under-stage areas shall comply with the requirements of paragraph eleven of this subdivision.

(4) EXITS FROM THE STAGE. -

At least two exits, remote from each other, shall be available from every point on a stage, each within a travel distance limitation of one hundred twenty-five feet. The occupant load of the stage shall be based upon one person per fifteen square feet for the performing area and on one person per fifty square feet for the remaining area. When any portion of a stage is used for audience seating at any time, exits of adequate capacity shall be provided for that portion, within the travel distance limitations for assembly space seating. Exit openings serving a stage directly shall have a capacity of seventy-five persons per unit of exit width.

(5) SCENERY AND SCENIC ELEMENTS. - All scenery or scenic elements shall be of noncombustible materials, or of materials having a flame-spread rating not exceeding twenty-five, or of materials that have been rendered flameproof in compliance with the provisions of chapter four of this title. Scenery and scenic elements not complying with the above requirements may be used only when expressly permitted by the fire department.

(6) RIGGING LOFTS, FLY GALLERIES, AND GRIDIRONS. - Girders, beams, or slats of galleries or gridirons over the stage floor or in the rigging loft need not be fire protected but shall be of noncombustible materials designed in accordance with the provisions of subchapters nine and ten of this chapter.

(7) AUTOMATIC SPRINKLER PROTECTION. - Stages in F-1a places of assembly shall be provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter, as follows:

a. Automatic sprinklers shall be placed above all rigging lofts; and above all stage areas, other than those portions of stage areas specifically designated on approved plans as performing areas which do not have rigging lofts above and that are not at any time used for storage purposes. Sprinklers above rigging lofts shall be located so that no gridiron or other obstruction intervenes between the sprinkler heads and the scenery or scenic elements.

b. When any part of a stage is sprinklered in accordance with the provisions of subparagraph a of this paragraph, or when rigging lofts are provided, such stage areas and rigging lofts shall be completely separated from audience areas by a deluge sprinkler system designed to form a vertical water curtain, with heads spaced to provide a water density of at least three gpm per linear foot. The water curtain system shall be controlled by a deluge valve actuated by a "rate of rise system" and "fixed temperature system." The heat actuating devices shall be located on not more than ten foot centers around the perimeter of the sprinklered area or as otherwise required for the type of device used to assure operation of the system. In addition to the automatic controls, manual operating devices shall be located at the emergency control station as required by paragraph ten of this subdivision, and adjacent to at least one exit from the stage. Such exit shall be remote from the emergency control panel.

c. When openings are provided in the stage floor for stage lifts, trap doors or stairs, sprinklers spaced five feet on centers shall be provided around the opening at the ceiling below the stage, and baffles at least twelve inches in depth shall be installed around the perimeter of the opening.

d. All valves controlling sprinkler supplies shall be provided with tamper switches wired to an annunciator panel located at the emergency control panel.

e. The operation of any section of the sprinkler system and the deluge system shall activate the emergency ventilating equipment required in paragraph eight of this subdivision.

f. The water flow alarm, tamper switches and deluge system equipment shall be provided with central station supervision in addition to the required local alarm.

g. Existing premises shall be required to

conform with this requirement on or before January twelfth, nineteen hundred eighty. However, existing sprinkler systems, which have been previously accepted by the department or by the fire department, shall be deemed in compliance with this requirement.

(8) EMERGENCY VENTILATION. - Emergency ventilation shall be provided for all stages in F-1a places of assembly to provide a means of removing smoke and combustion gases to the outdoors in the event of a fire, as follows:

a. A mechanical exhaust system shall be provided of sufficient capacity to exhaust an amount of air at least equal to the sum of the following:

(1) two cfm per square foot of the performing area.

(2) four cfm per square foot of that portion of stage area that is not designated as performing area.

(3) four cfm per square foot of rigging loft area.

b. The exhaust system shall be designated to be activated both manually and automatically, manual operation shall be by means of a manually operated switch located at the emergency control panel as required by paragraph ten of this subdivision and adjacent to at least one exit from the stage. Such exit shall be remote from the emergency control panel. Automatic activation shall be by means of the sensing devices that start the operation of the sprinklers. Exhaust air openings of ducts shall be located so as to provide the most effective removal of smoke and combustion gases.

c. The exhaust system shall be provided with an automatic emergency by-pass damper in the exhaust duct on the suction side of the fan. Such damper shall close to* the fan in the event of a power failure to the fan motor and shall open directly to the outdoors if the fan is located outside the building, or shall open to a duct leading directly to the outdoors if the fan is located inside the building. When located inside the building, the fan shall be insulated with a minimum of one inch magnesia block or the equivalent in insulating and fire-resistive qualities. Exhaust fans shall have drive and bearings located outside of the fan impeller housing. The exhaust system shall not be connected to exhaust openings in any space other than the stage and rigging loft, and shall be constructed to comply with the provisions of subchapter thirteen of this chapter[. All]** switches shall be clearly labelled "emergency stage ventilation" and shall be painted red.

*As enacted but "to" probably intended to be omitted.

** Copy in brackets not enacted but probably intended.

d. The emergency ventilation system shall be connected to both the normal and emergency light and power circuits.

(9) CURTAINS. - No curtain shall be located between the audience area and the stage unless it is designated to permit the air movement required for emergency ventilation in paragraph eight of this subdivision to bypass or pass through the curtain without excessive billowing, and be

made of noncombustible fabrics, as specified in the appendix of reference standard RS 7-3.

(10) EMERGENCY CONTROL PANEL. - An emergency control panel shall be provided, as follows:

a. It shall be located on or adjoining the stage, except that where the stage is surrounded by seating, it shall be located so as to permit a view of the audience and stage areas. It shall be manned in accordance with the requirements of the fire department at all times during the presentation of a performance to an audience.

b. It shall be equipped with tell-tale lights to indicate when feeders and subfeeders of emergency light and power circuits are in operation in assembly spaces and all exits, including safe areas.

c. It shall, when a deluge type sprinkler system is provided, be equipped with manual operating devices to activate the sprinkler system. It shall also be provided with a signal system to show when any portion of the sprinkler system has been deactivated.

d. It shall be provided with switches to provide for operation of the emergency ventilating system. Controls for the ventilating system shall be electrically supervised. The supervisory circuit shall be provided with a trouble bell and light, both of which shall be activated in the event of a failure in the ventilation system. A silencing switch may be provided, and where provided, shall have either an automatic reset or shall ring again when the trouble is corrected.

e. It shall be equipped with a public address system serving loudspeakers in the assembly space. The public address system shall be connected to both the normal and emergency light and power circuits.

f. It shall be equipped with an alarm system and intercom connected to the manager's office, the dressing rooms, and to a supervisory central fire station.

(11) AUXILIARY STAGE SPACES. -

Auxiliary stage spaces such as understage areas, dressing rooms, green rooms, storage rooms, work shops, and similar spaces associated with the use of the stage shall comply with the following:

a. No point within any auxiliary stage space shall be more than fifty feet from a door providing access to an exit.

b. There shall be at least two exits available from every auxiliary space, one of, which shall be available within a travel distance of seventy-five feet. A common path of travel of twenty feet to the two exits shall be permitted.

c. The occupant load of dressing rooms shall be based on one person per fifty square feet of area.

d. Auxiliary stage spaces shall be equipped with automatic sprinklers when required by the provisions of subchapter seventeen of this chapter.

e. No workshop involving the use of combustible or inflammable paint, liquids, or gases or their storage

shall open directly upon a stage.

f. The interior finish of auxiliary stage spaces shall comply with the requirements of table 5-4.

(12) STAGE LIGHTING. - No stage lights shall be placed so that they will develop temperatures on the surface of any material that will cause that material to ignite, or smoke, or cause its flameproofing to deteriorate.

§[C26-802.3] 27-547 F-1b Places of assembly. -

F-1b places of assembly shall comply with all of the requirements of article two of this subchapter, and with the following:

(a) Certificate of occupancy. -

The certificate of occupancy for F-1b places of assembly shall specifically note the prohibition against the use or placement of scenery or scenic elements on or above the stage.

(b) Stage requirements. -

(1) DEFINITION. - For the purposes of this section, the stage in an F-1b place of assembly shall be the area where the principal activity viewed by the audience takes place.

(2) CONSTRUCTION. - Raised platforms may be built as stages in F-1b places of assembly when they are supported on floors having the fire-resistance ratings required by table 3-4, in accordance with the following:

a. The area below the platform shall be enclosed on all sides with solid construction.

b. The horizontal area of stage construction shall not exceed the following:

Wood frame: maximum area-four hundred square feet.

Fire retardant treated wood: maximum area-twelve hundred square feet.

Noncombustible frame: maximum area-unlimited.

c. The floor of the stage, when wood is used, shall be a least one inch nominal thickness, and shall be laid on a solid, noncombustible backing, or all spaces between supporting members shall be fire-stopped with noncombustible material.

d. In all F-1b places of assembly providing live entertainment, at anytime, the stage, dressing rooms and property rooms shall be provided with automatic sprinkler and fire alarm protection in conformance with the provisions of subchapter seventeen of this chapter. Existing premises shall be required to conform with this requirement on or before January twelfth, nineteen hundred eighty. However, existing sprinkler systems, which have been previously accepted by the department or by the fire department, shall be deemed in compliance with this requirement.

(3) EXITS FROM THE STAGE. -

At least two exits, remote from each other, shall be available from every point on a stage, each within a travel distance limitation of one hundred fifty feet.

The occupant load of the stage shall be based upon one person per twenty-five square feet of area. When any portion of a stage is used for audience seating at any time, exits of adequate capacity shall be provided for that portion, within the travel distance limitations for assembly space seating. Exit openings serving a stage directly shall have a capacity of one hundred persons per unit of exit width.

(4) EMERGENCY CONTROL PANEL. - In F-1b places of assembly having an occupant load over six hundred persons, an emergency control panel shall be provided, as follows:

a. It shall be located so as to have a view of the audience and stage areas, and shall be manned during the presentation of a performance to an audience, by a competent person instructed in its use.

b. It shall be equipped with tell-tale lights to indicate when feeders and subfeeders of emergency light and power circuits are in operation in assembly spaces and all exits, including safe areas.

c. It shall be equipped with a public address system serving loudspeakers in the assembly space. The public address system shall be connected to both the normal and emergency light and power circuits.

ARTICLE 4 F-2 PLACES OF ASSEMBLY

§[C26-803.1] 27-548 General. - The provisions of this section shall apply to all places of assembly classified in occupancy group F-2 under the provisions of subchapter three. F-2 places of assembly shall comply with all of the requirements of article two of this subchapter, and with the following:

(a) Enclosure. - To qualify as an F-2 outdoor place of assembly, a place of assembly shall have at least forty percent of the combined surface area of all exterior wall and roof planes open to the outdoors. When a portion of an outdoor place of assembly is enclosed to a greater extent, that portion shall comply with all of the requirements of this code applicable to indoor places of assembly.

(b) Grandstands. - Grandstands shall comply with the following:

(1) CONSTRUCTION.- Grandstands shall be designed in accordance with the requirements of subchapters nine and ten of this chapter.

(2) HEIGHT AND AREA.- Grandstands, when built entirely of noncombustible materials, may be of unlimited height and area, and when built of combustible materials, shall be subject to the following limitations:

a. No section of seating shall exceed twenty feet in height, or exceed ten thousand square feet in area.

b. When more than one section of seating is provided, and the separation between them is less than fifty feet, each section shall be separated from the other by construction having a fire-resistance rating of

a least two hours and rising to a height of at least two feet six inches above the levels of seating at each row.

c. No outdoor grandstand of combustible materials shall be erected within less than two-thirds of its height, but in no case less than ten feet, of a building or an interior lot line unless separated therefrom by noncombustible construction having a one hour fire-resistance rating.

(3) SPACES UNDER SEATS. -

Spaces under grandstand seats shall be kept free of all combustible materials and shall not be occupied or used for other than egress, unless such spaces are completely enclosed by noncombustible construction having a two hour fire-resistance rating.

(4) PARKING. - Motor vehicle parking spaces shall not be closer than twenty feet to any grandstand unless separated therefrom by noncombustible construction having a one hour fire-resistance rating.

(c) Stage requirements. -

(1) DEFINITION. - For the purposes of this section the stage in an F-2 place of assembly shall be the area where the principal activity viewed by the audience takes place.

(2) CONSTRUCTION. - The horizontal area of stage construction shall not exceed the following:

Wood frame: maximum area-five thousand square feet.

Fire retardant treated wood: maximum area-ten thousand square feet. Noncombustible frame: maximum area-unlimited.

(3) EXITS FROM THE STAGE. -

At least two exits, remote from each other, shall be available from every point on a stage, each within a travel distance limitation of three hundred feet. The occupant load of the stage shall be based upon one person per fifty square feet of area. When any portion of a stage is used for audience seating at any time, exits of adequate capacity shall be provided for that portion, within the travel distance limitations for assembly space seating. Exit openings serving a stage directly shall have a capacity of four hundred persons per unit of exit width.

(4) EMERGENCY CONTROL PANEL. -

In F-2 places of assembly having an occupant load over one thousand persons, an emergency control panel shall be provided as follows:

a. It shall be located so as to have a view of the audience and stage areas, and shall be readily accessible at all times during the presentation of a performance to an audience, to a competent person instructed in its use.

b. It shall be equipped with tell-tale lights to indicate when feeders and subfeeders of emergency light and power circuits are in operation in assembly spaces and all exits.

c. It shall be equipped with a public address system serving loudspeakers in the assembly space. The public address system shall be connected to both the normal and emergency light and power circuits.

(d) Drive-in-theaters-

Drive-in theaters shall comply with the following:

(1) Projection booths and projection machines shall comply with the requirements of section 27-543 of article two of this subchapter. Motor vehicle parking spaces shall not be closer than twenty feet to any projection booth or machine.

(2) Projection screens and supporting structures shall comply with the requirements of section 27-544 of article two of this subchapter and shall be designed in accordance with the requirements of subchapters nine and ten of this chapter as applied to signs. Motor vehicle parking spaces shall not be closer than twenty feet to any projection screen.

(e) Amusement parks. - Buildings and structures within amusement parks shall be constructed to conform with all of the requirements of this code governing the specific use and occupancy. Amusement devices shall not be placed in operation until they have been made to comply with the provisions of subchapter eighteen of this chapter.

ARTICLE 5 F-3 AND F-4 PLACES OF ASSEMBLY

§[C26-804.1] 27-549 General. -

The provisions of this section shall apply to all places of assembly classified in occupancy group F-3 or F-4 under the provisions of subchapter three of this chapter. F-3 or F-4 places of assembly shall comply with all the requirements of article two of this subchapter and the following:

(a) Stage requirements. -

(1) With scenery and scenic elements. - Where an F-3 or F-4 place of assembly provides a stage using scenery and scenic elements, the space shall comply with all of the requirements of this code applicable to F-1a places of assembly.

(2) Without scenery and scenic elements. - Where an F-3 or F-4 place of assembly provides a stage not using scenery or scenic elements, the space shall comply with all of the requirements of this code applicable to F-1b places of assembly.

(3) Cabarets. - In all F-4 places of assembly used as a cabaret, the stage dressing rooms and property rooms shall be provided with automatic sprinkler and fire alarm protection in compliance with the provisions of subchapter seventeen of this chapter. Existing premises shall be required to conform with this requirement on or before January twelfth, nineteen hundred eighty.

(b) Retroactive provisions.- On or before January twelfth, nineteen hundred eighty, all places of assembly providing entertainment or used as a cabaret within F-3 or F-4 occupancies shall be provided with automatic sprinkler and fire alarm protection to comply with the provisions of subchapter seventeen of this chapter.

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SUBCHAPTER 9 LOADS

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**	
[900.0]	Art. 1	General
[900.1]	550	Scope
[900.2]	551	Standards
[900.3]	552	Definitions
[901.0]	Art. 2	Dead Loads
[901.1]	553	Construction Materials and Assembled Elements of Construction
[901.2]	554	Service Equipment
[901.3]	555	Partition Loads
[902.0]	Art. 3	Live Loads
[902.1]	556	General
[902.2]	557	Floor Live Loads
[902.3]	558	Live Loads for Sidewalks, Driveways, and Railings
[902.4]	559	Columns in Parking Areas
[902.5]	560	Stage Areas Using Scenery or Scenic Elements
[902.6]	561	Roof Loads
[902.7]	562	Moving Loads
[902.8]	563	Partial Loading Conditions
[902.9]	564	Floor Loads to be Posted
[903.0]	Art. 4	Live Load Reduction
[903.1]	565	Roof Loads
[903.2]	566	Floor Live Loads
[903.3]	567	Contributory Floor Areas
[903.4]	568	Foundations and Column Supports
[904.0]	Art. 5	Wind Loads and Earthquake Loads
[904.0]	569	Wind Loads and Earthquake Loads
[905.0]	Art. 6	Other Loads
[905.1]	570	Earth Pressures and Foundation Loads
[905.2]	571	Bins and Bunkers
[905.3]	572	Prestressing Forces
[905.4]	573	Construction Loads
[905.5]	574	Fluid Pressures
[905.6]	575	Ice
[905.7]	576	Thermal Forces
[905.8]	577	Shrinkage
[906.0]	Art. 7	Distribution of Loads
[906.1]	578	Distribution of Vertical Loads
[906.2]	579	Distribution of Horizontal Loads

*"C26" omitted from section numbers in this column.

** "27" omitted from section numbers in this column.

LIST OF TABLES

Table No.

9-1 Percentage of Live Load

ARTICLE 1 GENERAL

§[C26-900.1] 27-550 Scope. -

Buildings and parts thereof, shall be capable of resisting all levels*** actually imposed thereon without exceeding the allowable stresses prescribed in subchapters ten and eleven of this chapter. In no cases shall the assumed loads be less than the minimum values described herein. In addition, within special flood hazard areas, and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, applicable load requirements of reference standard RS 4-5 shall be applied.

*** *As enacted but "loads" probably intended.*

§[C26-900.2] 27-551 Standards. -

The provisions of reference standard RS-9 shall be a part of this subchapter.

§[C26-900.3] 27-552 Definitions. -

For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

ARTICLE 2 DEAD LOADS

§[C26-901.1] 27-553 Construction materials and assembled elements of construction. - Except as provided in section 27-555 of this article, the dead load shall be the actual weight of the building materials or construction assemblies to be supported, computed from the unit weights given in reference standard RS 9-1. Where unit weights are not established in reference standard RS 9-1, the actual weights may be determined by analysis or from data in manufacturers' drawings or catalogs. Unit weights less than those given in reference standard RS 9-1 may be used only with approval of the commissioner.

§[C26-901.2] 27-554 Service equipment. - Provision shall be made for the weights of all building service equipment including plumbing stacks, piping, heating and air conditioning equipment, electrical equipment, elevators, elevator machinery, flues, and similar fixed equipment. The weights of such equipment (or the allowances therefor) shall be included in the dead load. The weight of equipment that is part of the occupancy of a given area shall be considered as live load. See also paragraph two of subdivision (b) and subdivision (d) of section 27-557 of article three of this subchapter.

§[C26-901.3] 27-555 Partition loads. - Weights of all partitions shall be considered, using either actual weights at locations shown on the plans or the equivalent uniform load given in subdivision (b) of this section.

(a) Actual loads. - Where actual partition weights are

used, the uniform design live load may be omitted from the strip of floor area under each partition.

(b) Equivalent uniform load. - The equivalent uniform partition loads in reference standard RS 9-1 may be used in lieu of actual partition weights except for bearing partitions or partitions in toilet room areas (other than in one- and two-family dwellings), at stairs and elevators, and similar areas where partitions are concentrated. In such cases, actual partition weights shall be used in design. Except as otherwise exempted, equivalent uniform loads shall be used in areas where partitions are not definitely located on the plans, or in areas where partitions are subject to rearrangement or location.*

**As enacted but "relocation" probably intended.*

ARTICLE 3 LIVE LOADS

§[C26-902.1] 27-556 General. -

In addition to the applicable dead, wind, and other loads, the building shall be designed for uniform live loads, for concentrated live loads, or for concurrent combinations of uniform and concentrated live loads, whichever produce the greatest stress.

§[C26-902.2] 27-557 Floor live loads. -

(a) Uniformly distributed live loads. - The minimum design values established in reference standard RS 9-2 for various occupancies or uses shall be used subject to the provisions of subdivision (d) of this section. Where the occupancy or use of a space does not conform to any of those listed, the design load shall be determined by the architect or engineer subject to approval by the commissioner.

(b) Concentrated live loads. -

(1) The building framing shall be capable of supporting the concentrated live loads established in reference standard RS 9-2, placed so as to produce maximum stress.

(2) Floors that support any items of machinery, electrical or mechanical equipment, or other concentrated live load in excess of one thousand pounds (including the weights of pads or bases) shall be designed to support such weight as a concentrated load or group of concentrated loads.

(c) Nonconcurrency. -

(1) When a concentrated live load is present, the uniformly distributed load may be considered to be omitted in the area occupied by the concentrated load.

(2) Where reference standard RS 9-2 indicates that the concentrated live load is nonconcurrent with the uniform live load, it may be assumed that the total concentrated load is to be omitted when the uniform load is present and that the total uniform load is to be omitted when the concentrated load is present.

(d) Conformance. - For purposes of determining that the magnitude of the actual live load conforms to or is less than the minimum design live load established in this section, the actual uniform live load shall be approximated by averaging the total load actually applied over a rectangular area of one hundred fifty

square feet having no side less than eight feet.

§[C26-902.3] 27-558 Live loads for sidewalks, driveways, and railings. -

(a) Sidewalks and driveways. -

(1) When supported on grade, all sidewalks for new buildings and alterations shall be subject to inspection and acceptance by the commissioner. Portions of such sidewalks that are located between the curb line and the street line shall be constructed in compliance with the specifications for concrete sidewalks of the department of transportation.

(2) All sidewalks and driveways or portions thereof that are structurally supported shall be designed for a live load of one hundred psf uniformly distributed and in accordance with the provisions of subchapter ten of this chapter. Where subject to intentionally or accidentally imposed wheel loads of vehicles, such portions of sidewalks and driveways shall be designed for a uniformly distributed load of six hundred psf or for the maximum vehicular wheel load that could be imposed thereon, whichever develops the greater stresses.

(3) Appurtenant components of sidewalks and driveways, including manholes, manhole covers, vault covers, gratings, etc., shall be designed for the loads prescribed in paragraph two of this subdivision, or shall conform to the standards of the city agency having jurisdiction.

(b) Railings and parapets. -

(1) Railings and parapets around stairwells, balconies, areaways, and roofs, and other railings in similar locations other than those for places of assembly, shall be designed to resist the simultaneous application of a lateral force of forty plf and a vertical load of fifty plf, both applied to the top of the railing. For railings and parapets at the front of theater balconies and in similar locations in places of assembly, the lateral force shall be increased to fifty plf and the vertical load to one hundred plf. An exception is made for railings in one- and two-family dwellings, which shall be designed for a lateral force of twenty plf plus a vertical load of twenty plf, both applied at the top of the railing. The total lateral force and total vertical load shall be at least two hundred pounds each.

(2) Intermediate and bottom rails, if provided, shall be designed for the simultaneous application of forty plf applied horizontally and fifty plf applied vertically; however, lateral and vertical design loads on intermediate and bottom rails need not be considered in the design of posts and anchorages. For railings having solid panels, the panels shall be designed for a uniform lateral load of twenty psf.

(3) Where railings or parapets support fixtures, allowance shall be made for the additional loads imposed thereby.

(4) Railings, bumpers, or similar devices used in parking areas to resist the impact of moving vehicles shall be designed to resist a lateral load of three hundred plf applied at least twenty-one inches above

the roadway; but in no case shall the load be less than twenty-five hundred pounds per vehicle.

§[C26-902.4] 27-559 Columns in parking areas. -

Unless specially protected, columns in parking areas subject to impact of moving vehicles shall be designed to resist the lateral load due to impact and this load shall be considered a load of infrequent occurrence. For passenger vehicles, this lateral load shall be taken as a minimum of twenty-five hundred pounds applied at least twenty-one inches above the roadway and acting simultaneously with other design loads.

§[C26-902.5] 27-560 Stage areas using scenery or scenic elements. - Scenery battens and suspension systems shall be designed for a load of thirty pounds per linear foot of batten length. Loft block and head block beams shall be designed to support vertical and horizontal loads corresponding to a four inch spacing of battens for the entire depth of the gridiron. Direction and magnitude of total forces shall be determined from the geometry of the rigging system including load concentrations from spot line rigging. Locking rails shall be designed for a uniform uplift of five hundred psf with a one thousand pound concentration. Impact factor for batten design shall be seventy-five percent and for loft and head block beams shall be twenty-five per cent. A plan drawn to a scale not less than one-quarter inch equals one foot shall be displayed in the stage area indicating the framing plan of the rigging loft and the design loads for all members used to support scenery or rigging. Gridirons over stages shall be designed to support a uniformly distributed live load of fifty psf in addition to the rigging loads indicated.

§[C26-902.6] 27-561 Roof loads. -

Roofs and marquees shall be designed for wind, live, and other loads as prescribed in subdivisions (a) through (d) of this section. It may be assumed that maximum wind load occurs with zero live load and that maximum live load occurs with zero wind load. For dwellings an exception is made for awnings, canopies, and patio covers, which may be designed for a live load of twenty psf of horizontal projection.

(a) Live load. - Minimum design live loads shall be as follows:

(1) For roofs with slopes up to and including twenty degrees from the horizontal, thirty psf of horizontal projection.

(2) For roofs with slopes greater than twenty degrees from the horizontal, thirty psf of horizontal projection, reduced by one psf for each degree of slope in excess of twenty degrees.

(3) For valleys, live loadings shall be increased to provide for accumulations of snow. The loading intensity shall be assumed to vary from forty-five psf at the low point to fifteen psf at the ridge.

(4) For roofs having curved or pyramidal shapes, the

proposed live load shall be established by the architect or engineer, subject to approval by the commissioner.

(b) Wind load. - The provisions of section 27-569 of article five of this subchapter shall apply.

(c) Concentrated loads. -

The provisions of subdivision (b) of section 27-557 of this article shall apply.

(d) Special loads. -

(1) When used for purposes such as promenades, assembly areas, or roof gardens, design shall be made for live loads corresponding to the particular usage, as indicated in reference standard RS 9-2. Such loads shall be considered as nonconcurrent with the wind load or with the live load specified in subdivision (a) of this section. The design live and wind loads for roofs, as specified elsewhere in this subchapter, shall be deemed to provide for incidental use of the roof of a building by the occupants thereof.

(2) Where roofs are intended for the ponding of water, the roof shall be designed for the maximum possible depth of water which may be ponded thereon as determined by the relative levels of roof deck and overflow weirs or scuppers. Such load need not be considered as occurring simultaneously with wind or live load.

(3) Girders and roof trusses (other than joists) over garage areas regularly utilized for the repair of vehicles and over manufacturing floors or storage floors used for commercial purposes shall be capable of supporting, in addition to the specified live and wind loads, a concentrated live load of two thousand pounds applied at any lower chord panel point for trusses, and at any point of the lower flange for girders.

(4) Where roofs are landscaped, the uniform design live load on the landscaped portions shall be thirty psf. The weight of the landscaping materials shall be considered as dead load and shall be computed on the basis of saturation of the earth. The areas adjacent to the landscaped portions shall be considered as assembly areas, unless specific provision is made to prevent such use.

(5) Where equipment is placed on roofs, the design shall provide for the support of such equipment.

§[C26-902.7] 27-562 Moving loads. -

Where applicable to the use or occupancy of the building, the design shall consider the moving loads described below.

(a) General. - The loads established in subdivisions (a) and (b) of section 27-557 of this article shall be assumed to include allowance for ordinary impact conditions.

(b) Passenger vehicles. - Areas used for, and restricted by physical limitations of clearance to, the transit or parking of passenger vehicles shall be designed for the uniformly distributed and concentrated loads for parking areas for such vehicles as provided in reference standard RS 9-2, applied without impact. An exception is made for members or constructions which,

because of physical limitations, cannot be subjected to direct load from the vehicle or from a jack or hoist used to shall be designed for the loads corresponding raise or suspend the vehicle. Such members or constructions to the actual usage.

(c) Truck loads. - Minimum loads (including vertical, lateral, and longitudinal) and the distribution thereof shall meet the applicable requirements or reference standard RS 9-3, except that impact shall be taken as ten percent of the vertical reaction.

(d) Railroad equipment. - Minimum loads (including vertical, lateral, longitudinal, and impact) and the distribution thereof shall meet the applicable requirements of reference standard RS 9-4.

(e) Crane runways and supports. -

(1) VERTICAL LOADS. - Actual maximum wheel loads occurring when the crane is lifting its capacity load shall be used. To allow for impact, the lifted load shall be increased twenty-five percent or the wheel loads increased fifteen percent whichever produces greater stress condition.

(2) HORIZONTAL LOADS. -

a. Lateral load (due to crane trolley travel) shall be twenty percent of the sum of the capacity load and the trolley weight, applied one-half at the top of each rail and acting in either direction normal to the runway rail.

b. Longitudinal load (due to crane travel) shall be twenty percent of the maximum total reaction (not including impact) on the rail being considered, applied at the top of the rail and acting parallel to the runway.

(f) Monorail beams and supports. -

(1) Vertical loads shall be the sum of the capacity load and trolley weight. To allow for impact, the lifted load shall be increased ten percent for hand-operated and twenty-five percent electrically-operated trolleys.

(2) Longitudinal loads shall be twenty percent of the sum of the capacity load and the weight of the trolley.

(3) Lateral loads shall be twenty percent of the sum of the capacity load and the weight of the trolley.

(4) Centrifugal forces shall be considered for curved tracks.

(g) Loads on supports for elevators, dumbwaiters, and escalators. - The provisions of subchapter eighteen of this chapter shall apply.

(h) Loads on machinery supports. -

Unless machinery is isolated from the support framing, the reactions of reciprocating or heavy power-driven units shall be increased at least fifty percent and reactions of light shaft - or motor-driven [*sic*] units shall be increased at least twenty-five percent to provide for impact.

(i) Assembly structures. -

Seating areas in grandstands, stadiums, and similar assembly structures shall be designed to resist the simultaneous application of a horizontal swaying load of at least twenty-four plf of seats applied in a direction parallel to the row of the seats, and of at least ten plf of

seats in a direction perpendicular to the row of the seats. When this load is used in combination with wind for outdoor structures, the wind load shall be one-half of the design wind load, and the provisions of subchapter ten of this chapter relating to infrequent stress conditions shall apply to this loading condition.

(j) Heliports and helistops. -

(1) CONCENTRATED LOADS. -

a. Landing area. - Helicopter landing areas shall be designed for either of the following vertical loads acting at any location:

1. A single concentrated load equal to three quarters of the gross weight of the helicopter and acting on an area of one square foot.

2. Concentrated loads representing the gross wheel reactions of the helicopter acting simultaneously and increased one-third for impact.

b. Taxiing area. - Helicopter taxiing areas shall be designed for concentrated loads in accordance with clause two of this subparagraph.

(2) UNIFORM LIVE LOAD. -

The landing and taxiing areas shall be capable of supporting a uniformly distributed live load of forty psf acting nonconcurrently with the concentrated loads.

§[C26-902.8] 27-563 Partial loading conditions. -

(a) Uniformly distributed loads. -

In continuous framing and cantilever construction, the design shall consider live load on all spans and arrangements of partial live load that will produce maximum stresses in the supporting members. The simplifications given in paragraphs one through three of this subdivision are permissible.

(1) FLOOR AND ROOF FRAMING. -

a. For vertical live load applied to the level under consideration, the far ends of the columns above and below that level may be assured* as fixed.

b. Combinations of live load may be limited to the following:

1. Live load placed on two adjacent spans.

2. Live load placed on alternate spans. The effects of live load on spans more than two spans away from the span under consideration may be neglected.

(2) ARCHES AND GABLED FRAMES. -

a. Live load placed on 1/2 span adjacent to one support.

b. Live load placed on the center 1/4 span.

c. Live load placed on 3/8 the span adjacent to each support.

(3) COLUMNS. - Moments due to vertical loads may be calculated from the live load on the largest single adjacent span of the floor under consideration. This moment shall be assumed to act concurrently with live load on all other floors.

(b) Moving concentrated loads. -

Structural members supporting moving concentrated loads shall be designed for only those loads that can physically occur simultaneously and are arranged to produce maximum stresses.

**As enacted but "assumed" probably intended.*

§[C26-902.9] 27-564 Floor loads to be posted. -**(a) Posting required. -**

Posting requirements shall conform to the requirements of section 27-225 of article twenty-three of subchapter one of this chapter.

(b) Data required. - The following floor load data shall be shown:

(1) The uniformly distributed design live load for each floor or part thereof.

(2) The weight of any piece of machinery or equipment weighing more than one thousand pounds, and its identifying description and location.

(3) The maximum design wheel load and total maximum weight of any vehicle that may be brought into the building.

(4) The equivalent uniform partition loads or, in lieu of this, a statement to the effect that the design was predicated on actual partition loads.

ARTICLE 4 LIVE LOAD REDUCTION**§[C26-903.1] 27-565 Roof loads. -**

No reduction shall be permitted.

§[C26-903.2] 27-566 Floor live loads. -

The uniform live load to be used for design shall be the basic value established in reference standard RS 9-2 multiplied by the percentages given in subdivisions (a) through (d) of this section.

(a) Except as provided in subdivisions (b), (c), and (d) the percentages in table 9-1 shall apply. Contributory areas shall be computed in accordance with section 27-567 of this article.

(b) No live load reduction shall be permitted for the following: members and connections (other than columns, piers, and walls) supporting floor areas used for storage (including warehouses, library stacks, and record storage); areas used for parking of vehicles; and areas used as place of assembly, for manufacturing, and for retail or wholesale sales. For columns, piers, and walls supporting such floor areas the maximum live load reduction shall be twenty percent.

(c) No live load reduction shall be permitted for calculating shear stresses at the heads of columns *[sic]* in flat slab or flat plate construction.

(d) In lieu of the percentages given in table 9-1, the live load reductions for columns, piers and walls may be taken as fifteen percent of the live load on the top floor, increased successively at the rate of five percent on each successive lower floor, with a maximum reduction of fifty percent; and for girders supporting two hundred square feet or more of floor area, the live load reduction may be taken at fifteen percent. The limitations of subdivisions (b), (c) and (d) of this section shall apply.

TABLE 9-1 PERCENTAGE OF LIVE LOAD*

Contributory Area (sq. ft.) <i>[sic]</i>	Ratio of Live Load to Dead Load*		
	0.625 or less	1	2 or more
149 or less.....	100	100	100
150-299.....	80	85	85
300-449.....	60	70	75
450-599.....	50	60	70
600 or more.....	40	55	65

Note for Table 9-1:

*For intermediate values of live load/dead load, the applicable percentages of live load may be interpolated.

§[C26-903.3] 27-567 Contributory floor areas. -

For purposes of computing live load reduction, contributory floor areas shall be determined as follows:

(a) For the design of one-way and two-way slabs: the product of the shorter span length and a width equal to one-half the shorter span length. Ribbed slabs shall be considered as though the slabs were solid.

(b) For the design of slabs in flat plate or flat slab construction: one-half the area of the panel.

(c) For the design of columns and girders or trusses framing into columns: the loaded area directly supported by the column, girder, or truss. For columns supporting more than one floor, the loaded area shall be the cumulative total area of all of the floors that are supported.

(d) For the design of joists and similar multiple members framing into girders or trusses, or minor framing around openings: twice the loaded area directly supported but not more than the area of the panel in which the framing occurs.

§[C26-903.4] 27-568 Foundations and column supports.-

The live load to be supported by the foundation or by trusses or girders that support columns shall be the total column reaction reduced as provided in section 27-566 and section 27-567 of this article.

ARTICLE 5***WIND LOADS AND EARTHQUAKE LOADS*****§[C26-904.0] 27-569 Wind loads and earthquake loads.-****(a) Wind loads.-**

The structural frame and exterior components of all buildings, tanks, and other exposed constructions shall be designed to resist the pressures due to wind as prescribed in reference standard RS 9-5. Wind shall be assumed to act from any direction. For continuous framing, the effects of partial loading conditions shall be considered.

(b) Earthquake loads.

Every building, structure and portion thereof shall, at a minimum, be designed and constructed to resist the effects of seismic ground motions as prescribed in reference standard RS 9-6.

**Local Law 17-1995.*

ARTICLE 6 OTHER LOADS

§[C26-905.1] 27-570 **Earth pressures and foundation loads.** - The provisions of article three of subchapter eleven of this chapter shall apply.

§[C26-905.2] 27-571 **Bins and bunkers-**

Loads on component parts of bins and bunkers may be reduced for friction on sidewalls, provided that sidewalls and supports are proportioned for the increased vertical loads. Where stresses would be increased in any component by arching of the fill, the effect of such arching shall be considered.

§[C26-905.3] 27-572 **Prestressing forces.** -

Prestressing forces shall be considered in the design of prestressed concrete structures, cable structures, guyed structures, and multiple intersecting truss webs utilizing tension members.

§[C26-905.4] 27-573 **Construction loads.** -

The provisions of subchapter nineteen of this chapter shall apply.

§[C26-905.5] 27-574 **Fluid pressures.** -

The design of building components shall consider pressures, both positive and negative, of confined fluids and gases.

§[C26-905.6] 27-575 **Ice.** -

The weight of a one-half inch radial thickness of ice on all surfaces shall be considered as part of the live load in the design of open framed or guyed towers.

§[C26-905.7] 27-576 **Thermal forces.** -

The design of enclosed buildings more than two hundred fifty feet in plan dimension shall provide for the forces and/or movements resulting from an assumed expansion corresponding to a change in temperature of forty degrees F. For exterior exposed frames, arches, or shells regardless of plan dimensions, the design shall provide for the forces and/or movements resulting from an assumed expansion and contraction corresponding to an increase or decrease in temperature of forty degrees F for concrete or masonry construction and sixty degrees F for metal construction. For determining required anchorage for piping, the forces shall be determined on the basis of temperature variations for the specific service conditions. Friction forces in expansion bearings shall be considered.

§[C26-905.8] 27-577 **Shrinkage.** -

The design of reinforced concrete components shall provide for the forces and/or movements resulting from shrinkage of the concrete in the amount of 0.0002 times the length between contraction joints for standard weight concrete, and 0.0003 times the length between contraction joints for lightweight concrete. The design of arches and similar structures shall provide for effects of shrinkage, plus rib-shortening, plus plastic flow.

ARTICLE 7 DISTRIBUTION OF LOADS

§[C26-906.1] 27-578 **Distribution of vertical loads.-**

Distribution of vertical loads to supporting members shall be determined on the basis of a recognized method of elastic analysis or system of coefficients of approximation. Elastic or inelastic displacements of supports shall be considered and, for the distribution of dead loads, the modulus of elasticity of concrete or composition sections shall be reduced to consider plastic flow. Secondary effects, due to warping of the floors shall be considered.

§[C26-906.2] 27-579 **Distribution of horizontal loads.** - The following provisions shall apply to superstructure framing only, and shall not apply to structures wherein horizontal loads are transmitted to the foundation by stay-cables, arches, non-rectangular frames, or by frames, trusses, or shear walls not oriented in vertical planes.

(a) **Distribution of horizontal loads to vertical frames, trusses and shear walls.** - Horizontal loads on the superstructure shall be assumed to be distributed to vertical frames, trusses, and shear walls by floor and roof systems acting as horizontal diaphragms. The proportion of the total horizontal load to be resisted by any given vertical frame, truss, or shear wall shall be determined on the basis of relative rigidity, considering the eccentricity of the applied load with respect to the center of resistance of the frames, trusses, or shear walls. For vertical trusses, web deformations shall be considered in evaluating the rigidity.

(b) **Distribution of horizontal loads within rigid frames of tier buildings.** -

(1) **ASSUMPTIONS.** - The distribution of horizontal loads within rigid frames of tier buildings may be determined on the basis of a recognized method of elastic analysis or, subject to limitations in paragraph two of this subdivision, may be predicated on one or more of the following simplifying assumptions:

a. Points of inflection in beams or columns are at their midspan and midheight, respectively. The story shear is distributed to the columns in proportion to their stiffnesses.

b. The change in length of columns due to axial effects of the horizontal loads may be neglected.

c. Vertical column loads due to horizontal forces are taken by the exterior columns only, or are resisted by the columns in proportion to the column distances from the neutral axis of the bent.

(2) **LIMITATIONS.** -

a. For buildings over three hundred feet in height, the change in length of the columns, due to the effects of the horizontal loads, shall be evaluated or the framing proportioned to produce regular movements of the successive joints at each floor so that warping of the floor system may be neglected.

b. Simplifying assumptions used in design shall be subject to approval by the commissioner for any of the following conditions or circumstances:

1. For buildings over three hundred feet in height or for buildings with a height-width ratio greater than five.
2. At two-story entrances or intermediate floors.
3. Where offsets in the building occur.
4. Where transfer columns occur.
5. In any similar circumstances of irregularities or discontinuities in the framing.

(c) Distribution of load in self-relieving construction.- the framing of self-relieving construction may be proportioned on the assumption that connections are fully rigid in resisting moments due to lateral load and that any larger moments due to the gravity loads or due to a combination of gravity and lateral loads will be relieved by deformation of the connection material, provided that:

(1) The fasteners shall be capable of developing the full moment capacity of the connection at the allowable unit stress established in subchapter ten of this chapter.

(2) The connection shall be capable of resisting the moment due to lateral load, and the shear due to lateral load plus vertical load, all at the allowable unit stresses established in subchapter ten of this chapter.

(3) The framing and the building are within the limitations established in subparagraph (b) of paragraph two of subdivision (b) of this section.

(4) The connections shall be detailed to permit the required deformations without fracture, and their capacity to so function shall be verified by test or other means.

(d) Structural walls and partitions. -

Walls and partitions, if specifically designed to resist the applied forces, may be considered as contributing to the resistance or rigidity of the structure with regard to horizontal loads.

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SUBCHAPTER 10 STRUCTURAL WORK

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**		[1004.10]		
			[1004.11]	611.1	Conveying Concrete by Pumping Methods
				612	Formwork
				613	Concrete Utilizing Preplaced Aggregate
				613.1	Precast and Prestressed Concrete
				613.2	Thin-Section Precast Concrete Construction
[1000.0]	Art. 1	Scope and General Requirements	[1005.0]	Art. 6	Steel
[1000.1]	580	Scope	[1005.1]	614	General Requirements
[1000.2]	581	Standards	[1005.2]	615	Identification
[1000.3]	582	Definitions	[1005.3]	616	Quality Control
[1000.4]	583	Plans	[1006.0]	Art. 7	Wood
[1000.5]	584	Permits	[1006.1]	617	General Requirements
[1000.6]	585	General Requirements	[1006.2]	618	Identification
[1000.7]	586	Materials and Methods of Construction	[1006.3]	619	Use of Non-Stress Grade Wood
			[1006.4]	620	Quality Control
[1000.8]	587	Fire Protection	[1006.5]	621	General Construction Requirements
[1000.9]	588	Use of Used and Unidentified Materials	[1006.6]	622	Empirical Provisions in Lieu of Design
[1000.10]	589	Equivalent Systems of Design	[1006.7]	623	Heavy Timber Construction (Construction Class II-A)
[1000.11]	590	Deferred Detailing			
[1001.0]	Art. 2	Structural Design-General Requirements	[1006.8]	624	Construction Methods
[1001.1]	591	Stability	[1007.0]	Art. 8	Aluminum
[1001.2]	592	Bracing	[1007.1]	625	General Requirements
[1001.3]	593	Secondary Stresses	[1007.2]	626	Identification
[1001.4]	594	Combination of Loads	[1007.3]	627	Quality Control
[1001.5]	595	Deflection Limitations	[1007.4]	628	Erection
[1002.0]	Art. 3	Adequacy of the Structural Design	[1008.0]	Art. 9	Reinforced Gypsum Concrete
[1002.1]	596	General	[1008.1]	629	General Requirements
[1002.2]	597	Questionable Construction	[1008.2]	630	Identification of Metal Reinforcement
[1002.3]	598	Core Tests of Concrete Construction			
			[1008.3]	631	Limitations of Use
[1002.4]	599	Load Tests	[1009.0]	Art. 10	Thin Shell and Folded-Plate Construction
[1003.0]	Art. 4	Masonry	[1009.1]	632	General Requirements
[1003.1]	600	General Requirements	[1009.2]	633	Analysis
[1003.2]	601	Identification	[1009.3]	634	Thin Concrete Shells
[1003.3]	602	Inspection	[1010.0]	Art. 11	Suspended Structures
[1004.0]	Art. 5	Concrete	[1010.1]	635	General Requirements
[1004.1]	603	General Requirements	[1010.2]	636	Suspenders
[1004.2]	604	Identification of Metal-Reinforcement	[1010.3]	637	Tests of Materials for Bridge Wire Suspenders
			[1010.4]	638	Tests of Materials for Other Types of Suspenders
[1004.3]	605	Mixes			
[1004.4]	606	Documentation	[1010.5]	639	Design
[1004.5]	607	On-Site Inspections	[1010.6]	640	Fittings for Wire Cable Suspenders
[1004.6]	608	Admixtures			
[1004.7]	609	Licensed Concrete Testing Laboratories	[1010.7]	641	Construction
			[1010.8]	642	Protection of Suspenders
[1004.8]	610	Short-Span Concrete Floor and Roof Construction Supported on Steel Beams	[1011.0]	Art. 12	Glass Panels
			[1011.1]	643	Scope
			[1011.2]	644	Support for Glass Panels
[1004.9]	611	Pneumatically Placed Concrete	[1011.3]	643	Glass Requirements
			[1011.4]	646	Thickness of Glass
			[1011.5]	647	Special Glasses

[1011.6]	648	Installation of Glass Panels
[1011.7]	649	Protection of Glass Panels
[1011.8]	650	Deflection of Support
[1011.9]	651	Panels Subject to Human Impact Loads

*"C26" omitted from section numbers in this column.

**"27" omitted from section numbers in this column.

LIST OF TABLES

Table No.

10-1	Inspection of Materials and Assemblies
10-2	Inspection of Methods of Construction
10-3	Minimum Cement Factor
10-4	Nailing Schedule
10-5	Minimum Weights of Coating-Bridge Wire, Zinc-Coated, for Bridge Strand and Bridge Rope Constructions
10-6	Probability of Breakage for Glass Panels
10-7	Maximum Area of Glass
10-8	Multiplying Factors for Various Types of Glass
10-9	Requirements for Glass Panels Subject to Impact Loads

ARTICLE 1 SCOPE AND GENERAL REQUIREMENTS

§[C26-1000.1] 27-580 Scope. -The provisions of this subchapter, supplemented by the additional requirements of subchapter eleven of this chapter, shall establish minimum requirements for materials, designs, and construction to be used for all structural elements in buildings. In addition, within special flood hazard areas and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, materials, designs and construction required for structural elements by reference standard RS 4-5 shall be applicable.

§[C26-1000.2] 27-581 Standards. -The provisions of reference standard RS-10 shall be a part of this subchapter.

§[C26-1000.3] 27-582 Definitions. -For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-1000.4] 27-583 Plans. -For the requirements governing the filing of plans and the work to be shown on the plans, see subchapter one of this chapter.

§[C26-1000.5] 27-584 Permits. -

For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

§[C26-1000.6] 27-585 General requirements. -

For purposes of this code, the structural elements of a building shall normally include all floor, roof, and wall framing members and slabs (but not including slabs-on-grade); all piers, walls, footings, piles, and similar elements of the foundation; and all other elements of both foundation and superstructure which, in engineering practice, are proportioned on the basis of calculated stress. Where doubt exists as to the structural nature of an element, the provisions of this subchapter, and of subchapter eleven of this chapter, shall be deemed to apply only to an element in which the materials are stressed in excess of thirty-three and one-third percent of the allowable stress values (without increase for infrequent stress conditions) for such material in its proposed use, or to an element wherein public safety would be involved in the event of excessive distortion under the applied loads.

§[C26-1000.7] 27-586 Materials and methods of construction. - Materials and methods of construction used in the manufacture and/or placement of structural elements in a building shall be subject to the requirements of article seven of subchapter one of this chapter, the inspection provisions established in tables 10-1 and 10-2 and the detailed requirements of articles four through twelve of this subchapter and article thirteen of subchapter eleven of this chapter.

§[C26-1000.8] 27-587 Fire protection requirements to apply. -Where a material or method of construction in a specific use is required to provide fire protection as well as structural adequacy, the material or method of construction shall meet both specified requirements.

§[C26-1000.9] 27-588 Use of used and unidentified materials. -The utilization of used materials and unidentified or ungraded materials shall be limited to non-structural elements, except:

(a) Such materials (or elements) may be reused, or continued in use, at stress levels to which the materials or elements were subjected in the previous construction, or at load capacity as demonstrated by load test procedures as described in subdivision (a) of section 27-599 of article three of this subchapter.

(b) Unidentified materials may be graded by the recovery and test of representative samples, or by other means satisfactory to the commissioner.

(c) Used materials shall be considered to be graded where the grade is clearly indicated on the approved plans for the existing construction and may be used at the allowable stress levels for that grade of like material as established in the building code in force at the time the plans for the existing construction were approved.

§[C26-1000.10] 27-589 Equivalent systems of design. -

Nothing in this subchapter shall be construed to prohibit the use of any system of design, alternate to those indicated, provided that it can be demonstrated to the satisfaction of the commissioner that such system of design will provide a factor of safety against structural

failure consistent with the requirements of articles four through twelve of this subchapter, fire safety in consonance with the requirements of subchapters three through eight of this chapter, and such other characteristics pertinent to the safety of life, health, and property as prescribed in this subchapter or as may be required by the commissioner.

(a) Alternate or equivalent materials or methods of construction shall be subject to the provisions of section 27-133 of article seven of subchapter one of this chapter.

§[C26-1000.11] 27-590 Deferred detailing. -

Where structural elements are normally detailed on shop or working drawings, the application for the permit shall so state, and issuance of the permit shall be conditioned upon future submission of such shop or working drawings showing the approval of an architect or engineer with regard to such

elements, or of a signed statement by an architect or engineer to the effect that such drawings were prepared to his or her satisfaction. In cases where the detailing of structural elements has been made on the basis of fire-resistance ratings, load tables, or similar data as given in manufacturer's catalogues, the application for approval of the plans shall so state and issuance of such acceptance shall be conditional upon submission of a statement by the manufacturer, or of other supporting documentary evidence of accreditation furnished by the manufacturer, attesting to the accuracy of the data and stating that such data were derived in conformance with the provisions of this code. Where the detailing of structural elements has been made on the basis of data published in technical documents of recognized authority issued by, or accredited by the agency or association promulgating the applicable reference standard cited in this code, such statements will not be required.

TABLE 10-1 INSPECTION OF MATERIALS AND ASSEMBLIES

Materials	Elements That Shall be Subject to Controlled Inspection ^{a,b,d}	Elements That Are Not Subject to Controlled Inspection ^{a,c,d}
Steel	None	All structural elements and connections.
Concrete	Materials for all structural elements proportioned on the basis of calculated stresses seventy per cent or greater, of basic allowable values. See article five for specific requirements relating to "quality control of materials and batching."	(1) All materials for structural elements proportioned on the basis of calculated stresses less than seventy percent of basic allowable values. (2) Concrete materials for: (a) Short span floor and roof construction proportioned as per section 27-610. (b) Walls and footings for buildings in occupancy group J-3. (3) Metal reinforcement.
Aluminum	None	All structural elements and connections.
Wood	None	All structural elements and connections.
Reinforced gypsum concrete	None	All structural elements.
Masonry	None	All structural elements.
Other	Requirements as may be established in other subchapters of this code or by the commissioner.	

Notes for Table 10-1:

^aFor general provisions relating to inspection see section 27-132.

^bAll structural materials and assemblies subject to controlled inspection shall be tested and/or inspected at their place of manufacture and evidence of compliance with the provisions of this subchapter shall be provided as stipulated in articles four through twelve.

^cMill, manufacturer's and supplier's inspection and test reports will be accepted as evidence of compliance with the provisions of this code for all structural materials and assemblies not subject to controlled inspection.

^dBasic allowable stress values as referenced herein shall denote allowable stress value without increase for infrequent stress conditions as established in this code or in the applicable reference standard for the material or element in its proposed use.

**ARTICLE 2 STRUCTURAL DESIGN-
GENERAL REQUIREMENTS**

§[C26-1001.1] 27-591 Stability. -Except as provided in article twelve of subchapter eleven of this chapter with regard to foundation elements, a building, or any

element thereof shall be proportioned to provide a minimum factor of safety of 1.50 against failure by sliding or overturning. The required stability shall be provided solely by the dead load plus any permanent anchorages, which may be provided.

§[C26-1001.2] 27-592 Bracing. -Unless otherwise specified in the reference standards, members used to brace compression members shall be proportioned to resist an axial load of at least two percent of the total compressive design stress in the member braced, plus any transverse shear therein.

§[C26-1001.3] 27-593 Secondary stresses. - Secondary stresses in trusses shall be considered and where of significant magnitude, their effects shall be provided for in the design.

****§[C26-1001.4] 27-594 Combination of loads.** - Dead loads, live loads (including impact) and reduced live loads, where applicable, shall be considered as basic loads. Wind, earthquake, thermal forces, shrinkage, and unreduced live loads (where live load reduction is permitted by subchapter nine of this chapter) shall be considered as loads of infrequent occurrence. Members shall have adequate capacity to resist all applicable combinations of the loads listed in subchapter nine of this chapter, in accordance with the following:

****Local Law 17-1995.**

(a) Where design is based on allowable working stresses, the loads as described in subchapter nine of this chapter shall be multiplied by the following factors and the design shall be based on the resulting load values:

(1) For combinations of basic loads, only, the factor shall be 1.0, except that for the design of temporary structures (defined as a structure, which will be in place six months or less) the factor shall be 0.75.

(2) For any combination of one or more basic loads with any one load of infrequent occurrence, the factor shall be 0.75, except that for the design of temporary structures the factor shall be 0.67.

(3) For any combination of one or more basic loads with two or more loads of infrequent occurrence, the factor shall be 0.67.

Exception.—The provisions of reference standards RS 10-8 and RS 10-9 relating to increases of allowable unit stresses for short-time loading shall apply.

(b) Where design is based on ultimate strength criteria (including plastic design of steel structures and proportioning of suspended structures), the loads, as described in subchapter nine of this chapter shall be multiplied by the factors indicated in subdivision (e) of section 27-639 of article eleven of this subchapter and in the applicable reference standards. The design shall be based on the resulting load values.

Exceptions.—1. Where combinations of load for which factors are given in the reference standard include the load of wind (or earthquake) the design additionally shall consider combinations of load wherein each other of the loads of frequent* occurrence as listed in this paragraph are substituted for the load of wind.

2. The design also shall consider combinations of load wherein two most critical of the loads of infrequent

occurrence are combined with the basic loads. For such combination, however, the factors indicated in the reference standards and in subdivision (e) of section 27-639 of article eleven of this subchapter for suspended structures, for the combination of basic loads plus one load of infrequent occurrence may be reduced fifteen percent.

***As enacted but “infrequent” probably intended.**

§[C26-1001.5] 27-595 Deflection limitations. -

The applicable provisions of the several reference standards cited in this subchapter shall apply. In addition, the total of the dead plus live load vertical deflections (including effects of creep and shrinkage) of members, supporting walls, veneered walls, or partitions constructed of or containing panels of masonry, glass, or other frangible materials shall not exceed 1/360 of the span.

ARTICLE 3 ADEQUACY OF THE STRUCTURAL DESIGN

§[C26-1002.1] 27-596 General. - The structural design of a member or assembly shall be deemed to be adequate if the design computations demonstrate conformance with the applicable standards noted in articles four through twelve of this subchapter. Where, because of practical difficulties, such computations cannot be executed, the structural design may be deemed adequate if the member or assembly is subjected to, and satisfactorily performs under, load tests in accordance with the provisions of subdivision (a) of section 27-599 of this article. Where there is a question as to the adequacy of a completed or partly completed construction, the provisions of section 27-597, 27-598 and subdivision (b) of section 27-599 of this article shall apply.

§[C26-1002.2] 27-597 Questionable construction. -

If, upon inspection, it is found that a construction or any part thereof, as built, shows open cracks, spallings, or other signs of distress; or should inspection records show more** significant deficiency of construction; or should laboratory tests on concrete or other materials that have been incorporated into the work indicate deficiency of strength; or should there be a reasonable doubt as to the strength, stability, or adequacy of the construction or any part thereof, such construction may be checked to verify the adequacy thereof either by computation, or by core or load tests conducted in accordance with the provisions of section 27-598 or subdivision (b) of section 27-599 of this article or by any combination of these means. Should the adequacy of construction not be verified within a reasonable time, such construction shall be rejected and shall be demolished or reinforced or rebuilt to be made safe in conformance with the requirements of this code. In the event of a disagreement, the final decision as to the acceptance of the work shall be made by the commissioner. All such tests shall be made without expense to the city.

****As enacted but “some” probably intended.**

TABLE 10-2 INSPECTION OF METHODS OF CONSTRUCTION

Materials	Operations on Structural Elements That Shall be Subject to Controlled Inspection ^{a,b,d}	Operations on Structural Elements That Are Not Subject to Controlled Inspection ^{a,c,d}
Steel	<ol style="list-style-type: none"> (1) Welding operations and the tensioning of high strength bolts in connections where the calculated stresses in the welds or bolts are fifty percent or more of basic allowable values. (2) Connection of fittings to wire cables for suspended structures, except where cables together with their attached fittings are proof-loaded to not less than fifty-five percent of ultimate capacity. 	<ol style="list-style-type: none"> (1) Welding operations and the tensioning of high strength bolts in connections where the calculated stresses in the welds or bolts are less than fifty percent of basic allowable values. (2) All other fabrication and erection operations not designated for controlled inspection.
Concrete	Except for those operations specifically designated in this table are*** not subject to controlled inspection, for all concrete, the operations described in subdivision (a) of section 27-607 shall be subject to controlled inspection.	<ol style="list-style-type: none"> (1) All operations relating to the construction of members and assemblies (other than prestressed members) which involve the placement of a total of less than fifty cubic yards of concrete and wherein said concrete is used at levels of calculated stress seventy percent or less of basic allowable values. (2) Placing and curing of concrete for all: <ol style="list-style-type: none"> (a) Short span floor and roof construction as per section 27-610. (b) Walls and footings for buildings in occupancy group J-3. (3) Size and location of reinforcement for walls and footings for buildings in occupancy group J-3. (4) All other operations not described in subdivision (a) of section 27-607.
Aluminum	Welding operations in connections where the calculated stresses in the welds are fifty percent or more of the basic allowable values.	<ol style="list-style-type: none"> (1) Welding operations in connections where the calculated stresses in the welds are less than fifty percent of basic allowable values. (2) All other fabrication and erection operations not designated for controlled inspection.
Wood	Fabrication of glued - laminated assemblies and of plywood components.	All other operations not designated for controlled inspection.
Reinforced Gypsum Concrete	None	All operations incident to the fabrication and placement of structural elements.
**Reinforced Masonry	<ol style="list-style-type: none"> (1) Fabrication of prefabricated units. (2) Placement and bedding of units, sizes of members, including thickness of walls and wythes; sizes of columns; the size and position of reinforcement, in place, and provisions for curing and protection against freezing for all reinforced masonry construction unless such operations are specifically not designated for controlled inspection. 	<ol style="list-style-type: none"> ** (1) All masonry work for buildings in occupancy group J-3. ** (2) All mixing of mortar. ** (3) All other operations not designated for controlled inspection.
**Un-Reinforced Masonry	Placement and bedding of units and sizes of members including thickness of walls and wythes; sizes of columns; and provisions for curing and protection against freezing for all masonry construction proportioned on the basis of structural analysis as described in section four of reference standard RS 10-1A*, unless such operations are specifically not designated for controlled inspection.	<ol style="list-style-type: none"> ** (1) All masonry work for buildings in occupancy group J-3. ** (2) All mixing of mortar. ** (3) All other operations not designated for controlled inspection.
Piling	See provisions of subchapter eleven.	
Other	Requirments as may be established in other subchapters on this code.	

Notes for Table 10-2:

^aFor general provisions relating to inspection see section 27-132.

^bAll construction operations designated for controlled inspection shall be inspected by the architect or engineer designated for controlled inspection during the performance of such operation.

^cCertification by the fabricator or erector, as applicable, will be accepted as evidence of compliance with the provisions of this code for all construction operations not subject to controlled inspection.

^dBasic allowable stress values as referenced herein shall denote allowable stress value without increase for infrequent stress conditions as established in this code or in the applicable reference standard for the material or element in its proposed use.

* *"A" not enacted but probably intended*

** *Local Law 17-1995.*

*** *"are" enacted "is" probably intended.*

§[C26-1002.3] 27-598 Core tests of concrete construction.-

The adequacy of the concrete in a building may be ascertained by the recovery and testing of cores. Cores shall be taken and tested in accordance with the procedure described in reference standard RS 10-16. In lieu thereof, cores cast-in-place and originally cured with the parent concrete, or other device acceptable to the architect or engineer designated for controlled inspection and which will produce test specimens simulating the condition of the concrete in place including the size and proportions specified for core specimens may be utilized to demonstrate the adequacy of the concrete in place. The compressive strength so determined shall meet the requirements for strength tests as described in reference standard RS 10-3.

§[C26-1002.4] 27-599 Load tests. -

(a) **Prequalifying load tests.-** The provisions of this section shall apply only to load tests made for the purpose of establishing the structural adequacy of members or assemblies before such members or assemblies are incorporated into the work. Load tests for the purpose of establishing the strength of an element or assembly, in place, after construction, shall conform to the requirements of subdivision (b) of this section.

(1) **TEST SPECIMENS.** -The test specimens shall be a true representation of the units or assemblies to be used in the work and, unless sufficient tests are conducted on differing specimens to interpolate the performance of members of varying characteristics, test specimens shall be substantially identical with the units or assemblies to be used in service. Particular attention shall be given to matching the type and grade of material and, in the case of concrete, the mix, age, curing, and other pertinent variables.

(2) **SUPPORT CONDITIONS AND INTERACTION.-** Load tests shall be performed in such a manner that the supports for the members or assemblies being tested will simulate the conditions of support in the building, except that conditions of partial fixity may be approximated by condition of full or zero restraint, whichever produces a more severe stress condition in the member being tested. The test conditions shall be such as to obviate all interaction of fills, finishes, partitions, supports, or members whose interaction normally would be neglected in design. Where continuous, multiple, intersecting, or connected members are used in the test, all interacting members shall be simultaneously and fully loaded and additional tests shall be performed under the partial

loading conditions specified in subchapter nine of this chapter. Test specimens shall not be unloaded and reloaded or subjected to cyclical loading, except as specifically required by the provisions of this code and except that the adding of increments of additional load to a member already under load and the application of the test load as described in subparagraph (b) of paragraph three of this subdivision following removal of the test load described in subparagraph (a) of paragraph three of this subdivision will be permitted.

(3) **STRENGTH REQUIREMENTS.** -The member or assembly, supported as described in paragraph two of this subdivision, shall be capable of supporting:

a. Without visible damage (other than hairline cracks) its own weight plus a test load equal to one hundred fifty percent of the design live load plus one hundred fifty percent of any dead load that will be added at the site; and
b. Without collapse, its own weight plus a test load equal to fifty percent of its own weight plus two hundred fifty percent of the design live load plus two hundred fifty percent of any dead load that will be added at the site. The latter loading shall remain in place for a minimum period of one week. All loading conditions described in subchapter nine of this chapter shall be considered. The design live load shall be the nominal value reduced for contributory area as described in subchapter nine. Except as permitted under paragraph five of this subdivision, units to be tested shall be full size. Load bearing wall and partition assemblies shall be tested both with and without window and door framing where such framing will be included in the final assemblies.

Exception: If the load tests are conducted and the results promulgated in a manner that will permit clear differentiation between the dead and live load components added at the site, then the capacity of the member or assembly without visible damage other than hairline cracks as determined under load test condition in subparagraph a of paragraph three of this subdivision, may be reduced to the weight of the member, plus any dead load that will be added at the site, plus one hundred fifty percent of the design live load; and the capacity of the member or assembly to resist collapse as determined under load test condition in subparagraph b of paragraph three of this subdivision may be reduced to one hundred fifty percent of the weight of the member, plus one hundred fifty percent of any dead load that will

be added at the site, plus two hundred fifty percent of the design live load.

(4) **DEFLECTION REQUIREMENT.** -With the member or assembly supported as described in paragraph two of this subdivision, and after loading as required by the provisions of subparagraph a of paragraph three of this subdivision and the removal of said load, the percentage of recovery of the deflection caused by the superimposed load shall be at least seventy-five percent. The deflection under the design live load shall not exceed that permitted in this subchapter.

(5) **MODEL TESTS.** -Tests on models less than full size may be used to determine the relative intensity, direction, and distribution of stresses and applied loads, but shall not be considered as a proper method for evaluating stresses in, nor the strength of, individual members unless approved by the commissioner for this purpose. Where model analysis is proposed as a means of establishing the structural design, the following conditions shall be met:

a. Analysis shall be made by a firm or a corporation satisfactory to the commissioner.

b. The similitude, scaling, and validity of the analysis shall be attested to by an officer or principal of the firm or corporation making the analysis.

c. A report on the analysis shall be submitted showing test set-ups, equipment, and readings.

(b) **Load tests of completed construction.**- The provisions of this subdivision shall apply to any type of construction where the appropriate reference standard does not provide for load test of completed construction and the construction is questionable. When the appropriate reference standard provides for such load testing, the provisions of reference standard shall be used.

(1) **STRENGTH.** -The construction shall be loaded in two stages:

(a) With all dead load to which it will be subjected in service plus a superimposed load equal to the design live load reduced as described in subchapter nine of this chapter; and

(b) With a total load, including its own weight, equal to one hundred fifty percent of the total dead load to be supported in service plus one hundred eighty percent of the design live load, reduced for contributory area as described in subchapter nine of this chapter, which load shall remain in place for a minimum period of twenty-four hours.

(2) **DEFLECTION REQUIREMENT.** -Under the first stage loading, the deflection shall not exceed that permitted in the applicable reference standard. The residual deflection after removal of the second stage loading shall not exceed twenty-five percent of the calculated elastic deflection under the superimposed test load. The structure, after recovery of the deflection shall not show any evidence of serious distress.

(3) **INTERACTION.**- The load area shall extend to include the loading of all framing and elements that contribute to the strength of the element or elements under test, by way of interaction.

(4) **LATERAL LOADS.**- Where the elements in question must resist lateral loads in service, such loads shall be simulated in the tests. In such case, the magnitude of the applied live load and lateral load components of the test load may be adjusted as described in section 27-594 of article two of this subchapter, provided that the stress condition under the load increments described in paragraph one of this subdivision is not more critical.

(5) **RELOADING.** -Unloading and reloading or cyclical loading of test areas will not be permitted, except for the addition of increments of additional load to a member already under load.

[(6) **LIMITATION ON USE OF LOAD TESTS OF CONCRETE STRUCTURES.** -Where the strength tests of the concrete (as defined in reference standard RS 10-3) that initiate the requirement for load tests show strengths less than 2/3 of the strength required by the design of the specific element, the use of load tests to show the adequacy of the structure will not be permitted.]*

**Copy in brackets not enacted but probably intended.*

ARTICLE 4 MASONRY

§[C26-1003.1] **27-600 General requirements. -**

(a) **Unreinforced masonry.** - Materials, design, and construction of unreinforced masonry shall meet the requirements of reference standard RS 10-1.

(b) **Reinforced masonry.** - Materials, design, and construction of reinforced masonry shall meet the requirements of reference standard RS 10-2.

§[C26-1003.2] **27-601 Identification. -**

(a) **Masonry units.** -Masonry units shall be clearly identified to show the grade of the unit and the compressive strength where called for on the plans.

(b) **Metal reinforcement.**- Reinforcing bars shall be rolled so as to identify the grade of steel and the size. Bundles and rolls of cold-drawn steel wire or welded wire fabric shall be tagged so as to identify the type and grade of steel and the size.

§[C26-1003.3] **27-602 Inspection.** -The inspection of masonry and masonry construction shall conform to the requirements of tables 10-1 and 10-2.

ARTICLE 5 CONCRETE

*§[C26-1004.1] **27-603 General requirements. -**

Concrete materials, design, construction, quality, inspection and testing shall meet the requirements of reference standard RS 10-3. Precast concrete construction utilizing a thin skin or slab stiffened or supported by a system of ribs shall conform to the requirements of reference standard RS 10-4.

**Local Law 65-1990.*

§[C26-1004.2] **27-604 Identification of metal-reinforcement.-**

Reinforcing bars shall be rolled so as to identify type and grade of steel, and size. Bundles and rolls of wire,

strands, or welded wire fabric shall be tagged so as to identify the type and grade of steel and the size.

***[C26-1004.3] 27-605 Mixes.**- Concrete may be proportioned, batched, and mixed by any of the following methods:

**Local Law 65-1990.*

(a) Method I. -Mixes with Minimum Cement Content. -

(1) MINIMUM CEMENT CONTENT. -The cement content used in the work shall not be less than the content given in table 10-3 for the corresponding strength of concrete.

(2) WATER-CEMENT OR STRENGTH-CEMENT RATIO.- Normal weight concrete proportioned on the basis of preliminary tests shall be produced by using a water-cement ratio corresponding to a point on a strength-cement or water-cement ratio curve. Proportioning of lightweight and heavyweight concrete, and concrete using an aggregate other than natural sand, gravel or stone shall be by using a strength-cement content curve. The point on the respective curves shall represent a strength of concrete at the slump and age called for on the plans at least twenty-five percent higher than the specified strength, f'_c . The cement content shall not be less than the content shown in table 10-3.

(3) PRELIMINARY TESTS. -Preliminary tests of concrete shall be made in advance of any concreting operation by a licensed concrete testing laboratory acceptable to the architect or engineer of record. Preliminary tests shall consist of compression strength tests of molded concrete cylinders made in accordance with reference standards RS 10-17 and RS 10-21. A curve representing the relation between the average strength of the concrete at twenty-eight days, or at any other specified age filed with the department, and the strength-cement ratio or the water-cement ratio shall be established for the range of strength values at the slump required for the work. The tests shall include at least four mixes with different strength-cement ratios or four mixes with different water-cement ratios and at least four cylinder specimens for each mix. The cylinder strength tests shall be supplemented by tests to confirm that the cement and aggregates conform to the provisions of reference standard RS 10-3.

(4) PREVIOUSLY ACCEPTED MIXES. -In lieu of the requirements of paragraph three of this subdivision, the architect or engineer designated for controlled inspection may permit the use of mix proportions of aggregates having the same specific gravity, size and gradation; cements of the same type and batch weight; admixtures of the same type and quantity; and other ingredients the same as or equal to those that have been previously submitted with applicable preliminary tests which complied with paragraphs one and two of this subdivision, and which have been accepted by the commissioner within the past year. If any of the mix proportions or ingredients are changed, a separate submission for acceptance shall be required.

(5) QUALITY CONTROL AND INSPECTION OF MATERIALS AND OF BATCHING. -Where concrete materials are used for structural elements defined in section 27-585 of article one of this subchapter, quality control and inspection shall be provided at the batch plant by a licensed concrete testing laboratory under the

revision: July 1, 2008

supervision of the architect or engineer designated for controlled inspection, in accordance with the requirements of table 10-1 and in sufficient scope to:

a. Determine and record the actual batched weights of the ingredients and the volume of water charged into the mixer;
b. Verify that such weights conform to the weights and proportions required by the preliminary test mix, adjusted for moisture content, fineness modulus and gradation of aggregates;

c. Verify conformance of the quality and condition of the materials to reference standard RS 10-3;

d. Verify that the aggregates have the same specific gravity, size and gradation; the cement is the same type and batch weight, the admixtures are the same type and quantity; and that any other ingredients are the same as or equal to those used for the preparation of the preliminary test mixes;

e. For all concrete, whether or not designated for controlled inspection, attestation of the results of quality control and inspection at the batch plant shall appear on a ticket accompanying each load of concrete. The attestation for subparagraphs a, b, c and d of this paragraph shall be executed by the licensed concrete testing laboratory.

f. The licensed concrete testing laboratory shall also attest that the slump entrained air content and unit weight of the fresh concrete, as discharged from the mixer at the job site, were tested in accordance with reference standards RS 10-49, RS 10-51, RS 10-52, RS 10-61, RS 10-62, RS 10-63 and RS 10-64, and that all were in compliance with the accepted mix design.

(b) Method II. -Proportioning on the basis of field experience. -

(1) PROPORTIONING.- For the computation of the standard deviation in accordance with reference standard RS 10-14, mixes with test data from previous projects, similarly proportioned in accordance with the provisions of subdivision (a) of this section, and having materials of similar density and admixtures and having a slump equal to or greater than that at which the concrete is to be placed shall be used. Such mixes may be accepted subject to the approval of the architect or engineer designated for controlled inspection.

(2) STRENGTH. -The required average strength, $**f_{cr}$, to be used as the basis for the selection of mix proportions, shall in no case be less than fifteen percent higher than the specified strength called for on the plans.

***As enacted but " f'_c " probably intended.*

(3) BATCHING. -The concrete shall be produced either in the concrete production facility used to produce the concrete from which the tests were made to develop the field experience data referred to in paragraph one of this subdivision or, subject to the approval of the architect or engineer designated for controlled inspection, in any concrete production facility that has data showing a record of standard deviation equal to or less than that of the original facility. All concrete proportioned according to field experience shall be produced in a plant with automatic recording equipment for all ingredients.

(4) QUALITY CONTROL AND INSPECTION OF MATERIALS AND OF BATCHING. - When the concrete is batched in a plant where automatic recording

equipment documents the batched weights or volumes of cement, aggregates, admixtures and water, no inspection of the materials or of the batching, nor any attestation by a licensed concrete testing laboratory responsible to the architect or engineer designated for controlled inspection, shall be required. A concrete producer shall:

- a. Verify that such weights conform to the required weights and proportions, and to the strength-cement ratio or water-cement ratio required by the proportioning established pursuant to paragraph one of this subdivision, adjusted for moisture content, fineness modules and gradation of aggregates.
- b. Verify conformance of the quality and condition of the materials to reference standard RS 10-3.
- c. Attest, on a ticket accompanying each load, to the specified strength of the concrete, the actual weights or volume of the ingredients, and the weight or volume of water charged into the mixer at the batch plant or to be added at the job site. A statement that subparagraph b of this paragraph has been complied with shall also be included.
- d. If at any time the automatic recording equipment becomes inoperative, the concrete production facility may be permitted, but only with the approval of the architect or engineer designated for controlled inspection, to batch and mix concrete for a period not to exceed three consecutive working days. During such a period, the concrete production facility shall engage a concrete batch plant inspector from a licensed concrete testing laboratory to observe and record the actual weights of the cement, aggregates, admixtures and other ingredients, and the weight or volume of water charged into the mixers. If the automatic recording equipment is inoperative for a period longer than three consecutive working days the concrete production facility shall not batch or mix concrete and the architect or engineer designated for controlled inspection shall notify the commissioner in writing that such equipment is inoperative.

***TABLE 10-3 MINIMUM CEMENT CONTENT**

Specified Compressive Strength in 28 Days (f'c)-psi	Minimum Pounds of Cement Per Cubic Yard of Concrete (all aggregates)
3,000	540
3,500	610
4,000	660
5,000	800
Over 5,000	Permitted only by reference standard RS 10-3
6,000 and over	Permitted only by reference standard RS 10-3 "Special Requirements for High Strength Concrete."

NOTE: Minimum pounds of cement may be reduced up to 8 percent by the addition of an accepted admixture.

**Local Law 65-1990.*

(c) Method III. -Average concrete. -

- (1) in lieu of making preliminary tests, average concrete limited to the concrete strengths shown in table 10-3A

below may be used, and the cement content shall not be less than the value given in table 10-3A for the corresponding specified compressive strengths, nor shall the total volume of water (moisture plus added water) exceed that specified therein, provided that the total yardage placed does not exceed fifty cubic yards and the levels of calculated stress do not exceed seventy percent of the basic allowable stresses.

***TABLE 10-3A**

Specified compressive strength in twenty-eight days (f'c) pounds per square inch	Minimum pounds of cement per cubic yard of concrete	Maximum permissible total volume of water, U.S. gallons per cubic yard of concrete
2000	520	40
2500	560	41
3000	610	42

**Local Law 65-1990.*

- (2) Each load of concrete shall be certified by the producer to the owner, whether produced at a ready mixed plant or site mixed, as to the total quantity of concrete, concrete strength and actual quantities per cubic yard of each material, including water, contained therein. A copy of such certificate shall be available to the department during the progress of the work and for two years thereafter.

***§[C26-1004.4] 27-606 Documentation.-** All mix proportions and supporting data shall be submitted for acceptance to the commissioner or to the architect or engineer designated for controlled inspection, as required, prior to the start of any work. All required attestations shall become a part of the documentation to be filed with the commissioner, and shall be subject to verification by strength tests, as hereinafter described, by check sampling of ingredients, or by such other inspections as the commissioner or the architect or engineer designated for controlled inspection may elect. Copies of all documentation filed with the commissioner, all the licensed concrete testing laboratory test data and required attestations, together with the tapes recording the batch weight where automatic recording equipment is used shall be available for inspection for a period of two years after the completion of the project. Such records shall be maintained by the architect or engineer designated for controlled inspection.

**Local Law 65-1990.*

***§[C26-1004.5] 27-607 Inspections. -** Inspection of concrete and concrete construction shall conform to the requirements of tables 10-1 and 10-2 and the provisions of this subchapter.

(a) Controlled inspection. - Controlled inspection of concrete construction shall include:

(1) **STRENGTH TESTS.** - Strength tests shall be performed on all structural concrete. The provisions of reference standard RS 10-3 shall apply. A licensed concrete testing laboratory shall, in compliance with reference standards RS 10-17, RS 10-51 and RS 10-52, sample the concrete, make and cure the test specimens at the job site, transport the specimens to the laboratory and test the specimens for compressive strength. Written reports of the results shall be furnished to the architect or engineer designated for controlled inspection and to the concrete producer immediately, but not more than five days following the conclusion of the compression strength tests. Test specimens shall be stored on the job site in an insulated curing box of sufficient size and strength to contain all the specimens made in any four consecutive working days and to protect the specimens from falling over, being jarred or otherwise disturbed during the period of initial curing. The box shall be erected, furnished and maintained by the concrete contractor. Such box shall be equipped to provide the moisture and to regulate the temperature necessary to maintain the proper curing conditions required by reference standard RS 10-52. Such box shall be located in an area free from vibration such as pile driving and traffic of all kinds. No concrete requiring inspection shall be delivered to the site until such storage curing box has been provided. Specimens shall remain undisturbed in the curing box until ready for delivery to the testing laboratory but not less than sixteen hours. Specimens delivered to the laboratory prior to an age of forty-eight hours shall not be demolded prior to delivery. All specimens shall be carefully removed from the box and transported to the laboratory by the licensed concrete testing laboratory in accordance with the provisions of reference standard RS 10-52. All specimens shall be delivered to the laboratory before the laboratory closes at the end of the second working day following the day the specimens were molded. The date of arrival at the laboratory shall be recorded on the specimen test reports. All concrete failing to meet the specified minimum strength requirements shall be rejected by the architect or engineer designated for controlled inspection pending verification of the adequacy of the construction as described in section 27-598 of article three of this subchapter.

(2) **ADDITIONAL TESTS.** -Each sample of fresh concrete made in accordance with reference standard RS 10-51 for the purpose of molding strength test specimens shall be made under the supervision of the architect or engineer designated for controlled inspection. Each sample shall be tested by the licensed concrete testing laboratory to determine its slump in accordance with reference standard RS 10-49, its entrained air content in accordance with reference standards RS 10-61 and RS 10-62, its unit weight in accordance with reference standards RS 10-63 and RS 10-64 and its temperature. If any of the tests fail to meet the specified requirements, the concrete shall be sampled again and the particular test that failed

shall be repeated. If the second test fails to meet the specified requirements, then, with the approval of the architect or engineer designated for controlled inspection, adjustments shall be made to the concrete in the mixer to correct the deficiency. Test specimens shall not be molded from any sample that did not meet the specified requirements nor shall the concrete from which the sample was taken be placed in the structure, provided, however, that such concrete may be used elsewhere in the work where it meets or exceeds the specified requirements, but only with the approval of the architect or engineer designated for controlled inspection. In such case, test specimens shall be molded by the licensed concrete testing laboratory, which shall also record the precise location where the concrete was placed in the structure.

(3) **CONTROLLED INSPECTION LOG BOOK.** - A controlled inspection log book, limited solely to the concrete construction work, readily available to inspectors and representatives of the department, concrete suppliers and the architect and/or engineer of record, shall be maintained at the job site by the architect or engineer designated for controlled inspection, who shall make therein daily entries pertaining to the progress of the work. The entries shall describe, but not be limited to, the location, size and dimensions of the concrete members for which forms were constructed that day; the reinforcement installed in, and the specific locations and time spans of, every concrete placement; the air temperature, wind velocity and direction and other weather conditions during the twenty-four hours after concrete has been placed, specifically at 8 a.m., noon and four p.m., the protections taken against excessive temperatures and adverse weather conditions at each placement made that day; the method used, to cure the concrete and the period during which such methods were maintained; the actual hour when forms were stripped and shores were reinstalled and tensioning was applied to all prestressed members. The log shall become a part of the documentation to be filed with the commissioner as provided in section 27-606 and shall include the attestation of the architect or engineer designated for controlled inspection that the concrete construction work complies with the approved plans and the provisions of this code.

(b) Other required inspection. -Quality control or inspection shall be provided with respect to all operations of mixing and placing concrete and reinforcement that are not designated for controlled inspection. In the case of sidewalks, curbs, paving, slabs-on-grade and any work designated in table 10-1 under the caption "Elements That Are Not Subject To Controlled Inspection" or in table 10-2 under the caption "Operations on Structural Elements That Are Not Subject to Controlled Inspection," all inspections shall be subject to and in accordance with the requirements of subdivision (b) of section 27-132. If any test to determine the quality or compressive strength of the concrete is required, the fresh concrete shall be sampled and tested for slump, entrained air content, unit

weight and temperature. Compression strength test specimens shall be molded only by a licensed concrete testing laboratory or by a person certified by the American Concrete Institute as qualified to perform such function. Attestation shall be executed by the person superintending the use of the material in accordance with the requirements of subdivision (b) of section 27-132 of article seven of subchapter one of this chapter.

**Local Law 65-1990.*

***§[C26-1004.6] 27-608 Admixtures.** -Admixtures may be used in the concrete only where included in the preliminary test mixes made in accordance with paragraph three of subdivision (a) of section 27-605 or mixes proportioned in accordance with the provisions of reference standard RS 10-3. In the case of mixes proportioned in accordance with subdivision (c) of section 27-605, there shall be no reduction of the cement content called for in table 10-3A because admixtures are used in the mix. Where admixtures are used, the provisions of reference standards RS 10-3 and RS 10-44 shall apply. In addition, no anti-freeze agents shall be used. Admixtures shall be added in measured quantities in conformance with the accepted mix design.

**Local Law 65-1990.*

***§[C26-1004.7] 27-609 Licensed concrete testing laboratories.** -All strength tests of concrete and testing of concrete materials required by the provisions of this section shall be performed by concrete testing laboratories licensed in accordance with the requirements of article nine of subchapter two of chapter one of title twenty-six of the administrative code and rules promulgated by the commissioner. The licensed concrete testing laboratory shall, among other things, analyze, evaluate and test concrete materials; determine whether the materials comply with specifications and pertinent referenced national standards in reference standard RS 10-3; select mix proportions for preliminary tests; recommend the mix proportions to be used on the project for which the tests were made; analyze data from previous projects and compute the standard deviation; and recommend the mix proportions to be used based on such field experience data. At the batch plant or at the job site, the licensed concrete testing laboratory shall, among other things, sample concrete and test for slump, entrained air content, unit weight and temperature, mold compression test specimens; store and cure such specimens on the job site; remove, transport and deliver such specimens to the laboratory; demold, store, cure, cap and test such specimens at the laboratory and furnish written reports of the results of all tests of the materials and concrete to the architect or engineer designated for controlled inspection and to the concrete producer. When tests of the hardened concrete are required, they shall be made by the licensed concrete testing laboratory in accordance with reference standard RS 10-3 and the national

standards for making tests for penetration resistance, rebound number, pullout strength and of drilled cores. The architect or engineer designated for controlled inspection is authorized either to dismiss or to employ a particular licensed concrete testing laboratory at any time during the progress of the work.

**Local Law 65-1990.*

§[C26-1004.8] 27-610 Short-span concrete floor and roof construction supported on steel beams. -In lieu of analysis, the following empirical procedures may be used for the design of short-span concrete floor and roof slabs containing draped reinforcement and supported on steel beams. The empirical equations described in subdivisions (c) and (d) of this section shall apply only where the steel beams are placed, or are encased, in a manner that will provide section for the transfer of shear from slabs to beams equivalent to, or in excess of, the slab thickness required by said equations.

(a) Concrete. -The concrete shall have a minimum compressive strength at twenty-eight days of seven hundred psi.

(b) Reinforcement. -Reinforcement shall consist of steel fabric, rods, or other suitable shapes that shall be continuous or successively lapped to function as a continuous sheet. The main reinforcement shall be at least 0.15% of the gross cross section where continuous steel fabric is used and at least 0.25% of the gross cross section where other forms of steel reinforcement are used. All reinforcing shall be draped, with the center of the reinforcement at the center of the span one inch above the bottom of the slab and the center of reinforcement over the support one inch below the top of the slab.

(c) Minimum slab thickness. -The minimum total thickness of concrete floor and roof construction shall be determined by the following formula, but shall not be less than four inches:

$$t = \left| \frac{L}{2} \right| + \left| \frac{w-75}{200} \right|$$

where: t = total thickness (in.)

L = clear span between steel flanges (ft.)

w = gross uniform load (dead load plus reduced live load) (psf).

(d) Allowable load. -The allowable load shall be determined by the following formula:

$$w = \frac{3CA_s}{L^2}$$

where: w = gross uniform load (psf)

A_s = cross sectional area of main reinforcement (sq. in. per ft. of slab width)

L = clear span between steel flanges in feet. (L shall not exceed ten feet in any case, and when the gross floor load exceeds two hundred psi shall not exceed eight feet)

C = the following coefficient for steel having an ultimate strength of at least fifty-five thousand psi;

1. For lightweight aggregate concrete:
 - a. twenty thousand when reinforcement is continuous.
 - b. fourteen thousand when reinforcement is hooked or attached to one or both supports.
 2. For stone concrete:
 - a. twenty-three thousand when reinforcement is continuous.
 - b. fifteen thousand when reinforcement is hooked or attached to one or both supports.
- (1) When the above formula is used the reinforcement shall be hooked or attached to one or both supports or be continuous.
 - (2) If steel of an ultimate strength in excess of fifty-five thousand psi is used, the above coefficient may be increased in the ratio of the ultimate strength to fifty-five thousand but at most by thirty percent.
- (e) Openings in floors and roofs.** -Openings more than one foot six inches on a side shall be framed. All areas encompassing multiple openings aggregating more than one foot six inches in any ten foot width or span of floor or roof slab shall be framed.

§[C26-1004.9] 27-611 Pneumatically placed concrete.- Construction methods shall conform to the applicable provisions and recommendations of reference standard RS 10-15.

***§27-611.1 Conveying concrete by pumping methods.**- All classes and strengths of concrete may be conveyed by pumping methods. All materials and methods used shall conform to the rules promulgated by the commissioner for conveying concrete by pumping methods.

**Local Law 65-1990.*

§[C26-1004.10] 27-612 Formwork, slip form construction, lift method construction, precast and prestressed construction.- The provisions of subchapter nineteen of this chapter shall apply.

**Local Law 65-1990.*

§[C26-1004.11] 27-613 Concrete utilizing preplaced aggregate. -The use of concrete formed by the injection of grout into a mass of preplaced coarse aggregate will be permitted where it can be demonstrated by successful prototype installation that the proposed mix, materials, and method of placement will produce a concrete of the specified strength and free of areas or inclusions of uncemented aggregate.

(a) Prototypes. -At least two prototypes, from either previous work or samples prepared for the proposed project shall be prepared. The forms shall be stripped, and a minimum of six cores recovered and tested to demonstrate the strength of the concrete produced by the proposed materials and methods of installation. In addition, the homogeneity of the prototypes shall be demonstrated by demolishing the prototypes.

(b) In-place concrete. -The concrete, as finally placed in the work, shall be prepared using the same materials, mix, equipment, and procedures utilized to prepare the successful prototype installations.

***(c) Inspection.** -All preparation and placement of structural concrete utilizing preplaced aggregates shall be subject to controlled inspection. Compression test specimens shall be prepared and tested as required for premixed concrete, except that the specimens shall be prepared under conditions that will simulate the conditions under which the concrete in the work is installed.

**Local Law 65-1990.*

***§27-613.1 Precast and prestressed concrete.** - The provisions of reference standard RS 10-3 shall apply.

**Local Law 65-1990.*

***§27-613.2 Thin-section precast concrete construction.**- The provisions of reference standard RS 10-4 shall apply.

**Local Law 65-1990.*

ARTICLE 6 STEEL

§[C26-1005.1] 27-614 General requirements. - Materials, design, and construction methods shall meet the requirements of the following reference standards:

(a) Structural steel. -Reference standard RS 10-5.

(b) Light *gauge cold formed steel.** - Reference standard RS 10-6.

****(c) Open web steel joists.**- Reference standard RS 10-7. The commissioner shall amend RS 10-7 to establish minimum acceptable fireproofing methods for open web steel joists and to redefine the limitations or restrictions on the buildings or occupancies in which the use of open web steel joists shall be permitted.

***Local Law 26-2004.*

**** As enacted but "gage" probably intended.*

§[C26-1005.2] 27-615 Identification. -Structural steel that is required to have a minimum yield point greater than thirty-six thousand psi shall at all times in the fabricator's plant, be marked, segregated, or otherwise handled so that the separate alloys and tempers are positively identified, and after completion of fabrication, shall be marked to identify the alloy and temper. Such markings shall be affixed to completed members and assemblies or to boxed or bundled shipments of multiple units prior to shipment from the fabricator's plant. Open web steel joists shall have identification affixed to each bundle or lift showing size and type.

§[C26-1005.3] 27-616 Quality control. -

(a) Reference.- The provisions of tables 10-1 and 10-2 shall apply.

(b) Welding operations. -

(1) Welding work shall be performed only by persons who have obtained a license from the commissioner.

(2) Where manual welding work is not performed in the city of New York, welds shall be made by welders qualified under the provisions of appendix D, parts II and III, of the AWS code for welding in building construction. Qualification with any of the steels permitted by the AWS code shall be considered as qualification to weld any of the other steels permitted by the code.

(3) Tack welds, which are later incorporated into finished welds carrying calculated stress, shall not be considered as structural welds.

(4) The inspection of welding operations stipulated in table 10-2 shall include a check to ascertain that the welders employed on the work have the required license or who are qualified in accordance with paragraph two of this subdivision.

ARTICLE 7 WOOD

§[C26-1006.1] 27-617 General Requirements. -

Materials (other than non-stress grade lumber), design, and construction methods shall meet the requirements of the following reference standards:

(a) **Lumber and timber.** -Reference standard RS 10-8.

(b) **Plywood.** -Reference standard RS 10-9.

(c) **Structural glued-laminated lumber.** -Reference standard RS 10-18.

§[C26-1006.2] 27-618 Identification.-

Except as provided for in subdivisions (a) and (c) of this section, all wood used for structural elements shall be identified as to grade and shall bear an identifying mark of an approved bureau or agency performing the grading, or the official grade mark and trade mark of the bureau or association under whose rules the wood was graded, in accordance with the following:

(a) **Lumber and timber.** -All lumber and timber, including non-stress grade lumber, shall be identified by the grade mark of a lumber grading or inspection bureau or agency approved by the commissioner, except that pre-cut material and rough-sawn lumber may be covered by a certificate of inspection issued by a lumber grading or inspection agency approved by the commissioner in lieu of grade marking.

(b) **Plywood.** -Plywood used structurally shall bear identification as to grade, type, and species group, or identification index. Such identification shall be affixed by and identified by the trademarks of a testing and grading agency approved by the commissioner.

(c) **Glued-laminated.** - Glued-laminated structural members shall bear identification and/or shall be accompanied by certification in accordance with the provisions of reference standard RS 10-18.

(d) **Resawn lumber.** -Resawn (or reused) lumber shall be marked in accordance with its regraded status.

§[C26-1006.3] 27-619 Use of non-stress grade wood.-

The use of non-stress grade wood in structural elements shall be limited to the following conditions:

(a) Studs, joists, and rafters proportioned on the basis of the empirical provisions of section 27-622 of this article.

(b) The architect or engineer responsible for the design may assign an allowable stress value for the proposed material based on the provisions of reference standard RS 10-8 relating to "other species and grade." Under

such condition, the required species and grade of wood, together with the assigned stress value, shall be conspicuously indicated on the plans.

§[C26-1006.4] 27-620 **Quality control.** -Inspection of the fabrication of glued-laminated assemblies, as stipulated in table 10-2, shall include a check of sizes of members, of fit, and of gluing operations.

§[C26-1006.5] 27-621 General construction requirements.-

The provisions of this section shall be considered as supplemental to the provisions of the applicable reference standards.

(a) **Firecutting.** -The ends of wood beams, joists, and rafters resting on masonry or concrete walls shall be firecut to a bevel of three inches in their depth.

(b) **Protection of members.** -

(1) Positive drainage shall be provided for all areas under the building not occupied by basements or cellars.

(2) All loose wood and debris and all wood forms shall be removed from spaces under the building. All stumps and roots shall be grubbed to a minimum depth of twelve inches.

(3) Wood members embedded in the ground and used for the support of buildings shall be treated.

(4) Wood joists or wood structural floors closer than eighteen inches, wood girders closer than twelve inches, or sills closer than eight inches to an exposed ground surface within or without the building shall be treated or shall be of an equivalent resistant species.

(5) Sleepers, sills, columns, and posts supported on concrete or masonry piers shall be treated or shall be of an equivalent resistant species unless isolated from the ground as specified in paragraph four of this subdivision or by a concrete slab. Where the isolation consists of a concrete slab-on-grade, the sleepers, sills, columns, or posts shall be raised at least three inches above the top of such slab.

(6) Ends of wood girders entering masonry or concrete walls shall be provided with a minimum one-half inch air space on top, sides, and at the end, unless the girder is treated or is of an equivalent resistant species.

(7) Wood or plywood used as siding or a combination of siding and sheathing shall be isolated from exposed ground by at least six inches.

(8) Crawl spaces shall be ventilated as required in subchapter twelve of this chapter.

(9) Where treated timber is required, the preservative treatment shall comply with reference standards RS 10-20 and RS 10-22. Treatment of wood poles shall comply with reference standard RS 10-28. All treated wood shall be handled in accordance with the provisions of reference standard RS 10-29.

§[C26-1006.6] 27-622 Empirical provisions in lieu of design.

-The provisions of this section may be used in lieu of structural analysis only for those buildings in

occupancy group J-3 where the specific occupancies correspond to a live load requirement of forty psf, or less, and to constructions wherein the supporting framing consists of multiple, closely spaced members, such as joists, studs, platform or balloon frames. All wood structural members in other classes of construction shall be proportioned on the basis of the analysis of stresses. All requirements established in this section may be reduced when an analysis of stresses, executed in accordance with reference standard RS 10-8, indicates such reduction is feasible. Sizes of wood members stated in this section are nominal sizes.

(a) Stud walls and partitions. -

- (1) Studs shall be of equivalent or better grade than the minimum grades for the various species as established in reference standard RS 10-13.
- (2) Corner posts shall be 3-stud members or members of equivalent strength.
- (3) Load bearing studs shall be set with the larger cross section dimension perpendicular to the wall or partition. Studs in exterior walls of one story buildings of construction class II-D and II-E shall be at least two inches by three inches spaced not more than sixteen inches on center, or where studs are two inches by four inches, spaced not more than twenty-four inches on center. Studs for other classes of construction shall be at least two inches by four inches spaced not more than sixteen inches on center.
- (4) Stud walls resting on concrete or masonry shall have sills at least two inches in nominal thickness. Where such sills bear on concrete, they shall be fastened with minimum one-half inch bolts embedded at least six inches. Each sill piece shall have at least two anchor bolts, with one bolt located at least one inch from each end of the plate, and with intermediate spacing not more than eight feet. Where such sills bear on masonry, they shall be anchored in accordance with the applicable provisions of reference standard RS 10-1.
- (5) Stud partitions that rest directly over each other and are not parallel to floor joists or beams may extend down between the joists and rest on the top plate of the partition, partition girder, or foundation below, or may be constructed on sill plates running on top of the beams or joists.
- (6) All load bearing stud partitions shall be supported on walls, other partitions, double joists or beams, solid bridging, or on beams at least as wide as the studs. Joists supporting a partition parallel to the joists wherein the joists are spaced apart to permit the passage of piping or duct work shall be provided with solid blocking at intervals of not more than sixteen inches.
- (7) Load bearing partitions perpendicular to joists shall not be offset from supporting girders, walls, or partitions by more than the depth of the joists unless the joists are proportioned on the basis of analysis of stress.
- (8) In interior walls and in bearing partitions, double studs shall be provided at the sides of openings that are

greater than three feet six inches up to six feet in width, and triple-studs shall be provided at the sides of openings of greater width.

(9) Headers shall be provided over each opening in exterior walls and bearing partitions. Where the opening does not exceed three feet, each end of the header shall be supported on a stud or framing anchor. Where the opening exceeds three feet in width each end of the header shall be supported on one stud and where the opening exceeds six feet each end shall be supported on two studs.

(10) All studs in exterior walls and in bearing partitions shall be capped with double top plates installed to provide overlapping at corners and at intersections with other walls and bearing partitions. End joists in double top plates shall be offset at least twenty-four inches. In lieu of double top plates, a continuous header of similar dimensions may be used. For platform frame construction, studs shall rest on a single bottom plate.

(b) Bracing of exterior walls. -Exterior stud walls shall be braced by one inch by four inch continuous diagonal strips let into the face of the studs and into the top and bottom plates at each corner of the building. Bracing may also be provided by one of the following means:

- (1) Wood board sheathing of one inch nominal thickness, applied diagonally.
- (2) For one and two-story dwellings, plywood sheathing at least four feet by eight feet (except where cut to fit around openings and for similar purposes) and at least five-sixteenths of an inch thick on studs spaced sixteen inches or less on centers and at least three-eighths of an inch thick on studs spaced more than sixteen inches but not exceeding twenty-four inches on centers.
- (3) For one story dwellings and for the upper story of two story dwellings, fiberboard sheathing applied vertically in panels at least four feet by eight feet (except where cut to fit around openings and for similar purposes). Fiberboard sheathing shall be at least one-half inch thick and shall conform to the provisions of reference standard RS 10-27.
- (4) For one story dwellings and for the upper story of two story dwellings, gypsum board sheathing applied horizontally in panels at least two feet by eight feet (except where cut to fit around openings and for similar purposes). Gypsum boards shall be at least one-half inch thick and shall conform to the provisions of reference standard RS 10-19.

(c) Floor and roof framing. -

- (1) SPAN TABLES. -Joists and rafters may be used in accordance with reference standard RS 10-13.
- (2) BRIDGING. -In all floor and roof and framing, there shall be at least one line of bridging for each eight feet of span. The bridging shall consist of at least one inch by three inch lumber or equivalent metal bracing. A line of bridging or solid blocking shall also be required at supports unless lateral support is provided by nailing to a beam, header, or to the studs. Midspan

bridging is not required for floor or roof framing in one- and two-family dwellings where joist depth does not exceed twelve inches. Bridging shall bear securely against and be anchored to the members to be braced.

(3) **NOTCHES.** -Notches in the ends of joists and rafters shall not exceed one-fourth the depth unless adequate reinforcement is provided or analysis of stresses indicates that larger openings are feasible without the necessity for reinforcement. Notches in joists or rafters, located in the span shall not exceed one-sixth the depth and shall not be located in the middle third of the span. Bored holes shall not be within two inches of the top or bottom of the joists or rafter and the diameter of any such hole shall not exceed one-third the depth. For stair stringers, the minimum effective depth of the wood at any notch shall be three and one-half inches unless the stringer is continuously supported on a wall or partition.

(4) **SUPPORT.** -

- a. Floor or roof framing may be supported on stud partitions.
- b. Tail beams over twelve feet long and all header and trimmer beams over six feet long shall be hung in metal stirrups having anchors, or by other methods providing adequate support. Trimmers and headers shall be doubled where the header is four feet or more in length.
- c. Except where supported on a one inch by four inch ribbon strip and nailed to the adjoining stud, the ends of floor joists shall have at least one and one-half inches of bearing on wood or metal, nor less than four inches on masonry.
- d. Joists framing from opposite sides of and supported on a beam, girder, or partition shall be lapped at least four inches and fastened, butted end-to-end and tied by metal straps or dogs, or otherwise tied together in a manner providing adequate support.
- e. Joists framing into the side of a wood girder shall be supported by framing anchors, on ledger strips at least two inches by two inches, or by equivalent methods.
- f. Wood joists and rafters bearing on masonry walls shall be anchored to such walls in accordance with the applicable provisions of reference standard RS 10-1.

(5) **RAFTERS AND CEILING JOISTS.** -

- a. Where rafters meet to form a ridge, they shall be placed directly opposite each other and nailed to a ridge board at least one inch thick, and not less than the cut end of the rafters in depth.
- b. Provisions shall be made to resist the thrust from inclined rafters by connection of collar beams at least one inch by six inches, by connection to joists, or by equivalent means.
- c. Where ceiling joists are not parallel to rafters, subflooring or metal straps attached to the ends of the rafters shall be installed in a manner to provide a continuous tie across the building.

d. Ceiling joists shall be continuous, or where they meet over interior partitions, shall be securely joined to provide a continuous tie across the building.

e. Valley rafters shall be double members. Hip rafters may be single members. Valley and hip rafters shall be two inches deeper than jack rafters.

f. Trussed rafters shall be designed in accordance with the provisions of reference standard RS 10-8.

(6) Built-up members shall be securely spiked or bolted together and provision shall be made to resist the horizontal shear between laminations.

(d) Nailing schedule. -The size and number of nails for connections shall be in accordance with table 10-4.

§[C26-1006.7] 27-623 Heavy timber construction (construction class II-A). -

(a) Minimum sizes of members. -To conform to the fire resistance rating requirements for heavy timber construction (construction class II-A), members shall be solid sawn or solid glue-laminated and of the following minimum dimensions: (Sizes of wood members indicated in this section are nominal sizes).

(1) **COLUMNS, FRAMES AND ARCHES.** -

- a. Columns shall be at least eight inches in all dimensions when supporting floor loads, and at least six inches wide and eight inches deep when supporting roof and ceiling loads only.
- b. Beams and girders shall be at least six inches wide and ten inches deep.
- c. Frames or arches that spring from grade or the floor line and support floor loads shall be at least eight inches in all dimensions.
- d. Timber trusses supporting floor loads shall have members at least eight inches in all dimensions.
- e. Frames or arches for roof construction that spring from grade or the floor line and do not support floor loads shall have members at least six inches wide and eight inches deep for the lower half of the height, and at least six inches deep for the upper half.
- f. Frames or arches for roof construction that spring from the top of walls or wall abutments, framed timber trusses, and other roof framing, which do not support floor loads, shall have members at least four inches wide and six inches deep. Spaced members may be composed of two or more pieces at least three inches thick when blocked solidly through their intervening spaces or when such spaces are tightly closed by a continuous wood cover plate at least two inches thick secured to the underside of the members. Splice plates shall be at least three inches thick. When protected by approved automatic sprinklers under the roof deck, framing members shall be at least three inches wide.

TABLE 10-4 NAILING SCHEDULE

Building Element	Nail Type	Number and Distribution
Stud to sole plate	Common-toe-nail	4—8d
Stud to cap plate	Common-end-nail	2—16d
Double Studs	Common-direct	10d 12 in. o.c. or 16d 30in. in o.c.
Corner Studs	Common-direct	16d 30 in. o.c.
Sole plate to joist or blocking	Common	16d 16 in. o.c
Double cap plate	Common-direct	16d 24 in. o.c
Cap plate laps	Common-direct	3—16d
Ribbon strip, 6 in. or less	Common-direct	2—10d each bearing
Ribbon strip, over 6 in.	Common-direct	3—10d each bearing
Roof rafter to plate	Common-toe-nail	3—16d
Roof rafter to ridge	Common-toe-nail	2—16d
Jack rafter to hip	Common-toe-nail	3—10d
Floor joists to studs (no ceiling joists)	Common-direct	5—10d or 3—16d
Floor joists to studs (with ceiling joists)	Common-direct	2—10d
Floor joists to sill or girder	Common-toe-nail	2—16d
Double-joist to joist	Common-direct	10d—staggered at 16 in.
Ledger strip	Common-direct	3—16d at each joist
Ceiling joists to plate	Common-toe-nail	2—16d
Ceiling joists to every rafter	Common-direct	(see table following)
Ceiling joists (laps over partitions)	Common-direct	3—16d
Collar beam	Common-direct	4—10d
Bridging to joists and rafters	Common-direct	2—8d each end
Bridging to studs	Common-direct or toe	2—10d each end
Diagonal brace (to stud and plate)	Common-direct	2—8d each bearing
Tail beams to headers (when nailing permitted)	Common-end	1—20d each 4 sq. ft. floor area
Header beams to trimmers (when nailing permitted)	Common-end	1—20d each 8 sq. ft. floor area
1 in. Subflooring (6 in. or less in width)	Common-direct	2—8d each joist
1 in. Subflooring (over 6 in. in width)	Common-direct	3—8d each joist
2 in. Subflooring	Common-direct	2—20d each joist
1 in. Wall Sheathing (8 in. or less in width)	Common-direct	2—8d each stud
1 in. Wall sheathing (over 8 in. in width)	Common-direct	2—8d each stud
Plywood sheathing and subflooring ^a	Common-direct	
1 in. Roof sheathing (6 in. or less in width)		2—8d each rafter
1 in. Roof sheathing (over 6 in. in width)	Corrosion -direct	3—8d each rafter
Shingles, wood	Corrosion-resistive	2—No.15 B&S each bearing
Weather boarding	Common-resistive	2—8d each bearing
1/2 in. Fiberboard sheathing	1 1/2 in. galvanized roofing nail 6d common nail 16 ga. galvanized staples, 1 1/8 in. long, 7/16 in. crown	3 in c.c. on all edges and 6 in. c.c. at other bearings
25/32 in. Fiberboard sheathing	1 3/4 in. galvanized roofing nail 8d common nail 16 ga. galvanized staples, 1 1/2 in. long, 7/16 [in.]* crown	
1/2 in. Gypsumboard sheathing	1 1/2 in. galvanized roofing nail 11 ga. 3/8 in. to 7/16 in. head 16 ga. galvanized staples, 1 1/2 in. long, 7/16 [in.]* crown	

Notes for Table 10-4:^aFor nailing of plywood, see reference standard RS 10-9.

*Copy in brackets not enacted but probably intended.

CEILING JOIST NAILING TO EVERY RAFTER**(Number of 16d nails)**

Slope of Roof	4/12		5/12		6/12		7/12		9/12		12/12	
Rafter Spacing, o.c. (in.)	16	24	16	24	16	24	16	24	16	24	16	24
Width of building —												
Up to 24 ft.....	5	8	4	7	3	5	3	4	3	3	3	3
24 to 30 ft.....	7	11	6	9	4	7	3	6	3	4	3	3

(2) FLOORS. -

a. Planks shall be splined or tongue-and-groove, not less than three inches thick, covered with one inch tongue-and-groove flooring, laid crosswise or diagonally to the plank, or other surface having equivalent fire resistance; or shall be,

b. At least four inches wide, set on edge close together and well spiked, and covered the same as for three inch thick plank. The planks shall be laid so that there is no continuous line of end joints except at points of support. Floors shall not extend closer than one-half inch to walls to provide an expansion joint, but the joint shall be covered at top or bottom to avoid flue action.

(3) ROOF DECKS. -Roof decks shall be splined or tongue-and-groove planks at least two inches thick; or tongue-and-groove plywood panels (bonded with exterior glue) at least one and one-eighth inch thick, with face grain perpendicular to supports that shall be spaced not more than forty-eight inches on center; or of planks at least three inches wide set on edge close together and laid as required for floors.

(b) Construction details. -Self releasing type wall plate boxes or approved hangers shall be provided where beams and girders enter masonry.

§[C26-1006.8] 27-624 Construction methods. -

(a) Fabrication. -All timber shall be accurately cut and framed to a close fit in such a manner that the joints will have even bearing over the contact surfaces. Mortises shall be true to size for their full depth and tenons shall fit snugly. No shimming in joints, or open joints, shall be permitted.

(b) Erection. -

(1) ASSEMBLY. -Joints shall have a tight fit. Fasteners shall be installed in a manner that will not damage the wood. End compression joints shall be brought to full bearing. All framework shall be carried up true and plumb.

(2) TEMPORARY CONNECTIONS.- As erection progresses, the work shall be bolted, or nailed as necessary, to resist all dead load, wind, and erection stresses.

(3) ALIGNMENT. -The structure shall be properly aligned before final tightening of the connections.

ARTICLE 8 ALUMINUM**§[C26-1007.1] 27-625 General requirements. -**

Materials, design, and construction methods shall meet the requirements of reference standards *RS 10-10A, RS 10-10B and RS 10-11.

*Reference Standard designations revised per DOB 9-2-01 promulgation.

§[C26-1007.2] 27-626 Identification. -Aluminum for structural elements shall at all times in the fabricator's plant, be marked, segregated, or otherwise handled so
revision: July 1, 2008

that the separate alloys and tempers are positively identified, and after completion of fabrication shall be marked to identify the alloy and temper. Such markings shall be affixed to completed members and assemblies or to boxed or bundled shipments of multiple units prior to shipment from the fabricator's plant.

§[C26-1007.3] 27-627 Quality control. -

(a) Reference. -The provisions of tables 10-1 and 10-2 shall apply.

(b) Welding operations. -

(1) Welding work shall be performed only by persons who have obtained a license from the commissioner.

(2) Where manual welding work is not performed in the city of New York, welds shall be made by welders qualified under the applicable provisions of reference standard RS 10-25.

(3) Tack welds that are not later incorporated into finished welds carrying calculated stress shall not be considered as structural welds.

(4) The inspection of welding operations stipulated in table 10-2 shall include a check to ascertain that the welders employed on the work have the required license or are qualified in accordance with paragraph two of this subdivision.

§[C26-1007.4] 27-628 Erection. -

(a) Bracing. -All framework shall be carried up true and plumb. Temporary bracing shall be provided to support all loads imposed upon the framework during construction that are in excess of those for which the framework was designed.

(b) Temporary connections. -As erection progresses, the work shall be securely bolted, or welded, to resist all dead loads, wind, and erection stresses.

(c) Alignment. -The structure shall be properly aligned before riveting, permanent bolting, or welding is performed.

ARTICLE 9 REINFORCED GYPSUM CONCRETE**§[C26-1008.1] 27-629 General requirements. -**

Materials, design, and construction methods shall meet the requirements of reference standard RS 10-12.

§[C26-1008.2] 27-630 Identification of metal reinforcement.-

Bundles or rolls of welded wire fabric shall be securely tagged so as to identify the type and grade of steel, and the size.

§[C26-1008.3] 27-631 Limitations of use. -

Reinforced gypsum concrete shall not be used where exposed directly to the weather or where subject to frequent or continuous wetting. Precast units shall be protected by coverings or coatings from the weather and

from contact with moisture during shipment and during storage at the work site.

ARTICLE 10 THIN SHELL AND FOLDED-PLATE CONSTRUCTION

§[C26-1009.1] 27-632 **General requirements.** -Thin shell and folded-plate construction may be used for buildings or portions of buildings, as required in this section and subject to the provisions of this subchapter. The applicable provisions of the several reference standards relating to allowable stresses and the use of structural materials shall apply except as modified in this section.

§[C26-1009.2] 27-633 **Analysis.** -

(1) Unless otherwise permitted by the commissioner, stresses, displacements, and stability of thin shell and folded-plate structures shall be determined on the basis of the assumption of elastic behavior. The shell or plate may be assumed to be homogeneous and isotropic.

(2) The analysis for stability shall consider large deflections, creep effects and the deviation between the actual and theoretical shell surface.

§[C26-1009.3] 27-634 **Thin concrete shells.** -

The provisions of section 403, 404 and 405 of reference standard RS 10-45 shall apply with the following modifications. The remaining sections of reference standard RS 10-45 shall not apply.

(1) The advisory provisions of this standard shall be considered as mandatory.

(2) The minimum ultimate strength of concrete for thin shells shall be three thousand psi.

(3) Change all references to "the building code (ACI 318-63)" to "reference standard RS 10-4."

ARTICLE 11 SUSPENDED STRUCTURES

§[C26-1010.1] 27-635 **General requirements.** -

The materials, design, and construction of suspended structures shall meet the applicable requirements of the code and the requirements of this article.

§[C26-1010.2] 27-636 **Suspenders.** -

(a) **Bridge Wire Cable.** -Bridge wire cables used for suspenders shall be either bridge strand or bridge rope fabricated from galvanized bridge wire.

(1) **WIRE.** -Wire shall be produced from rods rolled from high carbon steel, the composition of which shall be controlled to provide internal soundness, uniformity of chemical composition and physical properties, freedom from injurious surface imperfections, and shall meet the following requirements.

a. The minimum ultimate tensile strength of zinc-coated wire shall be as follows:

Class A coatingtwo hundred twenty thousand psi

Class B coatingtwo hundred ten thousand psi

Class C coatingtwo hundred thousand psi

b. Yield strength shall be one hundred fifty thousand psi minimum for zinc-coated wire with class A or Class B coating, one hundred forty thousand psi minimum for zinc-coated wire with class C coating, based on the cross-sectional area of the coated wire when loaded to 0.7% elongation in a ten inch gage length. In determining the yield strength, an initial stress equivalent to forty-two thousand psi, based on cross-sectional area of the coated wire, shall be applied to the wire sample. At this loading, the extensometer shall be attached and an initial dial reading set at the equivalent of 0.15% elongation.

c. Elongation shall be four percent minimum in a ten inch gage length, determined as the permanent increase in length after failure of a marked section of the wire originally ten inches [*sic*] in length except that a value of two percent will be permitted for wires 0.110 in. or less in diameter having a class A zinc coating.

d. The zinc-coated wire must withstand wrapping at a rate not exceeding fifteen turns per minute twice around a mandrel equal to three times the wire diameter without fracture of the steel.

e. The wire used in bridge strand or bridge rope shall be zinc-coated (galvanized) in accordance with the requirements of table 10-5. Weight of coating shall be determined in accordance with the provisions of reference standard RS 10-24.

TABLE 10-5-MINIMUM WEIGHTS OF COATING-BRIDGE WIRE, ZINC-COATED, FOR BRIDGE STRAND AND BRIDGE ROPE CONSTRUCTIONS

Diameter of coated Wire (in.)	Minimum Weight of Coating (Ounces per Sq. Ft. of Uncoated Wire Surface)		
	Class A	Class B	Class C
0.041 to 0.061 incl.....	0.40	0.80	1.20
Over 0.061 to 0.079 incl.....	0.50	1.00	1.50
Over 0.079 to 0.092 incl.....	0.60	1.20	1.80
Over 0.092 to 0.103 incl.....	0.70	1.40	2.10
Over 0.103 to 0.119 incl.....	0.80	1.60	2.40
Over 0.119 to 0.142 incl.....	0.85	1.70	2.55
Over 0.142 to 0.187 incl.....	0.90	1.80	2.70
Over 0.187.....	1.00	2.00	3.00

(2) **BRIDGE STRAND.** -Bridge strands shall be made from wires complying with subparagraphs a through e of paragraph one of this subdivision, and shall meet the following requirements:

a. The wires shall be made in such lengths that the strands can be manufactured with no splices in the outside wires. Splicing of inner wires during the stranding operation is permissible. When joints are necessary in any wires, they shall be electrically butt welded and shall be recoated in a workmanlike manner. Joints in the wires of strand shall be made and dispersed in a manner that will maintain the minimum specified breaking strength of the strand.

b. The minimum breaking strength shall be based on tests to destruction and shall be certified by the manufacturer.

c. Bridge strand shall be prestretched to produce a stable modulus of elasticity of at least the following values for strand wires having class A coating:

one-half inch to two and

nine-sixteenths inches dia.twenty-four million psi

two and five-eighths inches and larger..twenty-three million psi

For bridge strands that have classes B and C zinc-coating on the outside wires, the modulus of elasticity shall not be more than one million psi less than the corresponding values for bridge strand with a class A coating. The pre-stretching load shall not exceed fifty-five percent of the breaking strength of the strand.

(3) **BRIDGE ROPE.** -Bridge rope shall be made from wires complying with subparagraphs a through e of paragraph one of this subdivision, and shall meet the following requirements:

a. Joints are permissible in inner and outer wires and shall be electrically butt welded and shall be recoated in a workmanlike manner. Joints in the wires of strand shall be made and dispersed in a manner that will maintain the minimum specified breaking strength of the rope.

b. The minimum breaking strength shall be based on tests to destruction and shall be certified by the manufacturer.

c. Bridge rope shall be prestretched to produce a stable modulus of elasticity of at least twenty million psi for rope wires having a class A coating. For bridge rope that has class B and C zinc-coatings on the outside wires, the modulus of elasticity shall not be more than one million psi less than the corresponding value for bridge rope with a class A coating. The prestretching load shall not exceed fifty-five percent of the breaking strength of the rope.

(b) Other materials. -Any structural material permitted for use under the provisions of other sections of this subchapter may be used for support of a suspended structure including, but not limited to, types of steel permitted for use under the provisions of reference standard RS 10-5; reinforcing steel and wire, prestressing wire and strand, and high strength alloy steel bars conforming to the requirements of reference standard RS 10-3; and steel conforming to the requirements of reference standards RS 10-66 and RS 10-69. Prestressing

wire and strand may be used for suspenders without the application of prestressing force. All such suspenders shall be protected as described in section 27-642 of this article.

§[C26-1010.3] 27-637 Tests of materials for bridge wire suspenders. -The following minimum quantities of bridge wire for suspenders shall be tested:

(1) Tensile strength tests of the wires shall be made of a specimen cut from each coil of zinc coated wire.

(2) Tests for elongation and for yield strength shall be made on samples from approximately ten percent of the coils of any one size finished wire. If any of these tests fail to meet the specified requirements, all the coils in that lot of finished wire shall be tested and only coils that satisfactorily pass the test shall be used.

(3) Tests of the zinc coating shall be made of approximately five percent of the coils of any one size of finished wire. If any of these tests fail to meet the specified requirements, all the coils in that lot of finished wire shall be tested and only coils that satisfactorily pass the test shall be used.

§[C26-1010.4] 27-638 Tests of materials for other types of suspenders. - The applicable provisions of reference standards RS 10-3 and RS 10-5 shall apply.

§[C26-1010.5] 27-639 Design. - The following design requirements shall supplement the applicable provisions of this subchapter.

(a) Flexibility. - Suspenders, unless encased, may be considered as perfectly flexible.

(b) Elastic stretch. - The elastic stretch of the suspenders shall be considered.

(c) Displacement. - Displacement resulting from changes in magnitude and position of load and its effects [*sic*] on stress shall be considered.

(d) Other considerations. - Consideration shall be given to the effects of temperature variations, partial and reversible wind loadings, and vibration.

(e) Allowable working load. -The allowable working load in suspenders formed from bridge wire cable shall be computed on the basis of factors equal to one and one-half times dead load plus two and one-half times live load or one and two-tenths times dead load plus two times live load plus two times wind load, applied to the specified, minimum, ultimate strength of the suspender. The allowable working load in suspenders conforming to the materials specifications or* several reference standards of this code shall be the allowable working stresses for tension members as prescribed in the applicable reference standard or, for those materials where allowable stresses for tension members are not prescribed, on factors of one and one-half times dead load plus two times live load or one and two-tenths times dead load plus one and one-half times live load, plus one and one-half times wind load, also applied to

the specified minimum, ultimate strength of the suspender. In no case, however, shall the factor, applied to the yield strength of the material or to the prestretching or prestressing force, exceed one and one-tenth times dead load plus one and one-quarter times live load.

**As enacted but "of" probably intended.*

§[C26-1010.6] 27-640 Fittings for wire cable suspenders.-

Fittings for wire cable suspenders shall be capable of developing the specified minimum ultimate strength of the attached cable or strand without developing stresses in the fitting equal to, or in excess of, the yield strength of the material in the fitting. One end fitting, of each type and size to be used, shall be tested to insure the adequacy of the fitting to develop the ultimate strength of the cable or strand to which it is to be attached.

§[C26-1010.7] 27-641 Construction. -

(a) General. -The general provisions of reference standard RS 10-5 relating to erection of steel shall apply.

(b) Fitting for wire cable suspenders. -

(1) Only fittings designed for use with the specific wire cable shall be used.

(2) All fittings shall be galvanized in accordance with reference standard RS 10-23.

(3) Zinc used for attaching all splattered fittings shall be at least equal to the grade designated as "high grade" in reference standard RS 10-26.

§[C26-1010.8] 27-642 Protection of suspenders. -

(a) Protected locations. -All wires in bridge strands, bridge ropes, or other wire rope or strand suspenders placed on the interior of structures or concealed from exposure by interior finish shall have at least a class A coating of zinc. Rods, bars, plates, or shapes used for suspenders shall be given a protective coating as specified for the protection of like material in the applicable reference standard.

(b) Exposed locations. -The outside wires of bridge strand or bridge rope suspenders placed in locations exposed to the weather shall have at least a class B coating of zinc and the inside wires shall have at least a class A coating. Rods, bars, plates, or shapes used for suspenders shall be given a protective coating as specified for the protection of like material in the applicable reference standard.

ARTICLE 12 GLASS PANELS

§[C26-1011.1] 27-643 Scope.- The provisions of sections 27-644 through 27-648 of this article shall apply to the use of glass in the exterior wall of a building and shall be limited to exterior application wherein the glass would not be subjected to any loads normal to the face of glass other than those due to wind. For applications involving human impact, the provisions of section 27-651 of this article shall apply. For other cases, the strength and mode of installation of glass shall conform to accepted industry standards.

§[C26-1011.2] 27-644 Support for glass panels. -

Glass shall be firmly held in place. The supports shall be of adequate strength to resist the applicable design wind loads as prescribed in subchapter nine of this chapter.

§[C26-1011.3] 27-645 Glass requirements.- Glass shall meet the requirements of reference standard RS 10-68 for the applicable type, size, thickness and quality.

§[C26-1011.4] 27-646 Thickness of glass. -

Thicknesses of glass panels shall be chosen either on the basis of statistical probability of breakage (subdivision (a) of this section) or on the basis of table 10-7, at the designer's option.

(a) Statistical probability. -Thickness of glass panels shall be chosen so that the statistical probability of breakage when the glass is initially subjected to the design wind load specified in table RS 9-5-1 does not exceed the values indicated in table 10-6. Probability or load factors used for design shall be derived by test. The sufficiency and validity of such test data shall be subject to approval by the commissioner.

(b) Alternate requirements.- Alternative to the requirements of paragraph (a) above, the thickness of glass panels may be chosen from table 10-7. For glass with assured minimum thickness greater than required by reference standard RS 10-68, the maximum areas in table 10-7 may be increased in proportion to the assured minimum thickness.

[C26-1011.5] 27-647 Special glasses.- For types of glass other than single annealed sheet and plate glass, allowable maximum areas may be determined by multiplying values in table 10-7 by the appropriate multiplying factor listed in table 10-8.

§[C26-1011.6] 27-648 Installation of glass panels. -

Glass panels shall be handled and installed so that their strength is not impaired by chipping or scratching, shall be fully and firmly embedded [*sic*] in their supports, and shall be mounted in a manner that will accommodate differential movements due to thermal and loading conditions.

§[C26-1011.7] 27-649 Protection of glass panels. -

Glass panels installed in areas where they will be subject to unusual conditions of construction damage, such as spatter from welds or locations near materials hoists, shall be protected by a hardboard covering or its equivalent during the period that such work is in progress.

§[C26-1011.8] 27-650 Deflection of support.-

The deflection of members supporting glass panels under the design wind load (measured perpendicular to the plane of the panel) shall not exceed $L/175$, where L is the span of the supporting member. In no case shall such deflection exceed three-quarters of an inch.

**TABLE 10-6 PROBABILITY OF BREAKAGE FOR GLASS PANELS
(BASED ON COEFFICIENT OF VARIATION OF 25%)**

Elevation Above Grade of Mid-Point of Glass		Area of Panel — Sq. Ft.			
-Ft.....	0-60	60-80	80-100	100-120	120+
0-50.....	1.0%	1.0%	1.0%	1.0%	1.0%
*50 or more.....	1.0%	0.8%	0.6%	0.4%	0.2%

**As enacted but "more than 50" probably intended.*

TABLE 10-7 MAXIMUM AREA OF GLASS — SQ. FT.

Nominal Thickness of Glass-Inches	Elevation Above Grade of Mid-Point of Glass-Ft.			
	0-50	50-300	300-600	600+
Sheet Glass				
Single strength.....	9	9	8	7
Double strength.....	13	13	11	10
3/16".....	25	25	21	19
7/32".....	32	32	27	24
Plate and Float Glass				
13/64".....	25	25	21	19
1/4".....	37	37	32	28
5/16".....	54	54	46	40
3/8".....	78	74	63	58
1/2".....	114	100	86	75
5/8".....	152	120	103	90
3/4".....	210	137	118	103
7/8".....	241	158	135	118
1".....	312	204	175	153

TABLE 10-8 MULTIPLYING FACTORS FOR VARIOUS TYPES OF GLASS

Glass Type	Multiplying Factor
Full tempered.....	4.0
Heat strengthened.....	2.0
Factory-fabricated double glazing...	1.5*
Laminated.....	0.6
Wired.....	0.5
Sandblasted or etched.....	0.4

*For asymmetrical units base strength on thinner lite.

§[C26-1011.9] 27-651 Panels subject to human impact loads.-

Glass in prime and storm doors, interior doors, fixed glass panels that may be mistaken for means of egress or ingress, shower doors and tub enclosures, or in similar installations wherein one or more of the following criteria apply, shall meet the requirements set forth in table 10-9, or by comparative tests shall be proven to produce equivalent performance:

- (a) openings are located in regularly occupied spaces.
- (b) lowest point of panel is less than eighteen inches above finished floor.
- (c) minimum dimension of panel is larger than eighteen inches.

TABLE 10-9 REQUIREMENTS FOR GLASS PANELS SUBJECT TO IMPACT LOADS^{a,b}

*3. Glass Type	Individual Opening Area	Requirements
Regular plate, sheet or rolled (annealed)	Over 6 sq. ft.	Not less than 3/16 in. thick. Must be protected by a push-bar or protective grille firmly attached on each exposed side ^c , if not divided by a muntin.
Regular plate, sheet or rolled (annealed), surface sandblasted, etched, or otherwise depreciated	Over 6 sq. ft.	Not less than 7/32 in. thick. Must be protected by a push-bar or protective grille firmly attached on each exposed side ^c .
Regular plate, sheet or rolled (annealed), obscure	Over 6 sq. ft.	Not less than 3/16 in. thick. Must be protected by a push-bar or grille firmly attached on each exposed side ^c .
Laminated	Over 6 sq. ft.	Not less than 1/4 in. thick. Shall pass impact test requirements of reference standard RS 10-67.
Fully-tempered	Over 6 sq. ft.	Shall pass impact test requirements of reference standard RS 10-67.
Wired	Over 6 sq. ft.	Not less than 7/32 in. thick. Shall pass impact test requirements of reference standard RS 10-67.
All unframed glass doors (swinging)		Shall be fully-tempered glass and pass impact test requirements of reference standard RS 10-67.

Notes for Table 10-9:

^aGlass less than single strength (SS) in thickness shall not be used.

^bIf short dimension is larger than 24 in., glass must be double strength (DS) or thicker.

^cBuilding owners and tenants shall maintain push-bars or protective grilles in safe condition at all times.

*"3," *enacted but probably not intended.*

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[1105.3]
[1105.4]
[1105.5]
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685 Foundation Piers
686 Foundation Walls
687 Construction of Footings,
Foundation Piers, and
Foundation Walls

249

[1112.4]	722	Footings, Foundation Piers, Foundation Walls and Pile Caps
[1112.5]	723	Subgrade for Footings, Foundation Piers, and Foundation Walls
[1112.6]	724	Construction Required for or Affecting the Support of Adjacent Properties or Buildings

***“C26” omitted from section numbers in this column.*

***“27” omitted from section numbers in this column.*

LIST OF TABLES

Table No.

11-1	Unified Soil Classification
11-2	Allowable Soil Bearing Pressures
11-3	Allowable Compressive Stress for Pile Materials
11-4	Minimum Driving Resistance and Minimum Hammer Energy for Steel H Piles, Pipe Piles, Precast and Cast-in-Place Concrete Piles, and Composite Piles (other than timber)
11-5	Minimum Driving Resistance and Hammer Energy for Timber Piles
11-6	Basic Maximum Pile Loads

ARTICLE 1 GENERAL

§[C26-1100.1] 27-652 Scope.- The provisions of this subchapter shall establish minimum requirements for the design and construction of the foundations of buildings. In addition, within special flood hazard areas, and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, foundations shall conform with the applicable provisions of reference standard RS 4-5.

§[C26-1100.2] 27-653 Standards.- The provisions of reference standard RS-11 shall be part of this subchapter.

§[C26-1100.3] 27-654 Definitions.- For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-1100.4] 27-655 Plans.-For the requirements governing the filing of plans and the work to be shown on the plans, see subchapter one of this chapter.

§[C26-1100.5] 27-656 Permits.-For the requirements governing equipment work permits and for equipment use permits, see subchapter one of this chapter.

§[C26-1100.6] 27-657 General requirements. - Except as otherwise specifically provided herein, the foundations of buildings including retaining walls and other structures shall bear on, or be carried down to, satisfactory bearing materials in such manner that the

entire transmitted load will be distributed over the supporting soils at any depth beneath the foundation at unit intensities within the allowable bearing values established in this subchapter. In addition, foundations shall be proportioned to limit settlements to a magnitude that will not cause damage to the proposed construction or to existing adjacent or nearby buildings during or after construction.

§[C26-1100.7] 27-658 Depth of foundations. -

(a) Footings and Pile Caps.- The bottom surface of any footing, pier, pile cap, or other foundation construction, other than grade beams, shall be carried down at least four feet below the lowest level of the adjoining ground or pavement surface that is exposed to frost, except as follows:

(1) In refrigerator, cold storage, or similar areas, the depth shall be increased as required to find *[sic]* the construction below the potential level of freezing in the soil, or loss of heat from the soil shall be prevented by insulation, warm air ducts, circulating systems, or equivalent means.

(2) For foundation elements resting on rock, the footings may rest on the rock surface at shallower depths than those indicated above, provided that visual inspection of the rock surface directly underlying the bearing area shows it to be free of seams, cracks, or disintegrated materials that could serve as reservoirs for water and thus be subject to freezing.

(3) For foundation elements in the interior of closed and heated buildings, or in cases where the soil underlying the foundation is not subject to frost action, there shall be no mandatory minimum requirement for embedment.

(4) Mobile or portable buildings not more than one story high may be supported on foundation elements bearing at grade, subject to the following conditions:

a. The building shall be supported on jacks, wedges, or other devices that will permit readjustment of level in the event of displacement.

b. The bearing capacity of the underlying soil shall be adequate to support the building loads without rupture. Where the building is to be supported on nominally unsatisfactory bearing materials, the provisions of sections 27-677 and 27-679 of article four of this subchapter shall apply except that, where the bearing material is confined under pavement and the bearing pressure on the surface of the soil material does not exceed five hundred psf, special investigation of the foundation will not be required.

c. The bearing area shall be well drained and not subject to inundation.

d. The levels of the foundations shall be checked and adjusted to compensate for displacements at least once every year, and the owner shall maintain a record of such work, available for inspection by the commissioner.

(5) Where piles project above grade and displacement of the pile cap is prevented by interposing a space

between the underside of the cap and the ground, the requirement for embedment of the cap below the level of frost penetration, shall not apply.

(b) Grade beams. -The bottom surface of any grade beam shall be carried down at least eighteen inches below the lowest level of the adjoining ground or pavement surface that is exposed to frost.

§[C26-1100.8] 27-659 Foundations at different levels. -Where footings are supported at different levels, or at different levels from the footings of adjacent structures, the influence of the pressures under the higher footings on the stability of the lower footings shall be considered. Consideration shall be given to the requirements for lateral support of the material supporting the higher footings, the additional load imposed on the lower footings, and assessment of the effects of dragdown on adjacent pile-supported buildings.

§[C26-1100.9] 27-660 Slabs on grade. -Slabs on grade within or adjacent to a building shall be so designed to limit settlement of such slabs to a magnitude that will not impair their usability or cause damage to the building or its foundations.

§[C26-1100.10] 27-661 Construction. -

The provisions of subchapter nineteen of this chapter relating to safety and of subchapter ten of this chapter relating to concrete, timber, masonry, and steel construction shall apply. For inspection requirements, see article thirteen of this subchapter.

(a) Cold weather. -No foundation shall be placed on frozen soil. No foundation shall be placed in freezing weather unless provision is made to maintain the underlying soil free of frost.

(b) Seepage. -In an excavation where soil and ground water conditions are such that an inward or upward seepage might be produced in soil material intended to provide vertical or lateral support for foundation elements or for adjacent foundations, excavating methods that will control or prevent the inflow of ground water shall be employed to prevent disturbance of the soil material in the excavation or beneath existing buildings. No foundation shall be laid on soil that has been disturbed by seepage unless remedial measures, as directed by an architect or engineer, are taken.

ARTICLE 2 SOIL INVESTIGATIONS

§[C26-1101.1] 27-662 General. -Borings in earth or rock, recovery of samples, tests of soil samples, load tests, or other investigations or exploratory procedures shall be performed as necessary for the design and construction of a safe foundation subject to inspection in accordance with the requirements of article thirteen of this subchapter.

§[C26-1101.2] 27-663 Borings. -(a) Number. -At least one boring shall be made for every twenty-five hundred square feet of building area or fraction thereof and, for buildings supported on piling of such type or capacity that load tests are required, one boring shall be made for every sixteen hundred square feet of building area or fraction thereof except as indicated in paragraphs one through three of this subdivision.

(1) For one- and two-family dwellings (appurtenant structures such as garages, sheds, and porches shall be considered as part of the dwelling):

a. Buildings supported on footings founded on soil of class 8-65 or better. -For contiguous groups of four or more dwellings at least one boring shall be made for every four buildings. For isolated dwellings and for contiguous groups of two or three dwellings, the overall site shall be explored by at least one boring or auger probing or, alternately, the site of each building shall be explored by one test pit carried to a depth of at least eight feet below the level of the bottom of the proposed footings.

b. Buildings supported on piles or on footings founded in soil strata of class 9-65, or poorer. -The site shall be explored by at least one boring for every four buildings in contiguous groups or one boring for each building in the case of isolated dwellings.

(2) For buildings having a plan area in excess of ten thousand square feet and where subsurface conditions as determined from preliminary borings or from borings on neighboring sites consist of uniform deposits of materials of class 1-65, 2-65, 3-65, 6-65, 7-65, or 8-65, subject to the approval of the commissioner, the required borings may be reduced to one for every five thousand square feet of building area or fraction thereof except where the foundation is to be supported on piles.

(3) Where foundations are to rest on rock of class 1-65, 2-65, or 3-65 and such rock is exposed prior to construction over a part or all of the area of the buildings, borings will not be required in those areas where rock is exposed, and the area (within the limits of the building) of the exposed rock surface shall not be included in the area used to compute the required number of borings, provided the following requirements are met:

a. The presence of defects or the inclination of bedding planes in the rock are of such size and location as to not affect the stability of the foundation.

b. The foundation is designed for bearing pressures not exceeding those permitted in table 11-2 without increase for embedment.

(b) Location. -At least two-thirds of the required number of borings shall be located within the area under the building. Those outside the area shall not be more than twenty-five feet from the limits of the building. Borings shall be uniformly distributed or distributed in accordance with the loading pattern imposed by the building.

(c) Depth. -

(1) Unless soil material of class 1-65 through 3-65 is encountered at shallower depth, borings shall extend below the deepest part of the excavation as necessary to satisfy the more restrictive of the following requirements:

a. Borings shall extend deep enough into nominally satisfactory bearing material to establish its character and thickness, but not less than the following:

1. Where the soil material is class 5-65-ten feet.
2. For one- and two-family residences, two stories or less in height-fifteen feet.
3. For other cases-twenty-five feet.

b. Borings shall extend to the depth at which the vertical stress caused by the proposed construction is reduced to ten percent or less of the original vertical stress at this depth due to the weight of the overburden, except that where strata of soil materials of class 9-65 or poorer are encountered within this depth, the borings shall penetrate such strata and be carried to a depth that shows penetration continuous of material of class 8-65 or better as required in paragraph a of this subdivision.

c. In addition to the requirements of paragraphs a and b of this subdivision, at least one boring in every ten thousand square feet of building area, but not less than one boring per building, shall be carried to a depth of one hundred feet below the curb for buildings having an average area load exceeding one thousand psf. The average load shall be computed as the sum of all dead loads and live loads of the building, divided by the area of the building at ground level.

(2) Where rock is encountered in borings within the depths noted in paragraph one the borings shall be cored a minimum of five feet into rock, or farther where necessary or required, to obtain at least a recovery of thirty-five percent core from five feet of penetration but not to exceed the depth in paragraph one of this subdivision. However, for foundations supported on piles or drilled-in caissons bearing on the rock and having a capacity in excess of eighty tons per unit, the capacity of the rock to support the applied load shall be demonstrated by increasing the length of coring to ten feet.

(d) Types. -

(1) SOIL BORINGS. -Soil samples shall be recovered at intervals not to exceed five feet and at every change of soil strata. Such samples shall be recovered using a two inch O.D. split spoon sampler having an inside diameter of one and three-eighths inches and a constant internal cross section. The sampler shall be at least twenty-four inches long and shall be tipped with a heat treated, sharp cutting shoe. It shall be straight and sound, with an undistorted cross section. The rods to which the sampler is attached shall be one inch extra heavy pipe or one and five-eighths O.D. drill rods. The sampling tools shall be driven with a one hundred forty pound hammer having a fall of thirty inches. The blows per foot so recorded shall be designated hereinafter, by the symbol, N. The fall of the hammer shall be a free

fall and the energy of impact shall not be mitigated by friction of the hoisting line on the drum, friction of the hammer against its guide, or other similar effects. All samples, except those of rock, shall be preserved in air tight bottles having a capacity of at least eight ounces.

(2) ROCK BORINGS. -Where borings are required to penetrate rock they shall be advanced by core drilling, and core samples shall be recovered using a double tube core barrel and diamond bits that provide cores at least one and three-eighths inches in diameter.

(e) Data to be reported. -Records of all borings required by the provisions of subdivision (a) of this section shall accompany the application for approval of the foundation plans. Such records shall show, as a minimum, the size of casing and the number of blows per foot required to advance the casing (to the depth that casing is used); the weight of hammer and the distance of fall; a description of the sampler; a description of the drill tools and equipment including, where used, the size of diamond bits and type of core barrels; the number of blows required to drive the sampling spoon for each six inches increment of penetration; the elevation of the ground surface referenced to an established datum; the location and depth of the boring and its relation to the proposed construction; the elevations at which samples were taken; the elevations at which core drilling was started and stopped for each "run;" the elevations of the boundaries of soil strata; percent recovery for each "run" of core drilling; description of the soil strata encountered and geological classification of rock drilled (based on visual examination of cores); any particular, unusual, or special conditions such as loss of water in the earth and rock strata, boulders, cavities, and obstructions, use of special type of samplers, traps, etc.; and the level of ground water together with a description of how and when the ground water level was observed. All abandoned or unsuccessful attempts at borings or rock drilling shall be reported.

(f) Disposition of Samples and Cores. -Soil samples and rock cores shall be retained in an accessible location by the owner, or by the party making application for approval of the foundation plans for a period of one year after the date of issuance of a certificate of occupancy, and shall be available upon reasonable notice for inspection by the commissioner.

§[C26-1101.3] 27-664 Test pits. -

(a) Tests pits may be substituted for boring on a one-for-one basis. All applicable requirements as to depth, numbers of samples, data to be reported, and disposition of samples shall be observed, except that the use of sample spoon, recording of driving resistance, and recovery of rock cores is not required in test pit investigations, and except as provided in subdivision (b) of this section.

(b) Test pits for buildings not more than one story in height or for one or two-family residences not more than two stories in height need only extend four feet

below the deepest part of the excavation for the construction of footings, or a minimum of four feet when foundation elements rest on grade pursuant to paragraph four of subdivision (a) of section 27-658 of article one of this subchapter, provided that such structures are supported by footings bearing on nominally satisfactory bearing materials of class 9-65 (except soft clay) soil or better.

§[C26-1101.4] 27-665 Boring methods. -

Borings shall be made by continuous driving and cleaning out of a pipe casing (including telescoping of smaller sizes inside of larger casing) except as permitted in subdivisions (a), (b) and (c) of this section. Where casing is used, it shall be cleaned out to undisturbed soil prior to sampling and the sample spoon driven into soil that has not been affected by chopping, washing, or hydrostatic imbalance.

(a) Uncased borings. -Uncased borings, including borings where the casing is omitted for part of the depth, may be used if the mud slurry method is followed. The requirements for soil sampling and rock coring shall be the same for uncased borings as for borings made using casing, except that prior to each soil sampling operation the boring shall be substantially cleaned of disturbed material and the sample spoon shall be advanced through any settled solids before counting the blows required to drive the spoon. Longer sample spoons, having a sludge chamber, shall be used where settled solids exceed six inches. In determining ground water levels, methods shall be used to reduce and replace the mud slurry so that the hydrostatic head may be measured. The procedures shall be described in detail in the records.

(b) Augur borings. -Borings may be made with augers except that short flight augers shall not be used in granular soils below the water level. Sampling procedures in auger borings for both soil and rock shall be the same as for cased borings. Full hydrostatic head shall be maintained in granular soils below the ground water level during the boring operation.

(c) Maximum diameter. -Where the bore hole, as drilled by any method, is in excess of four inches in diameter, sampling operations shall be performed through a temporary casing having a four inch inside diameter or less.

§[C26-1101.5] 27-666 Probing and geophysical explorations. -

(a) Footings, pier or wall designs. - Where the foundations for a proposed building consist of footings or foundation piers or walls bearing on rock of class 1-65, 2-65 or 3-65, the use of probings, auger borings or geophysical methods, made without the recovery of soil samples or rock cores, may (except as hereafter specified) be substituted for up to one-half of the number of borings required by the provisions of subdivision (a) of section 27-663 of this article, provided that such probings, borings, etc. are carried to adequate depth and are of a nature that will reasonably define the surface contours of the rock. The

accuracy of such surface contour definition shall be confirmed by recovering rock cores at the locations of at least one-fifth of the probings or auger borings or, in the case where geophysical methods are used, those borings which are made shall be so distributed as to permit confirmation of the accuracy of the geophysical investigations. The provisions of paragraph two of subdivision (a) of section 27-663 of this article, shall not apply where the provisions of this section are invoked.

(b) Pile support. - Where the foundation for the proposed building consists of piling bearing on rock of class 1-65, 2-65 or 3-65, the provisions of subdivision (a) of this section shall apply, provided that the borings consistently show that the soil overlying the rock consists solely of deposits of class 6-65 through 11-65 and is free of boulders or other obstructions.

(c) Geophysical methods. - Geophysical investigations shall be conducted by experienced and qualified personnel acceptable to the commissioner who may reject the results and require additional exploration by borings if the results of the geophysical explorations cannot be satisfactorily correlated to the logs of the borings.

§[C26-1101.6] 27-667 Existing borings. - Existing boring data may be utilized subject to the following:

- (1) Borings, test pits, probings, etc., that have been made in accordance with all requirements of this section, but not necessarily for the investigation of the specific project for which application is being made, may be utilized in fulfillment of these provisions.
- (2) The logs of borings, test pits, probings, etc., that have been made in accordance with all requirements of this section, but wherein the soil samples and/or rock cores are not available for examination, may be utilized in fulfillment of these provisions to an extent not to exceed one-half of the required number of borings.
- (3) Borings, test pits, probings, etc., or the logs thereof, that do not meet the specific requirements of this subchapter, but which are of suitable type and adequate penetration to provide the data required for the safe design and construction of the proposed foundation, may be utilized in fulfillment of the provisions of this section, subject to the approval of the commissioner.

ARTICLE 3 FOUNDATION LOADS

§[C26-1102.1] 27-668 Soil bearing pressures. -The loads to be used in computing the bearing pressures on materials directly underlying footings shall be the total column, pier, or wall reactions determined in accordance with the provisions of subchapter nine of this chapter, on the basis of reduced live load; plus the weight of the foundations; plus the weight of any soil, fill, and slabs on grade that is included within vertical planes projected upward from the extreme limits of the footing to the final ground surface. Live load on grade, or on slabs on

grade, within these limits shall also be included. Impact loads shall be considered in accordance with the provisions of section 27-673 of this article.

§[C26-1102.2] 27-669 Pile reactions. -The loads to be used in computing pile reactions shall be determined as provided in section 27-668 of this article except that where piles penetrate fill, clay, silt, peat, or similar compressible strata, the pile loads shall be increased by the amount of drag exerted by such material, and by any overlying strata, during consolidation. Computation of the amount of drag shall consider the amount of added fill, the amount of shear strain between pile (or group) and the soil, the ratio of vertical to horizontal pressure in the soil, and the arrangement of the piles. The soil surrounding or underlying the pile cap shall not be considered as providing any vertical support for the cap.

§[C26-1102.3] 27-670 Lateral loads. -

**** (a) Earth and ground water pressure.** -Every foundation wall or other wall serving as a retaining structure shall be designed to resist, in addition to the vertical loads acting thereon, the incident lateral earth pressures and surcharges, plus hydrostatic pressures corresponding to the maximum probable ground water level. Retaining walls shall be designed to resist at least the superimposed effects of the total static lateral soil pressure, excluding the pressure caused by any temporary surcharge, plus an earthquake force of $0.045 w_s h^2$ (horizontal backfill surface), where w_s equals unit weight of soil and h equals wall height. Surcharges which are applied over extended periods of time shall be included in the total static lateral soil pressure and their earthquake lateral force shall be computed and added to the force of $0.045 w_s h^2$. The earthquake force from backfill shall be distributed as an inverse triangle over the height of the wall. The point of application of the earthquake force from an extended duration surcharge shall be determined on an individual case basis. If the backfill consists of loose saturated granular soil, consideration shall be given to the potential liquefaction of the backfill during the seismic loading using reference standard RS 9-6.

(b) Wind and other superstructure loads. -Provision shall be made to resist lateral loads imposed on the superstructure due to wind or other causes.

(c) Soil movements. - Buildings shall not be constructed in areas where the soil is subject to lateral movements unless positive provision is made to prevent such movements.

****Local Law 17-1995.**

§[C26-1102.4] 27-671 Eccentricities. -Eccentricity of loading in foundations, including eccentricity of loading on the bases of retaining walls, shall be investigated and the maximum soil pressure or pile load (considering eccentricity) shall be kept within the safe capacity thereof as established in articles four and eight of this subchapter. Soil pressure and pile load due to

eccentricity shall be computed on the basis of straight line distribution of foundation reaction. However, other modes of distribution of the foundation reaction may be assumed, subject to the approval of the commissioner, if it can be demonstrated that the pile and/or soil is capable of sufficient plastic deformation to develop such mode of distribution without failure.

§[C26-1102.5] 27-672 Uplift forces. - Uplift and overturning forces due to wind and hydrostatic pressure shall be considered.

§[C26-1102.6] 27-673 Impact. -Impact forces may be neglected in the design of foundations, except for foundations bearing on loose granular soils, or, regardless of the type of soil material, for foundations supporting cranes, heavy machinery, and* moving equipment, or where the ratio of the live load causing impact to the total of the reactions from live load applied without impact plus dead load exceeds one-third.

***As enacted but "or" probably intended.**

§[C26-1102.7] 27-674 Stability. -The provisions of article twelve of this subchapter shall apply.

ARTICLE 4 ALLOWABLE SOIL BEARING PRESSURES

§[C26-1103.1] 27-675 Classification of soil materials. -

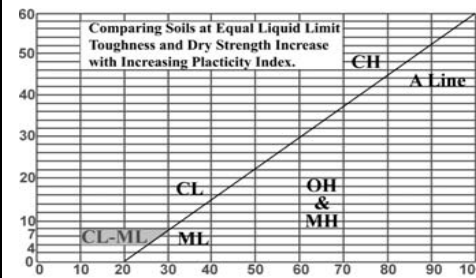
For purposes of this subchapter, soil materials shall be classified and identified in accordance with table 11-1. In addition, the following supplementary definitions shall apply.

(a) Rock. -

(1) HARD SOUND ROCK. -Includes crystalline rocks such as Fordham gneiss**, Ravenswood gneiss**, Palisades diabase, Manhattan schist. Characteristics [*sic*] are: the rock rings when struck with pick or bar; does not disintegrate after exposure to air or water; breaks with sharp fresh fracture; cracks are unweathered and less than one-eighth inch wide, generally no closer than three feet apart; core recovery with a double tube, diamond core barrel is generally eighty-five percent or greater for each five foot run.

****As enacted but "gneiss" probably intended.**

TABLE 11-1 UNIFIED SOIL CLASSIFICATION
(Including Identification and Description)

Major Divisions		Group Symbols	Typical Names	Field Identification Procedures (Excluding particles larger than 3 in. and basing fractions on estimated weights)			Information Required for Describing Soils	Laboratory Classification Criteria									
1	2	3	4	5			6	7									
Coarse-grained Soils More than half of material is <i>larger</i> than No. 200 sieve size.	Gravels More than half of coarse fraction is larger than No. 4 sieve size. (For visual classification, the 1/4-in. size may be used as equivalent to the No. 4 sieve size.)	Clean Gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixture, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.			For undisturbed soils add information on stratification, degree of compactness, cementation, moisture condition, and drainage characteristics.	Determine percentage of gravel and sand from grain-size curve. Depending on percentage of fine (fraction smaller than No. 200 sieve size) coarse-grained soils are classified as follows: Less than 5% More than 12% 5% to 12% GW, GP, SW, SP, GM, GC, SM, SC. Borderline cases requiring use of dual symbols.	$C_u = \frac{D_{60}}{D_{10}}$ Greater than 4		$C_e = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3		Not meeting all gradation requirements for GW			
			GP	Poorly graded gravels or gravel-sand mixture, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.					Atterberg limits below "A" line or P1 less than 4		Above "A" line with P1 between 4 and 7 are <u>borderline</u> cases requiring use of dual symbols.					
		GM	Silty gravels, gravel-and-silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).			Atterberg limits above "A" line with P1 greater than 7										
		GC	Clayey gravels, gravel-and-clay mixtures.	Plastic fines (for identification procedures see CL below).													
	Clean Sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.			Example: Silty sand, gravelly; about 20% hard, angular gravel particles 1/2-in. maximum size; rounded and subangular sand grains, coarse to fine; about 15% nonplastic fines with low dry strength; well compacted and moist in place; alluvial sand; (SM).	$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6		$C_e = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3		Not meeting all gradation requirements for SW					
		SP	Poorly graded sands or gravelly sands, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.				Atterberg limits above "A" line or P1 less than 4		Limits plotting in hatched zone with P1 between 4 and 7 are <u>borderline</u> cases requiring use of dual symbols.							
		SM	Silty sands, sand-silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).				Atterberg limits above "A" line with P1 greater than 7									
		SC	Clayey sands, sand-clay mixtures.	Plastic fines (for identification procedures see CL below).													
				Identification Procedure on Fraction Smaller than No. 40 Sieve Size.													
				Dry Strength (Crushing Characteristics)	Dilatancy (Reaction to shaking)	Toughness (Consistency near PL)											
	Fine-grained Soils More than half of material is <i>smaller</i> than No. 200 sieve size.	Silt and Clays Liquid Limit is 50 or less	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	None to slight	Quick to slow	None	For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions									
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	Medium to high	None to very slow	Medium										
		Silt and Clays Liquid Limit is greater than 50	OL	Organic silts and organic silty clays of low plasticity.	Slight to medium	Slow	Slight	Give typical name; indicate degree and character of plasticity; amount and maximum size of coarse grains; color in wet condition; odor, if any; local or geologic name and other pertinent descriptive information; and symbol in parentheses. Example: Clayey silt, brown; slightly plastic; small percentage of fine sand; numerous vertical root holes; firm and dry in place; loess; (ML).						LIQUID LIMIT PLASTICITY CHART For Laboratory classification of fine-grained soils			
			MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	Slight to medium	Slow to none	Slight to medium										
			CH	Inorganic clays of high plasticity, fat clays.	High to very high	None	High										
			OH	Organic clays of medium to high plasticity, organic silts.	Medium to high	None to very slow	Slight to medium										
Highly Organic Soils		Pt	Peat and other highly organic soils.	Readily identified by color, odor, spongy feel and frequently by fibrous texture													

(1) Boundary classifications: Soils possessing characteristics of two groups are designed by combinations of group symbols. For example GM-GC, well-graded gravel-sand mixture with clay binder.

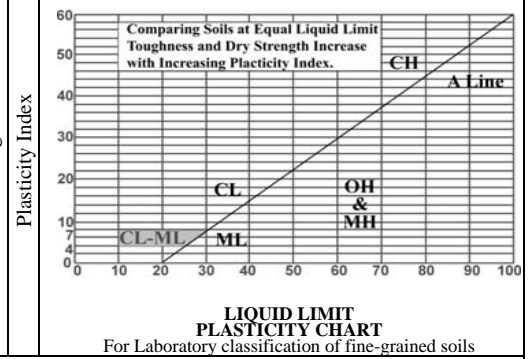
(2) All sieve sizes on this chart are U.S. standard.

(3) Adopted by Corps of Engineers and Bureau of Reclamation, January 1952

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Determine percentage of gravel and sand from grain-size curve. Depending on percentage of fine (fraction smaller than No. 200 sieve size) coarse-grained soils are classified as follows:
Less than 5% GW, GP, SW, SP,
More than 12% GM, GC, SM, SC.
5% to 12% Borderline cases requiring use of dual symbols.

Use grain-size curve in identifying the fractions as given under field identification.



(1) Boundary classifications: Soils possessing characteristics of two groups are designed by combinations of group symbols. For example GM-GC, well-graded gravel-sand mixture with clay binder.
(2) All sieve sizes on this chart are U.S. standard.
(3) Adopted by Corps of Engineers and Bureau of Reclamation, January 1952

**FIELD IDENTIFICATION PROCEDURES FOR FINE-GRAINED
SOILS OR FRACTIONS (Notes for Table 11-1)**

These procedures are to be performed on the minus No. 40 sieve size particles, approximately 1/64 in. For field classification purposes, screening is not intended, simply remove by hand the coarse particles that interfere with the tests.

Dilatancy (reaction to shaking)

After removing particles larger than No. 40 sieve size, prepare a pat of moist soil with a volume of about one-half cubic inch. Add enough water if necessary to make the soil soft but not sticky.

Place the pat in the open palm of one hand and shake horizontally, striking vigorously against the other hand several times. A positive reaction consists of the appearance of water on the surface of the pat which changes to a livery consistency and becomes glossy. When the sample is squeezed between the fingers, the water and gloss disappear from the surface, the pat stiffens, and finally it cracks or crumbles. The rapidity of appearance of water during shaking and of its disappearance during squeezing assist in identifying the character of the fines in a soil.

Very fine clean sands give the quickest and most distinct reaction whereas a plastic clay has no reaction. Inorganic silts, such as a typical rock flour, show a moderately quick reaction.

Dry Strength (crushing characteristics)

After removing particles larger than No. 40 sieve size, mold a pat of soil to the consistency of putty, adding water if necessary.

Allow the pat to dry completely by oven, sun or air-drying, and then test its strength by breaking and crumbling between the fingers. This strength is a measure of the character and quantity of the colloidal fraction contained in the soil. The dry strength increases with increasing plasticity.

High dry strength is characteristic for clays of the CH group. A typical inorganic silt possesses only very slight dry strength.

Silty fine sands and silts have about the same slight dry strength, but can be distinguished by the feel when powdering the dried specimen. Fine sand feels gritty whereas a typical silt has the smooth feel of flour.

Toughness (consistency near plastic limit)

After particles larger than the No. 40 sieve size are removed, a specimen of soil about one-half inch cube in size, is molded to the consistency of putty. If too dry, water must be added and if sticky, the specimen should be spread out in a thin layer and allowed to lose some moisture by evaporation. Then the specimen is rolled out by hand on a smooth surface or between the palms into a thread about one-eighth inch in diameter. The thread is then folded and rerolled repeatedly. During this manipulation, the moisture content is gradually reduced and the specimen stiffens, finally loses its plasticity, and crumbles when the plastic limit is reached.

After the thread crumbles, the pieces should be lumped together and a slight kneading action continued until the lump crumbles.

The tougher the thread near the plastic limit and the stiffer the lump when it finally crumbles, the more potent is the colloidal clay fraction in the soil. Weakness of the thread at the plastic limit and quick loss of coherence of the lump below the plastic limit indicate either inorganic clay of low plasticity, or materials such as kaolin-type clays and organic clays which occur below the A-line.

Highly organic clays have a very weak and spongy feel at the plastic limit.

(2) **MEDIUM HARD ROCK.** -Includes crystalline rocks of paragraph one of this subdivision, plus Inwood marble and serpentine. Characteristics are: all those listed in paragraph one of this subdivision, except that cracks may be one-quarter inch wide and slightly weathered, generally spaced no closer than two feet apart; core recovery with a double tube, diamond core barrel is generally fifty percent or greater for each five foot run.

(3) **INTERMEDIATE ROCK.** -Includes rocks of paragraphs one and two of this subdivision, plus cemented shales and sandstone of the Newark formation. Characteristics are: the rock gives dull sound when struck with pick or bar; does not disintegrate after exposure to air or water; broken pieces may show weathered surfaces; may contain fracture and weathered zones up to one inch wide spaced as close as one foot; core recovery with a double tube, diamond core barrel is generally thirty-five percent or greater for each five foot run.

(4) **SOFT ROCK.** - Includes rocks of paragraphs one, two and three of this subdivision in partially weathered condition, plus uncemented shales and sandstones. Characteristics are: rock may soften on exposure to air or water; may contain thoroughly weathered zones up to three inches wide but filled with stiff soil; core recovery with a double tube, diamond core barrel is less than thirty-five percent for each five foot run, but standard penetration resistance in soil sampling is more than fifty blows per foot. Where core recoveries are less than twenty percent and the material is to be used for bearing, a minimum three inches diameter core shall be recovered and the material recovered shall be classified in accordance with table 11-1.

(b) Special soil types. -

(1) **FINE SAND.** - Soils of group SM, containing more than fifty percent (by weight) of particles passing a number sixty mesh sieve.

(2) **HARDPAN.** - Soils of groups GM, GC, and SW, generally directly overlying rock, and which are sufficiently cemented to be difficult to remove by picking.

(3) **CLAY SOILS.** - Soils of each group SC, CL and CH shall be classified according to consistency as hard, medium, or soft in accordance with the following:

a. **Hard clay.** - A clay requiring picking for removal, a fresh sample of which cannot be molded by pressure of the fingers.

b. **Medium clay.** - A clay that can be removed by spading, a fresh sample of which can be molded by a substantial pressure of the fingers.

c. **Soft clay.** -A clay, a fresh sample of which can be molded with slight pressure of the fingers.

(4) **SILT SOILS.** - Soils of each group ML and MH shall be classified as dense, medium, or loose depending on relative difficulties of removal as described for hard, medium, and soft clays in paragraph three of this subdivision.

(5) **VARVED SILT.** -A natural soil deposit consisting of alternating thin layers of silt, clay, and sand in which the silt or silt plus sand layers predominate.

§[C26-1103.2] 27-676 Satisfactory bearing material.-

The following materials, or any combination of them shall be considered as generally satisfactory bearing materials; hard sound, medium hard, intermediate, and soft rock; hardpan; granular soils of G and S groups;

dense or medium silt soils of groups ML and MH; and hard or medium clay soils of groups CL and CH.

§[C26-1103.3] 27-677 Nominally unsatisfactory bearing material. -Fill material, peat (group Pt), organic silts and clays (grouping OL and OH), soft or loose soils of groups ML, CL, HM and CH, varved silt, or satisfactory bearing materials that contain lenses of, or are underlain by, these materials shall be considered as nominally unsatisfactory bearing materials.

§[C26-1103.4] 27-678 Allowable soil bearing pressures.-The allowable bearing pressures on satisfactory bearing materials shall be those established in table 11-2. The allowable bearing pressures on nominally unsatisfactory bearing materials shall be those established in accordance with section 27-679 of this article. Allowable bearing pressure shall be considered to be the allowable pressure at a point in the soil mass in excess of the stabilized overburden pressure existing at the same point prior to construction operations. The stabilized overburden pressure existing at a point shall be defined as that portion of the weight of the overlying soil material that is supported by granular interaction rather than pore pressure. In general,

the magnitude of the stabilized overburden pressure may be approximated as follows:

- (a) The overlying soil material shall have been in place for an adequate length of time to produce a stable condition of pore pressure in, or below, the foundation level. Where the bearing stratum consists of soils of classes 5-65 through 8-65, the bearing stratum shall be considered to be fully consolidated except with regard to the weight of that portion of the overlying soil material that consists of added fill material.
- (b) Where all or a portion of the overlying soil consists of fill material, the weight of the fill material shall not be included in the stabilized overburden pressure unless the magnitude of stabilized pressure is verified by an architect or engineer on the basis of laboratory or field tests on undisturbed material.
- (c) Where the bearing stratum consists of soils of classes 9-65 through 11-65, the stabilized overburden pressure shall be considered as zero unless the magnitude of the stabilized pressure is established by an architect or engineer on the basis of laboratory or field tests on undisturbed material.

TABLE 11-2 ALLOWABLE SOIL BEARING PRESSURES

Class of Material	Description See Notes* (1)	Basic Allowable Bearing Values (Tons per sq. ft.) See Notes (10), (11), and (12)	
1-65	Hard Sound Rock.....	60	See Notes (2) and (8).
2-65	Medium Hard Rock.....	40	See Notes (2) and (8).
3-65	Intermediate Rock.....	20	See Notes (2) and (8).
4-65	Soft Rock.....	8	
5-65	Hardpan.....	—	See Notes (3) and (8).
6-65	Gravel and Gravel Soils (Soil Groups GW, GP, GM, & GC and soils of Soil Groups SW, SP, and SM containing more than 10% of material retained on a No. 4 sieve).....	—	See Notes (4) and (8) and (9).
7-65	Sands (other than Fine Sands) (Soil Groups SW, SP, & SM but containing not more than 10% of material retained on a No. 4 sieve).....	—	See Notes (5) and (8) and (9).
8-65	Fine Sand.....	—	See Notes (6) and (8) and (9).
9-65	Clays and Clay Soils (Soil Groups SC, CL, & CH)		
	Hard.....	5	See Note (7).
	Medium.....	2	See Note (7).
	Soft.....	See Sec. 27-679.	
10-65	Silts and Silt Soils (Soil Groups ML & MH)		
	Dense.....	3	
	Medium.....	1.5	
	Loose.....	See Sec. 27-679.	
11-65	Nominally Unsatisfactory Bearing Materials	See Sec. 27-679.	

*As enacted but "Note" probably intended.

Notes:

(1) Classification. The soil classifications indicated in this table are those described in section 27-675 of this article. Where there is doubt as to the applicable classification of a soil stratum, the allowable bearing pressure applicable to the lower class of material to which the given stratum might conform shall apply unless the conformance to the higher class of material can be proven by laboratory or field test procedures.

(2) Allowable bearing pressure on rock. The tabulated values of basic allowable bearing pressures apply only for massive rocks or, for sedimentary or foliated rocks, where the strata are level or nearly so, and, then only if the area has ample lateral support. Tilted strata and their relation to nearby slopes or excavations shall receive special consideration.

(3) Allowable bearing pressure on hardpan. For hardpan consisting of well cemented material composed of a predominantly granular matrix and free of lenses of fine grained material and inclusions of soft rock, the basic allowable bearing pressure shall be twelve tons per square foot. For hardpan consisting of poorly cemented material or containing lenses of fine grained material, inclusions of soft rock, or a fine grained matrix, the basic allowable bearing pressure shall be eight tons per square foot.

(4) Allowable bearing pressure on gravel and gravel soils. Values of basic allowable bearing pressure shall be as follows:

- (a) For soils of Soils Groups GW, GP, GM, and GC:
Compact, well graded material—ten tons per square foot.
Loose, poorly graded material—six tons per square foot.
Intermediate conditions—Estimate by interpolation between indicated extremes.
- (b) For soils of Soil Groups SW, SP, and SM, containing more than ten percent of material retained on a No. 4 sieve :
Compact, well graded material—eight tons per square foot.
Loose, poorly graded material—four tons per square foot.
Intermediate conditions—Estimate by interpolation between indicated extremes.

(5) Allowable bearing pressure on sands. The basic allowable bearing pressure shall be determined from the resistance to penetration of the standard sampling spoon. The basic allowable bearing pressure in tons per square foot shall equal 0.10 times N but not greater than six tons per square foot, nor less than three tons per square foot. The appropriate value for the penetration resistance at various areas of the site shall be made by averaging the measured resistance within a depth of soil below the proposed footing level equal to the width of the footing. Where the average values so obtained do not vary by more than twenty-five percent of the minimum of the average values over the site of the proposed building, the lowest average value shall be used for the design of the entire building. Where the variation exceeds twenty-five percent, the allowable bearing pressure shall be predicated on the lowest average value unless appropriate measures are taken to avoid detrimental amounts of differential settlements of the footings. Where the design bearing pressure on soils of class 7-65 exceeds three tons per square foot, the embedment of the loaded area below the adjacent grade shall not be less than four feet and the width of the loaded area not less than three feet, unless analysis shall demonstrate the proposed construction to have a minimum factor of safety of 2.0 against shear failure of the soil.

(6) Allowable bearing pressure on fine sand. The basic allowable bearing pressure shall be determined from the resistance to penetration of the standard sampling spoon. The basic allowable bearing pressure in tons per square foot shall equal 0.10 times N but not greater than four tons per square foot nor less than two tons per square foot, except that, for loose materials (resistance to penetration of the standard sampling spoon ten blows per foot or less), where the foundation is subjected to vibratory loads from machinery or similar cause, the indicated basic values shall not apply. The allowable bearing pressure shall be established by analysis applying accepted principles of soil mechanics and a report of such analysis satisfactory to the commissioner shall be submitted as a part of the application for the acceptance of the plans.

(7) Allowable bearing pressure on clays and clay soils. The bearing capacity of medium and hard clays and clay soils shall be established on the basis of the strength of such soils as determined by field or

laboratory tests and shall provide a factor of safety against failure of the soil of not less than 2.0 computed on the basis of a recognized procedure of soils analysis, shall consider probable settlements of the building, and shall not exceed the tabulated maximum values.

(8) Increases in allowable bearing pressure due to embedment of the foundation. (a) The basic allowable bearing values for rock of classes 1-65, 2-65, and 3-65 shall apply where the loaded area is on the surface of sound rock. Where the loaded area is below the adjacent rock surface and is fully confined by the adjacent rock mass and provided that the rock mass has not been shattered by blasting or otherwise is or has been rendered unsound, these values may be increased ten percent of the base value for each foot of embedment below the surface of the adjacent rock surface in excess of one foot, but shall not exceed twice the basic values. (b) The basic allowable bearing values for soils of classes 5-65 through 8-65 determined in accordance with notes three, four, and five above, shall apply where the loaded area is embedded four feet or less in the bearing stratum. Where the loaded area is embedded more than four feet below the adjacent soil, these values may be increased five percent of the base value of each foot of additional embedment, but shall not exceed twice the basic values. Increases in allowable bearing pressure due to embedment shall not apply to soils of classes 4-65, 9-65, 10-65, or 11-65.

(9) Increase in allowable bearing pressure for limited depth of bearing stratum: The allowable bearing values for soils of classes 6-65, 7-65, and 8-65 determined in accordance with this table and the notes thereto (including note eight), may be increased up to one third where the density of the bearing stratum below the bottom of the footings or the tips of the piles increases with depth provided that: (a) The bearing stratum is not underlain by materials of a lower class. (b) The allowable bearing value of the soil material underlying the bottom of the footings or the tips of the piles increases at least fifty percent within a depth below the footing or the tips of the piles which is not greater than the width of the footing or the width of the polygon circumscribing the pile group. (c) It shall be demonstrated by a recognized means of analysis that the probable settlement of the foundation due to compression, and/or consolidation do not exceed acceptable limits for the proposed building.

(10) Combination of loads. The provisions of section 27-594 of article two of subchapter ten of this chapter shall apply.

(11) Correction for foundations bearing on materials of varying bearing capacities. Where it is shown by borings or otherwise that materials of varying bearing value will be used for support of a building: (1) Where the weakest material does not rank below class 5-65, no modifications shall be required. (2) Where the weakest materials rank as classes 6-65 through 8-65, if the difference in basic allowable bearing values for the several materials does not exceed thirty percent of the allowable value for the poorest material which is to support the foundation, the foundations may be proportioned in direct conformance with the allowable bearing pressures. Where the difference in basic allowable bearing values exceed thirty percent, appropriate measures shall be taken to limit the differential settlements of the different portions of the structure to tolerable values. (3) For materials of classes 9-65 and 10-65, in all cases, appropriate measures shall be taken to equalize the settlements of the different portions of the structure.

(12) Inundated footings. The provisions of this section relating to materials of classes 1-65 through 7-65, shall be deemed equally applicable both to the dry and to the inundated condition of the soil provided: (a) That the subgrade is undisturbed by the construction operations, (b) The bearing area is in a confined condition. For such cases, no reduction in allowable bearing value will be required where the soil supporting the foundation is subject to a rising level of inundation. However, the effects on settlement of a failing level of inundation occurring after construction of the foundation shall be considered in the design.

(d) The stabilized overburden pressure shall not include the weight of any soil removed by excavation and not replaced. For footings, the total stabilized overburden pressure shall not exceed the weight of a one square foot column of soil (considering submerged weight where the soil column is partly submerged) measured from the bottom of the footing to the lowest level of the final grade above the footing. For a box foundation, where the strength of the slab is adequate to stabilize the underlying soil, the stabilized overburden pressure shall not exceed the weight of a one square foot column of soil measured from the bottom of the box to the lowest level of the adjacent grade.

(e) Where the bearing stratum consists of soils of classes 9-65 through 11-65, the allowable bearing pressure shall be adjusted for the effects of rebound due to excavation as determined from consolidation test data.

(f) Where the bearing stratum consists of rock of classes 1-65 through 3-65, the stabilized overburden pressure shall be neglected.

§[C26-1103.5] 27-679 Bearing capacity of nominally unsatisfactory bearing materials.- Whenever soils exploration shows that the proposed foundation would rest on, or be underlain by, nominally unsatisfactory bearing materials, a report based on soil tests and foundation analysis (including analysis of undisturbed samples) shall be submitted by an architect or engineer, demonstrating, subject to the approval of the commissioner, that the proposed construction, under a condition of one hundred percent overload, is safe against failure of the soil materials. The report shall also show that the probable total magnitude and distribution of settlement to be expected under design conditions will not result in instability of the building or stresses in the structure in excess of the allowable values established in subchapter ten of this chapter. In addition, the following provisions shall apply:

(a) Fill materials. -

(1) CONTROLLED FILLS. -Fills shall be considered as satisfactory bearing materials of class 6-65 or 7-65 when placed in accordance with the following procedures, under the provisions for controlled inspection.

(a) Before placement of fill, the existing ground surface shall be stripped of all organic growth, timber, rubbish, and debris. After stripping, the ground surface shall be compacted to the density [described]* in subparagraph d of this paragraph.

**Copy in brackets not enacted but probably intended.*

(b) Materials for fill shall consist of sand, gravel, crushed stone, crushed gravel, or a mixture of these, and shall contain no organic matter. The fill materials shall contain no particles exceeding four inches in the largest dimension. No more than thirty per cent of the material shall be retained on a three-quarter inch sieve. The material passing the three-quarter inch sieve shall contain, by weight, no more than forty percent passing the one hundred sieve, or twelve percent passing the two hundred sieve.

(c) The grading of the fill shall be determined in accordance with the applicable procedures of reference standards RS 11-1 and RS 11-2.

(d) Fill shall be placed and compacted at its optimum moisture content, in uniform layers not more than twelve inches thick (after compaction) and each layer shall be thoroughly compacted to a density not less than ninety-five percent of the density prescribed in reference standard RS 11-3. The field density shall be verified by in-place density tests made on each lift of the embankment. Fill shall not be placed when frozen or placed on a frozen or wet sub-grade.

(2) UNCONTROLLED FILLS. -Fill material, other than controlled fill, may be used for the support of buildings, other than one-and two-family dwellings, and may be considered as satisfactory bearing material of applicable class, subject to the following:

a. The soil within the building area shall be explored using test pits. At least one test pit, penetrating at least eight feet below the level of the bottom of the proposed footings, shall be provided for every twenty-five hundred square feet of building area. Where such test pits consistently indicate that the fill is composed of material that is free of voids and free of extensive inclusions of mud, organic materials such as paper, garbage, cans, or metallic objects, and debris, the provisions of subparagraphs b and c of this paragraph shall apply. Where the test pits show such voids or inclusions, the additional provisions of subparagraph d of this paragraph shall apply. Borings may be used in lieu of test pits, provided that continuous samples at least four inches in diameter are recovered.

b. The building area shall be additionally explored using one standard boring under each column. These borings shall be carried to a depth sufficient to penetrate into natural ground, but not less than twenty feet below grade, and a sufficient number shall penetrate deeper than twenty feet as required to meet the provisions of section 27-663 of article two of this subchapter. Where such borings show voids or inclusions, the provisions of subparagraph d of this paragraph shall apply.

c. The allowable soil bearing pressure on the fill material shall not exceed two tons per square foot.

d. Wherever the fill shows voids or inclusions as described in subparagraphs a and b of this paragraph, either the fill shall be treated as having no presumptive bearing capacity, or the building shall incorporate adequate strength and stiffness to bridge such voids or inclusions or shall be articulated to prevent damage due to differential or localized settlement of the fill.

(b) Organic silts, organic clays, soft inorganic clay, loose inorganic silt, and varved silt. -

(1) The allowable bearing pressure shall be determined independently of table 11-2 subject to the following:

a. For varved silts, the soil bearing pressure produced by the proposed building shall not exceed two tons per square foot, except that for desiccated or preconsolidated soils, higher bearing pressures will be allowed.

b. For organic silts or clays (groups OL and OH) or for soft or loose soils of groups ML, CL, MH, and CH, the soil bearing pressure produced by the proposed building shall not exceed one ton per square foot except that a value of two tons per square foot will be permitted on soils that are adequately preconsolidated or artificially treated.

(2) The report required in this section shall contain, as a minimum, the following information:

a. Geological profiles through the area defining the stratigraphy.

b. Sufficient laboratory test data on the compressible material to indicate the coefficient of consolidation, coefficient of compressibility, permeability, secondary compression characteristics, and Atterberg limits.

c. Where the design contemplates improvement of the natural bearing capacity and/or reduction in settlements by virtue of preloading, cross sections showing the amount of fill and surcharge to be placed on* design details showing the required time for surcharging shall be indicated, and computations showing the amount of settlement to be expected during surcharging. Records of settlement plate elevations and pore pressure readings, before, during, and after surcharging, shall be filed with the commissioner.

**As enacted but "and" probably intended.*

d. The estimated amount and rate of settlement expected to occur after the structure has been completed, including the influence of dead and live loads of the structure.

e. A detailed analysis showing that the anticipated future settlement will not adversely affect the performance of the structure.

f. Where sand drains are to be used, computations showing the diameter, spacing, and method of installation of such drains, shall be provided.

(c) Artificially treated soils. -

Nominally unsatisfactory soil materials that are artificially compacted, cemented, or preconsolidated (including soils compacted by vibration, cemented by chemical injection, or preconsolidated by use of electric current, but not including cases where preconsolidation consists solely of the use of surcharge with or without sand drains) may be used for the support of buildings, and nominally satisfactory soil materials that are similarly treated may be used to resist soil bearing pressures in excess of those indicated in table 11-2 for the soil in its natural state, subject to the following:

(1) The vertical and lateral extent of the soil that is compacted, cemented, or preconsolidated shall conform to the full extent of the distribution of loading that is assumed for purposes of computing the intensities of the soil bearing pressure. The actual soil bearing pressure shall not exceed the limitations of subdivisions (a) and (b) of this section for nominally unsatisfactory bearing

materials or, for satisfactory bearing materials, shall not exceed the limitations of table 11-2.

(2) After the treatment procedure, a minimum of one boring shall be made for every sixteen hundred square feet of that portion of the building area that is supported on treated soil, and a sufficient number of samples shall be recovered from the treated soil to demonstrate the efficacy of the treatment.

§[C26-1103.6] 27-680 Utility services. -Where utility service lines are to be laid in soil materials of class 11-65, provision shall be made to prevent damage to such services lines, as follows:

(a) Where the lines enter a structure, including a building, a manhole, or a junction chamber, that is rigidly supported on piles or in firm bearing material, the services shall be supported on piles or bearing materials of adequate firmness to prevent differential settlement of the service lines with respect to the structure; otherwise, provisions, such as oversized sleeves, flexible connections, utility tunnels, or other approved device, shall be made to permit the anticipated differential movement to occur without damage to the service lines.

(b) Where the lines enter a structure that is supported on soil materials of class 11-65 or on soft clay or loose silt deposits, an engineering analysis shall be made of the probable differential settlement of the utility service line with respect to the structure, and provision shall be made to accommodate such displacement, as described in subdivision (a) of this section.

ARTICLE 5 SOIL LOAD BEARING TESTS

§[C26-1104.1] 27-681 Applicability. -Soil load bearing tests made at the option and expense of the owner of the proposed structure and inspected in accordance with the provisions of section 27-132 of article seven of subchapter one of this chapter, controlled inspection, may be accepted by the commissioner as evidence of allowable bearing capacity of a given soil stratum, subject to the following limitations:

(a) The applicability of soil load bearing tests shall be limited to soil materials of classes 5-65 through 10-65.

(b) Soil load bearing tests shall not be used to justify allowable bearing pressures in excess of the maximum allowable bearing values established in table 11-2 for the applicable class of material.

(c) Soil load bearing tests shall not be applicable where the proposed bearing stratum is underlain by a stratum of lower class, unless analysis indicates that the presence of such lower stratum will not create excessive settlements of the building.

§[C26-1104.2] 27-682 Procedure. -

(a) Preparations. -

(1) A sketch showing the layout, levels, number of tests, details of test apparatus, and test procedures shall be filed with the commissioner before conducting such tests. The sketch shall also include the locations and levels of the proposed tests in relation to the contemplated foundation levels as well as the logs of borings that have been made for the building or buildings involved.

(2) The tests shall be made at the levels contemplated for the proposed building footings, and in at least two locations within the limits of the building area. The surfaces at the locations of the proposed tests shall be leveled at the elevations of the proposed test for a clear distance of at least five feet all around the test plate.

(3) The loaded area shall be square and at least twenty-four inches by twenty-four inches.

(4) When load tests are performed on materials affected by drying, suitable methods shall be used to prevent evaporation from the material.

(5) In the event ground water is present *immediately below, at, or above the level required to be tested, dewatering facilities shall be installed to maintain ground water a minimum of four feet below the level of the test plate during the preparation and duration of the test or tests.

**As enacted but "immediately" probably intended.*

(6) Trenches and other provisions at the ground surface shall be made to prevent inflow of surface water and to remove water that may drain into the test area. The entire test area shall be protected against weather and rainfall for the entire duration of the test.

(7) The load platform providing the support for the test load shall be supported on adequate timber cribbing, which shall not be closer than five feet from the edge of the test plate.

(8) The plate on which the loads are applied shall be of steel having a minimum thickness of two inches and shall be set and centered in a depression in the bottom of the pit or loading area about thirty inches square for a twenty-four inch by twenty-four inch plate and eight inches deep. The area on which the plate is placed shall be scraped to remove any disturbed soil. The area to be tested shall be covered with a thin layer of fine clean sand that shall be smoothed and leveled until a completely level surface for placing the test plate is obtained.

(9) Settlement observations shall be made at four corners of test plate by means of dial extensometers. The extensometers shall provide readings to the nearest 0.001 in. In addition, settlement observations shall be taken using an engineer's level reading to 0.001 ft., properly referenced to a well-established benchmark.

(10) All tests shall be made under the surveillance of the commissioner, who shall be duly notified in order that he or she may be represented.

(b) Loading of the soil. -

(1) Loads shall be applied to the test plate by direct weight or by means of a hydraulic jack. The loading platform or

box shall be constructed to provide a concentric load on the plate. If direct weight is employed, the loading increments shall be applied without impact or jar.

The weight of the blocking placed on the plate and the loading platform or box shall be obtained prior to the test and this weight shall be considered as the first increment of load. If a hydraulic jack is employed, facilities for maintaining each increment of desired load constant under increasing settlement shall be provided.

The gauge *[sic]* for the jack and the jack shall be calibrated as a unit not more than two weeks prior to the test.

(2) The unit intensity of the test load shall be one and one-half times the unit intensity of the loading proposed to be imposed on the soil by the design loads. The test load shall be applied in a minimum of six increments at twenty-five percent, fifty percent, seventy-five percent, one hundred percent, one hundred twenty-five percent, and one hundred fifty percent of the proposed working load. Each load increment shall be maintained for a length of time as follows:

a. At the proposed loading and at one hundred fifty percent of load until the settlement is less than 0.005 in. over a period of twenty-four hours.

b. At other loadings until the settlement is 0.001 in. or less, over a period of five minutes.

(3) Under each load increment, settlement observations shall be made and recorded at intervals of one-half minute, one minute, four minutes, and each four minutes thereafter after application of load increment except in the instance of the working load and one hundred fifty percent of working load where, after the four minute reading, the time interval shall be doubled successively until the final settlement limitation is reached and the load is increased or removed.

(4) After the test load and limiting rate of settlement under the test load is reached, loads shall be removed in not less than three equal increments and rebound observations made in the same manner as for the loading increments. The final rebound shall be recorded twenty-four hours after the entire test load has been removed.

(c) Determination of results. -

(1) Subject to the limitations designated in section 27-681 of this article, the soil load test for soils of classes 5-65 through 8-65 shall be considered as tentatively substantiating the ability of the soil to support the proposed unit intensity of loading if the gross settlement of the test plate under the proposed unit intensity of loading does not exceed one-half inch and the total gross settlement after the fifty percent overload is applied does not exceed one inch. This tentative substantiation shall be supported by a report by the architect or engineer on the correlation of

the behavior of the load test to the probable behavior of the full size building. The proposed design load shall be considered as acceptable only upon written acceptance by the commissioner.

(2) For soils of classes 9-65 and 10-65, the soil load test alone shall not be considered as evidence of allowable bearing capacity of the soil, but the data so obtained may be utilized to establish an allowable bearing capacity subject to the provisions of section 27-677 and 27-678 of article four of this subchapter.

(3) In the event that it is desired to conduct load tests on square areas larger than the minimum stipulated above, permission may be granted provided notice of such increase in area is properly filed with the test information required to be submitted to the commissioner. The limiting gross settlements stipulated in paragraph one of this subdivision shall be increased in relation to the increase in width of test plate in accordance with the following formula:

$$S = (9S_1/16)(2B/B + 1)^2$$

where: S = settlement of the larger loaded area (in.)

S₁= permissible settlement of twenty-four inch by twenty-four inch loaded area, as specified in paragraph one of this subdivision (in.)

B = side dimension of square plate used for test (ft.)

ARTICLE 6 FOOTINGS, FOUNDATION PIERS, AND FOUNDATION WALLS

§[C26-1105.1] **27-683 Materials.**- All structural elements of foundations as defined in section 27-585 of article one of subchapter ten shall meet the requirements as to type and minimum quality of materials prescribed in such subchapter. Inspection of materials and construction shall comply with the provisions of section 27-586 of such subchapter.

§[C26-1105.2] **27-684 Footings.** - Inspections of subgrade of footings, piers and walls shall comply with the requirements of section 27-723 of article thirteen of this subchapter.

(a) **Wood footings.** -Wood footings may be used only for wood frame structures. Wood footings shall be given a preservative treatment in accordance with reference standard RS 11-4.

(b) **Pole buildings.** -Buildings not more than one story high may be supported on poles embedded in the ground. Wood poles shall conform to the requirements of reference standard RS 11-5 and shall be given a preservative treatment in accordance with reference standard RS 11-4. Steel poles embedded in the soil shall be protected as required by the provisions of paragraph one of subdivision (c) of section 27-685 of this article.

(c) **Grillages.** -Grillage beams shall be provided with proper spacers, **stiffeners, and diaphragms, or the space between the beams shall be filled with concrete or grout. In addition, all steel grillages shall be fully protected against corrosion by encasement, coating with metal protection of a type satisfactory to the commissioner or by other approved device.

***As enacted but "stiffeners" probably intended.*

(d) **Design.** -

(1) **CONCRETE FOOTINGS.** -Concrete footings shall be proportioned in accordance with the provisions of reference standard RS 10-3. Reinforcement shall extend to within four inches of the edges of the footing.

(2) **MASONRY FOOTINGS.**- Masonry used for the construction of footings shall be of solid units.

a. Reinforced masonry footings shall meet the requirements of reference standard RS 10-2 and shall be proportioned similarly to the proportioning of reinforced concrete footings.

b. Unreinforced masonry footings shall be of such dimension that a sloping plane extending downward from the top of the footing where it intersects the pier *of wall, to the bottom of the footing, and measured at the angle with the horizontal that is indicated below, will be contained entirely within the footing:

**As enacted but "or" probably intended.*

Soil bearing capacity of three tons per square foot or less-sixty degrees.

Soil bearing capacity between three tons per square foot and six tons per square foot-seventy degrees.

Soil bearing capacity greater than six tons per square foot shall be investigated.

The compressive stress in the footing, based on the assumption that the vertical load is uniformly distributed over horizontal sections bounded by said planes, shall not exceed the values given in reference standard RS 10-1.

§[C26-1105.3] **27-685 Foundation piers.**-

Foundation piers shall be designed as columns. Reinforced concrete piers shall be designed in accordance with the provisions of reference standard RS 10-3. Reinforced and unreinforced masonry piers shall be designed in accordance with the provisions of reference standards RS 10-2 and RS 10-1. Unreinforced concrete piers shall be designed in accordance with subdivision (b) of this section.

(a) **Lateral support.** -The equivalent unbraced length of a pier supported by lateral soil pressure may be determined by a recognized method of elastic analysis. Alternatively, such a pier may be assumed to be hinged, but laterally braced at intervals equal to the full height of the pier or eight times the least lateral dimension of the pier, whichever is the lesser value. The provisions of subdivision (e) of this section shall apply.

(b) **Unreinforced concrete piers.** -Where unreinforced concrete piers are used, the allowable compressive stress shall not exceed 0.25f 'c and the

center of cross section of the pier at any level shall not deviate from the line of action of the resultant of all forces (which line of action shall consider the eccentricities due to all loads and moments acting on the pier) by an amount more than one-sixtieth of its height or one-tenth of its least lateral dimension and the ratio of the height to the least lateral dimension shall not exceed eight. For larger values of the ratio of the height to the least lateral dimensions, or for greater eccentricities, piers shall be reinforced.

(c) Metal shells. -Where piers are encased by a metal shell, the shell may be considered as contributing to the structural strength of the pier provided that the thickness is one-eighth inch or greater, and subject to the following requirements:

(1) Where boring records or site conditions indicate possible deleterious action on the shell, where any portion of the shell is embedded in ash, cinder fill or garbage fill, where the encased piers are used for support of chemical plants, piles of coal, or under other conditions conducive to chemical seepage or corrosive action, or where the encased piers are used for support of electrical generating plants, the metal shells shall be protected against deterioration by encasement, coating, or other device acceptable to the commissioner.

(2) The area of the metal section of the shell multiplied by the efficiency of the horizontal joints shall be considered as equivalent vertical reinforcement of the pier. The area of the metal section of the shell, multiplied by the efficiency of the vertical joints, shall be considered as equivalent spiral reinforcement of the pier.

(d) Minimum dimensions. - The provisions of subdivision (e) of this section shall apply. In addition, the plan dimensions of the pier shall not be less than those of the column above. If the column above is a steel section resting on a base plate, the base plate and pier shall be proportioned for allowable bearing pressures as prescribed in reference standards RS 10-1, RS 10-2, and RS 10-3.

(e) Filling. -The provisions of subdivisions (a) and (d) of this section shall apply only where the fill (or backfill) is placed around the pier as controlled fill, and wherein the level of the fill is raised uniformly around the entire perimeter of the pier. Where the fill operation is not controlled the least lateral dimension of a foundation pier shall be twenty-four inches and the pier shall be proportioned for lateral pressure equal to the pressure of a differential height of fill equal to five feet, applied simultaneously with the other loads on the pier specified in article three of this subchapter.

§[C26-1105.4] 27-686 Foundation walls. -

(a) Concrete. - Concrete foundation walls shall be designed in accordance with the provisions of reference standard RS 10-3 relating to bearing or retaining walls. The equivalent unbraced height of a wall supported by lateral soil pressure may be determined by a recognized method of elastic analysis. Alternatively, such a wall may be assumed to be laterally braced at intervals as follows:

(1) Where fill is placed against both faces of the walls: the full height of the wall or eight times the thickness, whichever is the lesser value.

(2) Where both faces of the wall are not in contact with soil: the height of the unbraced section of the wall or eight times the thickness of the wall, whichever is greater, but not more than the full height of the wall.

(b) Masonry. -Masonry foundation walls shall conform to the provisions of reference standards RS 10-1 and RS 10-2, and the following:

(1) **TYPES.** -Masonry foundation walls may be of plain or reinforced masonry and shall be of solid units, except that load bearing hollow units will be permitted for support of one- and two-story buildings.

(2) **WALL THICKNESS.** -Foundation walls of masonry shall be designed and constructed in accordance with the provisions of reference standards RS 10-1 and RS 10-2, supplemented by the provisions of subdivision (a) of this section, relating to unbraced height. The thickness shall be at least six inches.

§[C26-1105.5] 27-687 Construction of footings, foundation piers, and foundation walls. -The provisions of sections 27-661 and 27-723 of this subchapter shall apply. In addition, methods of installation and construction shall satisfy the following conditions:

(a) Footings, piers, or walls shall be founded on undisturbed soil or on satisfactorily compacted or prepared materials.

(b) Accurate preparation and inspection of the bearing materials directly underlying the foundation shall be possible; and the bearing area shall be substantially level or suitably benched.

(c) Excavation shall be kept substantially free of water during construction of the foundation except that the use of tremie or similar underwater construction will be permitted in the case of foundations bearing directly on rock, provided that the construction procedure will permit thorough cleaning and preparation of the rock surface, and that the surface of the rock is maintained in a clean condition, unfouled by the inflow of soil or settlement of the fluid suspension, until the concrete is in place.

ARTICLE 7 PILE FOUNDATIONS-GENERAL REQUIREMENTS

§[C26-1106.1] 27-688 Administrative requirements. -

(a) Identification of piles. -A plan showing clearly the designation of all piles by an identifying system shall be filed with the commissioner prior to installation of such piles. All detailed records for individual piles shall bear an identification corresponding to that shown on the plan. A copy of such plan shall be available at the site for inspection at all times.

(b) Record of pile driving. -A record of the penetration and behavior of each pile during installation shall be kept by the architect or engineer designated in section 27-721 of article thirteen of this subchapter. Such records shall be prepared on forms furnished by, or satisfactory to, the commissioner and, upon the completion of pile installation, shall be filed with the commissioner together with the records of any additional borings or subsurface information obtained during installation of the piles, and plans showing any deviations of the pile or related constructions (including any corrective measures) from the details and locations shown on the approved plans. Inspection of piling and pile load tests shall conform to the requirements of section 27-721 of article thirteen of this subchapter.

§[C26-1106.2] 27-689 Minimum pile penetrations. -

(a) Required by soil bearing capacity. -The provisions of paragraph one of subdivision (b) of section 27-700 of article eight of this subchapter shall apply.

(b) Required for lateral restraint. -The provisions of section 27-694 of this article shall apply.

(c) Piles located near a lot line. -Piles located near a lot line shall be designed on the assumption that the adjacent lot will be excavated to a depth of ten feet below the nearest legally established curb level. Where such excavation would reduce the embedded length of the pile, the portion of the pile exposed shall be considered as providing no lateral or vertical support, and the load-carrying determination in accordance with the provisions of article eight of this subchapter shall be made after the resistance offered by the soil that is subject to potential excavation has been discounted.

§[C26-1106.3] 27-690 Use of existing piles at demolished structures.- Piles left in place where a structure has been demolished shall not be used for the support of new construction unless satisfactory evidence, including load or hammer testing of representative piles, can be produced indicating the capacity, length, and driving conditions of the piles. The load bearing value for such existing piles shall be the least of the values indicated by: (1) the load or hammer test, (2) the capacity of the pile as a structural member, and (3) the allowable bearing pressure on the soil underlying the pile tips, all in accordance with the provisions of article eight of this subchapter.

§[C26-1106.4] 27-691 Tolerance and modification of design due to field conditions. -

(a) Tolerance in alignment of the pile axis. -If the axis of any pile is installed out of plumb or deviates from the specified batter by more than four percent of the pile length, the design of the foundation shall be modified as may be necessary to resist the resulting vertical and lateral forces. In types of piles for which subsurface inspection is not possible, this determination shall be made on the exposed section of the pile, which section, at the time of

checking axial alignment, shall not be less than two feet. In piles which can be checked for axial alignment below the ground surface, the sweep of the pile axis shall not exceed four percent of the embedded length.

(b) Tolerance in location of the head of the pile. -

A tolerance of three inches from the designed location shall be permitted in the installation of each pile, without reduction in load capacity of the pile group. Where piles are installed out of position in excess of this amount, the true loading on such piles shall be analytically determined from a survey which defines the actual location of the piles as driven, and using the actual eccentricity in the pile group with respect to the line of action of the applied load. If the total load on any pile, so determined, is in excess of one hundred ten percent of the allowable load bearing capacity, correction shall be made by installing additional piles or by other methods of load distribution as required to reduce the maximum pile load to one hundred ten percent of the capacity.

(c) Bent piles. -Where piles have been bent during installation, and the amount of the bend exceeds the allowable tolerance for alignment of the pile axis in subdivision (a) of this section, the condition shall be investigated and, where required, correction made by the installation of additional piles, by strengthening the bent piles, by reduction in capacity or other means acceptable to the commissioner.

§[C26-1106.5] 27-692 Minimum spacing of piles.-

Piles shall be spaced to meet the following requirements:

(1) Spacing of piles shall provide for adequate distribution of the load on the pile group to the supporting soil, in accordance with the provisions of subdivision (b) of section 27-700 of article eight of this subchapter.

(2) In no case shall the minimum center-to-center spacing of piles be less than twenty-four inches, nor less than the values for specific types of piling as indicated in article ten of this subchapter. Unless special measures are taken to assure that piles will penetrate sufficiently to meet the requirements of section 27-689 of this article without interfering with or intersecting each other, the minimum center-to-center spacing of piles shall be twice the average diameter of the butt for round piles; one and three-quarters times the diagonal for rectangular piles; or, for taper piles, twice the diameter at a level two-thirds of the pile length measured up from the tip. In cases of practical difficulty, the spacing of new piles from existing piles under an adjacent building may be less than the above values provided that the requirements relating to minimum embedment and pile interference are satisfied and that the soil under the proposed and existing buildings is not overloaded by the closer pile grouping.

§[C26-1106.6] 27-693 Minimum section. -Except as provided in article ten of this subchapter for timber piles, no tapered pile shall be less than six inches in diameter at any section, nor have less than an eight inch diameter at cutoff. The taper of any tapered section may be uniform or may occur in steps. No pile of uniform section shall have a diameter of less than eight inches, or, if not circular, a dimension of less than seven and one-half inches. Tapered shoes or points of lesser dimensions may be attached to the tips of piles.

§[C26-1106.7] 27-694 Capping and bracing of piles.

(a) Capping of piles. -

(1) EMBEDMENT. -Tops of all piles shall be embedded at least three inches in concrete caps. Such concrete shall conform to the provisions of article five of subchapter ten of this chapter and shall extend at least four inches beyond the edge of all piles. Alternatively, and only where the piles project above the future grade and will be readily accessible for visual inspection at all times, the tops of the piles may be capped with timber or steel caps, which shall be connected to the piles. Cap plates will not be required for steel H piles embedded in a reinforced concrete cap. Inspection of pile caps shall be as required in section 27-722 of article thirteen of this subchapter.

(2) UPLIFT. -Where piles are subject to uplift, they shall be anchored into the cap to resist at least one and one-half times the amount of such uplift without exceeding the basic allowable stresses as established in subchapter ten.

(3) REINFORCEMENT. -Reinforcement shall be placed to provide at least three inches of clear cover, measured to the surface of the pile cap that is in contact with the ground. All reinforcement adjacent to timber or concrete piling shall have a minimum of one inch of concrete protection. Reinforcement shall extend to within four inches of the edges of the pile cap.

(4) DESIGN. -Except as modified above, concrete pile caps shall be designed in accordance with the provisions of reference standard RS 10-3.

(b) Bracing of piles. -Except for short piles as described in subdivision (c) of this section, every pile shall be laterally braced to conform with one or more of the following provisions:

(1) RIGID CAP. -Three or more piles connected by a rigid cap shall be considered as being braced provided that the piles are located in radial directions from the centroid of the group not less than sixty degrees apart (within a tolerance of three inches in location of the pile). A two-pile group, in a rigid cap, shall be considered to be braced along the axis connecting the two piles.

(2) BRACE BEAMS. -Piles may be braced by the use of brace beams or ties rigidly connecting to at least two other piles in radial directions not less than sixty degrees nor more than one hundred twenty degrees apart. Concrete brace beams shall have minimum dimensions of one-twentieth of the clear distance between pile caps, but not

less than eight inches. All brace beams shall be proportioned to resist a minimum axial load equal to three percent of the total axial load capacity of the piles that are to be braced by that beam, plus the moment due to any eccentricity between the centroid of the pile group and the line of action of the applied load. Where underlain by soil of class 9-65, 10-65 or 11-65, brace beams shall be proportioned to support the weight of soil, slab-on-ground, and live load on the slab-on-ground that is contained within vertical planes projected upward from the lateral limits of the brace beam. The design of brace beams to resist these loads shall conform to the provision of subchapter ten of this chapter.

(3) CONCRETE SLAB-ON-GRADE. -A continuous concrete slab or mat on grade, that is five inches or more in thickness and reinforced, and that extends at least forty feet in each direction and is anchored to the pile caps (or in which the piles are embedded at least three inches), may be used in lieu of brace beams for bracing of pile caps, providing that the slab is supported on material having an allowable bearing pressure of one and one-half tons per square foot or better and such material is not underlain by nominally unsatisfactory bearing materials.

(4) OTHER MEANS.- Piles may be braced by anchors, anchor wall, or other means acceptable to the commissioner.

(5) FLOOR SYSTEM.- Single-pile or two-pile groups or a single line of piles may be considered to be adequately braced if connected to, and braced by, a self supporting floor system provided: (1) that the details and dimensions of the floor and the wall or pier are of adequate strength to resist lateral displacement of the pile cap under conditions of maximum eccentricity of the applied load; and (2) that the wall or pier is braced until connection of the floor framing is made and the flooring (or slab) is in place.

(6) SPECIAL REQUIREMENTS FOR BRACING BATTER PILES.- The provisions of paragraphs one through five of this subdivision above shall apply. In addition, provisions shall be made to oppose the lateral thrust resulting from the pile inclination.

(c) Bracing of short piles. -

(1) All pile caps supported by piles that penetrate less than ten feet below cutoff level or less than ten feet below ground level shall be braced against lateral movement. Such bracing may consist of connection to other pile caps that encompass piles embedded more than ten feet below those levels; the use of suitable anchors, connection to a slab-on-grade or the floor system as described in paragraphs three and five of subdivision (b) of this section, or by other equivalent means. The heads of the piles shall be fixed in the cap. In no event shall more than fifty percent of the piles in the foundation of any building penetrate less

than ten feet below cut-off-level or less than ten feet below ground level.

(2) Where the embedded length of piles located near a lot line would be reduced to less than ten feet by excavation of the adjacent site to a depth of ten feet below the nearest established curb level, the provisions of paragraph one of this subdivision shall apply.

§[C26-1106.8] 27-695 Splicing of piles.- Splices shall be constructed so as to provide and maintain true alignment and position of the component parts of the pile during installation and subsequent thereto, and shall be of adequate strength to transmit the vertical and lateral loads (including tensions) and the moments occurring in the pile section at the location of the splice without exceeding the allowable stresses for such materials as established in subdivision (a) of section 27-700 of article eight of this subchapter. Except for piles which can be visually inspected after driving, splices shall develop at least fifty percent of the capacity of the pile in bending. In addition, all pile splices in the upper ten feet of the pile section shall be capable of resisting (at allowable working stresses) the moment and shear that would result from an assumed eccentricity of the pile load of three inches, or the pile shall be braced in accordance with the provisions of section 27-694 of article seven of this subchapter to other piles that do not have splices in the upper ten feet of embedment. For piles located near a lot line, the embedded length of such piles shall be determined on the basis that the adjacent site will be excavated to a depth of ten feet below the nearest established curb level.

§[C26-1106.9] 27-696 General requirements for installation of piles. -

(a) Protection of adjacent property. -Piles shall be installed with adequate provision for the protection of adjacent buildings and property.

(b) Protection of the pile during installation. -Piling shall be handled and installed to the required penetration and resistance by methods that leave their strength unimpaired and that develop and retain the required load-bearing resistance. Any damaged pile shall be satisfactorily repaired or the pile shall be rejected. Subject to the approval of the commissioner, damaged piles may be used at a fraction of the design load as determined by the architect or engineer in lieu of repair or rejection.

(c) Protection of pile materials after installation. - Where boring records or site conditions indicate possible deleterious action on pile materials due to soil constituents, changing water levels, or other causes, such materials shall be adequately protected by preservatives or encasements that will not be rendered ineffective by driving and that will prevent such deleterious action. The following specific provisions shall apply:

(1) Untreated timber piles shall not be used unless the top level of the pile is below the permanent water table. The permanent water table level shall not be assumed higher

than the invert level of any sewer, drain, or subsurface structure in the adjacent streets, nor higher than the water level at the site resulting from the lowest drawdown of wells or sumps, but in no case shall untreated timber piles be used where the cut-off level is less than ten feet below the adjacent legal grade. Where treated piles are required, preservative treatment shall consist of impregnation with creosote or a creosote solution or, for piles entirely embedded below grade, a pentachlorophenol solution may be used. Treatment shall be in accordance with all requirements of reference standard RS 11-6.

(2) Piles installed in ash or garbage fills, cinder fills, or which are free-standing in or near a seawater environment, or which are used for the support of chemical plants, coal piles or under similar conditions of chemical seepage or aggressive action, or which are used for support of electrical generating plants, shall be investigated regarding the need for special protective treatment and, where protective treatment is indicated, shall be protected against deterioration by encasement, coating, or other device acceptable to the commissioner.

(d) Equipment. -Equipment and methods for installing piles shall be such that piles are installed in their proper position and alignment, without damage. Equipment shall be maintained in good repair.

§[C26-1106.10] 27-697 Use of uncased concrete pile shafts.-

The use of uncased shafts (i.e., where the concrete of the pile shaft is in direct contact with the surrounding soil) will be permitted under the following conditions:

(a) For bored piles. -Where the bored hole is maintained free of water before and during placement of the concrete and the sides and bottom can be inspected prior to such placement, and provided that no displacement pile shall be installed within fifteen feet of any bored pile.

(b) For driven piles (including all piles wherein installation utilizes a temporary casing). - The maximum length of the uncased shaft shall be limited to ten feet unless otherwise permitted by the commissioner. Uncased shafts will be permitted to be formed in soil below the water table but shall not be formed in any soil of class 9-65 that is of medium or soft consistency; in any soil of class 10-65 that is of medium or loose density; or in any soil of class 11-65.

§[C26-1106.11] 27-698 Where more than one pile type, pile capacity, or method of pile installation is used.-

Wherever it is proposed to: (1) construct a foundation for a building utilizing piles of more than one type or capacity; (2) modify an existing foundation by the addition of piles of a type or capacity other than those of the existing piling; (3) construct or modify a foundation utilizing different methods or more than one method of installation, or using different types or capacities of equipment

(such as different types of hammers having markedly different striking energies or speeds); or (4) support part of a building on piles and part on footings, the several parts of the building supported on the different types, capacities, or modes of piling shall be separated by suitable joints providing for differential movement, or a report shall be submitted by the architect or engineer establishing to the satisfaction of the commissioner that the proposed construction is adequate and safe, and showing that the probable settlements and differential settlements to be expected will not result in instability of the building or stresses in the structure in excess of the allowable values established in subchapter ten of this chapter. The provisions of subdivision (d) of section 27-700 of article eight of this subchapter relating to required load tests shall apply separately and distinctly to each different type or capacity of piling, method of installation, or type or capacity of equipment used, except where analysis of the probable, comparative behavior of the different types or capacities of the piles or the methods of installation indicates that data on one type or capacity of pile permits a reliable extrapolation of the probable behavior of the piles of other types and capacities.

§[C26-1106.12] 27-699 Pile materials. -

The provisions of sections 27-580 and 27-588 of article one of subchapter ten of this chapter relating to "classification of materials, assemblies and methods of construction" and to the use of "used and unidentified materials" shall apply.

ARTICLE 8 PILE FOUNDATIONS-LOADS

§[C26-1107.1] 27-700 Allowable axial load. -The allowable axial load on a pile shall be the least value permitted by consideration of the following factors (for battered piles, the axial load shall be computed from the resultant of all vertical loads and lateral forces occurring simultaneously):

1. The capacity of the pile as a structural member.
2. The allowable bearing pressure on soil strata underlying the pile tips.
3. The resistance to penetration of the piles, including resistance to driving, resistance to jacking, the rate of penetration, or other, equivalent criteria as established in this section.
4. The capacity as indicated by load test, where load tests are required.
5. The maximum loads prescribed in subdivision (e) of this section.

(a) The capacity of the pile as a structural member. -

(1) EMBEDDED PORTION OF THE PILE. -

The compressive stress on any cross section of a pile produced by that portion of the design load that is considered to be transmitted to that section shall not exceed the allowable values for the construction materials as established in table 11-3. The tensile stress shall not

exceed the values established in subchapter ten of this chapter for like material.

(2) PORTION OF THE PILE THAT IS NOT EMBEDDED. -

That portion of any pile that is free standing in air or water shall be designed as a column in accordance with the provisions of subchapter ten of this chapter, fixed at a point five feet below the soil contact level in class 8-65 material or better and ten feet below in any other material. The conditions of lateral and rotational restraint offered by the pile cap shall be considered in determining the equivalent unbraced length.

(3) LOAD DISTRIBUTION ALONG EMBEDDED PORTION OF THE PILE. -The portion of the design load acting on any cross-section of a pile may be determined by analysis, considering time dependent changes in distribution of the load. As an alternative method for the purposes of this section, it may be assumed that:

- a. For piles embedded forty feet or more in materials of class 10-65 or better, or in controlled fills, and bearing on or in materials of classes 1-65 to 5-65: seventy-five percent of the load shall be assumed to be carried by the tip. For shorter piles, with similar conditions of embedment and bearing, one hundred percent of the load shall be assumed carried by the tip.
- b. For piles embedded in materials of class 10-65 or better, or in controlled fills, and bearing on or in materials of classes 6-65 to 10-65 (or controlled fills): the full load shall be assumed to act at a cross section located at two-thirds of the embedded length of the pile measured up from the tip. Where tapered piles are used, the stress at all sections of the pile shall be determined on the basis that the full load acts at a location as described above and that one-third of the full load acts at the tip. The stresses so computed shall not exceed the allowable values in table 11-3.
- c. For conditions not covered in subparagraphs a and b of this paragraph three the provisions relating to analysis shall apply.

(b) Allowable bearing pressure on soil strata underlying the pile tips. -

(1) BEARING CAPACITY. -The allowable pile load shall be limited by the provision that the pressures in materials at and below the pile tips, produced by the loads on individual piles and by the aggregate of all piles in a group or foundation, shall not exceed the allowable bearing values established in article four of this subchapter. The provisions of section[s]* 27-678 and 27-679 of article four of this subchapter shall apply. The transfer of load from piles to soil shall be determined by a recognized method of analysis. As an alternative, for purposes of this section, piles or pile groups may be assumed to transfer their loads to the underlying materials by spreading the load uniformly at an angle of sixty degrees with the horizontal, starting at a polygon circumscribing the piles, located as follows:

**Copy in brackets not enacted but probably intended.*

TABLE 11-3 ALLOWABLE COMPRESSIVE STRESS FOR PILE MATERIALS

Pile Material	Allowable Compressive Stress
Concrete	<p>Concrete—The provisions of Reference Standard RS 10-3 relating to short compression members shall apply. For working stress design use $0.25f'_c$. For ultimate strength design use minimum eccentricity of 5 per cent, $\phi = 0.70$ ($\phi = 0.75$ where a permanent metal shell having a minimum wall thickness of 1/8 inch is used), and load factors as specified in Reference Standard RS 10-3. The above provisions shall be deemed applicable to reinforced and unreinforced sections. For unreinforced sections use $D_s = D$ and $d = t$ (symbols refer to those used in Reference Standard RS 10-3).</p> <p>Reinforcing steel—$0.40f_y$ but not greater than 30,000 psi. (The provisions of article five of subchapter ten of this chapter relating to ties, spirals, and percentages of reinforcing steel for reinforced concrete compression members shall apply.)</p>
Timber	See timber piles (section 27-707 of article eight of this subchapter).
Steel	<p>H piles—$0.35f_y$, with f_y not to be taken as greater than 36,000 psi. Minimum thickness of metal shall be 0.40.</p> <p>Pipe piles, shells for cast-in place concrete piles and shells of pipe sections used in caisson piles: $0.35f_y$, (f_y not to be taken as greater than 36,000 psi.) for thickness of 1/8 in. or more. Metal thinner less* than 1/8 in. shall not be considered as contributing to the structural strength of the pile section.</p> <p>Core sections for caisson piles: $0.50f_y$ with f_y not to be taken as greater than 36,000 psi.</p>

Notes for Table 11-3: f'_c = 28 day compressive strength of concrete. f_y = Minimum specified yield strength of steel.

* "less" not enacted but probably intended.

a. For piles embedded entirely in materials of classes 4-65 to 8-65, or in controlled fill materials, the polygon shall be circumscribed at a level located two-thirds of the embedded length of the pile, measured up from the tip.

b. For piles penetrating through soils of classes 9-65, 10-65, or 11-65 into bearing in soils of class 8-65 or better, the polygon shall be circumscribed at the bottom of the strata of class 9-65, 10-65 or 11-65 materials.

c. In the case of piles having enlarged bases, the lateral distribution of the load to the soil may be assumed to begin at the junction of the shaft and the enlarged base and to extend as follows:

1. In the case where the enlarged base is formed in loose or medium compact (N value less than thirty) soils of class 6-65 or 7-65 that extend twenty feet or more below the junction of the base and shaft, or that are of lesser extent but are directly underlain by soil of class 5-65 or better, the bearing area may be taken at a plane six feet below said junction but not lower than the bottom of the soil strata of class 6-65 or 7-65.

2. Where the enlarged base is formed in compact (N value thirty to sixty) soils of class 6-65 or 7-65, or in any soil of these classes that extends less than twenty feet below the junction of the base and the shaft and that is underlain by soil of class 8-65 or poorer, the bearing area shall be taken at planes less than six feet below said junction, with a lower limit of three feet where the material is very compact (N value sixty, or greater) and the extent of the class 6-65 or 7-65 material is ten feet below the junction of shaft and base. (The provisions of subdivision (e) of section 27-710 of article ten of this subchapter relating to minimum depth of bearing stratum below the junction of base and shaft shall apply.) For conditions intermediate between that described in clause one

of this subparagraph and the lower limit conditions described here, the location of the bearing area may be determined by linear interpolation between the indicated limits of N value and extent of bearing material below the junction of shaft and base, giving equal weight to both variables.

3. Where the enlarged base is formed in or on soils of class 4-65 or 5-65, the bearing area shall be taken at a depth below the junction of the shaft and base consonant with the size and depth of the base formed, and as evaluated from the required test piles.

d. For all piles bearing on soils of classes 1-65 to 3-65, analysis of load distribution will not be required if the requirements relating to capacity of the pile as a structural member, to resistance to penetration, to load test where required, and to maximum tabulated loads are satisfied.

e. For piles bearing in soils of classes 9-65 and 10-65, for cases not described above, or for any case where the method of installing the pile utilizes a temporary casing, the provision relating to analysis shall apply.

f. In no case shall the area considered as supporting the load extend beyond the intersection of the sixty degree planes of adjacent piles or pile groups.

(2) BEARING STRATUM.- The plans for the proposed work shall establish, in accordance with the requirements relating to allowable bearing pressure, the bearing strata to which the piles in the various sections of the building are to be penetrated and the approximate elevations of the top of such bearing strata. Where penetration of a given distance into the bearing strata is required for adequate distribution of the loads, such penetration shall be shown on the plans. The indicated elevations of the top of the bearing strata shall be modified by such additional data as may be obtained during construction.

All piles shall penetrate to or into the designated bearing strata.

(c) Capacity as indicated by resistance to penetration.-

Where subsurface investigation, as described in article two of this subchapter, or general experience in the area, indicates that the soil that must be penetrated by the pile consists of glacial deposits containing boulders, or fills containing riprap, excavated detritus, masonry, concrete, or other obstructions in sufficient numbers to present a hazard to the installation of the piles, the selection of type of pile and penetration criteria shall be subject to the approval of the commissioner but in no case shall the minimum penetration resistance be less than that stipulated in tables 11-4 and 11-5.

(1) PILES INSTALLED BY USE OF STEAM-POWERED, AIR-POWERED, DIESEL-POWERED OR HYDRAULIC IMPACT HAMMERS. -

a. The minimum required driving resistance and the requirements for hammer energies for various types and capacities of piles are given in tables 11-4 and 11-5. To obtain the required total driving resistance, the indicated driving resistances shall be added to any driving resistance experienced by the pile during installation, but which will be dissipated with time (resistance exerted by non-bearing materials or by materials which are to be excavated). For purposes of this section, the resistance exerted by non-bearing materials may be approximated as the resistance to penetration of the pile recorded when the pile has penetrated to the bottom of the lowest stratum of nominally unsatisfactory bearing material (class 11-65, but not controlled fill) or to the bottom of the lowest stratum of soft or loose deposits of class 9-65 or 10-65 but only where such strata are completely penetrated by the pile. The provisions of articles nine and ten of this subchapter shall also apply.

b. Alternate for similitude method. -The requirement for installation of piling to the penetration resistances given in tables 11-4 and 11-5 will be waived where the following five conditions prevail:

1. The piles bear on, or in, soil of class 5-65 through class 10-65.
2. The stratigraphy, as defined by not less than one boring for every sixteen hundred square feet of building area, shall be reasonably uniform or divisible into areas of uniform conditions.
3. Regardless of pile type or capacity, one load test, as described in subdivision (d) of this section, shall be conducted in each area of uniform conditions, but not less than two typical piles for the entire foundation installation of the building or group of buildings on the site, nor less than one pile for every fifteen thousand square feet of pile foundation area shall be load tested.
4. Except as permitted by the provisions of clause six of this subparagraph, all building piles within the area of influence of a given load-tested pile of satisfactory performance shall

be installed to the same or greater driving resistance as the successful load-tested pile. The same or heavier equipment of the same type that was used to install the load-tested pile shall be used to install all other building piles, and the equipment shall be operated identically. Also, all other piles shall be of the same type, shape, external dimension, and equal or greater cross-section as the load-tested pile. All building piles within the area of influence represented by a given satisfactory load-tested pile shall bear in, or on the same bearing stratum as the load test pile.

5. A report by an architect or engineer shall be submitted establishing to the satisfaction of the commissioner, that the soil bearing pressures do not exceed the values permitted by the provisions of article four of this subchapter and that the probable differential settlements will not cause stress conditions in the building in excess of those permitted by the provisions of subchapter ten of this chapter.

6. Where the structure of the building or the spacing and length of the piling is such as to cause the building and its foundation to act as an essentially rigid body, the building piles may be driven to length and/or penetration into the bearing stratum without regard to penetration resistance, subject to the requirement of clause five of this subparagraph, relating to submission of report.

(2) PILES INSTALLED BY JACKING OR OTHER STATIC FORCES.-

The carrying capacity of a pile installed by jacking or other static forces shall be not more than fifty percent of the load or force used to install the pile to the required penetration, except for piles jacked into position for underpinning. The working load of a temporary underpinning pile shall not exceed the total jacking force at final penetration. The working load of each permanent underpinning pile shall not exceed the larger of the following values: two-thirds of the total jacking force used to obtain the required penetration if the load is held constant for seven hours without measurable settlement; or one-half of the total jacking force at final penetration if the load is held for a period of one hour without measurable settlement. The jacking resistance used to determine the working load shall not include the resistance offered by non-bearing materials which will be dissipated with time.

(3) PILES INSTALLED BY USE OF VIBRATORY HAMMER. -The capacity of piles installed by vibratory hammer shall not exceed the value established on the principle of similitude, as follows:

a. Comparison piles, as required by the provisions of subdivision (d), of this section, shall be installed using an impact hammer and driving resistances corresponding to the proposed pile capacities as determined in paragraph one of subdivision (c) of this section or to tip elevations and driving resistances as determined by the architect or engineer.

TABLE 11-4 MINIMUM DRIVING RESISTANCE AND MINIMUM HAMMER ENERGY FOR STEEL H-PILES, PIPE PILES, PRECAST AND CAST-IN-PLACE CONCRETE PILES AND COMPOSITE PILES (other than timber)

Minimum Driving Resistance ^{a,c,d,f*,e}						
Pile Capacity (tons)	Hammer ^b Energy (ft. lbs.)	Friction Piles (blows/ft.)	Piles Bearing on Hardpan (Soil Class 5-65) (blows/ft.)	Non- Displacement Piles Bearing on Decomposed Rock (Soil Class 4-65) (blows/ft.)	Displacement Piles Bearing on Decomposed Rock (Soil Class 4-65) (blows/ft.)	Piles Bearing on Rock (Soil Classes 1-65, 2-65, & 3-65)
Up to 20	15,000	19	19	48	48	
	19,000	15	15	27	27	
	24,000	11	11	16	16	
30	15,000	30	30	72	72	
	19,000	23	23	40	40	
	24,000	18	18	26	26	
40	15,000	44	50	96	96	
	19,000	32	36	53	53	
	24,000	24	30	34	34	
50	15,000	72	96	120	120	5 Blows per
	19,000	49	54	80	80	¼ inch
	24,000	35	37	60	60	(Minimum
	32,000	24	25	40	40	hammer
60	15,000	96		240	240	energy of
	19,000	63		150	150	15,000
	24,000	44		100	100	ft. lbs.)
	32,000	30		50	50	
70 & 80	19,000		5 Blows per ¼ inch (Minimum hammer energy of 15,000 ft. lbs.)	5 Blows per ¼ inch (Minimum hammer energy of 19,000 ft. lbs.)		
	24,000					
	32,000					
100 Over						
100**						

*Copy in brackets not enacted but probably intended.

**Appears with no corresponding hammer energy on original text.

Notes for Table 11-4:

^aFinal driving resistance shall be the sum of tabulated values plus resistance exerted by non-bearing materials. The driving resistance of non-bearing materials shall be taken as the resistance experienced by the pile during driving, but which will be dissipated with time and may be approximated as described in subparagraph a of paragraph one of subdivision (c) of this section.

^bThe hammer energy indicated is the rated energy.

^cSustained driving resistance—where piles are to bear in soil classes 4-65 and 5-65, the minimum driving resistance shall be maintained for the last six inches, unless a higher sustained driving resistance requirement is established by load test. Where piles are to bear in soil classes 6-65 through 10-65, the minimum driving resistance shall be maintained for the last twelve inches unless load testing demonstrates a requirement for higher sustained driving resistance. No pile need be driven to a resistance to penetration (in blows per inch) more than twice the resistance indicated in this table, nor beyond the point at which there is not measurable net penetration under the hammer blow.

^dThe tabulated values assume that the ratio of total weight of pile to weight of striking part of the hammer does not exceed 3.5. If a larger ratio is to be used, or for other conditions for which no values are tabulated, the driving resistance shall be as approved by the commissioner.

^eFor intermediate values of pile capacity, minimum requirements for driving resistance may be determined by straight line interpolation.

TABLE 11-5 MINIMUM DRIVING RESISTANCE AND HAMMER ENERGY FOR TIMBER PILES

Pile Capacity (tons)	Minimum Driving Resistance (blows-in.) to be added to driving resistance exerted by non-bearing materials ^{1,3,4}	Hammer Energy (ft.-lbs.) ²
Up to 20	Formula in Note ⁴ shall apply	7,500-12,000
Over 20 to 25		9,000-12,000
		14,000-16,000
Over 25 to 30		12,000-16,000
		(single-acting hammers)
Greater than 30		15,000-20,000
		(double-acting hammers)

Notes for Table 11-5:

¹The driving resistance exerted by non-bearing materials is the resistance experienced by the pile during driving, but which will be dissipated with time and may be approximated as described in subparagraph a of paragraph one of subdivision (c) of this section.

²The hammer energy indicated is the rated energy.

³Sustained driving resistance. Where piles are to bear in soil classes 4-65 and 5-65, the minimum driving resistance shall be maintained for the last six inches, unless a higher sustained driving resistance requirement is established by load test. Where piles are to bear in soil classes 6-65 thru 10-65, the minimum driving resistance measured in blows per inch shall be maintained for the last twelve inches, unless load testing demonstrates a requirement for higher sustained driving resistance. No pile need to be driven to a resistance to penetration (in blows per inch) more than twice the resistance indicated in this table nor beyond the point at which there is no measurable net penetration under the hammer blow.

⁴The minimum driving resistance shall be determined by the following formula:

$$P = \frac{2W_h H}{s + 0.1} \quad \text{or} \quad P = \frac{2E}{s + 0.1}$$

Where: P = Allowable pile load in pounds.

W_p = Weight driven in pounds.

W_h = Weight of striking part of hammer in pounds

H = Actual height of fall of striking part of hammer in feet.

E = Rated energy delivered by the hammer per blow in foot lbs.

s = Penetration of pile per blow, in inches, after the pile has been driven to a depth where successive blows produce approximately equal net penetration.

The value $\frac{W_p}{W_h}$ shall not exceed three.

b. For each comparison pile, install an identical index pile by use of the vibratory hammer at a location at least four feet, but not more than six feet, from each comparison pile. The index piles shall be installed to the same tip elevation as the comparison pile, except that where the comparison piles bear on soils of classes 1-65 to 5-65, the index piles shall bear in, or on, similar material. All driving data for the index pile shall be recorded.

c. The index piles shall be load tested in accordance with the provisions of subdivision (d) of this section. Should the specified load test criteria indicate inadequate capacity of the index piles, steps a, b, and c shall be repeated using longer, larger, or other types of piles.

d. All building piles within the area of influence of a given, satisfactorily tested index pile shall be installed to the same or lesser rate of penetration (in. per min.) as of the successful index pile. The same equipment that was used to install the index pile, identically operated as to rpm, manifold pressure, etc., shall be used to install the building piles. Also, all building piles shall be of the same type, size, and shape as the index pile. All building piles within the area of influence as represented by a given satisfactorily tested index pile shall bear in, or on, the same bearing stratum as the index pile.

(d) Capacity as indicated by load test. -Load test of piling shall be required as follows:

(1) **PILES INSTALLED BY STATIC FORCES.** -The load bearing capacity of all types and capacities of piles installed by static forces, other than caisson piles and underpinning piles, shall be demonstrated by load test.

(2) **PILES DRIVEN BY IMPACT HAMMERS.** -The load bearing capacity of piles installed by impact hammers shall be demonstrated by load test when the proposed pile capacity exceeds the following values:

a. Caisson piles-no load test required.

b. Piles installed open end to rock of class 1-65, 2-65 or 3-65-one hundred tons, except as provided in subparagraph d of this paragraph, and except that no load tests will be required for piles up to two hundred tons capacity wherein the pile load does not exceed eighty percent of the load determined on the basis of limiting stresses in the pile materials and provided that the pipe or shell be driven to the resistance indicated in table 11-4.

c. Piles bearing on rock or hardpan (soil classes 1-65 to 5-65) other than as described in subparagraph b of this paragraph, and except as provided in subparagraph d of this paragraph-forty tons.

d. Piles bearing on materials of class eight or better, wherein, on the assumption that one hundred percent of the load reaches the pile tip, (or, in case of piles having an enlarged base or other enlargement of the bearing area, the top of the enlargement), the bearing pressure on the soil underlying the tips or bases can be demonstrated to be equal to or less than the values of basic allowable pressure indicated in table 11-2-provided that the class and density of the bearing material supporting the piles be confirmed by not less than one boring at each column location, then the commissioner may reduce the required number of load tests.

e. All other types of piles-thirty tons.

(3) **PILES INSTALLED BY USE OF VIBRATORY HAMMERS.** -The load bearing capacity of all types and capacities of piles (other than caisson piles) shall be demonstrated by load test.

(4) **LOAD TEST PROCEDURES.** -Before any load test is made, the proposed apparatus and structure to be used in making the load test shall be satisfactory to the commissioner and when required by him or her, all load

tests shall be made under the commissioner's surveillance or that of his or her representative. A complete record of such tests shall be filed with the commissioner.

a. Areas of the foundation site within which the subsurface soil conditions are substantially similar in character shall be established. In addition, for friction piles bearing on*, or on, soil materials of class 6-65, or poorer, the uniformity of each such area shall be verified by installing at least three penetration-test piles, distributed over the area. Continuous records of penetration resistance shall be made for such piles. If the records of penetration resistance are not similar or are not in reasonable agreement with the information obtained from the borings, the assumed areas of similar subsurface conditions shall be modified in accordance with the information derived from the penetration-test piles and additional penetration-test piles shall be installed as required to verify the uniformity of such areas.

**As enacted but "in" probably intended.*

b. For piles installed by jacking or other static forces or by impact hammer, one load test shall be conducted in each area of uniform conditions, but not less than two typical piles for the entire foundation installation of the building or group of buildings on the site, and not less than one pile for each fifteen thousand square feet of the area of the building wherein said piles are to be used shall be load tested. For piles installed by use of vibratory hammers, one comparison pile shall be installed and one index pile shall be load tested in each area of uniform conditions, but not less than two index piles shall be tested for the entire foundation installation of the building or group of buildings on the site, nor less than one index pile be tested for every seventy-five hundred square feet of pile foundation area. For piles whose capacity is determined on the basis of similitude, the provisions of subparagraph b of paragraph one of subdivision (c) of this section shall apply.

c. The load test shall be conducted by a method that will maintain constant load under increasing settlement. Settlement observations shall be made by means of dial extensometers. The extensometers shall provide readings to the nearest one one-thousandth of an inch. In addition, settlement observations shall be taken using an engineer's level reading to one one-thousandth of a foot, properly referenced to a well-established benchmark.

1. Test loads shall be applied by direct weight or by means of a hydraulic jack. The loading platform or box shall be carefully constructed to provide a concentric load on the pile. If direct weight is employed, the loading increments shall be applied without impact or jar. The weight of the loading platform or box shall be obtained prior to the test and this weight shall be considered as the first increment of load. If a hydraulic jack is employed, facilities for maintaining each increment of desired load constant under increasing settlement shall be provided. The gauge and the jack shall be calibrated as a unit for each project.

2. The test load shall be twice the proposed working load of the pile. The test load shall be applied in seven increments at a load of fifty percent, seventy-five percent, one hundred percent, one hundred twenty-five percent, one hundred fifty

percent, one hundred seventy-five percent, and two hundred percent of the proposed working load. After the proposed working load has been applied and for each increment thereafter, the test load shall remain in place until there is no measurable settlement in a two hour period. The total test load shall remain in place until settlement does not exceed one one-thousandth of a foot in forty-eight hours. The total load shall be removed in decrements not exceeding twenty-five percent of the total load at one hour intervals or longer. The rebound shall be recorded after each decrement is removed, and the final rebound shall be recorded twenty-four hours after the entire test load has been removed.

3. Under each load increment, settlement observations shall be made and recorded at one-half minute, one minute, two minutes, four minutes, and each four minutes thereafter after application of load increment, except in the instance of the total load where, after the four minute reading, the time interval shall be successively doubled until the final settlement limitation is reached and the load is removed.

4. The allowable pile load shall be the lesser of the two values computed as follows:

(a) Fifty (50) percent of the applied load causing a net settlement of the pile of not more than one one-hundredth of an inch per ton of applied load. Net settlement in this paragraph means gross settlement due to the total test load minus the rebound after removing one hundred percent of the test load.

(b) Fifty (50) percent of the applied load causing a net settlement of the pile of three-quarters of an inch. Net settlement in this paragraph means the gross settlement as defined in subclause (a) of clause 4 of this subparagraph, less the amount of elastic shortening in the pile section due to total test load.

(5) FOUNDATION PILES. -Except as provided in clause six of subparagraph b of paragraph one of subdivision (c) of this section, all building piles within the area of influence of a given load-tested pile of satisfactory performance, shall be installed to the same or greater penetration resistance (or static load) as the successful load-tested pile. The same equipment (or heavier equipment of the same type) that was used to install the load-tested pile shall be used to install all other building piles, and the equipment shall be operated identically. Also all other piles shall be of the same type, shape, external dimension, and equal or greater cross section as the load-tested pile. All building piles within the area of influence represented by a given satisfactory load-tested pile shall bear in, or on the same bearing stratum as the load-tested pile. For friction piles where the actual pile lengths vary more than fifty percent from that of the test pile, the commissioner may require investigation to determine the adequacy of the piles.

(6) PILE GROUPS.- When the commissioner has reasons to doubt the safe load sustaining capacity of pile groups, he or she may require at the expense of the owner, group load tests up to one hundred fifty percent of the proposed group load.

(7) "CASING-OFF".- Any temporary supporting capacity that the soil might provide to the pile during a load test, but which would be dissipated with time, shall be obviated by "casing-off" or by other suitable means. For

purposes of this section, temporary supporting capacity shall include the resistances offered by any strata of nominally unsatisfactory bearing materials (class 11-65, other than controlled fill) or of soft or loose deposits of class 9-65 or 10-65 that are completely penetrated by the pile, or any resistance offered by granular soils that will be dissipated by reason of vibration.

(e) Maximum loads. -

(1) **BASIC MAXIMUM LOADS.** -Except as permitted by the provisions of paragraph two of this subdivision, the maximum allowable pile load, determined in accordance with the provisions of subdivisions (a) through (d) of this section, shall not exceed the values specified in table 11-6.

(2) **SUBSTANTIATION OF HIGHER ALLOWABLE LOADS.** -The pile capacities tabulated in table 11-6 may be exceeded where a higher value can be substantiated on the basis of test and analysis, as follows:

a. **Load tests.** -The provisions of subdivision (d) of this section shall be supplemented, as follows:

1. Not less than one single-pile load test shall be conducted for each ten thousand square feet of pile foundation area.

2. Final load increment shall remain in place for a total of not less than ninety-six hours.

3. Single test piles shall be subjected to cyclical loading or suitably instrumented so that the movements of the pile tip and butt may be independently determined. Other alternate methods or devices, acceptable to the commissioner which will permit evaluation of the transfer of load from piles to soil may be used.

4. Where the commissioner deems necessary, the provisions of paragraph six of subdivision (d) of this section relating to group load tests shall apply. If required, group load tests shall be performed in groups of numerically average size. Except where the proposed foundation is limited to single and/or two pile groups, each test group shall contain not less than three piles.

5. Individual pile loadings shall not exceed those determined from the single pile load tests.

6. The provisions of paragraph two of subdivision (d) of this section shall apply.

b. **Analysis and report.** - A report shall be submitted by the architect or engineer establishing to the satisfaction of the commissioner (on the basis of soil and load tests and foundation analysis, including analysis of the group action of the piles) that the proposed construction under a one hundred percent overload of the foundation is safe against failure of the pile and soil materials, and showing that the probable total magnitude and distribution of settlement to be expected under design conditions will not result in instability of the building or stresses in the structure in excess of the allowable values established in subchapter ten of this chapter.

c. **Penetration resistance.** - The penetration resistance shall not be less than that required by the provisions of subdivision (c) of this section or, where applicable values are not indicated therein, shall be determined from the required load tests. The pile material shall be capable of withstanding the driving stresses without being damaged.

(f) Combination of loads. - The provisions of section 27-594 of subchapter ten of this chapter shall apply.

§[C26-1107.2] 27-701 Allowable lateral load. - For plumb piles fully embedded in the ground, the lateral load applied at the top of the pile shall not exceed one ton per pile unless it has been demonstrated by tests that the pile will resist a lateral load of two hundred percent of the proposed working lateral load without lateral movement of more than one inch at the ground level and will resist the proposed working lateral load without a movement of more than three-eighths of an inch at the ground level. For piles projecting above the ground level the shear and bending stresses computed on the basis of cantilever action to a level of five feet below grade in soils of class 8-65 or better and to ten feet below grade in poorer soils shall not exceed the allowable values for like materials established in subchapter ten of this chapter. The provisions of subdivision (f) of section 27-700 of this article relating to combination of loads shall apply.

TABLE 11-6 BASIC MAXIMUM PILE LOADS

Type of pile	Basic maximum pile load (tons)
Caisson piles.....	No upper limit
Open-end pipe (or tube) piles bearing on rock of classes 1-65, 2-65, and 3-65.....	18 in. O.D. and greater — 250; less than 18 in. O.D. — 200
Closed-end pipe (or tube) piles, H piles, cast-in-place concrete and compacted concrete piles bearing on rock of classes 1-65, 2-65, and 3-65.....	150
Piles (other than timber piles) bearing on soft rock (classes 4-65)	
1) Displacement piles such as pipe, cast-in-place concrete, and compacted concrete piles.....	60
2) Non-displacement piles such as open-end pipe and H piles.....	80
Piles (other than timber piles) bearing on hardpan (class 5-65) overlying rock.....	100
Piles (other than timber piles) that receive their principal support other than by direct bearing on soils of classes 1-65 to 5-65.....	60
Timber piles	
Bearing in soils of classes 1-65 to 5-65.....	25
Bearing in soils of classes 6-65 to 10-65.....	30

§[C26-1107.3] **27-702 Uplift capacity.** -A minimum factor of safety against withdrawal of two shall be provided, except that the factor of safety against withdrawal shall be greater than two when the piles are subjected to dynamic uplift loads. The uplift capacity shall be demonstrated by pull-out tests, except where a factor of safety of three or more based on analysis is used, pull-out tests need not be conducted.

ARTICLE 9 PILE DRIVING OPERATIONS

§[C26-1108.0] **27-703 Exceptions.**- The provisions of sections 27-704 and 27-705 of this article shall not apply to piles driven with a vibratory hammer or other equipment wherein the energy of impact cannot be evaluated.

§[C26-1108.1] **27-704 Equipment.** -

(a) **General.**- The hammer shall travel freely in the leads. The cushion or cap block shall be replaced, if crushed. The hammer shall deliver its rated energy, and measurements shall be made of the fall of the ram or other suitable data shall be observed at intervals as required to verify the actual energy delivered at the termination of driving.

(b) **Cushion or cap block.**- The cushion or cap block shall be a solid block of hardwood with its grains parallel to the axis of the pile and enclosed in a tight-fitting steel housing, or shall be an equivalent assemblage. If laminated materials are used, the type and construction of these materials shall be such that their strength is equal to, or greater than, hardwood. Wood chips, pieces of rope, hose, shavings, or automobile tires and similar materials shall not be used. Cap blocks shall be replaced if burned, crushed, or otherwise damaged.

(c) **Followers.**- Followers shall not be used unless permitted in writing by the architect or engineer, and only when necessary to accomplish such installation. They shall be of steel or hardwood of such size, shape, length, and weight as to permit driving the pile in the desired location and to the required depth and resistance. The required driving resistance tabulated in tables 11-4 and 11-5 shall be increased to compensate for the loss of energy in the hammer blow. The follower shall be a single length section, shall be provided with a socket or hood carefully fitted to the top of the pile to minimize loss of energy and to prevent damage to the pile, and shall have sufficient rigidity to prevent "whip" during driving.

§[C26-1108.2] **27-705 Procedures.** -

(a) **Continuous driving.**- Driving of piles preliminary to final seating shall be continuous for an interval adequate to break or prevent the development of freeze. The hammer shall be operated at its rated speed during this interval.

(b) **Jetting.**- Jetting, augering and other methods of pre-excavation shall not be used unless permitted in writing by

the architect or engineer. When permitted, such procedures shall be carried out in a manner which will not impair the carrying capacity of the piles already in place or the safety of existing adjacent structures. Jetting or augering shall be stopped at least three feet above the final expected pile-tip elevation and at least three feet above the tip elevation of any pile previously driven within six feet of the jet or auger, except that where piles are to be end bearing on rock or hardpan, jetting or augering may be carried to the surface of the rock or hardpan. Piles shall be carried down beyond the depth of jetting, augering or other pre-excavation until the required resistance is obtained. If there is evidence that jetting or other procedures have disturbed the load-bearing capacities of previously installed piles, those piles that have been disturbed shall be restored to conditions meeting the requirements of this article by redriving or by other methods acceptable to the architect or engineer. Redriving or other remedial measures shall be instituted after the jetting or other operations in the area have been completed.

(c) **Sequence of installation.** -Individual piles and pile groups shall be installed in such sequence that: (1) the carrying capacity of previously installed piles is not reduced; (2) the soil surrounding the piles is not compacted to the extent that other piles in the group cannot be installed properly; and (3) ground movement that would damage adjacent buildings or utilities is prevented. In general, in any group, driving shall start from one side and proceed progressively toward the other side of the group or shall start from the middle and proceed toward the edges of the group.

(d) **Heaved piles.** -In soils in which the installation of piles causes previously installed piles to heave, accurate level marks shall be put on all piles immediately after installation, and all piles that have been heaved by an amount in excess of one-quarter of an inch shall be redriven to the required resistance.

(e) **Penetration measurements.**- Penetration measurements made for the purpose of determining resistance to driving shall not be made when pile heads are damaged to an extent that may affect measured penetration, nor shall they be made immediately after fresh cushion blocks have been inserted under the striking part of the hammer.

ARTICLE 10 PILE TYPES-SPECIFIC REQUIREMENTS

§[C26-1109.1] **27-706 Scope.** - Types of pile construction and installation that are not described in this section will be permitted for use only where acceptable to the commissioner.

§[C26-1109.2] **27-707 Timber piles.** -

(a) **Materials.** -Timber piles shall conform in quality to class A or B of reference standard RS 11-7.

(1) **SIZE OF PILES.** -Piles shall be of adequate size to resist the applied loads without creating stresses in the

pile materials in excess of twelve hundred psi for piles of southern pine, Douglas fir, oak, or other wood of comparable strength; or eight hundred fifty psi for piles of cedar, Norway pine, spruce or other wood of comparable strength. Except as provided in paragraph two of this subdivision, for piles forty feet or more in length and of thirty tons capacity or less, the following sizes or classes of piles shall be deemed to be adequate for considerations of stress in the pile material:

a. Piles of twenty-five to thirty tons capacity-Class A or minimum eight inch tip with uniform taper.

b. Piles of less than twenty-five tons capacity-Class A or B or minimum six inch tip with uniform taper.

(2) **PILES DRIVEN TO END BEARING.** -All timber piles, regardless of capacity, driven to end bearing on soils of classes 1-65 through 5-65 shall be class A or shall have a minimum eight inch tip and a uniform taper.

(3) **SPECIES OF WOOD.** -Any species of wood may be used that conforms to the provisions of reference standard RS 11-7 and that will stand the driving stresses.

(4) **PEELING.** -Unless treated, piles need not be peeled.

(b) Limitations on use. -Where timber piles are to be driven to end bearing on soils of classes 1-65 through 5-65 by use of an impact hammer, the installation of each such pile shall be under the personal supervision of an architect or engineer, and the operations of driving such piles, the observations of penetration resistance, and the operation of the equipment shall be so conducted as to terminate driving directly when the pile reaches bearing on the hard material. A report, prepared by the architect or engineer, describing the procedures, equipment, and precautions followed to prevent injury to the piling shall be submitted to the commissioner.

(c) Lagged and inverted piles. -The use of lagged or inverted piles will be permitted. Double lagging shall be adequately connected to the basic pile material to transfer the full pile load from the basic pile material to the lagging without exceeding values of allowable stress as established in subchapter ten of this chapter. The connection for single lagging shall be proportioned for half the pile load. The diameter of any inverted timber pile at any section shall be adequate to resist the applied load without exceeding the stresses indicated in paragraph one of subdivision (a) of this section, but in no case shall it be less than eight inches.

(d) Installation. -

(1) All broomed, crushed, or otherwise damaged materials at the head of the pile shall be removed before capping.

(2) Any sudden decrease in driving resistance shall be investigated with regard to the possibility of breakage of the pile, and if such sudden decrease in driving resistance cannot be correlated to boring data or some incident in the driving, and if the pile cannot be removed for inspection, it shall be considered as adequate cause for rejection of the pile.

§[C26-1109.3] 27-708 Precast concrete piles (including prestressed sections). -

(a) Materials. -Materials for precast concrete piles shall conform to the requirements of article five of subchapter ten of this chapter.

(b) Construction. -

(1) **HANDLING.** -Precast concrete piles shall be proportioned, cast, cured, handled, and driven so as to resist the stresses induced by handling and driving as well as by loads. Handling stresses shall be computed on the basis of fifty percent of the weight of the pile as an allowance for impact. Handling equipment shall be constructed so as to equalize the reactions on the several lines of the pile pickups. Loading conditions induced by handling and driving shall be considered as of infrequent occurrence.

(2) **DIMENSIONS.** -The minimum lateral dimension of the pile shall be ten inches, except for the taper at the tip.

(3) **STRUCTURAL DESIGN.** -Piles shall be proportioned in accordance with the provisions of article eight of this subchapter, subject to the following additional requirements:

a. For a length equal to at least three times the minimum lateral dimension at each end of the pile, lateral tie reinforcement consisting of 0.225 in. diameter rods or larger shall be spaced not more than three inches center-to center, or an equivalent spiral shall be provided. Elsewhere, the spacing of the ties or the pitch of the spiral may be increased to twelve inches. The minimum amount of longitudinal reinforcement shall be two percent of the concrete section placed in a symmetrical pattern of at least four bars. If prestressed piles are used, the minimum residual compression in the pile section shall be seven hundred psi. For piles designed with voids, the three inch spacing of the ties or spiral at each end of the pile shall be extended for a distance of twelve feet or one-third the length of the pile, whichever is smaller.

b. For piles designed with voids, the minimum wall thickness of the concrete in any section of the piles shall be four inches. Voids may extend through either or both ends of the pile. If the void extends through the lower end of the pile, the pile head shall be vented to prevent buildup of internal hydraulic pressure during driving.

c. Reinforcing steel shall be covered with at least one and one-half inches of concrete on the surface against the ground.

(c) Tolerances. -Voids, when used, shall be located within three-eighths of an inch of the position shown in the plans. The maximum departure of the pile axis from a straight line, measured while the pile is not subject to bending forces, shall not exceed one-eighth of an inch in ten feet or three-eighths of an inch in forty feet or, 0.1 percent of the pile length.

(d) Installation. -Precast concrete piles shall not be handled or driven until they have cured sufficiently to develop the necessary strength.

§[C26-1109.4] 27-709 Cast-in-place concrete piles. -

(a) Description. -Cast-in-place concrete piles shall be cast in shells previously installed in the ground or, with the limitations indicated in section 27-697 of article seven of this subchapter, may be cast in an uncased hole. Cast-in-place piles may be tapered or cylindrical, or a combination of tapered and cylindrical shapes.

(b) Materials. -Concrete for cast-in-place concrete piles shall conform to the requirements of article five of subchapter ten of this chapter. Slump shall be five inches plus or minus one inch. Where the pile shell is assumed to contribute to the capacity of the pile as a structural member, the shell shall be of metal and shall conform to the provisions of article six of subchapter ten of this chapter or section 27-712 of this article. Where the pile shell is not assumed to contribute to the capacity of the pile as a structural member, the shell may be of any material that will adequately resist the driving stresses and maintain an open well to receive the concrete. End closures for shells shall not project more than one-half inch beyond the outer limits of the pile when bearing in soils of class 6-65 or lower.

(c) Installation. -

(1) After installation to final depth and immediately before filling with concrete, the inside of the tube, shell, or bore shall be thoroughly cleaned to the bottom and inspected by lowering a drop light or by means of a light beam. To be accepted: (a) the pile shall be free of collapsed sections of shell and the pile shell shall not show any tears; (b) the pile shall be free of water except that a minor amount of water may be allowed to occur in the pile if it be absorbed by placing a suitable amount of dry cement-sand mixture in the tip end of the pile; and (c) the alignment of the pile shall conform to the provisions of section 27-691 of article seven of this subchapter. If the bottom of the casing is out of sight, the shape and alignment of the casing shall be surveyed with a suitable instrument, or the pile rejected.

(2) Concrete shall be placed by such methods that the entire volume of the tube, shell, or bore is filled and in a manner that will preclude separation of the ingredients.

(3) No concrete shall be placed in a cast-in-place pile until all piles within a radius of fifteen feet, or within the heave range, have been driven.

(4) Rejected pile shells shall be filled with concrete or sand.

(5) The concrete cap shall not be placed until at least one hour after all piles within the cap group are completely filled.

§[C26-1109.5] 27-710 Compacted concrete piles. -

(a) Description. - A "compacted concrete pile" shall denote a concrete pile formed with an enlarged base in which the concrete in the base is placed in small batches that are compacted prior to attaining an initial set. The concrete in the shaft of the pile shall be placed as specified in section 27-709 of this article for cast-in-

place concrete piles if a permanent casting is provided, or in small batches that are compacted.

(b) Materials. -Concrete for compacted concrete piles shall conform to the requirements of article five of subchapter ten of this chapter. Concrete to be compacted shall have a minimum compressive strength at the age of twenty-eight days of four thousand psi and shall be mixed with sufficient water to permit hydration of the cement, but the slump shall be zero. The concrete shall be placed and compacted before initial set can occur. Non-compacted concrete, if used for the pile shafts, shall conform to the requirements for cast-in-place concrete piles.

(c) Spacing. - Minimum spacing between compacted concrete piles shall be four feet six inches, center to center, except that where the shafts of such piles are cased for their full length, this spacing may be reduced to three feet six inches. Where a question exists as to possible damage to adjacent previously driven piles, these minimums shall be increased.

(d) Installation. -

(1) The base shall be formed by ramming concrete, in batches of approximately five cubic feet or less, from a drive casing and into the soil. Unless specifically otherwise permitted by the commissioner, a minimum of twenty blows of at least one hundred forty thousand foot-pounds per blow shall be required for extrusion of the last five cubic feet of concrete. The total quantity of concrete extruded from the drive casing to form the base shall be equal to or greater than the quantity so extruded in the case of the nearest successful applicable test pile, except that a compactive effort in excess of thirty blows, each of one hundred forty thousand foot-pounds, will not be required for extrusion of the last five cubic feet.

(2) After the expanded base has been formed, the shaft shall be constructed. Where a cased shaft is to be used, a steel shell shall be inserted into the drive casing and anchored to the expanded base by placing a fresh charge of concrete in the shell and driving it into the base. The shell may then be filled with concrete to cut-off elevation after the removal of the drive casing, in accordance with the provisions relating to cast-in-place concrete piles. Any annular space remaining between the shell and surrounding soil shall be suitably filled to assure proper lateral support of the shaft, unless there is sufficient recovery of the ground to provide the necessary support. Where an uncased shaft is to be used, the provisions of section 27-697 of article seven of this subchapter shall apply, and the concrete for the shaft shall be placed by ramming or by the use of approved pressure devices as the drive casing is withdrawn. Where ramming is used, the concrete batches being rammed shall not exceed five cubic feet in volume, not less than two blows of thirty thousand foot-pounds each shall be applied to compact each batch of concrete, and the bottom of the drive casing shall be kept below the level of the concrete at all times.

(3) The outside diameter of the permanent shaft shall not be more than four inches less than the inside diameter of the drive casing.

(4) Except where uncased shafts are used, as described in section 27-697 of article seven of this subchapter, no concrete shall be placed in the pile shafts until all piles within a radius of fifteen feet, or within the heave range, have been driven.

(e) Bearing material. -The enlarged base of the pile shall be formed in, or on the same type of bearing material as is used to support the nearest applicable load test pile and at a similar depth therein. In addition, the enlarged base shall be underlain by a minimum depth of ten feet (measured from the junction of the shaft and base) of soil materials of classes 1-65 to 7-65, except that, where installation of the base is permitted to be performed with blows of less energy than the one hundred forty thousand foot-pounds indicated in paragraph one of subdivision (d) of this section, the requirement for a ten foot depth of class 1-65 to 7-65 material may be reduced, subject to the approval of the architect or engineer and the approval *[sic]* of the commissioner.

§[C26-1109.6] 27-711 Steel H sections. -

(a) Materials.- Steel H sections may be of any type of steel permitted by the provisions of reference standard RS 10-5. The use of built-up sections or sections of other than "H" form will be permitted if the several components of the section are adequately connected to develop the strength of the adjacent components and if the ratio of width to thickness of the component parts does not exceed the values for conventional "H" sections.

(b) Limitations on use. -The tips of all steel H piles having a thickness of metal less than one-half inch, which are driven to end bearing on rock of class 1-65 through 3-65 by an impact hammer, shall be reinforced. The installation of all steel H piles by impact hammer to end bearing on rock of classes 1-65 through 3-65 shall be under the personal inspection of an architect or engineer, and the operations of driving such piles, the observations of penetration resistance, and the operation of the equipment shall be conducted so as to terminate driving directly when the pile reaches refusal on the rock surface.

§[C26-1109.7] 27-712 Concrete-filled pipe piles. -

(a) Materials.- The pipe shall conform to the provisions of reference standard RS 11-8. Concrete shall conform to the requirements of article five of subchapter ten of this chapter.

(b) Minimum dimensions. -

(1) Pipe installed open-end and having a nominal outside diameter of less than fourteen inches shall be at least one-quarter inch thick. For diameters from fourteen inches to eighteen inches, the minimum thickness shall be 0.310 in. For diameters over eighteen inches, the minimum thickness shall be 0.375 in.

(2) Steel pipe piles installed with ends closed shall have a minimum nominal wall thickness of at least 0.125 in.

(3) For piles which receive their principal support by friction, closure or splice plates shall not project more than three-eighths of an inch beyond the outer limit of the pipe section.

(c) Installation. -

(1) Pipe shells driven open-end shall be cleaned to the bottom of the shell after driving.

(2) After driving and cleaning the pipe, open-end piles driven to end bearing on rock or hardpan shall be resealed to full bearing by redriving, to the resistance indicated in Table 11-4. If the pipe shell shows two inches or more of penetration on redriving, the pipe shall be recleaned and redriven in successive cycles until the penetration on redriving is less than two inches.

(3) Pipe shells shall be inspected before filling with concrete, shall be clean, and shall meet the requirements for alignment and condition of the shell as specified with regard to the shells of cast-in-place piles. If leakage of water into the pipe occurs, the provisions of paragraph five of subdivision (e) of section 27-713 of this article shall apply.

(4) Placing of concrete fill in pipe shells shall conform to the requirements for placing concrete fill in cast-in-place piles.

§[C26-1109.8] 27-713 Caisson piles. -

(a) Description.- Caisson piles shall denote concrete filled pipe piles that are socketed into bedrocks of class 1-65, 2-65 or 3-65 and constructed with steel cores.

(b) Materials.- Pipe or shell and concrete shall conform to the requirements for concrete filled pipe piles, except that the minimum compressive strength of the concrete at the age of twenty-eight days shall be thirty-five hundred psi. Steel cores shall conform to the requirements for steel H piles. Reinforcing steel cages shall be covered with at least one and one-half inches of concrete.

(c) Design of rock socket. -The design of the rock socket shall be predicated on the sum of the allowable bearing pressure on the bottom of the socket plus bond along the sides of the socket. The allowable bearing pressure on the surface of the rock at the bottom of the socket shall be as established in section 27-678 of article four of this subchapter increased for embedment in accordance with note eight of table 11-2, provided that the strength of the concrete fill in the socket, computed as 0.45 f 'c is of comparable magnitude. The allowable bond stress between the concrete and the sides of the socket shall be taken as two hundred psi. The provisions of subdivision (c) of section 27-700 of article eight of this subchapter relative to penetration resistance shall not apply.

(d) Spacing and minimum dimensions. -

(1) Minimum diameter of a caisson shall be eighteen inches with a minimum shell thickness of three-eighths of an inch. Minimum depth of the rock socket shall be equal to the diameter of the pipe.

(2) The center-to-center spacing of caissons shall be at least two and one-half times the outside diameter of the shell.

(e) Installation. -

(1) The steel shell shall be installed through overburden, the material within the shell shall be removed, and the shell seated in the rock sufficiently to stop the inflow of soil. Where required to extend the shells, splices are to be welded. A suitable steel driving shoe shall be welded to the bottom of each caisson.

(2) A socket shall then be drilled in the rock to the required depth and shall be approximately of the same diameter as the inside diameter of the shell. Before placement of concrete, the socket and shell shall be thoroughly cleaned and the rock inspected to verify that the rock is of the class on which the design has been predicated, or of a better class. In case visual inspection cannot be made because of inability to unwater the caissons by standard pumping methods, drilling logs and screenings from the rock drilling operation may be utilized to determine the class of rock in the socket.

(3) Where more than one section of steel core is required, the mating ends of the sections shall be spliced so as to safely withstand the handling stresses to which they may be subjected. The ends shall be milled or field ground to insure contact. The steel core shall be centrally installed in the caisson before grouting and concreting, shall not be more than one inch above the rock at the bottom of the socket, and shall be full length of the caisson or extend a sufficient distance up into the shaft to transmit the load in the steel core into the concrete of the caisson. A minimum-weight thirty-six pounds stub core beam shall be installed in the socket for caissons not requiring steel cores in order to lock the caissons into the rock. In these cases, the length of the steel cores shall be twice the socket depth.

(4) Concrete and grout shall be placed so that it completely fills the shell, the socket, and the space between the steel core and shell, and in a manner that will preclude separation of the ingredients.

(5) If the leakage of water into the caisson is minor, the caisson shall be pumped out and one cubic yard of grout shall be placed in the caissons and then the balance of the concrete installed. If the leakage of water makes it inadvisable to attempt to place concrete in the dry, the shell shall be filled to its top with clean water, and the concrete placed by the tremie method to the top of the caisson in one continuous operation or by using a seal of grout of the same strength as the specified concrete. The grout seal, if used, shall be deposited by means of a grout pipe to an elevation of at least three feet above the cutting edge, and after a sufficient time has elapsed to allow the grout to set, the caisson shall be pumped dry and the remaining space filled with concrete.

§[C26-1109.9] 27-714 Composite piles. -Composite piles include those consisting of two types of pile joined together. The maximum allowable load shall be that allowed for the component of lesser strength used to make up the full pile length. The connection or joint

between the two components shall be constructed so as to prevent the separation of the upper and lower components during construction and thereafter. The details and methods of making joints shall be designed.

ARTICLE 11 UNDERPINNING

§[C26-1110.1] 27-715 General requirements. -

Where support of adjacent structures or properties is required, such support may be provided by underpinning, sheeting, and bracing, or by other means acceptable to the commissioner. Except as specifically permitted otherwise, underpinning piers, walls, piles, and footings shall be designed and installed in accordance with the applicable provisions of this subchapter relating to piers, walls, piles, and footings used in new construction and shall be inspected as provided in section 27-724 of article thirteen of this subchapter.

§[C26-1110.2] 27-716 Use of rock support in lieu of underpinning. - Existing structures founded at a level above the level of adjacent new construction may be supported on hard rock in lieu of underpinning, the use of sheeting and bracing, or the construction of retaining walls, provided that a report by the architect or engineer is submitted substantiating the safety of the proposed construction and verifying that an "in-place" inspection has been made of the rock exposed and of the jointing therein in the excavation.

ARTICLE 12 STABILITY

§[C26-1111.1] 27-717 General. - The possibility of overturning and sliding of the building shall be considered.

§[C26-1111.2] 27-718 Factor of safety. -

(a) Overturning. - The minimum factor of safety against overturning of the structure as a whole shall be one and one-half. Stability against overturning shall be provided by the dead load of the building, by the allowable uplift capacity of piling, by anchors, by the weight of soil directly overlying footings provided that such soil cannot be excavated without recourse to major modification of the building, or by any combination of these factors.

(b) Sliding. -The minimum factor of safety against sliding of the structure under lateral load shall be one and one-half. Resistance to lateral loads shall be provided by friction between the foundation and the underlying soil, by passive earth pressure, by batter piles, or by plum piles, subject to the following:

(1) The resistance to lateral loads due to passive earth pressure shall be discounted where the abutting soil could be removed, inadvertently, by excavation.

(2) In the case of pile supported structures, frictional resistance between the foundation and the underlying soil shall be discounted.

(3) The available resistance to friction between the foundation and the underlying soil shall be predicated on an assumed friction factor of one-half for soils of classes 1-65 through 8-65. A greater value of coefficient of friction may be used subject to verification by analysis and test. For soils of poorer classes, the stability shall be analyzed by accepted procedures of soil mechanics.

ARTICLE 13 INSPECTION

§[C26-1112.1] **27-719 General.** -The applicable provisions of article seven of subchapter one of this chapter shall apply.

§[C26-1112.2] **27-720 Boring and test pit operations.** -Boring and test pit operations shall be subject to controlled inspection, except that fifty percent or less of the required number of borings and/or test pits may be inspected by an architect or engineer other than the architect or engineer designated for controlled inspection. The records of borings and/or test pits shall be attested to as follows:

(a) The architect or engineer shall file a report stating which borings and/or test pits were performed under his or her inspection and whether such inspection was performed personally or otherwise. If the inspection was not made personally by the architect or engineer, the name and address of the inspector shall be noted. It shall be stated: that the borings and/or test pits so inspected were made and were carried to the depths indicated; that, to the best of the architect's or engineer's knowledge and belief, the description and classification of the soils are a true description of the samples recovered from the respective borings and/or test pits; that such samples were recovered at the levels indicated; and that the boring and/or test pit work progressed in such manner that the samples recovered are reasonably representative of the subsurface conditions.

(b) The accuracy of the other data indicated on the boring records shall be attested to by the drilling contractor or by the driller making the borings.

§[C26-1112.3] **27-721 Piling.** - The installation of all piling shall be subject to controlled inspection. Such inspection shall be performed only by an architect or engineer resident at the site, except that where more than one pile rig is working at a site, inspection of the work may be performed by nonlicensed or nonregistered personnel working under the resident architect or engineer, who need act only in a supervisory capacity. This exception shall not apply, however, in the cases of timber or steel piles driven to end bearing as described in article ten of this subchapter. Materials for piling shall be subject to inspection requirements as prescribed in subchapter ten of this chapter for those or like materials. In all cases, an inspector shall be assigned to observe the operations of each rig.

§[C26-1112.4] **27-722 Footings, foundation piers, foundation walls and pile caps.** -The provisions of section 27-683 of article six of this subchapter shall apply.

§[C26-1112.5] **27-723 Subgrade for footings, foundation piers, and foundation walls.** -The soil material directly underlying footings, foundation piers, and foundation walls shall be inspected by an architect or engineer after excavation and immediately prior to construction of the footings. If such inspection indicates that the soil conditions do not conform to those assumed for purposes of design and described on the plans, or are unsatisfactory due to disturbance, then additional excavation, reduction in allowable bearing pressure, or other remedial measures shall be adopted, as required. A copy of a report or reports on such inspection or inspections describing the conditions found and any necessary modification of the design, and bearing the signature of the architect or engineer making the inspections, shall be filed with the commissioner. In addition, notification shall be received by the department at least two working days prior to construction of the footing, pier, or foundation walls, that the subgrade is ready for inspection unless the requirements of section 27-209 of article twenty-one of subchapter one of this chapter have been met.

§[C26-1112.6] **27-724 Construction required for or affecting the support of adjacent properties or buildings.** -Except in cases where a proposed excavation will extend less than ten feet below the legally established grade, all underpinning operations and the construction and excavation of temporary or permanent cofferdams, caissons, braced excavated surfaces, or other constructions or excavations required for or affecting the support of adjacent properties or buildings shall be subject to controlled inspection. The details of underpinning, cofferdams, caissons, bracing, or other constructions required for the support of adjacent properties or buildings shall be shown on the plans or prepared in the form of shop or detail drawings and shall be approved by the architect or engineer who prepared the plans.

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**SUBCHAPTER 12
LIGHT, HEAT, VENTILATION, AND NOISE
CONTROL**

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**				
[1200.0]	Art. 1	General			
[1200.1]	725	Scope	[1206.3]	754	Minimum Quantity of Outside Air for Mechanical Ventilation
[1200.2]	726	Standards	[1206.4]	755	Use of Adsorption Devices
[1200.3]	727	Definitions	[1206.5]	756	Installation and Operation of Ventilating and Air Conditioning Systems
[1200.4]	728	Plans			
[1200.5]	729	Permits	[1207.0]	Art. 8	Ventilation of Special Spaces
[1200.6]	730	Tests and Inspections	[1207.1]	757	Rooms in Institutional H-1 Occupancy
[1201.0]	Art. 2	Existing Buildings	[1207.2]	758	Kitchens
[1201.1]	731	Alterations	[1207.3]	759	Bathrooms and Toilet Rooms
[1202.0]	Art. 3	Standards of Natural Light	[1207.4]	760	Inside Locker Rooms
[1202.1]	732	Natural Light Requirements	[1207.5]	761	Corridors
[1202.2]	733	Natural Light Sources and Location	[1207.6]	762	Crawl Spaces
[1202.3]	734	Area of Natural Light Sources	[1207.7]	763	Ventilation of Refrigeration Plants
[1203.0]	Art. 4	Standards of Artificial Light	[1207.8]	764	Ventilation of Boiler Rooms
[1203.1]	735	Artificial Light Requirements	[1207.9]	765	Ventilation for Schools
[1203.2]	736	Means of Egress	[1207.10]	766	Ventilation of Rooms or Spaces with Excessive Temperatures, Strong Odors, Toxic Substances, or Airborne Irritants
[1203.3]	737	Places of Assembly	[1207.11]	767	Ventilation for Special Uses and Occupancies
[1203.4]	738	Bathrooms and Toilet Rooms	[1208.0]	Art. 9	Noise Control in Multiple Dwellings
[1203.5]	739	Yards and Courts	[1208.1]	768	Requirements
[1204.0]	Art. 5	Standards of Heating	[1208.2]	769	Acoustical Isolation of Dwelling Units
[1204.1]	740	Heating Requirements	[1208.3]	770	Noise Control of Mechanical Equipment
[1204.2]	741	Minimum Temperature Requirements			
[1204.3]	742	Devices Producing Incidental Heat			
[1204.4]	743	Capacity of Central Heat Sources			
[1204.5]	744	System Design			
[1205.0]	Art. 6	Standards of Natural Ventilation			
[1205.1]	745	Occupiable Rooms			
[1205.2]	746	Habitable Rooms			
[1205.3]	747	Alcoves			
[1205.4]	748	Balconies			
[1205.5]	749	Natural Ventilation Sources			
[1205.6]	750	Area of Ventilating Openings			
[1205.7]	751	Minimum Dimensions of Habitable Rooms			
[1206.0]	Art 7	Standards of Mechanical Ventilation			
[1206.1]	752	Areas Requiring Mechanical Ventilation			
[1206.2]	753	Index for Ventilation			

***“C26” omitted from section numbers in this column.*

*** “27” omitted from section numbers in this column.*

LIST OF TABLES

Table No.

- 12-1 Minimum Space Temperature Requirements
- 12-2 Required Minimum Outdoor Air Supply and Exhaust
- 12-3 Maximum Sound Power Levels Permitted in Mechanical Equipment Spaces of Shafts Adjoining Dwelling Spaces
- 12-4 Maximum Sound Power Levels Permitted for Exterior Mechanical Equipment Adjoining Buildings
- 12-5 Noise Output Limitations for Exterior Mechanical Equipment
- 12-6 Maximum Permissible Air Velocities in Ducts
- 12-7 Maximum Permissible Sound Power Levels for Terminal Units

ARTICLE 1 GENERAL

§[C26-1200.1] 27-725 **Scope.** -The provisions of this subchapter shall establish and control the minimum requirements for light, heat, ventilation, and noise control except as otherwise provided in subchapters six, seven, and eight.

§[C26-1200.2] 27-726 **Standards.** -The provisions of reference standard RS-12 shall be a part of this subchapter.

§[C26-1200.3] 27-727 **Definitions.** -For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-1200.4] 27-728 **Plans.** -For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[C26-1200.5] 27-729 **Permits.** -For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

§[C26-1200.6] 27-730 **Tests and inspections.** -Where required in this subchapter, all equipment and systems shall be subject to tests and/or inspections that would disclose defects or operating conditions dangerous to life or health. Such equipment or systems shall not be operated until these defects or conditions are corrected.

ARTICLE 2 EXISTING BUILDINGS

§[C26-1201.1] 27-731 **Alterations.** -No building, or part thereof, shall hereafter be altered or rearranged so as to reduce any of the following to less than the required standards prescribed in this subchapter for buildings hereafter erected:

- (a) The amount of available natural or artificial light.
- (b) The output of devices providing heat to a room.
- (c) The outdoor air supply.

No additional room shall be created unless made to conform to the requirements of this subchapter except that in basements of one-family dwellings existing on January first, nineteen hundred eighty-two, and in basements of all other dwellings existing on January first, nineteen hundred forty-eight, the minimum clear ceiling height may be seven feet for the minimum area. In multi-family dwellings, the installation of all new mechanical equipment shall conform to the requirements of article nine of this subchapter except that existing mechanical equipment may be replaced with new equipment of the same kind as previously installed.

ARTICLE 3 STANDARDS OF NATURAL LIGHT

§[C26-1202.1] 27-732 **Natural light requirements.** - Every habitable room shall be provided with natural light complying with the provisions of this subchapter.

§[C26-1202.2] 27-733 **Natural light sources and location[s]*.** -

(a) Natural light, when required, shall be provided by windows, skylights, monitors, glazed doors, transoms, fixed lights, жалousies or other natural light transmitting media. Such sources shall not be located in recesses having a width of less than six feet and such sources shall not be located so as to create a habitable room whose depth exceeds thirty feet except in dwelling units of group one construction containing more than three habitable rooms. Such sources, except as provided in subdivision (b) of this section, shall face or open upon the sky or upon a public street, space, alley, park, highway, or right of way, or upon a yard, court, plaza, or space above a setback, when such yard, court, plaza, or space above a setback is located upon the same lot and is of the dimensions required by the applicable provisions of the zoning resolution. Where dwelling units in buildings or spaces classified in occupancy group J-1 or J-2 are located in a cellar or a basement such dwelling unit or units shall have at least one-half of their height and all of their window surfaces above every part of an "adequate adjacent space". Such "adequate adjacent space" shall be open to the sky and shall be a continuous surface area outside the dwelling unit or units not less than thirty feet in its least dimension and abutting at same level or directly below every part of the exterior walls of such dwelling unit or units. Such "adequate adjacent space" shall include only spaces which are located on the same lot or plot as the building or on a public street, space, alley, park, highway or right of way and the level of such areas which abut or adjoin the habitable room at least shall be six inches below the window sills of any windows.

(b) Natural light sources may face or open upon an enclosed or partially enclosed balcony or space above a setback when such balcony or space faces upon a public street, space, alley, park, highway or right of way or upon a yard, court, plaza, or space above a setback, when such yard, court, plaza, or space above a setback is located upon the same lot and is of the same dimensions required by the applicable provisions of the zoning resolution, the maximum depth of any habitable room is at most thirty feet measured from the outer face of the wall forming the partial or full enclosure of the balcony or space, the enclosure of the balcony or space is not more than one story in height, and the balcony or space complies with either of the following:

(1) The front of the balcony or space above a setback has an opening to the outer air whose area is equal to at least seventy-five percent of the floor surface area of such balcony or space.

(2) The front of the balcony or space above a setback may be completely enclosed when the building is of group one construction provided the outer enclosing walls are glazed with clear plate glass or with plastic equivalent complying with subdivision (e) of section 27-331 of article four of subchapter five of this chapter and such

glazed wall area is equal to at least fifty percent of the interior walls enclosing such balcony or space and at least fifty percent of the required glazed area is openable and no window from any bathroom, water closet [*sic*] compartment, or kitchen whose area is fifty-nine square feet or less opens on such balcony or space.

**Copy in brackets not enacted but probably intended.*

§[C26-1202.3] 27-734 Area of natural light sources. - Required sources of natural light shall have an aggregate transmitting area of at least ten percent of the floor area of the room or space served and where an enclosed or partially enclosed balcony or space above a setback complying with section 27-733 of this article intervenes, the required sources of natural light shall have an aggregate transmitting area of at least ten percent of the combined floor area of such room and the portion of the balcony or space directly adjoining and in front of such room. Each required source shall have a minimum transmitting area of twelve square feet and only that area of the light source above thirty inches from the finished floor may be considered as providing the natural light required in any space.

ARTICLE 4 STANDARDS OF ARTIFICIAL LIGHT

§[C26-1203.1] 27-735 Artificial light requirements.- Adequate means for producing artificial light by electricity shall be provided in every room or floor space in every building hereafter erected and in the portions of existing buildings where alterations are performed except as follows:

(a) Artificial light need not be provided in rooms or spaces occupied exclusively during the daylight hours between one hour after sunrise and one hour before sunset, and which are provided with natural light meeting the requirements of sections 27-733 and 27-734 of article three of this subchapter.

(b) Artificial light need not be provided in rooms or spaces with less than forty square feet of floor area if they are used exclusively for storage purposes or for mechanical facilities containing no rotating or moving parts, no combustion equipment, or no other hazardous equipment.

§[C26-1203.2] 27-736 Means of egress. -All means of egress shall be provided with the levels of artificial illumination as required in article six of subchapter six of this chapter.

§[C26-1203.3] 27-737 Places of assembly.- All places of assembly shall be provided with the levels of artificial illumination as required in subchapter eight of this chapter.

§[C26-1203.4] 27-738 Bathrooms and toilet rooms.- In all bathrooms and toilet rooms, the required means for producing artificial illumination shall be capable of

producing an average intensity of not less than ten foot candles, when measured at thirty inches above the floor.

§[C26-1203.5] 27-739 Yards and courts. -Where a building is classified in occupancy group J-1 or J-2, or where a building contains a space or spaces classified in occupancy group J-1 or J-2, all yards and courts shall be provided with adequate means of providing artificial light by electricity having a minimum intensity of not less than one foot candle measured at the lower level or levels of all yards or courts.

ARTICLE 5 STANDARDS OF HEATING

§[C26-1204.1] 27-740 Heating requirements.-

All habitable or occupiable rooms or spaces, and all other rooms or spaces listed in table 12-1, shall be provided with means of heating in accordance with the requirements of this subchapter and reference standard RS 12-1. Heating systems shall be capable of producing the required temperatures listed in table 12-1 when the outdoor temperature is five degrees Fahrenheit and the wind velocity is fifteen mph. In highly exposed locations, provision shall be made for higher wind velocities. Heating equipment shall not be required when either of the following conditions exist:

(a) Where the occupancy is seasonal and the rooms or buildings will not be occupied between November first and May first of the following year.

(b) Where the processes or activities normally conducted within the space will generate sufficient heat to produce the prescribed indoor temperature during the time of occupancy.

§[C26-1204.2] 27-741 Minimum temperature requirements.- Heating systems shall be capable of producing the required minimum space temperatures as set forth in table 12-1. Where the occupancy of a space does not conform exactly with any of the spaces listed, the temperature shall be determined by the requirements of the listed space to which it most nearly conforms.

§[C26-1204.3] 27-742 Devices producing incidental heat.- Where a room or space contains equipment that produces heat, such as motors, generators, resistors, lights, compressors, steam heated vessels, etc., and where such equipment is in constant use during the period of occupancy, the equipment may be considered as a supplementary heating device. Its heating capacity may be deducted from the required capacity of the heating devices in the room.

§[C26-1204.4] 27-743 Capacity of central heat sources.- Where central heat sources are used, they shall have a gross output capacity sufficient to provide for the required heating load, including appropriate allowance for distribution losses, pick-up, and the heating of domestic hot water if the central heat source is used for that purpose.

TABLE 12-1 MINIMUM SPACE TEMPERATURE REQUIREMENTS^a

Rooms or Spaces	Minimum Temperature (degree F)
Habitable rooms in all buildings.....	70
Building equipment and machinery rooms.....	50
Patients' rooms, bathrooms and toilet rooms, stairs and corridors in hospitals and nursing homes.....	75
Bathrooms and toilet rooms, except patients' bathrooms and toilet rooms in hospitals and nursing homes.	70
Offices, waiting rooms, art galleries, museums, libraries, meeting rooms, churches, classrooms, auditoriums, lecture halls, night clubs, restaurants, theatres, locker rooms, dressing rooms, and spaces where persons are engaged in sedentary activities.....	70
Laboratories, light machine work, product inspections, loft buildings, shops, stores, display rooms, show rooms, sales rooms, and spaces where persons are engaged in moderate physical activities.....	70
*Laboratories, light machine work, product inspections, loft buildings, shops, stores, display rooms, show rooms, sales rooms, and spaces where persons are engaged in moderate physical activities.....	65
Gymnasias, dance halls, skating rinks, bowling alleys, heavy assembly workrooms or shops, and spaces where persons are engaged in vigorous physical activities.....	60
Automotive repair shops.....	50
Storage areas, garages, space where work or process requires a low temperature.....	None
Hospital operating rooms, and recovery, labor, delivery, and nursery rooms.....	80
Swimming pools, bath houses, and shower rooms.....	75

Note for Table 12-1:

^aWhere the listed temperatures differ from those that are required to be maintained under the provisions of section 131.03 of the New York City health code, the higher temperature shall apply.

**Duplicate designation enacted on line above, this designation is probably intended.*

§[C26-1204.5] 27-744 System design. -Where central heat sources are used, the heating system including all wiring, piping and/or ductwork, the heat sources and the various space heating devices shall be designed and installed so as to be capable of producing the minimum temperatures set forth in table 12-1. Also, the installation of the entire system shall be in accordance with the applicable requirements of this subchapter and subchapters thirteen through sixteen of this chapter, and the electrical code of the city of New York.

ARTICLE 6 STANDARDS OF NATURAL VENTILATION

§[C26-1205.1] 27-745 Occupiable rooms. - All occupiable rooms shall be ventilated by natural or mechanical means, or by a combination of both. Natural ventilation may be provided except where mechanical ventilation is required by article seven or eight of this subchapter.

§[C26-1205.2] 27-746 Habitable rooms. - All habitable rooms shall be provided with natural ventilation complying with the provisions of this subchapter except as provided in section 27-750 of this article.

§[C26-1205.3] 27-747 Alcoves. - An alcove or room opening off another room or space shall be considered as a separate room in determining its requirements for ventilation. However, for dwellings classified in occupancy

group J-3, where the opening between the alcove and the room or space is at least eighty percent of the area of the common wall and the floor area of the alcove does not exceed twice the area of the opening, the alcove and the room opening into the alcove may be considered as a single space.

§[C26-1205.4] 27-748 Balconies. - Where an interior balcony or mezzanine opens to form part of another room or space, its area shall be added to the area of the room or space in which it is located to compute the ventilation required for both spaces.

§[C26-1205.5] 27-749 Natural ventilation sources. - Natural ventilation, when required, shall be provided by windows, skylights, monitors, doors, louvers, жалюзи, or other similar ventilating openings. Such ventilating openings shall open to the sky or a public street, space, alley, park, highway, or right of way, or upon a yard, court, plaza, or space above a setback, where such yard, court, plaza, or space above a setback is located on the same lot and is of the dimensions required by the applicable provisions of the zoning resolution.

§[C26-1205.6] 27-750 Area of ventilating openings. - Ventilating openings in all habitable rooms or spaces shall have a free openable area of at least five percent of the floor area of the room or space ventilated and where

there is an enclosed or partially enclosed balcony or space above a setback complying with section 27-733 of article three of this subchapter the ventilating openings shall have a free openable area of at least five percent of the combined floor area of such room and portion of the balcony or space directly adjoining and in front of such room. Each required ventilating opening shall have a minimum openable area of six square feet. Where fresh air is furnished in any habitable room or space by mechanical means supplying a minimum of forty cfm the free openable area of the openings may be reduced to one-half of the above requirements but not less than five and one-half square feet in aggregate. In all occupiable rooms or spaces, the free openable area shall be used to calculate the index for ventilation (section 27-753 of article seven of this subchapter), which shall determine the minimum requirements for supplementary mechanical ventilation.

****§[C26-1205.7] 27-751 Minimum dimensions of habitable rooms.-** Habitable rooms shall have a minimum clear width of eight feet in any part; a minimum clear area of eighty square feet and a minimum clear ceiling height of eight feet for the minimum area, except:

- (a) A room which complies with the requirements for natural light and ventilation and in addition has an opening of not less than sixty square feet into an immediately adjoining room may have a minimum floor area of seventy square feet and a least horizontal dimension of seven feet;
- (b) A dining space which has legally required ventilation, and in which the window has an area of at least one-eighth the floor area of such dining space;
- (c) One-half the number of bedrooms in a dwelling unit containing three or more bedrooms may have at* least minimum dimension of seven feet;
- (d) A room in a class B multiple dwelling as defined in section four of the multiple dwelling law which may have a minimum floor area of sixty square feet and a least horizontal dimension of six feet.

****Chapter 559 Laws of 1995.**

**As enacted but "a" probably intended.*

ARTICLE 7 STANDARDS OF MECHANICAL VENTILATION

§[C26-1206.1] 27-752 Areas requiring mechanical ventilation.-

Mechanical ventilation shall be provided in all occupiable rooms or spaces where the requirements for natural ventilation are not met; in all rooms or spaces, which because of the nature of their use or occupancy, involve the presence of dust, fumes, gases, vapors, or other noxious or injurious impurities, or substances which create a fire hazard; or where required by the provisions of article eight of this subchapter or subchapters six through eight of this chapter.

§[C26-1206.2] 27-753 Index for ventilation.- The index for ventilation for any room or space shall be computed by adding the following:

- (a) The contents per occupant, in cubic feet.
- (b) The floor area per occupant, times ten, in square feet.
- (c) The clear, unobstructed openable area of windows, skylights, and other sources of natural ventilation per occupant, times two hundred, in square feet. In all cases, the number of occupants used in computing the index for ventilation shall be the maximum number who will occupy the room or space simultaneously during any two-hour period.

§[C26-1206.3] 27-754 Minimum quantity of outside air for mechanical ventilation. - The minimum quantity of outside air required for mechanical ventilation in any occupiable room, where not otherwise prescribed, shall be determined according to table 12-2.

(a) Window requirements.- To be credited as ventilating openings under the provisions of this subchapter, windows or other openings shall meet the requirements of section 27-749 of article six of this subchapter, and where mechanical supply ventilation is not provided, shall have a free openable area of at least one square foot per one hundred square foot of floor area.

TABLE 12-2 REQUIRED MINIMUM OUTDOOR AIR SUPPLY AND EXHAUST (cfm per sq. ft.)

Index for Ventilation	Ventilated Rooms with Natural Ventilation Openings		Ventilated Rooms without Natural Ventilation Openings		Air Conditioned Rooms	
	Supply	Exhaust	Supply	Exhaust	Supply	Exhaust
0-300	2.5	2.0	2.5	2.0	1.5	1.5
301-520	2.0	1.5	2.0	1.5	1.2	1.2
521-850	1.5	1.25	1.5	1.25	0.9	0.9
851-1250	...	1.0	1.0	1.0	0.6	0.6
1251-1650	...	0.67	0.67	0.67	0.5	0.5
Over 1650	...	...	0.33	0.33	0.4	0.4

(b) Air conditioning. -

(1) In air conditioned rooms, the windows and other openings shall not be credited as such in computing the index for ventilation. Air conditioned rooms shall be considered as interior rooms.

(2) Air that has been exhausted from an air conditioned space may be reconditioned by air conditioning apparatus and recirculated as equivalent outdoor air, provided that the total of supply air is not less than required for air conditioned rooms by table 12-2 and that the amount of actual outdoor air is at least thirty-three and one-third percent of the required total. The actual outdoor air supply shall not, under any circumstances, be reduced to less than five cfm per occupant, except that these minimum requirements may be reduced by fifty percent as provided in section 27-755 of this article.

(c) Required exhaust.- Required exhaust may be accomplished by raising the pressure within the space with consequent leakage through doors and windows, or by drawing the vitiated air from air conditioned spaces into the return air duct of air conditioning apparatus or into an exhaust duct discharging directly to the outdoor air.

(d) Make-up air.- A sufficient quantity of air to make the exhaust system effective shall be provided to the space being exhausted by one or by any combination of the following methods:

- (1) By supplying air to the space by means of a blower system.
- (2) By infiltration through louvers, registers, or other permanent openings in walls, doors, or partitions, adjoining spaces where air is supplied by one of these methods.
- (3) By infiltration through cracks around window sash and doors.
- (4) By other methods acceptable to the commissioner.

(e) Prohibited use of recirculated air.- Air drawn from any of the following spaces may not be recirculated;* mortuary rooms; bathrooms or toilet rooms; or any space where an objectionable quantity of flammable vapors, dust, odors, or noxious gases is present. Air drawn from rooms that must be isolated to prevent the spread of infection shall not be recirculated, except that air drawn from hospital operating rooms may be recirculated, if in compliance with the following requirements:

**Semicolon enacted but colon probably intended.*

(1) There shall be a minimum of twenty-five total air changes per hour, of which five air changes per hour shall be outdoor air.

(2) All fans serving exhaust systems shall be located at the discharge end of the system.

******(3) Outdoor air intakes shall be located at least twenty-five feet from exhaust outlets of ventilation systems and other exhaust discharges, combustion equipment stacks, medical surgical vacuum systems, and plumbing vent stacks, from areas which may collect vehicular exhaust such as off-street loading bays, and from areas which may collect other noxious fumes. The bottom of outdoor air intakes serving central systems if installed above a roof, shall be located at least three feet above roof level.

(4) Positive air pressure shall be maintained at all times in relation to adjacent areas.

(5) All ventilation or air conditioning systems serving such rooms shall be equipped with a filter bed of twenty-

five percent efficiency upstream of the air conditioning equipment and a filter bed of ninety percent efficiency downstream of the supply fan, any recirculating spray water systems and water reservoir type humidifiers. All filter efficiencies shall be average atmospheric dust spot efficiencies tested in accordance with ASHRAE Standard 52-68.

(6) A manometer shall be installed across each filter bed.

(7) Duct linings shall not be used in ventilation and air conditioning systems serving such rooms unless terminal filters of at least ninety percent efficiency are installed downstream of linings.

(8) Air supplied shall be delivered at or near the ceilings and all exhaust air shall be removed near floor level, with at least two exhaust outlets not less than three inches above the floor.

******(f) **Outdoor air intakes.-** For high-rise office buildings erected pursuant to new building applications filed on or after October 22, 2004, outdoor air intakes serving spaces above the second story and serving spaces greater than ten thousand square feet of floor area shall be located at least twenty feet above ground level, at least twenty feet from exhaust outlets of ventilation systems and other exhaust discharges, and at least twenty feet from areas that may collect vehicular exhaust such as off-street loading bays.

****Local Law 26-2004.**

§[C26-1206.4] 27-755 Use of adsorption devices.- In all cases where the use of recirculated air is permitted, the required outdoor air supply may be reduced up to fifty percent, provided that the recirculated air is passed through adsorption devices. The adsorption devices shall be approved and rated. Means shall be provided for maintaining the effectiveness of the adsorption devices.

(a) Improper maintenance.- Should the adsorption devices be improperly maintained so that their effectiveness is impaired, the commissioner may order their removal. If the adsorption devices are removed, the air conditioning or ventilating system shall not be operated without supplying one hundred percent of the outdoor air required by this article or article eight of this subchapter.

(b) Test records.- The building owner shall, at all times, maintain a maintenance record showing the manufacturer's recommendation of the frequency of tests, the method of making tests, and the results of all tests of the adsorption devices. Such tests shall be made and certified by the manufacturer or by a laboratory acceptable to the commissioner at least twice every six months. The records of such tests shall be maintained for a period of at least two years, and shall be available for inspection by the commissioner.

(c) Ventilation of water closet compartments.- The use of any device that returns exhaust air from water closet compartments or from toilet rooms after passing through adsorption devices is not permitted as a means of providing ventilation for a water closet compartment for which a mechanical system of ventilation is required.

§[C26-1206.5] 27-756 Installation and operation of ventilating and air conditioning systems.- Where mechanical ventilation is accepted as an alternate for, or a supplement to, natural means of ventilation, or is

required under the conditions herein prescribed, or where ventilation is provided by means of air conditioning system, the system, equipment, and distributing ducts shall be installed in accordance with the applicable provisions of subchapters thirteen through fifteen of this chapter. Such required ventilating and/or air conditioning systems shall be kept in operation at all times when the building or space is being used in a normal manner in accordance with the purpose for which it was intended.

ARTICLE 8 VENTILATION OF SPECIAL SPACES

§[C26-1207.1] 27-757 Rooms in institutional H-1 occupancy.- In occupancy group H-1, rooms or spaces in which persons are detained under restraint may be naturally ventilated by means meeting the intent of this subchapter.

§[C26-1207.2] 27-758 Kitchens. -

Kitchens shall be ventilated as follows:

(a) Kitchens located within dwelling units and having a floor area of greater than fifty-nine square feet shall have natural ventilation as prescribed in article six of this subchapter. When the floor area is fifty-nine square feet or less, the kitchen shall be ventilated by either of the following:

(1) Natural means complying with article six of this subchapter and further that the windows shall have a minimum width of twelve inches, a minimum area of three* square feet or ten percent of the floor area of the space whichever is greater and so constructed that at least one-half of their required area may be opened. When the space is located at the top story the window or windows may be replaced with a skylight whose minimum width shall be twelve inches, whose minimum area shall be four square feet or one-eighth the floor area of the space whichever is greater and shall have ventilating openings of at least one-half of the required area of the skylight.

**As enacted but "three" probably intended.*

(2) Mechanical means exhausting at least two cfm of air per square foot of floor area. Where doors are used to separate the space, the lower portion of each door shall have a metal grille containing at least forty-eight square inches of clean openings or in lieu of such grille two clear open spaces may be provided, each of at least twenty-four square inches, one between the bottom of each door and the floor and the other between the top of each door and the head jamb.

(b) Kitchens, except those located within dwelling units, and side spaces, where cooking of any kind is done, shall be ventilated by either of the following; provided that in no instance may there be any violation of the nuisance provisions of the health code.

(1) Natural means complying with article six of this subchapter and supplemented with auxiliary mechanical supply and exhaust ventilation adequate to remove the fumes and smoke from the cooking equipment when operating.

(2) Mechanical means exhausting at least three cfm of air per square foot of floor area, but in no case less than one hundred fifty cfm. Such air shall be exhausted through duct or chimney constructed in accordance with the provisions of subchapters thirteen and fifteen of this chapter.

(c) Kitchens, snack bars, or pantries, where the operation consists of heating or warming previously prepared food that was cooked elsewhere, or preparation of food in vending machines may be ventilated by either of the following:

(1) Natural ventilation complying with article six of this subchapter.

(2) Mechanical ventilation complying with article seven of this subchapter.

§[C26-1207.3] 27-759 Bathrooms and toilet rooms.- Bathrooms and toilet rooms shall be ventilated as follows:

(a) When ventilated by natural means, the natural ventilation sources shall comply with section 27-749 of article six of this subchapter and shall have an unobstructed free area of at least five percent of the floor area. In no case shall the net free area of the ventilation sources be less than one and one-half square feet except that in occupancy groups H-1 and H-2, provided the ventilation opening conforming with section 27-749 of article six of this subchapter may be in a vent shaft provided that the net free area of the opening is not less than three square feet. The vent shaft cross-sectional area shall be increased by one-fifth of a square foot for every foot of height, but shall not be less than nine square feet in area and open to the outer air at the top; or, the vent shaft may be open at the sides above the roof with louvres providing an equivalent net free area at the top, equal to the area of the shaft.

(b) By individual vent shafts or ducts constructed of noncombustible materials with a minimum cross-sectional area of one square foot and one-third additional square foot for each additional water closet or urinal above two in number. The upper termination of such ducts shall be equipped with a wind-blown ventilator cap.

(c) When a bathroom or toilet room is not ventilated by natural ventilation as required by this section, it shall be mechanically ventilated as follows:

(1) Rooms containing only one water closet or urinal shall be mechanically ventilated by an exhaust system capable of exhausting at least fifty cubic feet of air per minute. Means shall be provided for air ingress by louvres in the door, by undercutting the door, or by transfer ducts, grilles, or other openings.

(2) Rooms containing more than one water closet or urinal, and any auxiliary spaces such as those used in hand basins, slop sinks, and locker rooms, shall be mechanically ventilated by an independent exhaust system capable of exhausting at least forty cubic feet of air per minute per water closet or urinal. The outdoor air supply shall conform to the requirements of article seven of this subchapter.

(3) Toilet exhaust systems shall be arranged to expel air directly to the outdoors.

§[C26-1207.4] **27-760 Inside locker rooms.** -Inside locker rooms and dressing rooms for more than one person shall be provided with exhaust ventilation giving at least four changes of air per hour.

§[C26-1207.5] **27-761 Corridors.** -Unless natural sources complying with section 27-749 of article six of this subchapter provide ventilating openings equivalent to at least two and one-half percent of the floor area, corridors in buildings of occupancy groups H-1, J-1 and J-2 more than three stories in height, shall be mechanically ventilated by a system supplying at least one-half cubic foot of outdoor air per minute per square foot of floor area. [, or a system exhausting 1/2 cu. ft. of air per minute per sq. ft. of floor area.]* When air conditioned, a part of the required supply may be recirculated as equivalent outdoor air, but at least thirty-three and one-third percent of the required air supply shall be actual outdoor air.

**Copy in brackets not enacted but probably intended.*

§[C26-1207.6] **27-762 Crawl spaces.** -

(a) **Buildings and structures without basements.** -In buildings and structures constructed without basements, and in which the first floor construction does not bear directly on the ground, a space at least eighteen inches high shall be provided directly under the floor beams, girders or sill of the first floor construction. Where the floor above such a space is constructed of wood or metal, the space shall be ventilated by one of the following means:

(1) At least four widely-distributed ventilating openings, providing a total net free area of at least one eight-hundredth of the area of the crawl space, shall be provided in the foundation walls, and the ground within the crawl space shall be covered with a vapor barrier in durability equivalent to at least fifty-five pounds, roofing felt with unsealed laps and with a transmission rate of one perm or less. At least two ventilating openings, providing a total net free area of at least one fifteen-hundredth the area of the crawl space shall be provided in foundation walls, provided that a vapor barrier with a transmission rate of one perm or less is installed over the entire underside of the first floor construction and overlaps the walls.

(2) Other means acceptable to the commissioner.

(b) **Buildings and structures with basements.** - No foundation wall vents shall be required where one side of a crawl space is completely open except for structural members, to a basement that has an area at least equivalent to that of the crawl space, provided that the basement is naturally ventilated by openings complying with section 27-749 of article six of this subchapter and

having a free openable area of at least five percent of the floor area of the basement.

§[C26-1207.7] **27-763 Ventilation of refrigeration plants.** -Rooms containing refrigeration plants shall be ventilated in accordance with the provisions of subchapter thirteen of this chapter.

§[C26-1207.8] **27-764 Ventilation of boiler rooms.** -Boiler rooms shall be ventilated in a manner that will provide air for combustion in accordance with the provisions of subchapter fourteen of this chapter and also prevent the accumulation of hot air over or near the equipment within the room.

§[C26-1207.9] **27-765 Ventilation for schools.** -School buildings shall be ventilated in accordance with the following requirements:

(a) **Rooms of instruction and administration.** -Classrooms, other rooms of instruction, and administrative rooms, where the index for ventilation is less than one thousand six hundred fifty, shall have a supply of outdoor air of at least fifteen cfm per occupant and mechanical exhaust. Where windows are used as the source of supply air, mechanical air exhaust shall be fifteen cfm per occupant. When outdoor air is supplied by mechanical means, the exhaust shall be at least eighty percent of the supply. In air-conditioned rooms, the conditioned air supply may be reduced to a minimum of ten cfm per occupant, of which at least five cfm shall be outdoor air.

(b) **Lockers and wardrobes.** -Lockers, wardrobes, or wardrobe rooms shall be ventilated in accordance with the provisions of section 27-760 of this article, and where these spaces are located within or adjacent to classroom[s]*, the exhaust air from the classroom may be used for such ventilation.

(c) **Auditoria and assembly rooms.** -Rooms where there are more than seventy-five occupants shall have a supply of outdoor air of at least fifteen cfm per occupant and mechanical exhaust. Where windows are used as the source of supply air, mechanical air exhaust shall be at least fifteen cfm per occupant. When outdoor air is supplied by mechanical means, the mechanical exhaust shall be at least eighty percent of the supply. In air-conditioning spaces, the conditioned air supply may be reduced to a minimum of ten cfm per occupant, of which at least five cfm shall be outdoor air.

**Copy in brackets not enacted but probably intended.*

§[C26-1207.10] **27-766 Ventilation of rooms or spaces with excessive temperatures, strong odors, toxic substances, or airborne irritants.** - In these rooms or spaces, prevention of all of the following conditions shall be considered in the design and installation of a ventilating system:

(a) Excessive temperatures that may be detrimental to the occupants.

(b) The danger of large concentrations of toxic substances in the air.

(c) The danger of large concentrations of airborne irritants and impurities, such as steam, gases, vapor, and dust, that may be injurious to health.

Where the exhausted air may contain toxic substances or strong objectionable odors, the exhaust system shall be independent of exhaust systems serving other parts of the building.

***As enacted but "and" probably intended.*

****As enacted but "objectionable" probably intended.*

§[C26-1207.11] 27-767 Ventilation for special uses and occupancies. -Special uses and occupancies, not provided for in this subchapter, shall be ventilated in accordance with the requirements of subchapter seven of this chapter. Ventilation of stage areas shall be in accordance with the requirements of subchapter eight of this chapter.

ARTICLE 9 NOISE CONTROL IN MULTIPLE DWELLINGS

§[C26-1208.1] 27-768 Requirements. -Interior walls, partitions, floor-ceiling constructions, and mechanical equipment in spaces or buildings of occupancy group J-2 shall be designed and constructed in accordance with the requirements of this subchapter, to provide minimum protection for each dwelling unit from extraneous noises emanating from other dwelling units and from mechanical equipment. In addition, airborne sound from exterior mechanical equipment of buildings in any occupancy group shall conform to the requirements of this subchapter.

(a) Field testing. -Where conditions indicate that the installed construction or equipment does not meet the noise control prescribed in this subchapter, measurements shall be taken to determine conformance or non-conformance. For conformance with this subchapter, the results of such measurements shall not fail by more than two db to meet the requirements in any octave band, or by more than two points to meet any STC or INR requirements.

(b) Materials or assemblies of materials utilized to meet noise control requirements shall comply with load bearing, fire protection or other applicable requirements of this code for walls, partitions and floor-ceiling constructions.

§[C26-1208.2] 27-769 Acoustical isolation of dwelling units. -

(a) Airborne noise. -

(1) Walls, partitions, and floor-ceiling constructions separating dwelling units from each other or from public halls, corridors, or stairs shall have a minimum sound transmission class (STC) rating of forty-five for airborne noise. This requirement shall not apply to dwelling unit entrance doors. However, such doors shall fit closely and not be undercut. For permits issued after January first, nineteen hundred seventy-two, the

STC required shall be fifty for airborne noise. For permits issued after April thirtieth, nineteen hundred seventy-three, dwelling unit entrance doors shall have a minimum STC of 35.

(2) STC ratings shall be obtained by tests conducted in accordance with the procedures of reference standard RS 12-2 except as provided in paragraph three of this subdivision.

(3) The STC ratings of construction assemblies as listed in reference standard RS 12-2 may be used to determine conformance with the requirements of paragraph one of this subdivision and with any other section that requires a specific STC rating.

(4) Penetrations or openings in walls, partitions, or floors for pipe sleeves, medicine cabinets, hampers, electric devices, or similar items shall be packed, sealed, lined, back-plastered, or otherwise isolated by sufficient mass to maintain the required STC ratings.

(5) Where grilles, registers, or diffusers in one dwelling unit are connected by ductwork with grilles, registers, or diffusers in another dwelling unit, and where such connecting duct is less than seven feet long, it shall be lined with duct lining; otherwise, an approved sound attenuating device shall be installed therein. Duct lining shall conform to the requirements of subchapter thirteen of this chapter.

(b) Structure-borne noise. -

(1) Floor-ceiling constructions separating dwelling units from each other or from public halls or corridors shall have a minimum impact noise rating (INR) of zero.

(2) Such INR shall be obtained by tests conducted in accordance with the procedure of reference standard RS 12-3 except as provided in paragraph three of this subdivision.

(3) The INR of a floor-ceiling construction listed in reference standard RS 12-3 shall be used to determine conformance with the requirements of paragraph one of this subdivision above and with any other paragraph that requires a specific INR. Constructions shall be designed and installed to avoid short circuiting the isolation devices that are incorporated into the constructions.

(4) This subdivision shall apply only to construction pursuant to permits issued after the thirty-first day of December, nineteen hundred seventy-six.

§[C26-1208.3] 27-770 Noise control of mechanical equipment. -

(a) Minimum airborne noise insulation requirements.

(1) **BOILER ROOMS.** - Boiler rooms adjoining dwelling spaces, either vertically or horizontally, shall be separated therefrom by floor-ceiling or partition constructions having a minimum STC rating of fifty.

(2) **MECHANICAL EQUIPMENT SPACES.** -Spaces or shafts containing air conditioning, refrigeration, or ventilating equipment, elevator machinery, or other mechanical equipment shall be separated both vertically and horizontally from dwelling units by constructions

that will provide a minimum STC rating of fifty. [Spaces or shafts containing equipment shall be separated both vertically and horizontally from dwelling units by constructions that will provide a minimum STC rating of fifty.]* Spaces or shafts containing equipment totaling more than seventy-five rated h.p. shall not be located vertically or horizontally adjacent to dwelling units unless the total sound power level output of all the equipment in the space or shaft is certified not to exceed the maximum sound power levels of table 12-3 in any octave band. Such sound power level ratings shall be obtained by tests conducted in accordance with the procedures of reference standard RS 12-5.

- a. Ventilating openings into mechanical equipment spaces. -Ventilating openings into boiler rooms and other mechanical equipment spaces shall not be located in yards or courts where there are windows opening from living quarters, unless such ventilating openings are provided with sound attenuating devices if needed to limit noise transmission to NC-40 (noise criterion) levels in the exposed dwelling units. For permits issued after January first, nineteen hundred seventy-two, the permissible noise levels shall not exceed NC-35.
- b. Noise criteria requirements.- Noise criteria requirements prescribed in this subchapter shall be in accordance with reference standard RS 12-4.

**Copy in brackets not enacted but probably intended.*

TABLE 12-3 MAXIMUM SOUND POWER LEVELS PERMITTED IN MECHANICAL SPACES OR SHAFTS ADJOINING DWELLING SPACES [^b]*

Octave Bands, c.p.s. Mid-Frequency	Max. Sound Power Level db ^a	
	db re 10 ⁻¹³ Watts	db re 10 ⁻¹² Watts
63	101	91
125	101	91
250	103	93
500	105	95
1000	102	92
2000	101	91
4000	98	88
8000	96	86

**Copy in brackets not enacted but probably intended.*

Notes for Table 12-3:

^aThe maximum sound power levels shall be reduced five db in any octave band where the equipment data indicate pure tone generation. The presence of pure tones may be determined by means of one-third octave band analysis. The criterion for a significant pure-tone component shall be an audible pure-tone sound together with an increase of the sound pressure level in the corresponding one-third octave band above the mean of the two adjacent one-third of at least:

Center frequency of one-third octave band.....	40/125	160/250	215/500	630/1,000	1,000/10,000
Increase in sound pressure level (db)	6	4	3	2	1 ½

^bFor permits issued after January first, nineteen hundred seventy-two, the maximum sound power levels shall be changed as follows:

Octave Bands, c.p.s. Mid-Frequency	db re 10 ⁻¹³ Watts	db re 10 ⁻¹² Watts
63	98	88
125	97	87
250	100	90
1000	97	87
2000	96	86
4000	93	83
8000	91	81

TABLE 12-4 MAXIMUM SOUND POWER LEVELS PERMITTED FOR EXTERIOR MECHANICAL EQUIPMENT ADJOINING BUILDINGS^b

Maximum distance from equipment to exterior window (ft.) ^a	Maximum Sound Power Levels in Octave Bands—db re 10 ⁻¹³ Watts ^a							
	Octave Bands c.p.s Mid Frequency							
	63	125	250	500	1000	2000	4000	8000
12	99	92	88	84	82	82	82	82
25	103	96	92	88	86	86	86	86
50	107	100	96	92	90	90	90	90
100	110	103	99	95	93	93	93	93
	Octave Bands—db re 10 ⁻¹² Watts							
12	89	82	78	74	72	72	72	72
25	93	86	82	78	76	76	76	76
50	97	90	86	82	80	80	80	80
100	100	93	89	85	83	83	83	83

Notes for Table 12-4:

^aThe minimum distance shall be measured in a straight line regardless of obstructions. Interpolated levels may be used for distances between those given in this table. See note a at end of table 12-3.

1. In the event sound power level data for the exterior mechanical equipment is not available, the sound pressure levels in octave bands, of the exterior mechanical equipment shall be measured.
2. The measurements shall be obtained with the microphone of the measuring equipment located at the interior of the dwelling unit affected in a line with the window nearest the exterior mechanical equipment. The window shall be fully open and the microphone shall be located three ft. away from the open portion of the window.
3. Measurements shall be obtained during times when the ambient sound pressure levels, in octave bands, are at least six db lower at all octave bands than the sound pressure levels measured with the exterior equipment operating. By ambient sound pressure levels is meant the measured sound pressure levels, at the above described measuring location, with the exterior equipment not in operation.

For permits issued after January first, nineteen hundred seventy-two, the permitted maximum sound power levels for exterior mechanical equipment adjoining buildings shall be changed as follows:

Feet	Maximum Sound Power Levels in Octave Bands—db re 10 ⁻¹³ Watts ^a							
	63	125	250	500	1000	2000	4000	8000
12	97	90	83	78	75	73	72	71
25	104	96	89	84	81	79	78	77
50	110	102	95	90	87	85	84	83
100	116	108	101	96	93	91	90	89
	[in]* Octave Bands—db re 10 ⁻¹² Watts							
12	87	80	73	68	65	63	62	61
25	94	86	79	74	71	69	68	67
50	100	92	85	80	77	75	74	73
100	106	98	91	86	83	81	80	79

*Copy in brackets not enacted but probably intended.

TABLE 12-5 NOISE OUTPUT LIMITATIONS FOR EXTERIOR MECHANICAL EQUIPMENT MAXIMUM SOUND PRESSURE LEVEL^{a,b} (NOT TO BE EXCEEDED IN ANY OCTAVE BANDS)

Octave Bands Center Frequency (cps)	Decibels re .0002 Microbar
63	64
125	57
250	51
500	45
1000	41
2000	39
4000	38
8000	37

Notes for Table 12-5:

^aMeasurements shall be obtained with a sound level meter and octave band analyzer, calibrated both electronically and acoustically before and after the measurements are made. The equipment used shall meet the requirements of reference standards RS 12-6.

^bFor permits issued after January first, nineteen hundred seventy-two, the maximum sound pressure levels shall be changed as follows:

Octave Bands Center Frequencies (cps)	Decibels re .0002 microbar
63	61
125	53
250	46
500	40
1000	36
2000	34
4000	33
8000	32

(3) DUCTWORK. -Ducts serving dwelling units shall be lined with duct lining for at least twenty feet from the fan discharge or intake; otherwise, an approved sound attenuating device shall be installed therein. All toilet exhaust ducts shall be lined with duct lining for at least twenty feet upstream of the exhaust fan intake, otherwise, an approved sound attenuating device shall be installed therein. Duct lining shall conform to the requirements of subchapter thirteen of this chapter.

(4) EXTERIOR MECHANICAL EQUIPMENT. - Mechanical equipment in a building in any occupancy group, when located outside of the building in a yard or court or on a roof, or where the equipment opens to the exterior of the building, shall be subject to the noise output limitations given in table 12-4 where one or more windows of a dwelling unit in any building in occupancy groups J-1, J-2, or J-3 is located within a sphere of one hundred foot radius whose center is any part of the equipment or its housing, unless it can be shown that the sound pressure levels, in octave bands, of the exterior mechanical equipment as measured within the dwelling unit do not exceed the levels given in table 12-5.

(b) Minimum structure-borne noise and vibration isolation requirements. -All isolators used in accordance with the following requirements shall be approved.

(1) BOILER ROOMS. -

a. Boilers.- All boilers supported on floors above a story having dwelling units shall be supported on resilient isolators having a minimum static deflection of one inch. The isolators shall be installed directly under the structural frame of the boiler.

b. Boiler breeching and piping.- When boilers are equipped with mechanical draft fans, the boiler breeching and piping that is supported from or on slabs, floors or walls that are contiguous to the dwelling unit shall be supported for a distance of fifty pipe diameters on or from resilient isolators. Each isolator shall have a minimum static deflection of one inch.

(2) INCINERATOR CHARGING CHUTES. -

a. Metal chutes. -Metal chutes, metal chute supports, and/or metal chute bracing, shall be free of direct contact with the shaft enclosure and the openings provided in the floor construction. Metal chutes shall be resiliently supported at each structural support location. Isolators shall provide a minimum static deflection of 0.30 in. All chutes shall be plumb.

b. Masonry chutes. -The interior chute wall shall be plumb and without obstructions for the full height of the shaft and shall have a smooth interior finish.

(3) PIPING. -

a. Metal piping connected to power driven equipment shall be resiliently supported from or on the building structure for a distance of fifty pipe diameters from the power driven equipment. The resilient isolators shall have a minimum static deflection of one inch for all piping with a four inch or larger actual outside diameter and one-half inch for piping with less than four inches in actual outside diameter. Piping connected to fluid

pressure-reducing valves shall be resiliently isolated for a distance of fifty pipe diameters from pressure reducing valves and isolators shall provide a minimum static deflection of one-half inch.

b. Equipment such as heat exchangers, absorption refrigeration machines, etc., that is located on any floor or roof other than a floor on grade, and that is not power driven but is connected by metal piping to power driven equipment, shall be resiliently supported from or on the building structure, for a distance of fifty pipe diameters from the power driven equipment. The resilient supports shall be vibration isolators having a minimum static deflection of one inch and shall incorporate approved resilient pads having a minimum thickness of one-quarter inch.

(4) FANS. -Except for fans installed in compliance with section 27-353 of article five of subchapter five of this chapter all fan equipment located on any roof or floor other than a floor on grade shall be mounted on or from vibration isolators. Fan equipment with motor drives separated from the fan equipment shall be supported on an isolated integral rigid structural base supporting both the fan and motor. Fan equipment with motor drives supported from the fan equipment shall be mounted directly on vibration isolators. Each isolator shall have provision for leveling. Isolators shall incorporate resilient pads having a minimum thickness of one-quarter inch. The vibration isolators shall provide a minimum isolator efficiency of ninety percent at fan rotor rpm with a maximum deflection of two inches. Fans and compressors of three h.p. or less assembled in unitary containers may meet this requirement with isolators internal to the container providing the isolators meet the above minimum isolator efficiencies.

(5) PUMPS. -All pumps of three h.p. or more located on any floor other than a floor on grade shall be supported on vibration isolators having a minimum isolation efficiency or eighty-five percent at the lowest disturbing frequency. Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of one-quarter inch.

(6) COMPRESSORS. -Compressors and drives located on a floor other than a floor on grade shall be mounted on vibration isolators having a minimum isolation efficiency of eighty-five percent at the lowest disturbing frequency. Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of one-quarter inch.

(7) COOLING TOWERS. -All moving parts of cooling towers located on a roof or floor other than a floor on grade shall be installed on vibration isolators providing a minimum isolation efficiency of eighty-five percent at fan rotor rpm with a maximum static deflection of four inches. Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of one-quarter inch.

(8) EVAPORATIVE CONDENSERS.- Evaporative and air cooled condensers located on a roof or floor other

than a floor on grade shall be mounted on vibration isolators providing a minimum isolation efficiency of eighty-five percent at fan rotor rpm with a maximum static deflection of four inches. Each isolator shall incorporate a leveling device and a resilient pad having a minimum thickness of one-quarter inch.

(9) DUCT CONNECTIONS TO FAN EQUIPMENT. - Flexible connections shall be installed between fan equipment and connecting ductwork.

(10) ELEVATOR MACHINERY.- Gear-driven machinery, gearless machinery, motor generators, and controllers

located in an elevator machinery room or shaft on a roof, or on a floor other than a floor on grade, shall be supported on vibration isolator pads having a minimum thickness of one-half inch.

(c) Maximum permissible air velocities in ducts. -

(1) DUCTS LOCATED OVER CEILINGS OF DWELLING PLACES. -The maximum permissible air velocity in ductwork located over the ceilings of dwelling spaces or in masonry shafts adjoining dwelling spaces shall not exceed the velocities prescribed in table 12-6.

TABLE 12-6 MAXIMUM PERMISSIBLE AIR VELOCITIES IN DUCTS

Type of System	Branch Ducts	Sub-Main Ducts	Main Ducts
Low Velocity	750 fpm	1000 fpm	1500 fpm
High Velocity	1000	2000	3000

In the application of table 12-6 the following shall apply:

a. Any duct that connects directly to any terminal device (grille, diffuser, etc.) shall be classified as a branch duct for a distance of at least four feet from the terminal device.

b. Any duct that connects a branch duct to a main duct or to the fan shall be classified as a sub-main duct. No duct may be classified as a sub-main duct if it connects to a terminal device by means of a connection less than four feet in length.

c. When a duct is connected to the fan and to two or more sub-main ducts it shall be classified as a main duct.

d. The maximum velocities shown in table 12-6 for low velocity ductwork shall apply in all cases except where a system of round ductwork is used and an acoustic air control device with self-contained attenuation components is located in the ductwork prior to each air terminal device. Branch ducts, if any connecting the acoustic air control devices to the terminals shall not have air velocities exceeding seven hundred fifty fpm. Maximum power level ratings for the acoustic air control devices shall be three db less than the values shown in table 12-7.

(d) Maximum permissible sound power levels of fan coil units, grilles, registers, diffusers and induction units. -Sound power level data, in octave bands, shall be certified in accordance with the provisions of section 27-131 of article seven of subchapter one of this chapter, for grilles, registers, diffusers and induction units at design operating conditions and for coil units when operating at specified cfm. The sound power levels shall not exceed the levels listed in table 12-7 when measured in accordance with the provisions of reference standard RS 12-5

TABLE 12-7 MAXIMUM PERMISSIBLE SOUND POWER LEVELS FOR TERMINAL UNITS¹

Octave Bands, c.p.s. Mid-Frequency	Sound Power Levels, db	
	db re 10 ⁻¹³ Watts	db re 10 ⁻¹² Watts
63	79	69
125	73	63
250	67	57
500	62	52
1000	59	49
2000	57	47
4000	54	44
8000	53	43

Notes for Table 12-7:

¹For permits issued after January first, nineteen hundred seventy-two, the Maximum Permissible Sound Power Level for terminal units shall be changed as follows:

Octave Bands, c.p.s. Mid-Frequencies	Sound Power Levels, [db]*	
	db re 10 ⁻¹³ Watts	db re 10 ⁻¹² Watts
63	76	66
125	69	59
250	62	52
500	57	47
1000	54	44
2000	52	42
4000	49	39
8000	48	38

*Copy in brackets not enacted but probably intended.

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SUBCHAPTER 13
MECHANICAL VENTILATION, AIR
CONDITIONING, AND REFRIGERATION SYSTEMS

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**	
[1300.0]	Art. 1	General
[1300.1]	772	Standards
[1300.3]	773	Definitions
[1300.4]	774	Plans
[1300.5]	775	Permits
[1300.6]	776	General Requirements
[1300.7]	777	Construction
[1300.8]	777.1	Smoke Control Requirements
[1300.9]	777.2	Ventilation in Existing J-1 Buildings
[1301.0]	Art. 2	Inspections and Tests for Equipment Use Permits
[1301.1]	778	General Requirements
[1301.2]	779	Required Ventilating Systems
[1301.3]	780	Voluntary Ventilating Systems or Other Voluntary Air Duct Systems
[1301.4]	781	Refrigerating Systems
[1302.0]	Art. 3	Operation and Maintenance
[1302.1]	782	General Requirements
[1303.0]	Art. 4	Posting
[1303.1]	783	General Requirements
[1304.0]	Art. 5	Code Requirements of Other City Departments
[1304.1]	784	Electrical
[1304.2]	785	Air Pollution
[1304.3]	786	Refrigeration

***"C26" omitted from section numbers in this column.*

****"27" omitted from section number in this column.*

ARTICLE 1 GENERAL

§[C26-1300.1] 27-771 Scope. -This subchapter shall establish the minimum safety requirements for, and control the design, construction, installation, alteration, and use of, systems for providing mechanical ventilation, air conditioning, air cooling, air heating, and refrigeration. In addition, within special flood hazard areas, and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, mechanical ventilation, air conditioning, and refrigeration systems, and related equipment shall meet the requirements of the applicable provisions of reference standard RS 4-5.

§[C26-1300.2] 27-772 Standards. -The provisions of reference standard RS-13 shall be a part of this subchapter.

§[C26-1300.3] 27-773 Definitions. -For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-1300.4] 27-774 Plans. -For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[C26-1300.5] 27-775 Permits. -For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

§[C26-1300.6] 27-776 General requirements. -

(a) Ventilation. -The minimum quantities of air and other requirements for the ventilation of habitable and occupiable rooms shall be as required by subchapter twelve of this chapter, and for the ventilation of special uses and occupancies by subchapters seven and eight of this chapter.

(b) Noise control. -Noise control requirements for mechanical equipment shall be as required by subchapter twelve of this chapter.

(c) Safety. -All systems, equipment, and materials including any devices, apparatus, piping work, sheet metal work, insulation work, and supports therefor, used as part of or in connection with installations governed by this subchapter, shall be designed, installed, located, and operated so that they will not create an immediate or potential danger to life or impair public health or welfare. No piping of any kind, with the exception of piping required or, permitted under subchapter seventeen of this chapter, shall be permitted within a stair enclosure. Ducts protected in accordance with the requirements of this subchapter, which do not reduce the required clearances of a stair enclosure, are permissible.

(d) Openings. -No openings for outdoor exhaust air discharges, air intakes, or reliefs from equipment shall be located and constructed so as to:

- (1) Interfere with the proper functioning of other openings in the same building or in adjoining buildings.
- (2) Interfere unreasonably with the occupants of the same building or adjoining buildings or with the general public.
- (3) Create a fire or health hazard.

§[C26-1300.7] 27-777 Construction.-

The construction, installation, and alteration of systems for providing mechanical ventilation, air conditioning, air cooling, air heating, and refrigeration, shall be in accordance with the following:

- (a) Air conditioning and ventilating systems for all occupancies shall be constructed in accordance with the

provisions of reference standard RS 13-1. In addition, equipment used for air conditioning systems shall be constructed, installed and altered in accordance with the provisions of reference standards RS 13-7 through 13-15. Where any conflicts arise between the electrical provisions of the foregoing reference standards and the New York City electrical code, the provisions of the latter shall govern.

(b) Air conditioning systems for one- and two-family dwellings, for one story buildings four thousand square feet or less in gross floor area provided ducts do not penetrate fire divisions, and for buildings classified in mercantile occupancy group C, twenty-five hundred square feet or less in gross floor area shall be constructed and installed in accordance with the provisions of reference standard RS 13-4. Also see article eleven of subchapter fourteen of this chapter.

(c) Exhaust systems for cooking spaces requiring mechanical ventilation in accordance with the provisions of subchapter twelve of this chapter, except kitchens located within dwelling units, shall be installed as provided in reference standard RS 13-2.

(d) Restaurant cooking equipment shall be provided with a means of ventilating such equipment constructed in accordance with the provisions of reference standard RS 13-3, provided however that restaurant cooking equipment installed for periodic cooking use other than commercial [*sic*] only, in community rooms of multiple dwellings, firehouses and other low hazard occupancies as determined by the commissioner may be provided with a means of ventilation constructed in accordance with the provisions of reference standard RS 13-1.

(e) Air blower and exhaust systems, where required for the removal or conveying of dust, vapor, or other impurities, shall be installed in accordance with the provisions of reference standard RS 13-5.

(f) Refrigeration systems shall be constructed, installed, and altered in accordance with the provisions of reference standard RS 13-6.

(g) The utilization of city water in air conditioning and refrigeration systems shall be subject to the requirements of reference standard RS-16.

§[C26-1300.8] 27-777.1 Smoke control requirements.

(a) In all buildings classified in occupancy group C, D, E, F, G, H, J-1 or J-2:

(1) Ventilation systems supplying different occupancy groups shall not be interconnected, provided however that a ventilation system may serve two occupancy groups located on the same floor when the accessory use occupies less than twenty per cent of the floor area occupied by the principal use.

(2) Ventilation systems supplying corridors shall not be interconnected with systems serving other spaces, except that this requirement shall not apply to floors

used exclusively as office space in buildings classified in occupancy group E which are fully sprinklered.

(3) A ventilation system supplying any part of a means of egress shall not be interconnected with any other ventilation system.

(4) A ventilation system supplying public areas and assembly spaces shall have smoke detecting devices that will shut down the system upon detecting smoke.

(5) In buildings classified in occupancy group J-2, ventilation systems supplying individual apartments shall not be directly connected with any other ventilation system.

(6) Except in buildings classified in occupancy group J-2, and as otherwise provided in section 27-343 of article five of subchapter five of this chapter, either a combined heat and smoke damper or independent heat and smoke dampers shall be installed at any penetration of construction required to have a fire-resistance rating.

(b) In all buildings classified in occupancy group C, D, E, F, G, H or J-1, there shall be provided a system of mechanical means of sufficient capacity to exhaust six air changes per hour or one cfm/sq. ft., whichever is greater, from the largest floor in the building, using either dedicated fan equipment or the building ventilation system arranged to shut down automatically with manual override capability to exhaust one floor at a time through a roof or an approved location on an exterior wall other than a lot line wall.

§[C26-1300.9] 27-777.2 Ventilation in existing J-1 buildings. -In any existing building classified in occupancy group J-1, either seventy-five feet or more in height or containing thirty or more sleeping rooms:

(a) Where a corridor or space above a ceiling in a corridor is being used on or after February first, nineteen hundred eighty-four to furnish direct ventilation to a sleeping room or suite, such use shall, unless continued use is permitted by the commissioner, be discontinued by closing all openings between the corridor and sleeping room with construction having a fire-resistance rating equal to the construction in which the opening occurs. When continued use of corridor spaces as a plenum is permitted, smoke detecting devices shall be installed in accordance with the requirements of section 27-981 of article six of subchapter seventeen of this chapter and activation of any two detectors on a floor shall cause closure of all openings to that floor and shut-off of ventilation service to the floor.

(b) All corridors and other public areas not provided with natural ventilation meeting the requirements of section 27-761 of article eight of subchapter twelve of this chapter shall be provided with manual smoke purging by means of existing ventilation systems.

(c) The requirements of this section shall be complied with on or before April first, nineteen eighty-seven.

ARTICLE 2 INSPECTIONS AND TESTS FOR EQUIPMENT USE PERMITS

§[C26-1301.1] 27-778 General requirements.-

No required ventilating system, no voluntary air duct system containing smoke detection or fire protection devices that are required by this subchapter, and no refrigeration system shall be placed in operation, until it has been tested and inspected in accordance with the requirements of this subchapter and until an equipment use permit has been issued by the commissioner, except as hereinafter provided.

§[C26-1301.2] 27-779 Required ventilating systems.-

The following tests and inspection requirements shall be complied with in order to obtain an equipment use permit for a required ventilating system.

***(a) Procedure.-** A required ventilating system shall be subject to the requirements for controlled inspection as provided in article eight of subchapter one of this chapter except that it shall not be required that the architect or engineer be in the employ of the owner. Such requirements shall include (1) a controlled inspection to verify that the installation and operation of the completed system comply with the requirements of this subchapter, comprising tests to ascertain that the amount of air being supplied to and exhausted from each space conforms with the requirements of this code, and tests that all required smoke detection and fire protection devices are functioning properly; and (2) a controlled inspection comprising tests to verify that required fire dampers are installed and functioning properly as provided for in subdivision (d) of section 27-343 of this code. When a required ventilating system handles five thousand cfm or less, it shall be subject to controlled inspection except that the person making the inspection may be an architect, engineer or a person with at least five years of experience installing ventilating systems. However, if such a system exhausts any of the following:

(1) fumes, dusts, vapors or other noxious or injurious substances,

(2) substances that create a fire hazard,
then the person making the inspection shall be an architect or engineer. It shall not be required that the architect or engineer be in the employ of the owner. The test reports required under the provisions of article eight of subchapter one of this chapter shall be filed in the form prescribed by the commissioner. The form shall include the quantity of air supplied or exhausted by each outlet.

(b) Fire extinguishing systems.- No equipment use permit for a required ventilating system containing a required fire extinguishing system shall be issued until a signed statement has been obtained from a representative of the fire commissioner who has witnessed the test of the

extinguishing system and its control devices, certifying the fire commissioner's acceptance of such a system.

(c) Owner's statement.- A statement shall be filed with the commissioner by the owner or lessee of the building that the required ventilating system will be kept in continuous operation at all times during the occupancy of the building and, if any smoke or fire detection devices or fire extinguishing systems have been installed, that he or she will have such devices and the fan shut-offs actuated by them tested and inspected by a competent person or agency at one year intervals or less. The owner or lessee shall also state that he or she will promptly make any necessary adjustments and repairs to keep the ventilating system and its safety devices in proper operating condition. A record of each inspection and test shall be maintained on the premises by the owner or lessee, and records for at least the last two years shall be made available for inspection by the commissioner and the fire commissioner.

**Local Law 26-2004.*

§[C26-1301.3] 27-780 Voluntary ventilating systems or other voluntary air duct systems. -The following test and inspection requirements shall be complied with in order to obtain an equipment use permit for a voluntary ventilating system or other air duct system when smoke detectors or fire protection devices are required.

(a) Procedure.- A voluntary ventilating system or other voluntary air duct system shall be subject to test and inspection to ascertain that all smoke detection and fire protection devices are functioning properly, and that the installation conforms with the requirements of this subchapter.

(b) Fire extinguishing systems.- No equipment use permit for a voluntary ventilating system containing a required fire extinguishing system shall be issued until a signed statement has been obtained from a representative of the fire commissioner who has witnessed the test of the extinguishing system and its control devices, certifying the fire commissioner's acceptance of such a system.

(c) Owner's statement.- A statement shall be filed with the commissioner by the owner or lessee of the building that he or she will have such devices and the fan shut-offs actuated by them tested and inspected by a competent person or agency at one year intervals or less. The owner or lessee shall also state that he or she will promptly make any necessary adjustments and repairs to keep these devices in operation. A record of each inspection and test shall be maintained on the premises by the owner or lessee, and the records for at least the last two years of operation shall be made available for inspection by the commissioner and the fire commissioner.

§[C26-1301.4] 27-781 Refrigerating systems. -The following test and inspection requirements shall be complied

with in order to obtain an equipment use permit for a refrigerating system, except as hereinafter provided.

(a) Procedure.- A refrigeration system shall be designated for test and inspection under the requirements for controlled inspection as provided in article eight of subchapter one of this chapter, except that it shall not be required that the architect or engineer be in the employ of the owner. Test information and all other information required by reference standard RS 13-6 shall be posted, and the inspection shall be made of the completed system to verify that the installation complies with the requirements of this subchapter.

(b) Temporary permit.- A temporary equipment use permit shall be required for a nonoperating system in which a charge is maintained. See subchapter one of this chapter for provisions governing temporary permits.

***(c) Exception.-** No equipment use permit or temporary equipment use permit shall be required for any refrigerating system exempted under the provisions of section 27-189 of article eighteen of subchapter one of this chapter; for any system using a group A2, B1 or B2 refrigerant and having a prime mover of one horsepower or less; or for any system using water or air as a refrigerant.

**Local Law 32-2004.*

ARTICLE 3 OPERATION AND MAINTENANCE

§[C26-1302.1] **27-782 General requirements.-** All systems shall be maintained in a clean and orderly condition, free from accumulations of dust, oily waste, or debris. All machinery and all operating devices on piping and ductwork shall be kept readily accessible for inspections and repair. Plenum chambers, air ducts, and cooling and heating coils shall be kept clean. Filters shall be cleaned or renewed at proper intervals to insure safe operation and adequate air flow and shall comply with the applicable requirements of the fire prevention code.

ARTICLE 4 POSTING

§[C26-1303.1] **27-783 General requirements. –** Information to be posted shall be as required in reference standard RS-13. Method of posting shall be as required in subchapter one of this chapter.

ARTICLE 5 CODE REQUIREMENTS OF OTHER CITY DEPARTMENTS

§[C26-1304.1] **27-784 Electrical.** -All electrical work shall be installed in accordance with the requirements of the electrical code of the city of New York.

§[C26-1304.2] **27-785 Air pollution.** -The discharge

of odors, smoke, or other emissions into the open air shall be subject to the requirements of the New York City air pollution control code.

§[C26-1304.3] **27-786 Refrigeration.-** For operating permits and qualification of operators for refrigeration systems, see the requirements of the fire department.



**SUBCHAPTER 14
HEATING AND COMBUSTION EQUIPMENT**

TABLE OF CONTENTS

[Sub-Art or Sec.]*	Art. or Sec.**		[1410.0]	Art. 11	Residence-Type Warm Air Heating Systems
			[1410.1]	812	General Requirements
			[1411.0]	Art. 12	Unit Heaters
			[1411.1]	813	General Requirements
			[1411.2]	814	Supports
			[1411.3]	815	Recessed Heaters
			[1411.4]	816	Fireplace Heaters
[1400.0]	Art. 1	General	[1412.0]	Art. 13	Floor Furnaces
[1400.1]	787	Scope	[1412.1]	817	Location
[1400.2]	788	Standards	[1412.2]	818	Enclosures
[1400.3]	789	Definitions	[1412.3]	819	Furnace Supports
[1400.4]	790	Plans	[1412.4]	820	Pit Access Openings
[1400.5]	791	Permits	[1412.5]	821	Duct Temperature
[1400.6]	792	General Requirements	[1412.6]	822	Pressure Regulator
[1401.0]	Art. 2	Inspections and Tests for Equipment Use Permits	[1412.7]	823	One-and Two-Family Dwellings
[1401.1]	793	Boilers	[1413.0]	Art. 14	Boilers
[1401.2]	794	Fuel Burning and Fuel Storage Installations	[1413.1]	824	General Requirements
[1402.0]	Art. 3	Licenses and Certificates	[1414.0]	Art. 15	Unfired Pressure Vessels
[1402.1]	795	High-Pressure Boiler Operating Engineer License	[1414.1]	825	General Requirements
			[1415.0]	Art. 16	Gas Fired Equipment
			[1415.1]	826	General Requirements
				826.01	Barbecue Grilles
[1402.2]	796	Oil Burning Equipment Installer License	[1416.0]	Art. 17	Fuel Oil Equipment
[1402.3]	797	Certificates	[1416.1]	827	General Requirements
[1402.4]	798	Operator's Inspection after Repairs	[1416.2]	828	Fuel Oil Storage Equipment
			[1416.3]	829	Location of Tanks
[1403.0]	Art. 4	Abatement of Air Contaminants	[1416.4]	830	Piping
[1403.1]	799	General Requirements	[1416.5]	831	Controls
[1404.0]	Art. 5	Equipment Standards	[1416.6]	832	Chimneys
[1404.1]	800	Standards for Gas and Oil Burning Equipment	[1417.0]	Art. 18	Refuse Disposal Systems
[1405.0]	Art. 6	Equipment Classification	[1417.1]	833	General
[1405.1]	801	Low Temperature Equipment	[1417.2]	834	Compliance
			[1417.3]	835	Permitted Types of Incinerators
[1405.2]	802	Medium Temperature Equipment	[1417.4]	836	Refuse Collection Rooms
[1405.3]	803	High Temperature Equipment	[1417.5]	837	Incinerator Rooms
			[1417.6]	838	Ventilation
[1406.0]	Art. 7	Equipment Foundation Mountings	[1417.7]	839	Draft Control
[1406.1]	804	General Requirements	[1417.8]	840	Charging Chutes and Exhaust Flues
[1407.0]	Art. 8	Equipment Clearances	[1417.9]	841	Charging Gates
[1407.1]	805	General Requirements	[1417.10]	842	Auxiliary Heat
[1407.2]	806	Reduction of Clearances	[1417.11]	843	Construction of Incinerators
[1408.0]	Art. 9	Combustion Air	[1417.12]	844	Construction of Chimneys and Charging Chutes
[1408.1]	807	Air Supply	[1417.14]	845	Cleanouts
[1408.2]	808	Flue Dampers	[1417.15]	846	Accessibility
[1409.0]	Art. 10	Piping Containing Steam, Hot Water or Other Fluids	[1417.16]	847	Cabinets and Control Wiring
			[1417.17]	848	Posting
[1409.1]	809	Insulation and Clearances	Art. 19		Solid Fuel Fireplaces, Fireplace Stoves and Room Heaters
[1409.2]	810	Firestopping		848.01	General
[1409.3]	811	Insulation Materials		848.02	Reference Standards
				848.03	Definitions

848.04	Installations
848.05	Structural Adequacy
848.06	Chimneys
848.07	Masonry Fireplaces
848.08	Wood Burning Appliances
848.09	Factory-Built Fireplaces
848.10	Fireplace Heat Exchangers and Fireplace Inserts
848.11	Imitation Fireplaces
848.12	Requirements

***“C26” omitted from section numbers in this column.
**“27” omitted from section numbers in this column.*

LIST OF TABLES

Table No.

14-1 Reduction of Appliance Clearance With
Specified Forms of Protection

ARTICLE 1 GENERAL

§[C26-1400.1] 27-787 Scope. -This subchapter shall establish the minimum safety requirements for, and control the design, construction, installation, alteration, and use of heating, combustion, fuel storage, and related equipment. In addition, within special flood hazard areas, and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, heating, combustion, fuel storage and related equipment shall meet the requirements of the applicable provisions of reference standard RS 4-5.

§[C26-1400.2] 27-788 Standards. -The provisions of reference standard RS-14 shall be a part of this subchapter.

§[C26-1400.3] 27-789 Definitions. -For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-1400.4] 27-790 Plans. -For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[C26-1400.5] 27-791 Permits. -For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

§[C26-1400.6] 27-792 General requirements. -
All heating, combustion, and cooking equipment shall be installed with adequate clearances from combustible construction in accordance with the provisions of this subchapter. Either the equipment shall be provided with insulation or the building construction shall be fire protected, so that during continued or intermittent operation the surface of combustible construction materials will not be raised to a temperature higher than one hundred seventy

degrees Fahrenheit. Such equipment shall be located, arranged, and protected so that the means of access to them for ordinary operation and maintenance will not be hazardous. They shall not be located in exits, hoistways, nor in the same space with other equipment or materials when the proximity to the other equipment or materials would create a hazardous condition. All piping shall be installed so as to provide for adequate expansion and contraction.

†As enacted but “construction” probably intended.

ARTICLE 2 INSPECTIONS AND TESTS FOR EQUIPMENT USE PERMITS

*****§[C26-1401.1] 27-793 Boilers. -**

(a) Acceptance tests. -Boilers shall not be placed in operation upon completion of construction until they have been inspected and tested and an equipment use permit has been issued by the commissioner. All final inspections and tests for boilers shall be subject to the provisions for controlled inspection as provided in subchapter one of this chapter, except that such inspections and tests shall be made by a qualified boiler inspector in the employ of the department or a duly authorized insurance company as provided in section two hundred four of the labor law. Equipment having a Btu input of not more than three hundred fifty thousand Btu per hour shall be exempt from this requirement.

(b) Periodic boiler inspections. -

(1) Except as provided in paragraph two of this subdivision, all boilers, as defined in section two hundred four of the labor law, excepting those boilers listed in subdivision five of such section of the labor law, shall be inspected at least once a year by duly authorized insurance companies or other qualified inspectors in the manner set forth in rules and regulations promulgated by the commissioner. Such inspections shall also include the chimney connectors described in article three of subchapter fifteen of this chapter. All boiler inspectors who perform periodic inspections pursuant to this subdivision shall be qualified under section two hundred four of the labor law and rules and regulations promulgated by the commissioner of labor.

(2) Each owner of a high-pressure boiler, as defined in sections 26-160 and 27-795 of this code, may choose to have the annual boiler inspection conducted by the department or by a duly authorized insurance company.

(c) Owner's annual statement. -

(1) The owner of each boiler that is subject to periodic inspection shall file an annual written statement with the commissioner, specifying:

- The location of each boiler.
- Whether or not the owner, agent, or lessee has had the boiler inspected by a duly authorized insurance company or other qualified inspector in accordance with the requirements of subdivision (b) of this section, setting forth the name and address of the insurance

company or other qualified inspector, the date of inspection, and the policy number covering the boiler.

(2) If the periodic boiler inspection has been performed by a duly authorized insurance company or other qualified inspector pursuant to subdivision (b) of this section, the annual statement shall be accompanied by a signed copy of the report of each boiler inspection, on such forms and in such manner as required by the commissioner.

(3) The statement shall be filed within thirty days after installation of a boiler. Thereafter, it shall be filed on or before the last day of December of the year of each annual inspection.

(d) Removal or discontinuance notice. -The owner of a boiler that is removed or discontinued from use shall file a written notice of such removal or discontinuance with the commissioner within thirty days of the date of removal or discontinuance.

(e) Failure to file statements and notices. -If an owner of a boiler shall fail to file any statement or notice required under this section, such owner shall be liable for a civil penalty pursuant to section 26-125 of this code.

(f) Additional inspections. - In addition to the inspections required by subdivisions (a) and (b) of this section, the commissioner may make such additional inspections as required to enforce the provisions of this code. No fee shall be charged for such additional inspections.

(g) Fees. -Every owner of a boiler in use and inspected by a duly authorized insurance company shall pay to the department an annual fee for each boiler in the amount prescribed by section 26-213 of title twenty-six of the administrative code to cover the city's administrative and supervisory costs involved. The fee shall be payable at the time of the filing of the statement required by this subdivision.

***Local Law 62-1991.

§[C26-1401.2] 27-794 Fuel burning and fuel storage installations. -

(a) Field tests. -

(1) All liquid fuel piping and fuel oil storage tanks shall be hydrostatically tested for tightness by the contractor who made the installation before the work is closed in and before the system is operated. The piping shall be tested at one and one-half times the maximum working pressure applicable to that part of the piping system but at a pressure less than the test pressure required for the storage tank. The minimum pressure for testing tanks shall be one and one-half times the maximum working pressure applicable to the tank but in no case less than twenty-five psi. The hydrostatic pressure shall be maintained until all joints and connections have been visually inspected for leaks, but in no case for less than one-half hour. The tank shall not show any permanent deformation as a result of the test. A record shall be kept of the pressure tests showing the name of the

contractor and the pressures at which the piping and the tank were tested.

(2) Gas distribution piping shall be tested for tightness by the contractor who made the installation before the work is closed in and before the system is operated, in accordance with the requirements of section 27-922 of article seven of subchapter sixteen of this chapter. For gas storage tanks see chapter four of this title.

(b) Inspections. -Fuel burning equipment shall be inspected in accordance with the requirements for controlled inspections in subchapter one, except that the inspections may be made by an architect or engineer who need not be in the employ of the owner or by a representative of the commissioner.

(c) Temporary use permit. -A temporary equipment use permit, as provided in subchapter one, may be issued by the commissioner upon receipt of a statement signed by the contractor who made the installation, certifying that:

(1) The portions of the work completed conform with all provisions of the code listing at the same any items still to be completed.

(2) All required pressure tests have been successfully completed on the portion of the work installed and giving the pressure at which the tests were made.

(d) Instruction cards. -For oil burning systems, cards giving complete instructions for the care and operation of the system shall be furnished and shall be permanently located in an easily visible and accessible location near the equipment.

(e) Exceptions. -An equipment use permit shall not be required for any installation for which a work permit is not required as provided in section 27-189 of article eighteen of subchapter one of this chapter.

ARTICLE 3 LICENSES AND CERTIFICATES

§[C26-1402.1] 27-795 High pressure boiler operating engineer license. -If a boiler produces steam or vapor or has a safety valve setting of more than fifteen psi and rated in excess of ten hp or if such boiler produces hot water at a pressure of more than one hundred sixty psi or at a temperature over two hundred fifty degrees Fahrenheit, such boiler shall be operated by a high-pressure boiler operator licensed in accordance with the requirements of subchapter two of title twenty-six of the administrative code.

§[C26-1402.2] 27-796 Oil burning equipment installer license. - All oil burning installations, including storage equipment, shall be made by, or under, the direct supervision of a licensed oil burning equipment installer, in accordance with requirements of subchapter two of title twenty-six of the administrative code.

§[C26-1402.3] 27-797 Certificates. -No oil burning equipment hereafter installed shall be operated until an equipment use permit has been issued by the commissioner,

the requirements of the air pollution control code have been met as provided in section 27-799 of article four of this chapter, and until approval for the storage of fuel oil has been given by the fire commissioner, except that temporary operation may be permitted as provided in section 27-188 of article eighteen of subchapter one of this chapter.

(a) Every oil burning installation that is not fully automatic or requires preheating shall be operated by, or under, the direct supervision of a person holding a certificate of fitness issued by the fire commissioner. Such person shall be in the building at all times while the burners are in operation, and shall be present in the boiler room during the starting of the operation of a boiler.

§[C26-1402.4] 27-798 Operator's inspection after repairs.-

After any repairs are made to a boiler or fuel burning equipment for which licensed or qualified operators are required, such operators shall check the repairs, together with the functioning of all control [*sic*] devices and the positioning of all valves. These licensed or qualified operators also shall be present during the starting of the operation of the equipment and shall be responsible for the proper and safe operation of such equipment.

ARTICLE 4 ABATEMENT OF AIR CONTAMINANTS

§[C26-1403.1] 27-799 General requirements.-

All heating and combustion equipment that is fired with solid, liquid, or gas fuels and that is subject to the provisions of this code, including all rubbish burners and incinerators, shall comply with the requirements of the air pollution control code.

ARTICLE 5 EQUIPMENT STANDARDS

§[C26-1404.1] 27-800 Standards for gas and oil burning equipment. -Gas burning and fuel oil burning equipment and accessory equipment or devices shall be accepted for use in accordance with the provisions of this subchapter when they comply with the test and installation standards of reference standard RS-14 as applicable, or have been approved by the board. Both methods shall be subject to the requirements of section 27-135 of article eight of subchapter one of this chapter.

ARTICLE 6 EQUIPMENT CLASSIFICATION

§[C26-1405.1] 27-801 Low temperature equipment.

-Equipment whose products of combustion at the point of leaving the equipment have a temperature of six hundred degrees Fahrenheit or less under normal operating conditions shall be classified as low temperature equipment.

§[C26-1405.2] 27-802 Medium temperature equipment.-

Equipment whose products of combustion at the point of leaving the equipment have a temperature of between

six hundred degrees and one thousand degrees Fahrenheit under normal operating conditions shall be classified as medium temperature equipment.

§[C26-1405.3] 27-803 High temperature equipment.-

Equipment whose products of combustion at the point of leaving the equipment have a temperature of one thousand degrees Fahrenheit or greater under normal operating conditions shall be classified as high temperature equipment.

ARTICLE 7 EQUIPMENT FOUNDATION MOUNTINGS

§[C26-1406.1] 27-804 General requirements. -All floor mounted combustion or heating equipment shall be mounted on noncombustible construction as provided in reference standard RS 14-17 or on combustible construction if such construction is protected as required in reference standard RS 14-17, provided the following conditions are met:

(a) All clearances shall comply with the requirements specified in section 27-792 of article one of this subchapter.

(b) Heating and combustion equipment which has been tested in accordance with applicable standards listed in reference standard RS-14, shall be installed with the clearances determined by such tests.

(c) Equipment which has been approved, as provided in section 27-135 of article eight of subchapter one of this chapter, shall be installed in accordance with the conditions of such approval.

(d) When mounted above combustible construction, the equipment is arranged so that flame or gaseous products of combustion do not impinge upon the base of the equipment.

ARTICLE 8 EQUIPMENT CLEARANCES

§[C26-1407.1] 27-805 General requirements.-

Clearances from combustible construction in walls, partitions and ceilings adjacent to combustion or heating equipment shall not be less than that tabulated in reference standard RS 14-15, provided the following conditions are met:

(a) All clearances shall comply with the requirements specified in section 27-792 of article one of this subchapter.

(b) Heating and combustion equipment which has been tested in accordance with the applicable standards listed in reference standard RS-14, shall be installed with the clearances determined by such tests.

(c) Equipment which has been approved, as provided in section 27-135 of article eight of subchapter one of this chapter, shall be installed in accordance with the conditions of such approval.

§[C26-1407.2] 27-806 Reduction of clearances. -The clearances required in section 27-805 of this article may be reduced when the exposed combustible construction is

protected with noncombustible material in accordance with the forms of protection listed in reference standard RS 14-16.

ARTICLE 9 COMBUSTION AIR

§[C26-1408.1] 27-807 Air supply. -

(a) **Oil fuels.** -The air supply for equipment burning fuel oil shall comply with the requirements in applicable standards in reference standard RS-14. Ventilation shall be capable of providing at least thirty-six cfm of air for each gallon of oil per hour required to fire the equipment to gross output.

(b) **Gas fuels.** -The air supply for equipment burning gas shall comply with the requirements of article sixteen of this subchapter.

(c) **Solid Fuels.** -The air supply for equipment burning solid fuels shall comply with those required for burning fuel oil based on Btu equivalent of the solid fuel.

(d) **Mechanical ventilation.** -If the ventilation for the purpose of combustion is supplied mechanically, the ventilating system shall be electrically interlocked with the burner so that when the burner is in operation the ventilating system shall maintain the room in which the equipment is located at a pressure not less than the outdoor atmospheric pressure.

§[C26-1408.2] 27-808 **Flue dampers.** -Dampers in flues shall be constructed so that they cannot completely cut off the passage of flue gases at any time. Tight-closing dampers may be installed with approved automatic draft and combustion controls.

ARTICLE 10 PIPING CONTAINING STEAM, HOT WATER OR OTHER FLUIDS

§[C26-1409.1] 27-809 **Insulation and clearances.** - All accessible piping in habitable and occupiable rooms carrying steam, water, or other fluids at temperatures exceeding one hundred sixty-five degrees Fahrenheit shall be insulated to prevent the temperature at the outer surface of the insulation from exceeding sixty degrees Fahrenheit above the ambient temperature. The openings for insulated piping through combustible floors, walls, partitions, ceilings and other combustible construction shall include clearance and insulation adequate to satisfy the requirements of section 27-792 of article one of this subchapter. Where accessible piping carries a fluid not exceeding two hundred fifty degrees Fahrenheit and insulation would interfere with the functioning of the system, such piping may be uninsulated provided sufficient clearance is maintained from the combustible construction so that the temperature limitation of section 27-792 of article one of this subchapter is not exceeded, and all uninsulated piping shall be provided with at least one-half inch clearance from combustible materials.

§[C26-1409.2] 27-810 Firestopping. -

For requirements governing firestopping around piping passing through floors, roofs, or fire separations, see subchapter five of this chapter.

§[C26-1409.3] 27-811 Insulation materials. -

All insulations shall be of noncombustible materials. All coverings, vapor barriers and adhesives shall have a flame spread rating no higher than twenty-five and a smoke developed rating no higher than fifty. Adhesives and mastic finishes shall be tested in sufficient bulk to produce maximum burning, and shall be tested in accordance with reference standard RS 14-11.

ARTICLE 11 RESIDENCE-TYPE WARM AIR HEATING SYSTEMS

§[C26-1410.1] 27-812 General requirements. -

Residence-type warm air heating systems shall be designed and installed in accordance with the applicable requirements of reference standard RS-14.

ARTICLE 12 UNIT HEATERS

§[C26-1411.1] 27-813 General requirements.-

All gas or oil burning unit heaters shall conform to the requirements of article five of this subchapter.

§[C26-1411.2] 27-814 **Supports.**- All suspended type direct-fired unit heaters shall be adequately supported by metal hangers, brackets, or other noncombustible supports with the clearances required in reference standard RS 14-15.

§[C26-1411.3] 27-815 **Recessed heaters.**- Recessed heaters shall be of an approved type, and shall be installed only in accordance with the conditions of approval.

§[C26-1411.4] 27-816 **Fireplace heaters.**- Gas-fired heaters, approved for use in fireplace recesses only, shall not be used elsewhere.

ARTICLE 13 FLOOR FURNACES

§[C26-1412.1] 27-817 **Location.** -Floor furnaces shall be located so as to be accessible and shall not be installed in the floor of any corridor or passageway, nor in any exit in a place of assembly.

§[C26-1412.2] 27-818 **Enclosures.** -Enclosures of floor furnaces shall be constructed entirely of noncombustible materials with a fire resistance rating of at least one hour and the enclosure shall be provided with adequate outdoor air in accordance with the requirements of article nine of this subchapter to ensure proper

combustion. The enclosure shall be provided with adequate means of access for servicing the furnace.

§[C26-1412.3] 27-819 Furnace supports. –

Floor furnaces shall be installed only in floors of noncombustible construction having at least a two hour fire resistance rating, except as provided for one- and two-family dwellings in section 27-823 of this article. Floor furnaces shall have the following clearances:

(a) Pit clearances. -Floor furnaces, when other than gas-fired, shall be mounted independently of the floor grille with a six inch clearance at the bottom and a twelve inch clearance at the sides except that the clearance on the control side shall be at least eighteen inches.

(b) Pit waterproofing. -When there is likelihood of water rising above the bottom clearance of the unit, the pit shall be constructed with a watertight enclosure with the sides extending at least four inches above the ground level.

§[C26-1412.4] 27-820 Pit access openings. -The access foundation wall opening or floor trap door shall be at least eighteen inches by twenty-four inches and the under floor passage to the furnace shall be at least twenty-four inches by twenty-four inches in cross-section.

§[C26-1412.5] 27-821 Duct temperature. -The outlet duct temperature of warm air heating furnaces shall not be greater than two hundred fifty degrees Fahrenheit.

§[C26-1412.6] 27-822 Pressure regulator. -

In gas-fired furnaces, a gas pressure regulator shall be provided so that the gas input does not exceed the manufacturer's rating. Pressure regulators shall comply with the requirements of article five of this subchapter.

§[C26-1412.7] 27-823 One-and two-family dwellings.-

Floor furnace enclosures shall be constructed of noncombustible materials with a fire resistance rating of at least one hour. Means shall be provided for supporting the furnace when the floor grille is removed. Clearances shall be as provided in reference standards RS 14-15 and 14-16.

ARTICLE 14 BOILERS

§[C26-1413.1] 27-824 General requirements. -The construction, installation, maintenance, and operation of boilers shall comply with the applicable requirements of reference standard RS 14-5.

ARTICLE 15 UNFIRED PRESSURE VESSELS

§[C26-1414.1] 27-825 General requirements. -The minimum clearance and fire protection requirements for unfired pressure vessels shall be the same as required for

boilers designed for the same operating temperatures. The construction, maintenance, installation, and operation of unfired pressure vessels shall comply with the applicable requirements of reference standard RS 14-4.

ARTICLE 16 GAS FIRED EQUIPMENT

§[C26-1415.1] 27-826 General requirements. -The construction and installation of gas burning equipment shall comply with the applicable requirements of article five of this subchapter and reference standard RS 14-2 and RS 14-6. The installation of gas piping shall be in accordance with the provisions of subchapter sixteen of this chapter, and for the installation of chimneys and gas vents, the provisions of subchapter fifteen of this chapter.

***§27-826.01 Barbecue grilles.** - Only accepted natural gas-fired barbecues or grilles that employ an open flame for roasting or broiling and that are located in the interior of buildings, or on the exterior of buildings when against any part of an exterior wall, shall be installed. All provisions for the construction and installation of fireplaces set forth in article 19 of this subchapter shall be complied with in the construction and installation of barbecue grilles.

**Local Law 80-1989.*

ARTICLE 17 FUEL OIL EQUIPMENT

§[C26-1416.1] 27-827 General requirements. -For the purpose of this subchapter, fuel oil shall mean hydrocarbon oils as classified in reference standard RS 14-3 and RS 14-12 and shall have a flashpoint not lower than one hundred degrees Fahrenheit when tested in accordance with reference standards RS 14-13 and marketed under the following commercial grades: range oil or no.1 fuel oil; diesel oil or no. 2 fuel oil; no. 4 fuel oil; no. 5 fuel oil; no. 6 fuel oil. Except as provided in section 27-4056 of this title the use of crankcase refuse oil as fuel oil is prohibited. These requirements shall not apply to (1) the use and installation of portable burners not requiring a connection to a flue where such burners are of the type commonly used for household purposes such as oil stoves, oil heaters and oil lamps equipped with a woven wick; (2) portable apparatus such as blow torches, soldering pots, tar heaters, snow melters, etc.; (3) storage tanks for oils used in industrial process such as cracking, distilling, manufacture of gas, or other similar processes. For the requirements governing the storage of such oils see chapter four of this title.

§[C26-1416.2] 27-828 Fuel oil storage equipment. -

(a) General requirements for fuel oil tanks. -All tanks shall be designed and installed in accordance with the provisions for steel work in subchapter ten of this chapter or in accordance with the provisions of this subchapter.

(1) All fuel oil storage tanks shall be built of steel plates or sheets, made by the open hearth or basic oxygen process. Such steel shall be free from physical imperfections, and shall be new, in good condition, and free from rust.

(2) Tanks shall be welded, riveted and caulked, or riveted and welded. Flanges or other pipe connections may be welded. All caulking shall be placed with round nose tools and without damages to the plates. Filler of any kind between plates shall be prohibited.

(3) Tanks to be buried shall be cleaned and then coated on the outside with two coats of red lead, or equivalent. They shall be further protected by a coating of hot tar, asphalt, or equivalent rust resistive material, applied at the work site. Tanks installed inside buildings above ground shall be coated with one coat of red lead, or equivalent.

(4) All buried storage tanks shall be constructed of at least one-quarter inch thick metal and shall be designed to withstand any external loads to which the tank may be subjected.

(5) At the time of installation all storage tanks shall bear a permanently-fixed plate, spot welded or equivalent, bearing the name of the tank manufacturer, the gage [*sic*] of the material, and capacity of the tank. Shop fabricated storage tanks shall be installed without structural alteration.

(6) All openings shall be through the top of the storage tank, except that storage tanks of two hundred seventy five gallon capacity or less, located above ground but below the lowest story, may be provided with a three-quarter inch opening for gravity discharge and a one inch opening in the bottom for cleaning and protection against corrosion.

(7) Tanks for no. 1, no. 2, no. 3 and no. 4 *commercial grade oils need not have manholes. However, if manholes are used for such oils, the manhole covers shall be bolted and made gastight. Tanks for no. 5 and no. 6 commercial grade oils shall have manhole covers bolted or otherwise secured to the tanks and kept hydrostatically tight at all times.

**As enacted but "commercial" probably intended.*

(8) Tanks outside of buildings shall be electrically grounded in accordance with the requirements for equipment grounding of the electrical code of the city of New York.

(9) Tanks shall be located at least seven feet measured in the most direct manner, from any source of exposed flame unless protected as provided in paragraph two or three of subdivision (a) of section 27-829 of this article and at least two feet from any surface where the temperature exceeds one hundred sixty-five degrees Fahrenheit.

(b) Construction requirements, cylindrical tanks, except vertical tanks above ground outside of buildings, more than two hundred seventy-five gallon capacity. -

(1) The thickness of cylindrical tanks, including oval, elongated oval, or **obround tanks of more than two hundred seventy-five gallon capacity shall be subject to the following requirements:

***As enacted but "round" probably intended.*

a. Tanks thirty-six inches in diameter and less-at least 1/4 in. shell and 1/4 in. heads.

b. Tanks thirty-seven to seventy-two inches in diameter-at least 1/4 in. shell and 5/16 in. heads.

c. Tanks seventy-three to one hundred twenty inches in diameter-at least 5/16 in. shell and 3/8 in. heads.

d. Tanks over one hundred twenty inches in diameter-shall be of at least 3/8 in. steel and shall be stiffened by angle rings or equivalent members so as to retain their cylindrical form.

(2) Dished heads for such tanks shall have a curvature the radius of which is not greater than the diameter of the tank. Dished heads shall be formed with an adequate cylindrical extension rim to provide a welding or riveting surface. If flat heads are used, they shall be braced in the same manner as described for the bracing of flat sides of rectangular tanks.

(3) Riveting in single lap seams shall not exceed a pitch as follows:

a. Shell 1/4 in. thick-5/8 in. diameter rivets, 2 1/4 in. pitch.

b. Shell 5/16 in. thick-5/8 in. diameter rivets, 2 3/8 in. pitch.

c. Shell 3/8 in. thick-3/4 in. in diameter rivets, 2 1/2 in. pitch.

(c) Rectangular tanks, of more than two hundred seventy-five gallon capacity. -

(1) Plates for rectangular tanks of more than two hundred seventy-five gallon capacity shall be at least 5/16 in. thick.

(2) Corners may be made up by bending the plates or by using angles.

(3) Minimum rivet diameter in seams shall be 5/8 in., and rivets shall be spaced not more than 2 1/4 in. center-to-center.

(4) All flat surfaces of rectangular tanks shall be braced by structural members or rods.

(5) When structural members are used, the rivet pitch shall not exceed six inches.

(6) All structural members shall be designed in accordance with the requirements of subchapter ten of this chapter.

(7) Connections between bracing members and the sides of the tank shall be designed so that the connection will not fail before the member will fail.

(d) All tanks except vertical tanks above ground, two hundred seventy-five gallon or less capacity. -

(1) All oil storage tanks of two hundred seventy-five gallon capacity or less that are not buried shall have a minimum thickness of shell and head plates of no. 10 manufacturer's standard gage [*sic*] steel plate. Storage tanks of sixty gallon capacity or less shall be similarly constructed but need not be thicker than No. 14 manufacturer's standard gage [*sic*].

(e) Vertical storage tanks over one thousand gallon capacity located outside of building above ground.-

(1) Vertical storage tanks located outside of buildings above ground shall be built of steel plates of the quality required for cylindrical tanks.

(2) The minimum thickness of shell or bottom plates shall be one-quarter of an inch, and the minimum

thickness of roof plates one-eighth of an inch. The thickness of shell plates shall be determined in accordance with the following formula:

$$t = \frac{P \times R \times F}{T \times E}$$

where: t = thickness of shell plate in inches.

P = head pressure at bottom of ring under consideration in psi.

R = radius of shell, in inches.

F = factor of safety (taken as five).

T = tensile strength of plate, in psi as verified by mill test certificate.

E = efficiency of vertical joint in ring under consideration. E shall in no case be taken greater than one.

(3) Roof plates shall have single lap-riveted or welded watertight seams, and the roof shall be built to shed water. Bottom plates shall have single lap riveted or welded seams. Shell plate seams shall be designed to develop the full strength of the plate.

(f) Storage containers of six gallons or less. -

(1) Oil storage containers used with burners or oil burning heaters and having a capacity of six gallons or less used in connection with burners or oil-burning heaters shall be designed so as to withstand a hydrostatic pressure test of at least five psi without permanent deformation, rupture, or leakage, and shall be approved.

(2) All storage containers used with burners or oil burning heaters shall be installed with rigid metal fasteners for wall, floor, or stand type installations, and shall be protected against mechanical damage.

(3) Portable containers may be filled by a pump mounted on a storage tank, provided that the pump is approved.

§[C26-1416.3] 27-829 Location of tanks. -

(a) Inside of buildings, above ground on the lowest floor.-

(1) TANK CAPACITY OF FIVE HUNDRED FIFTY GALLONS OR LESS.- Storage tanks having a capacity of five hundred fifty gallons or less may be installed above ground on the lowest floor of a building, provided that such tanks are mounted on adequate noncombustible supports, with the tank anchored thereto. No more than five hundred fifty gallons of total storage capacity may be connected to one burner or may be installed without the protection provided in paragraph two or three of this subdivision.

(2) TANK CAPACITY MORE THAN FIVE HUNDRED FIFTY GALLONS BUT LESS THAN ELEVEN HUNDRED GALLONS.- Storage tanks having a capacity of more than five hundred fifty gallons but less than eleven hundred gallons may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with noncombustible construction having at least a two hour

fire resistance rating. Weep holes one inch in diameter shall be provided at least every three feet along the bottom of the enclosure unless at least fifteen inches of clearance, together with access door, is provided between the tank and the enclosure.

(3) TANK CAPACITY ELEVEN HUNDRED GALLONS OR MORE.- Storage tanks having a capacity of eleven hundred gallons or more may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with noncombustible construction having at least a three hour resistance rating. At least fifteen inches clearance shall be provided over the tanks and on all sides between the tanks and the enclosure. A noncombustible access door, constructed so as to preserve the integrity of the fire resistive enclosure, shall be installed in the enclosure above the point where the capacity of the enclosure below the door sill would be equal to the capacity of the largest tank installed. When the longest inside dimension of the enclosure exceeds thirty-five feet, access doors shall be installed at intervals not exceeding twelve feet. Columns, pipes, or similar obstructions may project into the required fifteen inches of space within the enclosure, provided that access door or doors are so arranged that all portions of the enclosure are accessible for servicing.

(4) MAXIMUM TANK SIZE.- The capacity of individual storage tanks in no case shall exceed twenty thousand gallons.

(b) Inside of building above the lowest floor. -

(1) Fuel oil storage tanks having a capacity of two hundred seventy-five gallons or less may be installed inside of buildings above the lowest story when provided with a four inch thick concrete or masonry curb, or with a metal pan of gage [*sic*] equal to the gage [*sic*] of the tank, completely surrounding the tank and of sufficient height to contain two times the capacity of the tank. The number of such oil storage tanks shall be limited to one per story.

(2) Storage tanks having a capacity of two hundred seventy-five gallons or less, installed above the lowest floor inside a building shall be filled by means of a transfer pump supplied from a primary storage tank located and installed as otherwise required by this subchapter. A separate transfer pump and piping circuit shall be provided for each storage tank installed above the lowest floor. No intermediate pumping stations shall be provided between the storage tank and the transfer pump. Appropriate devices shall be provided for the automatic and manual starting and stopping of the transfer pumps so as to prevent the overflow of oil from these storage tanks.

(3) A float switch shall be provided with the curb or pan around the storage tank and shall be arranged so as to sound an alarm and stop the transfer pump in case of failure of the tank or the control in the tank. The operation of the float switch shall be tested at least once each week. An alarm bell shall be located in the same

room with the tank and a visual and audible alarm shall be located in a maintenance office. The enclosing and sealing of switches and wiring shall conform to the requirements of the electrical code of the city of New York for devices located in an atmosphere of flammable vapors.

(c) Inside of buildings, below ground. -

(1) Storage tanks having a capacity greater than two hundred seventy-five gallons may be buried inside a building provided that the top of the tank is at least two feet below floor level. In lieu of two feet of earth over the tank, the tank may be covered by concrete flooring having the same thickness as the basement floor, but not less than four inch concrete meeting the requirement of subchapter ten of this chapter and reinforced with two inch by two inch mesh of at least no. 20 U.S. standard gage [*sic*] steel wire. Tanks shall be placed in firm soil and shall be surrounded by clean sand or well-tamped earth, free from ashes and other corrosive substances, and free from stones that will not pass through a one inch mesh. When necessary to prevent floating, tanks shall be securely anchored.

(2) No tank shall be buried within three feet of any foundation wall or footing.

(d) Outside of building, below ground. -

(1) Storage tanks located outside of buildings and below ground shall be buried with the top of the tank at least two feet below ground. Tanks shall be placed in firm soil and shall be surrounded by clean sand or well-tamped earth, free from ashes or other corrosive substance, and free from stones that will not pass a one inch mesh. When necessary to prevent floating, tanks shall be securely anchored.

(2) No tank shall be buried within three feet of any foundation wall or footing.

(e) Outside of buildings, above ground. -

(1) Storage tanks of a capacity greater than two hundred seventy-five gallons located outside of buildings above ground shall be not less than one and one-quarter (1 1/4) tank diameters and in no case less than ten feet from the line of adjoining property, the nearest building or adjacent tank. The minimum clearance between individual tanks located outside of buildings above ground and the line of adjoining property which may be built upon shall be fixed by the following formula:

$$M.C. = 10 + 4 \left(\frac{G-275}{5000} \right)$$

where:

M.C. = minimum clearance from nearest surface of tank to adjoining property, in feet.

G = capacity of tank, in gallons.

The maximum allowable capacity of fuel oil storage tanks located outside of buildings above ground shall be one hundred thousand gallons.

(2) Tanks shall be located so as not to obstruct or interfere with any means of egress.

(3) Each storage tank shall be protected by an embankment or dike. Such protection shall have a capacity at least one and one-half times the capacity of the tank so surrounded and shall be at least four feet high, but in no

case shall the protection be higher than one-quarter the height of the tank when the height of the tank exceeds sixteen feet. Embankments or dikes shall be made of earthwork with clay core, of masonry, of reinforced concrete or of steel. Earth work embankments shall be firmly and compactly built of good earth free from stones, vegetable matter, etc., and shall have a flat section of at least three feet at the top and a slope of at least one and one-half to two on all sides. Concrete, masonry or steel dikes shall be designed so as to conform safely all of the oil in the tank so surrounded. Embankments or dikes shall be continuous and unpierced, and the outside toe shall be located at least five feet inside of the property line, and no less than five feet from a driveway or parking area.

(f) Tanks located along line of subways.-

(1) No buried tank shall be placed within twenty feet of the outside line of a subway wall. Where an above ground tank within a building is located within the outer lines of the subway, or within twenty feet of the outside line of the subway wall, such tank shall be placed within a welded steel oiltight pan of not less than no. 18 manufacturer's standard gage [*sic*] metal suitably reinforced and of capacity to contain the contents of the tank.

(2) For the purpose of the foregoing requirement, a subway shall be deemed to include any subsurface railroad or rapid transit roadbed.

§[C26-1416.4] 27-830 Piping.-

(a) Installation of piping and tubing.-

(1) Exposed piping shall be protected against mechanical damage and shall be adequately supported with rigid metal fasteners or hangers. All pipes connected to buried tanks, except test well piping, shall be provided with double swing joints at the tank.

(2) Only new wrought iron, steel or bass pipe, or type K or heavier copper tubing, or aluminum alloy tubing, properly identified, may be used. Metal tubing when used for conveying oil shall be adequately protected. Such tubing may be installed at the burner without protection. Drawn tubing when used in domestic installations shall be of at least 3/8 in. inside diameter up to the shut-off valve at the burner. Soldered connections shall be prohibited.

(3) Overflow pipes, where installed, shall not be smaller in size than the supply pipe.

(b) Relief valves.-

(1) Where a shut-off valve is installed in the discharge line from an oil pump, a relief valve shall be installed in the discharge line between the pump and the first shut-off valve.

(2) A relief or pressure regulating valve shall be provided in the oil piping system on the heater side of the shut-off valves.

(3) Relief valves shall be set to discharge at not more than one and one-half times the maximum working pressure of the system. The discharge from relief valves shall be returned to the storage tank or to the supply line. There shall be no shut-off valve in the line of relief.

(c) Fuel oil heaters.-Fuel oil heaters shall not be installed within the steam or water space of a boiler. Fuel oil heaters and the connecting piping shall be arranged to prevent oil leakage from being transmitted to the boiler. This may be accomplished by any of the following methods:

(1) By discarding the condensate from the heaters.

- (2) By using approved double tube or other approved heaters.
- (3) By means of a secondary hot water or steam heating system where the water or steam from the boiler has no direct contact with the oil heater.
- (4) By a sight tank arrangement for collecting and inspecting the condensate which is provided with a pump controlled by a hand switch for returning the condensate to the normal return system.
- (5) By such other method as may be permitted by the commissioner.

(d) Vent pipe.-

- (1) A vent pipe of iron or steel, without trap, draining to the tank, shall be provided for each storage tank. The lower end of the vent pipe shall not extend more than one inch through the top of the storage tank. Cross-connection between a vent pipe and fill pipe is prohibited.
- (2) Where a battery of storage tanks designed to hold the same grade of oil is installed, vent pipes may be run into a main header.
- (3) Vents shall be at least one and one-quarter inches in diameter for storage tanks not exceeding eleven hundred gallons capacity and at least two inches in diameter for storage tanks of eleven hundred gallons or more except that vents for storage tanks of sixty gallon capacity or less shall be at least one-half inch in diameter. Vents for tanks inside of buildings above the lowest floor shall be run into the primary storage tank vent.
- (4) Vent pipes shall be provided with an approved weatherproof hood having a free area of at least the pipe size area. Vent pipes shall terminate outside the building in a nonhazardous location, at least two feet from any building opening and less than two feet nor more than twelve feet above the fill pipe terminal, unless otherwise permitted by the commissioner. If the vent pipe terminal is not visible from the fill pipe terminal location, a one inch tell-tale line shall be connected to the tank and shall parallel the fill pipe and terminate at the fill pipe terminal with an unthreaded end. Such tell-tale lines shall be provided with a check valve set to prevent flow of surface water to the storage tank.

(e) Fill pipes.-

- (1) Fill pipes shall terminate outside the buildings, with the fill pipe terminal located at or above grade, at least two feet from any building opening and five feet from any subway grating at or below the level of the fill pipe terminal. No fill pipe shall be less than two inches in diameter, and no fill pipe for no. 6 oil shall be less than three inches [sic] in diameter. Where no. 6 oil is used, the fill pipe terminal shall be located within three feet of the curb, unless otherwise required by the department of transportation or the transit authority. Where there are facilities for the delivery tank truck to drive onto the premises, the fill terminal may be located elsewhere than at the curb, provided that the location complies with the other requirements of this subchapter.
- (2) Each storage tank shall be provided with a separate fill pipe, except that where a battery of tanks is installed containing the same grade of oil, a common fill and header pipe may be installed.
- (3) Where the top of the storage tank is above the fill pipe terminal, the fill pipe shall be connected to the top

of the tank and provided with a shut-off valve and swing check valve both of which shall be located at the fill pipe terminal. However, the shut-off and check valves may be installed in an accessible location inside the building at or below the level of the fill pipe terminal.

(4) All fill pipe terminals shall be of an approved type, and shall be provided with lugs for embedding in concrete. In lieu of lugs, a set screw or threads to fasten the terminal to the fill pipe may be used. The outer flange of the fill pipe terminal or the seal cap shall be permanently marked "fuel oil." The fill pipe terminal shall be threaded or provided with other equivalent means to receive the seal cap. The seal cap shall be suitably slotted for receiving an opening wrench, and an oilproof gasket inserted in a groove in the fill pipe terminal shall be provided so as to make the seal cap leakproof. A strainer shall not be required but, if used, shall be of at least one-eighth inch mesh. Where a storage system for volatile flammable oil and a storage system for fuel oil are to be used in the same premises, the terminal of the fuel oil pipe shall be provided with a left-handed thread and the fill pipe fitting shall be of a different size than that required for the fill pipes to the tanks containing the volatile flammable oil.

****(f) Piping from transfer pump to equipment or to storage tanks above the lowest floor.-**

- (1) The piping from a transfer pump to equipment at levels above the lowest floor or to storage tanks at levels above the lowest floor in buildings, the return piping, and vent piping shall comply with the applicable provisions of subdivisions (a) and (d) of this section and shall be enclosed in a shaft constructed of four inch concrete or masonry having a four inch clearance from all pipe or pipe covering, except that no such enclosures shall be required within the room containing the pump, tank, or equipment where such room is itself enclosed with construction and materials having at least a two hour fire resistance rating. Provision shall be made for expansion in piping without the use of expansion joints.
- (2) Where it is necessary to make horizontal offsets in the supply piping and pipe shafts such piping shall be enclosed in a sleeve of other piping of at least no. 10 U.S. standard gage steel, two sizes larger and arranged to drain into the shaft. Horizontal piping offsets shall be further enclosed in construction having a two hour fire resistance rating, except that no such enclosure or pipe sleeve shall be required within the room containing the pump, tank, or equipment where such room is itself enclosed with construction and materials having at least a two hour fire resistance rating.

**as enacted but "least" probably intended.*

- (3) A drain pipe shall be installed at the base of shafts enclosing the supply and overflow piping. The pipe shall lead to an open sight drain or to an open sump.
- (4) Oil lines for equipment or tanks shall be steel pipe ASTM A-53 or A-106, grade B seamless, schedule 40 with welded connections up to the oil tank or equipment, except that fittings at the tank or equipment, shut off valves and other fuel oil flow and control devices may be screwed or flanged.
- (5) Pipe shafts shall not be penetrated by or contain other piping or ducts.

(6) The piping shall be located and secured from movement so as to prevent undue stress on the piping and to isolate the piping from vibrations from any equipment.

(7) Pipe connections to the main header (supply or return) shall be made from the top of the header, except for systems described in paragraph (11) of this subdivision.

(8) Required air vents and vacuum breakers shall be designed for their required use.

(9) All air vents and vacuum breakers shall be hard piped to a curb or pan as provided for in subdivision (b) of section 27-829.

(10) In systems with equipment above the lowest floor where such equipment is designed to operate utilizing fuel stored above the lowest floor, piping diameters shall not exceed four inches. However, where an applicant demonstrates by the inclusion of calculations on the plans that a greater diameter is necessary to ensure the proper flow for the functioning of the system, such greater diameter may be permitted. All oil stored above the lowest floor shall be in tanks complying with subdivision (b) of section 27-829 of this code; piping shall not be used for fuel storage purposes.

(11) In systems with equipment above the lowest floor where such equipment is designed to operate utilizing fuel pumped as needed from the lowest floor and without utilizing fuel oil stored above the lowest floor, piping diameters throughout such systems shall not exceed the design flow (three times the maximum firing rate as calculated by the engineer or architect). However, piping diameters within rooms containing such equipment may exceed the calculated design flow pipe size to provide limited reservoir storage to prime equipment, provided such reservoir storage is counted toward the maximum two hundred seventy-five gallons of oil storage per story as provided for in subdivision b of section 27-829 of this code.

(g) Heating coils in storage tanks. -The heating of oil in storage tanks shall be by means of coils using low pressure hot water or steam, or by means of electric heaters approved for use in oil storage tanks.

(h) Valves and devices to control the flow of oil. -

(1) Where more than one storage tank is connected to a common supply line, a shut-off valve shall be provided in the supply line at each tank. Where more than one burner is connected to a supply line a shut-off valve shall be provided at each burner. Where a single tank and a single burner are installed, a shut-off valve shall be required in the supply line at the tank and another at the burner. Valves shall be brass or equivalent in corrosion and fire resistance, shall provide tight shut-off, and shall be rated at one hundred twenty-five psi or greater as required by the pressure in the system.

(2) Where a storage tank is located so that the top of the tank is above the oil inlet to the burner or to the fuel pump, and the storage tank capacity is greater than two hundred seventy-five gallons, the supply line to the burner shall be provided with an approved anti-syphon device. The device shall be located at the highest point in the supply line. Where an approved foot valve is used in the tank and the tank is constructed with a manhole, an anti-syphon device shall not be required. No anti-syphon device shall be required where no. 6 fuel oil is used.

(3) The pressure in oil lines to burners located above the lowest floor of a building shall not be more than is required to circulate oil to and from the burners, and all parts of the oil system shall be capable of withstanding the maximum working pressure in that part of the system.

(4) A remote control shall be provided to stop the flow of oil to any burner. Such control shall be located outside the entrance to the room in which the burner is located and as close to such entrance as practicable, except that when an outside location is impracticable, such control may be located immediately inside the room in which the burner is located, provided such location is accessible at all times. All such controls shall be permanently labeled "remote control for oil burner." On storage tanks of sixty gallon or less capacity used with manually operated burners, such remote control may be installed in the supply lines between tank and burner.

(5) Pressure in a storage tank for the purpose of discharging oil shall be prohibited.

(6) In systems where either steam or air is used for atomizing the oil, the oil and the atomizing supply shall be interlocked so that where the supply of either is interrupted, the supply of the other will be immediately cut off.

(i) Oil level indicating devices and test wells. -

(1) All tanks located inside buildings shall be provided with an oil level indicating device. Test wells shall be prohibited in tanks located inside of buildings. Unused tank openings shall be permanently sealed to prevent the removal of plugs or cover.

(2) Oil level indicating devices shall be designed and constructed of substantial materials so that there can be no leakage of oil or oil vapor.

(3) Test wells in storage tanks located outside of buildings shall be capped oil tight and kept closed when not in use.

****Local Law 26-2004.**

§[C26-1416.5] 27-831 Controls.- With each automatic burner a set of safety controls of the electric, pneumatic, hydraulic, or mechanical type shall be installed and maintained in good working order. The proper controls for each burner shall be those that have been tested and accepted in accordance with the requirements of article five of this subchapter. The controls shall provide the following functions:

- (a) Oil temperature control (no. 5 and no. 6 oil).
- (b) Ignition.
- (c) Stack or combustion control.
- (d) High temperature or pressure control.

§[C26-1416.6] 27-832 Chimneys.- No oil burner shall be installed in any boiler, heater, range, or stove unless each boiler, heater, range, or stove is connected to a chimney complying with subchapter ten of this chapter, except for portable burners as prescribed in section 27-827 of this article.

ARTICLE 18 REFUSE DISPOSAL SYSTEMS

§[C26-1417.1] 27-833 General. -All incinerators and other refuse disposal systems in buildings shall be constructed, installed and altered in accordance with the

requirements of this subchapter.

§[C26-1417.2] 27-834 Compliance.- All new and existing refuse disposal systems shall be installed, altered and maintained in buildings in conformity with the applicable provisions of the administrative code, the air pollution control code and as follows:

(a) Charging chutes for refuse disposal system shall comply with applicable provisions of subchapter fifteen of this chapter.

§[C26-1417.3] 27-835 Permitted types of incinerators.- When permitted by sections 24-118 and 24-119 of title twenty-four of the administrative code, incinerators shall conform to the following:

(a) Semiautomatic incinerators.- Semiautomatic incinerators shall be limited to capacities not exceeding one million seven hundred thousand Btu/hr. in other buildings. Semiautomatic incinerators may have manually operated grates, but shall have automatically operated flue gates, gas or oil burners with temperature controls, overfire air fans and nozzle system[s]*, emission control devices, and clock controlled cycles.

(b) Automatic incinerators.- Automatic incinerators shall be required for capacities exceeding one million seven hundred thousand Btu/hr. They are optional for smaller capacities. Automatic incinerators shall have power operated grates, and automatically operated flue gates, gas or oil burners with temperature controls, overfire and underfire air fans and nozzle system, emission control devices and clock controlled cycles.

**Copy in brackets not enacted but probably intended.*

§[C26-1417.4] 27-836 Refuse collection rooms.-

A refuse collection room shall be provided for refuse reduction systems which utilize methods other than burning. Such rooms shall comply with the requirements of section 27-837 of this article.

a. Existing refuse rooms and incinerators rooms which have been approved for such use, may be retained as approved.

b. Existing incinerator combustion chambers may be used in whole or in part as refuse collection rooms provided the grates are removed and provided they comply with the provisions of section 27-837 of this article.

c. Floors of refuse collection rooms shall be constructed of concrete and shall be sloped to a floor drain within the room, connected to the house drain. A hose connection shall be provided within the room.

d. A hopper and cut-off door shall be provided at the bottom of the refuse chute. Where compacting equipment is used, it shall be located entirely within the enclosure of the refuse collection room except that motors, pumps, and controls may be installed in adjacent rooms.

e. Compacting equipment shall meet the criteria of the department of environmental protection and be approved. Where such equipment is installed so that the refuse flows directly into it, the compacting equipment may be used in place of the hopper and cut-off door. Compacting equipment shall be arranged to operate automatically when the level of refuse is not more than three feet below the lowest hopper door.

§[C26-1417.5] 27-837 Incinerator rooms.-

Incinerators and refuse collecting bins and spaces shall be located in rooms or compartments used for no other purpose. Such rooms or compartments shall be separated from all other occupancies by noncombustible construction having a fire resistance of at least two hours with self-closing opening protectives. Refuse collection bins and spaces shall be sprinklered in accordance with the construction provisions of subchapter seventeen of this chapter.

§[C26-1417.6] 27-838 Ventilation.-Fixed ventilation for combustion air to the incinerator room shall be provided by a louvered opening in a wall to outdoor air. When ducts are used, they shall be sized and installed so as to provide the amount of air required for combustion, taking into consideration head loss. Fans may be installed to deliver air to the incinerator room, provided they are in operation whenever the incinerator is in use. Louvers, ducts, and fans shall be sized to deliver at least two and one-half cfm of air for each pound per hour of refuse while burning is taking place. All duct work shall be installed in accordance with the requirements of subchapter thirteen of this chapter.

§[C26-1417.7] 27-839 Draft control.-If a manual damper or automatic draft controller, is provided in the incinerator flue, it shall be capable of closing off not more than ninety-five percent of the flue area, and the damper or controller shall be made of such materials and in such a manner so as to prevent warping, binding, cracking, corrosion, and distortion when exposed to operating temperatures. If an automatic draft controller is used, means shall be provided for temporary manual operation.

§[C26-1417.8] 27-840 Charging chutes and exhaust flues.-

All incinerators shall be constructed with a flue within a chimney to exhaust the products of combustion and a refuse charging chute which shall be separate from the flue. Refuse charging chutes shall not discharge directly into incinerators, except in buildings classified in residential occupancy group J and in accordance with the requirements of this subchapter and subchapter fifteen of this chapter.

(a) Flues for existing incinerators and existing refuse chutes may be used as refuse charging chutes provided they are in good condition and comply with the requirements of subchapter fifteen of this chapter.

§[C26-1417.9] 27-841 Charging gates.-Charging gates, when provided, shall be power operated. Gates and guide rails shall be of such materials and construction so as to withstand a temperature of two thousand degrees Fahrenheit, without distortion, warping, binding, cracking, or corrosion, and also to withstand impact by heavy falling objects.

§[C26-1417.10] 27-842 Auxiliary heat.-Burners or other sources of heat shall be provided for all incinerators. Such heat sources shall be capable of maintaining a temperature of at least fifteen hundred degrees ***Farenheit* at the discharge from the combustion chamber, and shall be equipped with safety devices to shut off the fuel in cases of ignition failure, flame failure, or insufficient draft.

***As enacted but "Fahrenheit" probably intended.*

§[C26-1417.11] **27-843 Construction of incinerators.**- Incinerators shall be constructed so as to be gas tight and shall be lined or protected with heat resistive materials suitable for the services required, as follows:

(a) **Masonry incinerators.**- When the combined hearth and grate area is twenty square feet or less, or the number of habitable rooms served is one hundred or less, combustion chambers, separation chambers, and connecting gas passages shall be constructed of eight inch common brick thick and lined with four and one-half inch of refractory material with an intervening air space of one inch. When the combined hearth and grate area is more than twenty square feet, or the number of habitable rooms served is more than one hundred, combustion chambers, separation chambers, and connecting gas passages shall be constructed of common brick eight inches thick and lined with nine inches of refractory material with an intervening air space of one inch.

(1) **TIES.** -Noncorroding metal ties shall be used at least every fifth course of common-brick. Structural steel angles, straps, and tiebacks shall be installed on all masonry incinerators having more than one hundred twenty-five cubic feet of combustion chamber volume.

(2) **INTERIOR CONSTRUCTION.** -Interior walls, curtain walls, bridge walls, or baffles shall, in every case, be of refractory brick, at least nine inches thick.

(3) **ARCHES.** -Sprung arches may be used if the span is less than four feet. [*sic*] Flat suspended type arches shall have a minimum of five inches of refractory material between the furnace heat and the hangers. Flat suspended arches shall have an insulated block roof of at least two and one-half inches thick.

(4) **ISOLATION.** -No structural supports for the vertical building flues or other parts of the building shall rest upon the incinerator; nor shall any metal guides, hangers, or structural steel parts of the incinerator be exposed to direct heat of combustion.

(5) **THERMAL BLOCK INSULATION.**- High temperature block insulation shall be at least equal to type 3 specified in reference standard RS 14-10.

(6) **REFRACTORY.**- Refractory material shall be firebrick or hydraulic setting castable refractory.

a. **Firebrick.**- Firebrick shall be high duty, spall resistant and conform to type A reference standard RS 14-7.

b. **Castable refractories.**- Castable refractories shall conform to reference standard RS 14-8 (Class F).

c. **Mortar.**- Mortar for firebrick shall be air setting high temperature cement conforming to reference standard RS 14-14.

(b) **Steel-cased incinerators.** -In lieu of the eight inch common brick outer wall and one inch air space required in subdivision (a) of this section, the outside enclosure of incinerators may be of no. 12 manufacturer's standard gage [*sic*] steel casing that is welded, riveted, or bolted to be gastight, with at least two thicknesses of two and one-half inches high high-temperature block insulation applied with staggered joints.

(c) **Other constructions.** -Other forms of incinerator construction, equivalent in terms of structural strength, insulating value, and temperature and erosion resistance, may be used, subject to approval by the commissioner.

§[C26-1417.12] **27-844 Construction of chimneys and charging chutes.**- For requirements governing the construction of chimneys and charging chutes, see article four of subchapter fifteen of this chapter.

§[C26-1417.14] **27-845 Cleanouts.**- Openings shall be provided so that all parts of the incinerator can be cleaned, including the ash pit, the combustion chamber, the passes of separation chambers, and the incinerator flue. Cleanouts shall be closed by tight fitting doors or covers, securely latched or otherwise held in a closed position. Ash pit and combustion chamber closures and frames shall be of cast iron or equivalent, with the frames securely attached to the incinerator.

§[C26-1417.15] **27-846 Accessibility.** -Sufficient space shall be provided around the incinerator and its appurtenances to facilitate cleaning, repair, and servicing. Clearance shall be provided to allow the cleanout doors to be completely opened so that all parts of the combustion chamber, ash pit, separation chambers, etc., may be reached and so implements used for this purpose can be freely manipulated. All dampers, gates, burners, valves, levers, etc., shall be accessible for repair and adjustment or replacement. No construction shall be located closer than sixteen inches to any part of an incinerator, except that noncombustible structural members two feet wide or less parallel to the incinerator, may be located as close as six inches to the incinerator, provided such members do not reduce accessibility to any moving parts of the incinerator.

§[C26-1417.16] **27-847 Cabinets and control wiring.**- All control equipment shall be installed in dustproof, noncombustible cabinets. Such cabinets shall not be mounted on the incinerator. Conduits carrying control wiring for the incinerator shall not be fastened to the incinerator. All electrical work shall comply with the electrical code of the city of New York.

§[C26-1417.17] **27-848 Posting.** -

(a) Operating and maintenance instructions shall be permanently and conspicuously mounted under transparent protective covers in the incinerator room, together with the equipment use permit. The instructions shall include complete procedures for operating and maintaining fuel burners, dampers, and other devices, and shall state quantities and kinds of materials that may be burned.

(b) On every door that opens into a space in which a service opening into a refuse chute is located, or on the wall directly over the service opening into the chute, the following sign shall be permanently and conspicuously posted:

"THROWING LIGHTED MATCHES, CIGARS OR CIGARETTES CARPET SWEEPINGS, NAPHTHALENE, CAMPHOR BALLS OR FLAKES, FLOOR SCRAPINGS, OIL SOAKED RAGS, EMPTY PAINT CANS, AEROSOL CONTAINERS, OR ANY OTHER FLAMMABLE OR HIGHLY COMBUSTIBLE OR EXPLOSIVE SUBSTANCE INTO THIS CHUTE IS UNLAWFUL AND SUBJECTS THE OFFENDER TO A PENALTY."

Such signs shall be designed as follows:

- (1) Signs on doors leading to the service openings and on walls over service openings shall be at least eight inches wide and three inches high, with lettering at least one-quarter inch high. The signs shall be located on the hall side approximately five feet above the floor.
- (2) The lettering of the signs shall be of bold type, and shall be properly spaced to provide good legibility. The lettering and the background shall be of contrasting colors.
- (3) Signs shall be durable and shall be securely attached to the door or wall.
- (4) Sufficient lighting shall be provided so that the signs are easily readable at all times.

*ARTICLE 19 SOLID FUEL FIREPLACES, FIREPLACE STOVES AND ROOM HEATERS

**Local Law 80-1989.*

§27-848.01 General.- The construction, installation, alteration and operation of all fireplaces, fireplace stoves and room heaters used for space heating shall be subject to the provisions of this article. This article shall not be construed to apply to a central heater with hot air distribution, a central boiler with either hot water or steam heat distribution or a water tank, water heaters, furnaces or cooking stoves.

§27-848.02 Reference standards.- The applicable reference standards shall be as follows:

- (a) Fireplaces and wood burning appliances. Reference standard RS 14-18.
- (b) Factory-built fireplaces. Reference standard RS 14-19.
- (c) Fireplace stoves. Reference standard RS 14-20.
- (d) Room heaters. Reference standard RS 14-21.

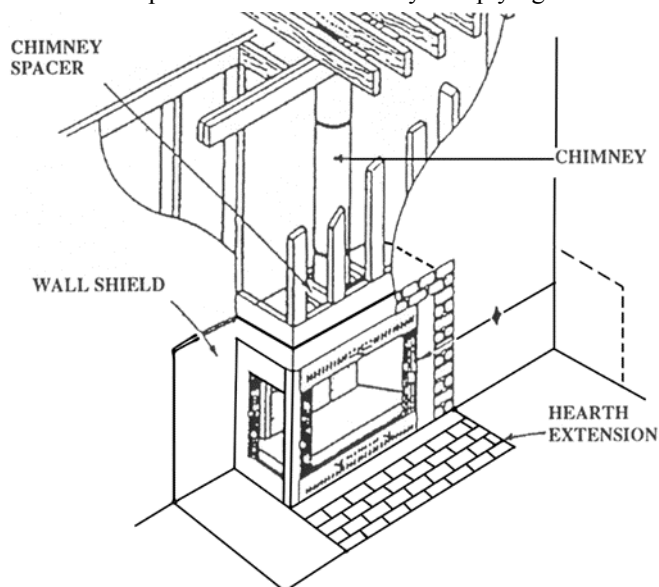
§27-848.03 Definitions. -As used in this article, the following terms shall have the following meaning:

Accessories, factory-built. Such devices as fireplace heater inserts, heat exchangers circulating air or water or other devices which may alter the combustion or heating characteristics of the fireplace.

Appliance. A device which utilizes fuel or other forms of energy to produce light, heat, power, refrigeration or air conditioning. This definition shall also include wood burning appliances and vented decorative appliances.

Fireplace, factory-built. A fireplace composed of factory-built components assembled in accordance with the terms of the listing and acceptance to form the completed fireplace and provided with a chimney complying with subchapter fifteen of this chapter (see figure 14-1).

Fireplace, masonry. A hearth and fire chamber made of solid masonry units such as bricks, stones, or reinforced concrete and provided with a chimney complying with

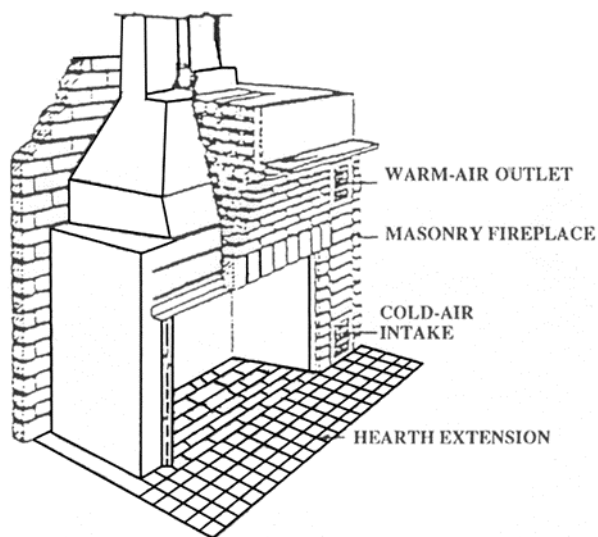


Factory-Built Fireplace

Figure 14-1

subchapter fifteen of this chapter.

Fireplace heat exchangers. Metal heat circulators designed for installation wholly within a masonry fireplace built in accordance with this code. Fireplace heat exchangers extract heat from the firebox of masonry fireplaces and return it to the area to be heated (see figure 14-2).



FIREPLACE-HEAT EXCHANGER

Figure 14-2

Fireplace inserts. Solid-fuel burning appliances located partially within a complying masonry fireplace. Stove and room heaters may be used as inserts for installation in masonry fireplaces (see figure 14-3).

Fireplace stoves. Freestanding assemblies having firechambers intended to be operated open to the room or

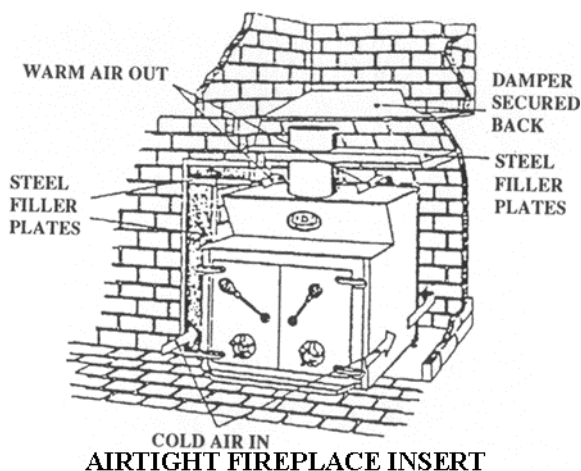


Figure 14-3

if equipped with doors to be operated with doors either open or closed and provided with a chimney complying with subchapter fifteen of this chapter (see figure 14-4).

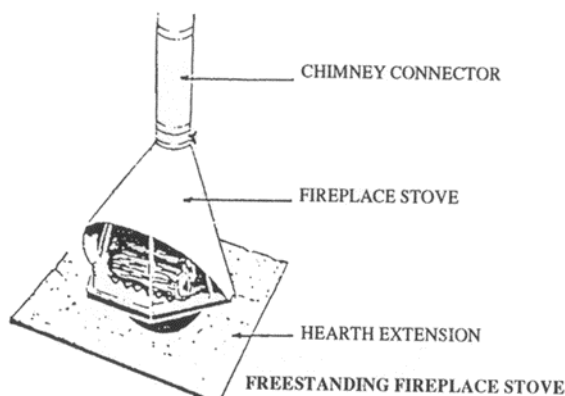


Figure 14-4

Room heater. A solid fuel burning freestanding firechamber assembly designed to be operated with the firechamber closed except for fueling and provided with a chimney complying with subchapter fifteen of this chapter (see figure 14-5).

Hearth extension. The noncombustible surfacing applied to the floor area beneath, and extending beyond the front, back and sides of a heating appliance.

Listed and listings. Terms referring to equipment which is shown in a list published by an accepted nationally recognized testing laboratory qualified and equipped for experimental testing and maintaining an adequate periodic inspection of current production and whose listing shows that the equipment complies with nationally recognized safety standards.

Manufacturer's installation instructions. Printed instructions included with equipment as part of the conditions of the listing.

Solid fuel. A material such as natural wood which will ignite and burn when subjected to fire.

§27-848.04 Installations.-

(a) Application.

(1) An application for the installation of a fireplace or stove equipment shall be filed by a registered architect or licensed professional engineer at the borough office of the department. The application shall describe the equipment in question and its installation.

(2) The applicant, prior to the filing of the application, shall make an inspection to determine the adequacy of the air supply for combustion and ventilation and the ability of the equipment to be installed to comply with code requirements.

(b) Qualifications of installer.-

(1) Installation shall be made only by persons authorized by the manufacturer to install the specific equipment in question.

(2) The installer shall certify to the registered architect or licensed professional engineer who has filed the application that the installation is in full compliance with the terms of the listing, acceptance and the manufacturer's instructions.

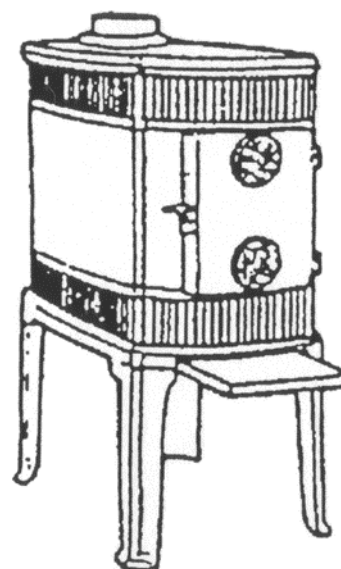
(3) For retrofit installations in occupied residential dwellings, the installer shall have a home improvement contractor's license from the department of consumer affairs.

(c) **Controlled inspection.** -Installation shall be subject to controlled inspection to ensure that the installation is in accordance with:

- (1) the structural elements shown on the approved plans,
- (2) the fire protection requirements, and
- (3) the listing, acceptance and the manufacturer's installation recommendations.

(d) **Environmental requirements.** - All solid fuel burning appliances shall comply with the requirements of the air pollution control law, chapter one of title twenty-four of this code.

(a) **State energy conservation code.** - The requirements of the New York State energy conservation construction code concerning the combustion air supply shall be complied with.



AIRTIGHT ROOM HEATER

Figure 14-5

§27-848.05 Structural adequacy.— The registered architect or licensed professional engineer filing the application for the installation shall certify on the application as to the adequacy of the structural supports and chimney bracing to sustain the loadings when in operation.

§27-848.06 Chimneys.— Fireplace, fireplace stove and room heater chimneys shall meet the requirements of subchapter fifteen of this chapter. Separate flues shall be provided for every fireplace, fireplace stove and room heater.

§27-848.07 Masonry fireplaces. —

(a) Construction.

(1) Masonry fireplaces shall be constructed of solid masonry units of reinforced portland or refractory cement concrete. Masonry fireplaces shall be supported on foundations of masonry or reinforced portland or refractory cement concrete, or on other noncombustible construction having a fire resistance rating of not less than three hours. Such supports shall be designed to support the loadings.

(2) Where a lining of low-duty fire clay refractory brick at least two inches thick laid in medium-duty fireclay refractory mortar, or the equivalent two inches thick soapstone, three-sixteenths inch thick steel or cast iron, or equivalent material capable of withstanding a temperature of 2000 degrees Fahrenheit without cracking or spalling or other accepted lining is provided, the total thickness of back and sides, including the lining, shall be not less than eight inches.

(3) Where such lining is not provided, the thickness of the back and sides shall be not less than twelve inches.

(4) Where the masonry supporting a fireplace is designed to support vertical loads from the building and corbels are used to support beams or girders, corbeling shall be as described in reference standard RS 14-18 as recommended for masonry chimneys. The lintel spanning the fireplace shall be designed and constructed to support the additional load transferred by the member.

(5) Masonry fireplaces shall be provided with chimneys designed and constructed in accordance with the requirements of subchapter fifteen of this chapter for construction of masonry chimneys or, where permitted by the individual listing, shall be provided with accepted factory-built chimneys having accepted adapters in accordance with the requirements for factory-built chimneys of subchapter fifteen of this chapter.

(b) Steel fireplace units.

(1) Steel fireplace units incorporating a firebox liner of not less than one quarter inch thick steel and an air chamber shall be installed with masonry to provide a total thickness at the back and sides of not less than eight inches, of which not less than four inches shall be solid masonry. Listed firebox liners shall be installed in accordance with the terms of the listing.

(2) Warm air ducts employed with steel fireplace units of the circulating air type shall be constructed of metal in accordance with reference standard RS 14-22, or of masonry.

(c) Clearance.

(1) All wood beams, joists, studs and other combustible material shall have a clearance of not less than two inches from the front faces and sides of masonry fireplaces, and not less than four inches from the back faces of masonry fireplaces. Headers of combustible material supporting masonry trimmer arches or concrete hearth extensions shall be located not less than twenty inches from the face of the chimney breast.

(2) Spaces between headers or trimmers of combustible material and masonry fireplaces shall be firestopped [*sic*] with noncombustible material. The material used for firestopping shall be galvanized sheet metal of at least no. 14 U.S. standard gage [*sic*] thickness, mineral board at least one quarter inch thick or equivalent rigid noncombustible sheet material not less than one half inch thick or other accepted noncombustible material.

(3) Woodwork, such as wood trim and mantels, or other combustible material shall not be placed within six inches of a fireplace opening. Combustible material above and projecting more than one and one-half inches from a fireplace opening shall not be placed less than twelve inches from the top of the fireplace opening.

(4) Clearances specified in reference standard RS 14-18 shall apply if greater than those specified in this subdivision.

(d) Hearth extensions.

(1) Masonry fireplaces shall have hearth extensions of brick, concrete, stone, tile or other accepted noncombustible materials. Such hearths shall be supported on trimmer arches of brick, stone, tile or concrete at least four inches thick, or of other equivalent materials and with noncombustible material against the underside thereof. Wooden forms or centers used during the construction of the hearth and hearth extension shall be removed when the construction is completed.

(2) Where the fireplace opening is less than six square feet, the hearth extension shall extend at least sixteen inches in front of the facing material and at least eight inches beyond each side of the fireplace opening.

(3) Where the fireplace opening is six square feet or larger, the hearth extension shall extend at least twenty inches in front of the facing material, and at least twelve inches beyond each side of the fireplace opening.

(4) Where a fireplace is elevated above or overhangs a floor, the hearth extension shall also extend over the area under the fireplace.

(e) Fireplace dampers. Every fireplace shall be equipped with a damper able to withstand distortion, binding, cracking or corrosion when exposed to the fireplace operating temperature.

(f) Accessories. Factory-built accessories shall be listed and accepted and shall be installed in accordance with the terms of their listing and acceptance.

§27-848.08 Wood burning appliances: Installation. -

(a) Scope. Wood burning appliances include factory-built fireplaces, fireplace stoves, room heaters, and fireplace inserts.

(b) Listing. Wood burning appliances shall be listed and accepted and shall be installed in accordance with the terms of their listing and acceptance.

(c) Location of appliances.

(1) Every appliance shall be located with respect to building construction and other equipment so as to permit access to the appliance. Sufficient clearance shall be maintained to permit cleaning of surfaces, the replacement of air filters, blowers, motors, controls and chimney connectors, and the lubrication and servicing of moving parts.

(2) Wood burning appliances shall not be installed in confined spaces or alcoves. The minimum size of the space or room in which the appliance is located shall be three hundred cubic feet. There shall be at least one openable window serving such space or room.

(3) Wood burning appliances shall not be installed in any location where gasoline or any other flammable liquids, vapors or gases are present or likely to be present.

(4) Wood burning appliances shall not be installed in any garage.

(d) Air for combustion and ventilation. Wood burning appliances shall be installed in a location in which the facilities for ventilation permit proper chimney draft and maintenance of safe temperature under conditions of use and provide sufficient air to prevent carbon monoxide from entering the dwelling space. Appliances shall be located so as not to interfere with proper circulation of air within the heated space. Where buildings are so tightly sealed that normal infiltration does not provide the necessary air, outside air shall be introduced.

(e) Mounting for residential type appliances.

(1) Residential type wood burning appliances that are tested and listed by an accepted national testing laboratory for installation on floors constructed of combustible materials shall be placed on such floors in accordance with the requirements of the listing and the conditions of acceptance. Such appliances which are not listed for installation on combustible floors by an accepted national testing laboratory shall be provided with floor protection in accordance with the provisions of subdivision (g) of this section. Residential type wood burning appliances are permitted to be placed without floor protection in any of the following manners:

- a. on concrete bases adequately supported on compacted soil, crushed rock or gravel;
- b. on concrete slabs or masonry arches that do not have combustible materials attached to the underside; or
- c. on accepted assemblies constructed entirely of non-combustible materials, and having a fire resistance

rating of not less than two hours, with floors constructed of noncombustible materials.

(2) Any floor assembly, slab or arch shall extend not less than eighteen inches beyond the appliance on all sides.

(3) In lieu of the requirements for floor protection specified herein, a floor protector listed by a recognized testing laboratory and installed in accordance with the installation instructions may be used.

(4) Appliances shall be supported by concrete bases, concrete slabs, masonry arches and floor ceiling assemblies and their supports which are designed and constructed to support the appliance.

(f) Mounting for fireplace stoves and room heaters.

(1) Fireplace stoves and room heaters which are set on legs or pedestals that provide not less than six inches of ventilated open space beneath the fire chamber or base of the appliance may be placed on floors of combustible construction, provided the floor under the appliance is protected with closely spaced solid masonry units not less than two inches in thickness. The top surface of the masonry shall be covered with sheet metal not less than 24 gage [*sic*] (0.024 inches). The floor protection shall extend not less than eighteen inches beyond the appliance on all sides.

(2) Fireplace stoves and room heaters [*sic*] which are set on legs or pedestals providing two to six inches of ventilated open space beneath the fire chamber or base of the appliance may be placed on floors of combustible construction, provided the floor under the appliance is protected with one course of hollow masonry units not less than four inches in thickness. The masonry units shall be laid with ends unsealed and joints matched in such a way as to provide a free circulation of air through the core spaces of the masonry. The top surface of the masonry shall be covered with sheet metal not less than 24 gage [*sic*] (0.024 inches). The floor protection shall extend not less than eighteen inches beyond the appliance on all sides.

(3) Fireplace stoves and room heaters with legs or pedestals that provide less than two inches of ventilated open space beneath the fire chamber or base of the appliance shall not be placed on floors of combustible construction.

(g) Clearances. Woodburning appliances shall be installed with the following minimum clearances to combustible construction: Above the top of appliance-thirty-six inches; from front-thirty-six inches; from back-thirty-six inches; from sides-thirty-six inches. The minimum clearance to noncombustible construction shall be six inches when table 14-1 herein is used except that forty-eight inches shall be maintained where the fuel is inserted. Accepted stoves shall be exempt from the above-mentioned clearances and shall be installed in accordance with the appropriate reference standard and clearances determined therefrom through tests specified in the reference standard.

TABLE 14-1 REDUCTION OF APPLIANCE CLEARANCE WITH SPECIFIED FORMS OF PROTECTION ^{1,2,3,4,5,6,7,8,9,10}

Clearance reduction system applied to and covering all combustible surfaces within the distance specified as required clearance with no protection	Maximum allowable reduction in clearance (percent)		When the required clearance with no protection is 36 in., the clearances below are the minimum allowable clearance. For other required clearances with no protection, calculate minimum allowable clearance from maximum allowable reduction. ^{9,10}	
	As Wall Protector	As Ceiling Protector	As Wall Protector (in.)	As Ceiling Protector (in.)
(a) 3 ½ in. thick masonry wall without ventilated air space	33%	—	24	—
(b) ½ in. thick noncombustible insulation board over 1 in. glass fiber or mineral wool batts without ventilated air space.	50%	33%	18	24
(c) 0.024 in. (24 gage) sheet metal over 1 in. glass fiber or mineral wool batts reinforced with wire, or equivalent, on rear face with ventilated air space.	66%	50%	12	18
(d) 3 ½ in. thick masonry wall with ventilated air space.	66%	—	12	—
(e) 0.024 in (24 gage) sheet metal with ventilated air space.	66%	50%	12	18
(f) ½ in. noncombustible insulation board with ventilated air space.	66%	50%	12	18
(g) 0.024 in (24 gage) sheet metal with ventilated air space over 0.024 in (24 gage) sheet metal with ventilated air space.	66%	50%	12	18
(h) 1 in. glass fiber or mineral wool batts sandwiched between two sheets 0.024 in. (24 gage) sheet metal with ventilated air space.	66%	50%	12	18

Notes for Table 14-1:

¹Spacers and ties shall be of noncombustible material. No spacers or ties shall be used directly behind appliance or conductor.

²With all clearance reduction systems using a ventilated air space, adequate air circulation shall be provided. There shall be at least 2 in. between the clearance reduction system and combustible walls and ceilings for clearance reduction systems using a ventilated air space.

³Mineral wool batts (blanket or board) shall have a minimum density of 8 lb. per ft³ and have a minimum melting point of 1500°F.

⁴Insulation material used as part of clearance reduction system shall have a thermal conductivity of 1.0(BTU-In.)/(Sq ft-Hr -°F) or less. Insulation board shall be formed of noncombustible material.

⁵If a single wall connector passes through a masonry wall used as a wall shield, there shall be at least 1/2 in. of open, ventilated air space between the connector and the masonry.

⁶There shall be at least 2 in. between the appliance and the protector. In no case shall the clearance between the appliance and the wall surface be reduced below that allowed in the table.

⁷Clearances in front of the loading door and/or ash removal door of the appliance shall not be reduced from those in Section 8-6.

⁸All clearances and thicknesses are minimums; larger clearances and thicknesses are acceptable. Clearances are not to be less than 12 in. from appliances.

⁹To calculate the minimum allowable clearance, the following formula may be used: $C_{pr} = C_{un} \times (1-R/100)$. C_{pr} is the minimum allowable clearance. C_{un} is the required clearance with no protection, and R is the maximum allowable reduction in clearance.

¹⁰Refer to Figures 14-11 and 14-12 for other reduced clearances using materials (a) through (h).

(h) Reduction of clearances from wood burning appliances.

(1) Clearances from listed and unlisted wood burning appliances to combustible material may be reduced if the combustible material is protected as described in table 14-1 herein and as shown in figures 14-6 to 14-10 herein.

(2) Clearances from wood burning appliances to combustible material may be reduced by the use of materials or products listed for the purpose of reducing

such clearances. Materials and products listed for such purpose shall be installed in accordance with the conditions of the listing and the manufacturer's instructions.

(3) For clearance reduction systems using an air space between a combustible wall and wall protector, adequate air circulation shall be provided by one of the following methods as shown in figure 14-10 herein:

- a. Adequate air circulation may be provided by leaving all edges of the wall open with an air gap of at least two inches.

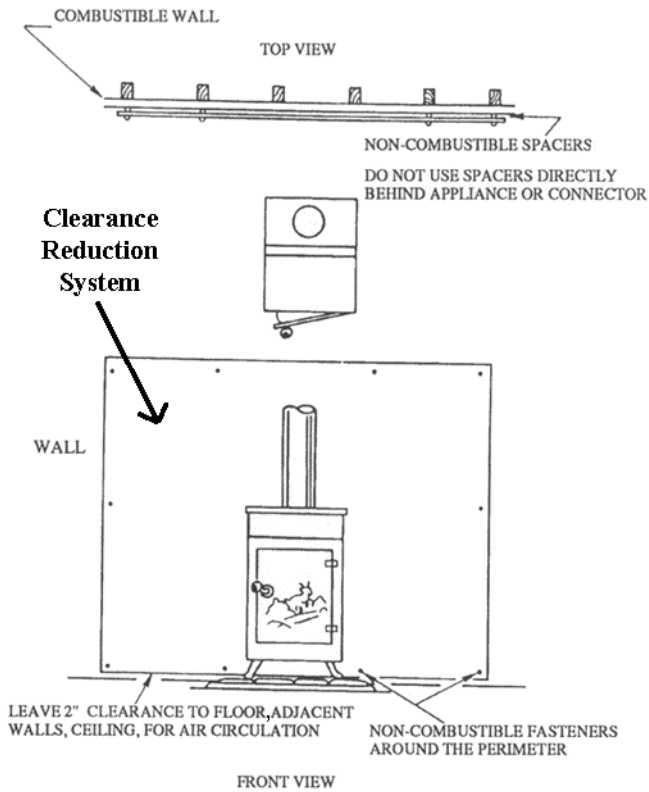


Figure 14-6

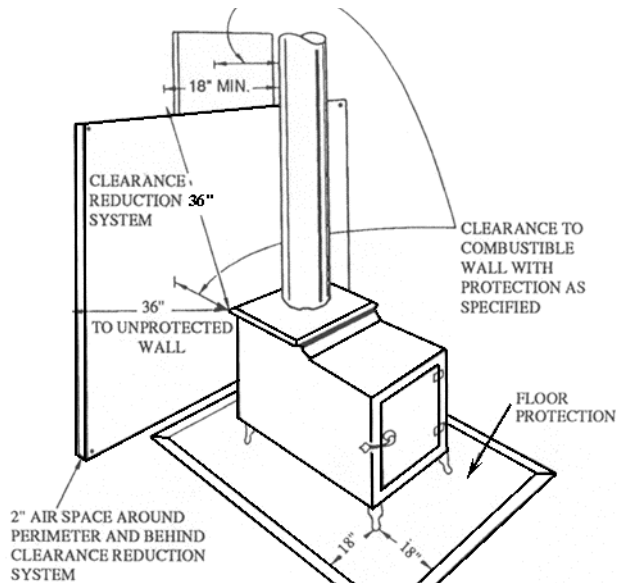


Figure 14-7

- b. If the wall protector is mounted on a single flat wall away from corners, adequate air circulation may be provided by leaving only the bottom and top edges or

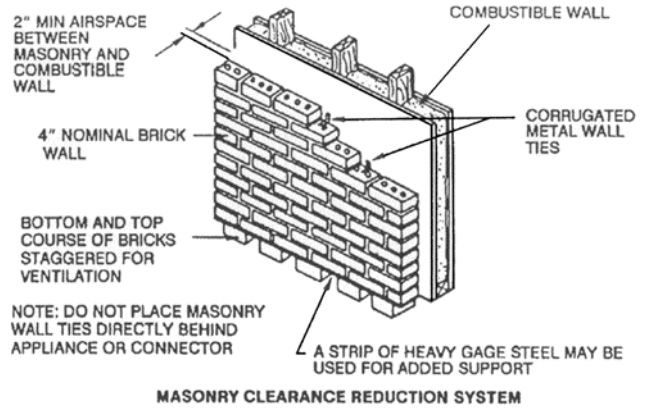


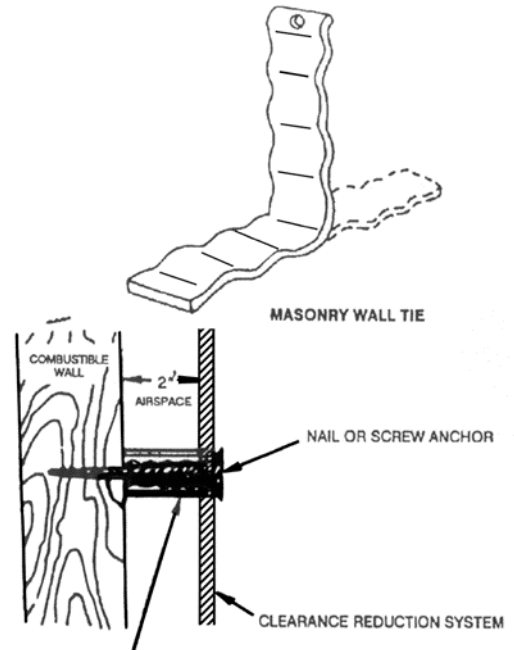
Figure 14-8

only the side and top edges open with an air gap of at least two inches.

- c. Wall protectors that cover two walls in a corner shall be open at the bottom and top edges with an air gap of at least two inches.

(4) All clearances shall be measured from the outer surface of the combustible materials to the nearest point on the surface of the wood burning appliance, disregarding any intervening protection applied to the combustible materials.

(5) All clearances provided between wood burning appliances and combustible materials shall be large enough so as to maintain sufficient clearance between chimney connectors and combustible materials as required in subchapter fifteen of this chapter.



2" NON-COMBUSTIBLE SPACER SUCH AS STACKED WASHERS, SMALL DIAMETER PIPE, TUBING OR ELECTRICAL CONDUIT.

MASONRY WALLS MAY BE ATTACHED TO COMBUSTIBLE WALLS USING WALL TIES.

DO NOT USE SPACERS DIRECTLY BEHIND APPLIANCE OR CONNECTOR.

Figure 14-9

- (i) **Accessories.** Factory-built accessories for wood burning appliances such as heat exchangers, stove mats,

floor pads and protection shields shall be listed and accepted, and shall be installed in accordance with the terms of their listing and acceptance.

§27-848.09 Factory-built fireplaces, fireplace stoves and room heaters. -

(a) **Acceptance.** Factory-built fireplaces, fireplace stoves and room heaters shall be listed and accepted for use as wood burning appliances.

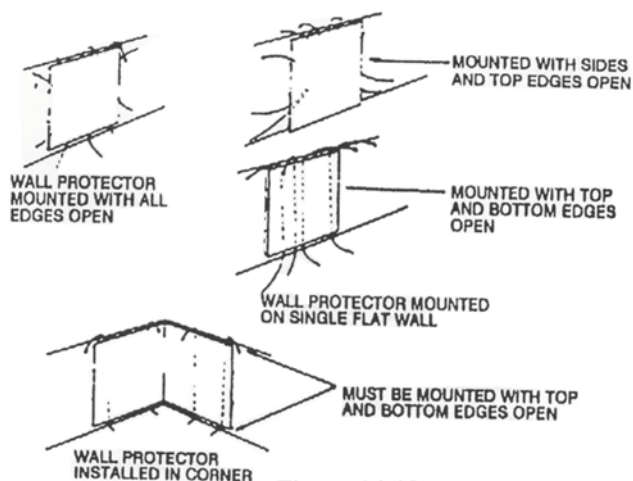


Figure 14-10

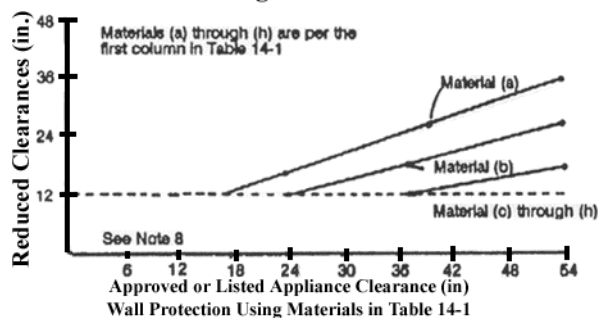


Figure 14-11

(b) **Occupancy group limitations.** Factory-built fireplaces, fireplace stoves and room heaters shall not be permitted in buildings other than those in residential occupancy group classifications J-2 and J-3, except that installations within other occupancy groups may be authorized by the commissioner pursuant to rules and regulations

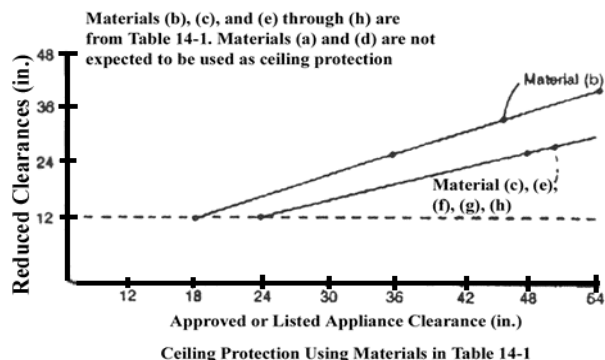


Figure 14-12

promulgated by the department.

(c) **Chimney requirements.**

(1) The chimney systems of factory-built fireplaces, fireplace stoves and room heaters shall be constructed in accordance with section 27-869.01.

(2) No chimney shall serve more than one factory-built fireplace, fireplace stove or room heater or be pierced to serve any other appliance.

(d) **Additional limitations.** Factory-built fireplaces, fireplace stoves or room heaters shall be:

- (1) located only in exterior rooms, and
- (2) limited to space heating of the room within which they are located.

(e) **Chimney connectors.**

(1) Stovepipe.

a. The stovepipe (or chimney connector) connecting a factory-built fireplace, fireplace stove or room heater to a chimney may contain no more than two elbows. The total length of the connecting pipe should be kept as short as possible while maintaining the required minimum spacing between the factory-built fireplace, fireplace stove or room heater and combustible materials. See subdivision (h) of section 27-848.08 of this code.

b. The connector pipe shall be as large as the flue collars (where the connector pipe joins the factory-built fireplace, fireplace stove or room heater), and shall be fabricated from steel coated with a high temperature rust inhibitor.

c. The pipe's horizontal section shall rise one-quarter inch for each foot of pipe, with the highest point being at the chimney inlet, and shall not be longer than three quarters of the chimney height.

d. When joining sections of pipe, the joints shall overlap at least two inches, with the crimped (male) end pointing down to prevent creosote drip or leak. Each joint shall be secured with three sheet metal screws. All fits shall be snug.

e. The thimble shall be cemented with high temperature cement at the flue inlet. The pipe shall not project into the flue itself.

f. Connector pipe clearance to combustible materials shall be at least three times the pipe diameter (e.g. eighteen inches for six inch pipe), but not less than eighteen inches.

g. Stovepipes shall not pass through floors, ceilings or closets. Stovepipes shall not pass through exterior walls unless directly connected with a thimble to the chimney as noted in subparagraph h of this paragraph.

h. Alternately, a listed and accepted noncombustible thimble larger in diameter than the connector pipe, or a burned fireclay or metal thimble surrounded by not less than twelve inches of brickwork may be used for protection.

i. Connectors and chimneys for factory-built fireplaces, fireplace stoves and room heaters shall be designed, located and installed to permit ready access for internal inspection and cleaning, in compliance with the requirements of subchapter fifteen of this chapter.

(2) Connection to masonry fireplace flue. A factory-built fireplace stove or room heater or insert may use a masonry fireplace flue when the following conditions are met:

- a. There is a connector which extends from the fireplace stove or room heater to the flue liner.
- b. The cross-sectional area of the flue is no more than three times the cross-sectional area of the flue collar of the factory-built fireplace, fireplace stove or room heater.
- c. There is a noncombustible seal below the entry point of the connector if the appliance vents directly through the chimney wall above the smoke chamber.
- d. The chimney system can be inspected and cleaned.
- e. Air from the habitable space is not used to dilute combustion products in the chimney flue.
- f. Hearth extensions are provided in accordance with the manufacturer's instructions or are of masonry of noncombustible construction in accordance with subdivision (d) of section 27-848.07.

§27-848.10 Fireplace heat exchangers and fireplace inserts.- Fireplace heat exchangers and fireplace inserts shall not be inserted into or connected to factory-built fireplaces unless listed by a nationally recognized testing laboratory and accepted for use in the specific fireplace.

§27-848.11 Imitation fireplaces.- Only natural gas-fired fireplace heaters accepted in accordance with the provisions of article twelve of subchapter thirteen of this chapter shall be used with imitation fireplaces and shall be installed in accordance with the conditions of the acceptance.

§27-848.12 Precautionary requirements. -

(a) Smoke detecting devices. Smoke detecting devices, complying with article six of subchapter seventeen of this chapter, are required where fireplaces, fireplace stoves or room heaters are installed. At least one device shall be in the same room as the installation or in an adjacent room.

(b) Fire extinguisher. A fire extinguisher rated for class "A" fires shall be available in the vicinity of a fireplace, fireplace stove or room heater.

(c) Latching. The fireplace stove fuel door shall be latched to prevent burning wood from falling out or an overfired fire from occurring due to an oversupply of air.

(d) Fireplace screens. Fireplace stoves shall be equipped with fireplace screens to minimize spark emission.

(e) Warnings. Warnings on fireplace stoves shall be as required by the United States Consumer Product Safety Commission [*sic*] and reference standard RS 14-20.

(f) Floor protection. Floor protection for fireplace stoves required by section 27-848.08(f) shall extend a minimum of twenty-six inches beyond the stove at the front or side where the ashes are removed and at least eight inches on the other sides.

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SUBCHAPTER 15 CHIMNEYS AND GAS VENTS

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**				
[1500.0]	Art. 1	General	[1503.2]	876	Chimneys for Building Service Incinerators
[1500.1]	849	Scope	[1503.3]	877	Chimneys for Industrial or Municipal Incinerator Plants
[1500.2]	850	Standards	[1503.4]	878	Incinerator Chimney Connectors
[1500.3]	851	Definitions	[1504.0]	Art. 5	Gas Vent Systems
[1500.4]	852	Plans	[1504.1]	879	General
[1500.5]	853	Permits	[1504.2]	880	Equipment Not Required to be Vented
[1500.6]	854	General Requirements	[1504.3]	881	Draft Hoods
[1500.7]	855	Factory-Built Chimneys and Gas Vents	[1504.4]	882	Chimneys for Venting Gas-Fired Equipment
[1501.0]	Art. 2	Chimneys	[1504.5]	883	Gas Equipment Connected to Chimneys
[1501.1]	856	General Requirements	[1504.6]	884	Types of Gas Vents
[1501.2]	857	Classification of Chimneys	[1504.7]	885	Labeling Gas Vents
[1501.3]	858	Cleanouts and Maintenance	[1504.8]	886	Special Venting Arrangements
[1501.4]	859	Chimney Heights and Locations	[1504.9]	887	Installation Requirements
[1501.5]	860	Adjoining Chimneys	[1504.10]	888	Gas Vent Height and Locations
[1501.6]	861	Metal Chimneys	[1504.11]	889	Adjoining Gas Vents
[1501.7]	862	Materials Other Than Metal for Construction of Chimneys	[1504.12]	890	Support of Gas Vents
[1501.8]	863	Chimney Construction for Low, Medium, and High Temperature Equipment	[1504.13]	891	Prohibited Termination
	863.01	Chimney Limitations and Tests	[1505.0]	Art. 6	Gas Vent Connectors
[1501.9]	864	Chimney Supports	[1505.1]	892	Construction
[1501.10]	865	Chimney Caps	[1505.2]	893	Clearances
[1501.11]	866	Corbelling of Chimneys	[1505.3]	894	Thimbles
[1501.12]	867	Clearances From Masonry and Concrete Chimneys	[1505.4]	895	Size of Connectors
[1501.13]	868	Smoke Test	**“C26” omitted from section numbers in this column.		
[1501.14]	869	Exhaust Gases from Internal Combustion Engines	**“27” omitted from section numbers in this column.		
	869.01	Factory-Built Chimneys			
	869.02	Changes in Appliance Fuels			
	869.03	Reduction in Flue Size			
[1502.0]	Art. 3	Chimney Connectors			
[1502.1]	870	Chimney Connector Construction			
[1502.2]	871	Chimney Connection			
[1502.3]	872	Chimney Connector Clearances			
[1502.4]	873	Underground Chimney Connectors			
[1502.5]	874	Annual Inspection of Chimney Connectors			
[1503.0]	Art. 4	Incinerator Chimneys and Refuse Charging Chutes			
[1503.1]	875	Charging Chutes for Refuse Reduction			

LIST OF TABLES

Table No.	
15-1	"F" Factor for Determining Chimney Distances
15-2	Minimum Clearances Required From Any Combustible Materials
15-3	Required Fire Resistance Ratings of Enclosures for Metal Chimneys
15-4	Low Temperature Chimney Constructions
15-5	Medium Temperature Chimney Construction
15-6	High Temperature Chimney Construction
15-6.1	Chimney Limitations and Tests
15-7	Required Thickness of Galvanized Steel for Connectors
15-8	Reduced Clearances for Chimney Connectors with Specified Forms of Protection
15-9	Minimum Size of Charging Chutes
15-10	Vent Connector Clearance for Gas-Fired Equipment
15-11	Reduced Clearances for Vent Connectors with Specified Forms of Protection

ARTICLE 1 GENERAL

§[1500.1] **27-849 Scope.** -This subchapter shall establish the minimum safety requirements for, and control the design, construction, installation, alteration, and use of chimneys and gas vents.

§[1500.2] **27-850 Standards.** - The provisions of reference standard RS-15 shall be a part of this subchapter.

§[1500.3] **27-851 Definitions.** -For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[1500.4] **27-852 Plans.** -For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[1500.5] **27-853 Permits.** -For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

§[1500.6] **27-854 General requirements.**—Chimneys or gas vents shall be designed and constructed so as to provide the necessary draft and capacity to completely exhaust the products of combustion to the outside air, and to satisfy the following conditions:

(a) **Temperature.** -The temperature on adjacent combustible surfaces shall not be raised above one hundred sixty degrees Fahrenheit.

(b) **Condensation.** -The condensation shall not be developed to an extent that can cause rapid deterioration of chimney or vent.

*§[1500.7] **27-855 Factory-built chimneys and gas vents.**—

(a) **Factory-built chimneys.** -Factory-built chimneys and chimney units shall be listed and accepted in accordance with the applicable reference standard and shall be installed in accordance with the temperature conditions and height limitations of the listing and acceptance, the manufacturer's instructions or this article, whichever is the most restrictive. Flue gas temperatures in the chimney shall not exceed the limits and durations employed during listing tests and as required by this code.

(b) **Gas vents.** -Type B and Type BW gas vents shall be listed and accepted in accordance with the conditions of the acceptance and applicable provisions of this code.

**Local Law 80-1989.*

ARTICLE 2 CHIMNEYS

§[1501.1] **27-856 General requirements.** -

(a) **Equipment requiring chimneys.** - All gas-burning equipment that produces flue gas temperatures in excess of five hundred fifty degrees Fahrenheit or four hundred eighty degrees Fahrenheit above room temperature, and all solid and liquid fuel-burning equipment, shall be connected to chimneys that conform to the requirements of this subchapter.

*(b) **Chimney construction.** -Unlisted chimneys shall be constructed of steel, brick, masonry units, concrete, concrete units, or equivalent materials. Chimneys shall be

of adequate structural strength, with resistance suitable for the temperatures to which they may be subjected and resistive to the corrosive action of gases. For structural requirements, see subchapters ten and eleven of this chapter.

(c) **Separation of flues.** -Whenever more than one flue is installed within a chimney, the lining of each flue shall be separated, one from the other, as follows:

(1) In low temperature chimneys with fire clay flue linings: by a wythe of cement grout at least one inch thick or other equivalent method.

(2) In medium temperature and high temperature chimneys: by a division wall of brick or concrete at least three and three-quarters inches thick or other equivalent method.

The separation between flue linings thus established shall in all cases be adequate to give stability for the chimney construction as required by subchapter ten of this article.

(d) **Test run.** -All new chimneys shall be test run by the applicant under operating conditions to demonstrate fire safety and the complete exhausting of smoke and the products of combustion to the outer air. The results of such test run shall be certified as correct by the applicant and shall be submitted in writing to the department.

(e) **Requirement of a smoke test.** -Whenever required by the commissioner after an inspection has been made of the chimney, a smoke test shall be made as outlined in section 27-868 of this article. Any faults or leaks found shall be corrected. Such smoke test shall be witnessed by a representative of the commissioner. In lieu thereof, the commissioner may accept the test report of an architect or engineer in which case the test shall be subject to the provisions for **controller inspection except that the architect or engineer may be retained by the contractor.

**Local Law 80-1989.*

***As enacted but "controlled" probably intended .*

§[1501.2] **27-857 Classification of chimneys.**—

Chimneys shall be classified as follows:

(a) **Low temperature chimneys.** -Chimneys designed and constructed to exhaust the products of combustion from low temperature equipment as defined in subchapter fourteen of this chapter.

(b) **Medium temperature chimneys.** - Chimneys designed and constructed to exhaust the products of combustion from medium temperature equipment as defined in subchapter fourteen of this chapter.

(c) **High temperature chimneys.** -Chimneys designed and constructed to exhaust the products of combustion from high temperature equipment as defined in subchapter fourteen of this chapter.

§[1501.3] **27-858 Cleanouts and maintenance.**—

Whenever a new chimney is completed or an existing chimney is altered, it shall be cleaned and left smooth on the inside. Cleanouts with a gas tight door shall be provided at the base of all chimneys.

§[1501.4] **27-859 Chimney heights and locations.** -

(a) **Low temperature chimneys.** -Low temperature chimneys shall extend at least three feet above the highest construction, such as a roof ridge, parapet wall, or penthouse, within ten feet of the chimney outlet, whether the construction

is on the same building as the chimney or on another building. However, such constructions do not include other chimneys, vents, or open structural framing. Any chimney located beyond ten feet from such construction, but not more than the distance determined in subdivision (d) of this section, shall be at least as high as the construction.

(b) Medium temperature chimneys. -Medium temperature chimneys shall extend at least ten feet above the highest construction, such as a roof ridge, or parapet wall or penthouse within twenty feet of the chimney outlet, whether the construction is on the same building as the chimney or on another building. However, such constructions do not include other chimneys, and vents. Any chimney located beyond twenty feet from such constructions but not more than the distance determined in subdivision (d) of this section, shall be at least as high as the construction.

(c) High temperature chimneys. -High temperature chimneys shall extend at least twenty feet above the highest construction, such as roof ridge, parapet wall, penthouse, or other obstruction within fifty feet of the chimney outlet, whether the construction is on the same building as the chimney or in another building. However, such constructions do not include other chimneys, vents, or open structural framing. Any chimney located beyond fifty feet from such construction but not more than the distance determined in subdivision (d) of this section, shall be at least as high as the construction.

(d) Formula. -The following formula shall be used for determining the distances referred to in subdivisions (a), (b) and (c) of this section:

$$D = F \sqrt{A}$$

where:

D = Distance, in ft., measured from the center of the chimney outlet to the nearest edge of the construction.

F = Value determined from table 15-1.

A = Free area, in sq. in., of chimney flue space.

TABLE 15-1 "F" FACTOR FOR DETERMINING CHIMNEY DISTANCES

Type of Fuel	"F" Factor		
	Low Temp. Chimney	Medium Temp. Chimney	High Temp. Chimney
Gas.....	2	2	3
No. 2 Fuel Oils.....	2.5	2.5	3
No. 3, No. 6 Fuel Oils, Solid Fuels and Incinerators.....	3	3	3

§[1501.5] 27-860 Adjoining Chimneys. -

(a) Responsibility of owner of taller building. - Whenever a building is erected, enlarged, or increased in height so that any portion of such building, except chimneys or vents, extends higher than the top of any previously constructed chimneys within one hundred feet, the owner of such new or altered building shall have the responsibility of altering such chimneys to make them

conform with the requirements of section 27-859 of this article. A chimney that is no longer connected with a fireplace or combustion or other equipment for which a chimney was required, shall be exempt from this requirement. Such alterations shall be accomplished by one of the following means or a combination thereof:

(1) Carry up the previously constructed chimneys to the height required in section 27-859 of this article.

(2) Offset such chimneys to a distance beyond that required in section 27-859 of this article from the new or altered building, provided that the new location of the outlet of the offset chimney shall otherwise comply with the requirements of this subchapter.

(b) Protection of draft. -After the alteration of a chimney as required by subdivision (a) of this section, it shall be the responsibility of the owner of the new or altered building to provide any mechanical equipment or devices necessary to maintain the proper draft in the equipment.

(c) Written notification. -The owner of the new or altered building shall notify the owner of the building affected in writing at least forty-five days before starting the work required and request written consent to do such work. Such notice shall be accompanied by plans indicating the manner in which the proposed alterations are to be made.

(d) Approval. -The plans and method of alteration shall be subject to the approval of the commissioner.

(e) Refusal of consent. -If consent is not granted by the owner of the previously constructed building to do the alteration work required by subdivisions (a) and (b) of this section, such owner shall signify his or her refusal in writing to the owner of the new or altered building and to the commissioner; and the owner of the new or altered building has submitted plans that conform to the requirements of this section, he or she shall thereupon be released from any responsibility for the proper operation of the equipment due to loss of draft and for any health hazard or nuisance that may occur as a result of the new or altered building. Such responsibilities shall then be assumed by the owner of the previously constructed building. Likewise, should such owner neglect to grant consent within forty-five days from the date of written request or fail to signify his or her refusal, he or she shall then assume all responsibilities as prescribed above.

(f) Procedure. -It shall be the obligation of the owner of the new or altered building to:

(1) Schedule this work so as to create a minimum of disturbance to the occupants of the affected building.

(2) Provide such essential services as are normally supplied by the equipment while it is out of service.

(3) Where necessary, support such extended chimneys and equipment from this building or to carry up such chimneys within his or her building.

(4) Provide for the maintenance, repair, and/or replacement of such extensions and added equipment.

(5) Make such alterations of the same material as the original chimney so as to maintain the same quality and appearance, except where the owner of the chimney affected shall give his or her consent to do otherwise. All work shall be done in such fashion as to maintain the architectural esthetics of the existing building.

(g) **Existing violations.** -Any existing violations on the previously constructed equipment shall be corrected by the owner of the equipment before any equipment is added or alterations made at the expense of the owner of the new or altered building.

(h) The commissioner may grant a variance in accordance with the provisions of section 27-107 of article one of subchapter one of this chapter.

§[1501.6] 27-861 Metal chimneys. -

(a) **Exterior metal chimneys.** - Exterior metal chimneys constructed of steel shall be of adequate thickness to resist all applied loads specified in subchapter nine of this chapter, but shall not be less than the thickness required in table 15-4.

(b) **Clearances for exterior metal chimneys.** -Metal chimneys erected on the exterior of a building shall have sufficient clearance from a wall or frame of combustible construction to satisfy the requirements of table 15-2 and to permit inspection and maintenance operations on the chimney, and shall comply with the following minimum requirements:

(1) Exterior metal chimneys over eighteen inches in diameter, for equipment of any operating temperature, shall have a clearance of at least four inches, and those eighteen inches or less in diameter shall have a clearance of at least two inches from a building wall of any combustible construction.

(2) No portion of an exterior metal chimney shall be nearer than twenty-four inches to any door or window or to any exit, or located where it would be readily accessible to the public, unless it is insulated or shielded to avoid injury to any person in contact with the chimney.

**TABLE 15-2 MINIMUM CLEARANCES
REQUIRED FROM ANY
COMBUSTIBLE MATERIALS**

Classification of Equipment		
Low Temperature	Medium Temperature	High Temperature
6"	24"	24"

**Bracket not enacted but probably intended.*

(c) **Enclosure of interior metal chimneys.** -

(1) Every interior metal chimney or part thereof erected within buildings shall be enclosed with non-combustible construction having a fire resistance rating of not less than that prescribed in table 15-3 in all stories above the one in which the equipment served thereby is located. Where the metal chimney passes through a combustible roof, it shall be guarded by a non-combustible ventilating thimble of galvanized metal or equivalent non-combustible material

that extends at least nine inches below and above the roof construction. The thimbles shall be of a size to provide clearances on all sides of the metal chimney of at least six inches for low temperature equipment and at least eighteen inches for medium and high temperature equipment as defined in subchapter fourteen of this chapter. However, if the metal chimney is insulated and protected to prevent a temperature of more than two hundred fifty degrees Fahrenheit on its exterior surface the thimble clearance may be reduced by fifty percent.

(2) The enclosure around a metal chimney shall provide a space on all sides of the chimney to permit inspection and repair for the entire chimney height. When metal chimneys have a minimum dimension of twenty-four inches in diameter and are completely jacketed with noncombustible insulating material within the required enclosure, access to permit inspection and repair shall not be required.

(3) The enclosing construction shall be of non-combustible materials and shall have a fire resistance rating as required in table 15-3 and shall be without openings, except access openings equipped with opening protectives constructed in accordance with the requirements of subchapter five of this chapter, at floor levels where necessary for complete inspection purposes.

(4) The required fire resistance ratings of table 15-3 for the enclosure of a medium or high temperature metal chimney may be reduced by one hour if the chimney is insulated with an insulation adequate for the temperature of the chimney and having at least a one hour fire resistance rating at all sections of the insulation.

**** TABLE 15-3 REQUIRED FIRE RESISTANCE
RATINGS OF ENCLOSURES FOR METAL
CHIMNEYS**

Chimney Classification	Required Fire Resistance Rating of Enclosure
Low Temperature	1 Hr. for buildings under 5 stories 2 Hr. for buildings 5 stories or more
Medium Temperature	2 Hr.
High Temperature	3 Hr.

Note for Table 15-3:

Table 3-4 of section 27-271 shall also be complied with in the construction of enclosures for metal chimneys.

**** Local Law 80-1989.**

(d) **Prohibited location.** -No interior metal chimney shall be carried up inside a ventilating duct unless such duct is constructed as required by this subchapter for metal chimneys, and only when such duct is used solely for exhaust venting the room or space in which the equipment served by the metal chimney is located. Metal chimneys shall not be installed in air supply ducts.

****(e)** Unlisted metal chimneys serving residential type or low heat appliances and producing flue gas having a temperature below 350°F at the entrance to the chimney at

full load or partial load shall be lined with acid and condensate resistant refractory material, or constructed of suitable stainless steel, or otherwise protected so as to minimize or prevent condensation or corrosion damage as required in reference standard RS 15-14.

****(f)** Steel chimneys for exterior use shall be insulated and weather sheathed to maintain flue surface temperatures above the acid dew point in all parts of the system in accordance with subdivision (b) of section 27-854.

****(g)** Steel chimneys for interior use shall be insulated to ensure enclosure temperatures not in excess of 160°F on combustible materials in accordance with subdivision (a) of section 27-854.

****Local Law 80-1989.**

§[1501.7] 27-862 Materials other than metal for construction of chimneys. -Materials other than metal for the construction of chimneys shall include the following:

- (a) Clay, concrete, or shale bricks, laid in a full bed of mortar.
- (b) One hundred percent solid masonry units, or hollow masonry units having the cores filled with mortar or grout, laid in spread mortar covering the entire cross-sectional area of the unit.
- (c) Concrete cast in place and adequately reinforced where required.
- (d) Natural stones that have been sawed, dressed, or have a tooled finish, laid in spread mortar.
- (e) Perforated radial brick. Such brick shall be laid in spread mortar equal to type M, of reference standard RS 15-3, and shall be shaped to the circular and radial lines of the various sections so as to form even joints.
- (f) Other equivalent materials or combination of materials.

TABLE 15-4 LOW TEMPERATURE CHIMNEY CONSTRUCTIONS

Material	Thickness	Lining Required	Type of Lining	Thickness	Air Space
Steel ^a (for exterior chimneys) ^b	1/8 in. for areas up to 7 sq. ft., 3/16 in. for areas up to 12.5 sq. ft., 1/4 in. for larger.	Not required	....	....	....
Steel ^a (for interior chimneys)	No. 16 U.S. gage for areas up to 155 sq. in., No. 14 U.S. gage up to 200 sq. in., No. 12 U.S. gage up to 255 sq. in., No. 10 U.S. gage for greater areas.	Not required	....	....	....
Brick, masonry units, or stone	8 inches ^c	Full height from chimney base to 4 in. above chimney walls.	Clay flue lining meeting requirements of Reference Standard RS 15-4, with fire clay mortar or cement mortar equal to that of Type M of Ref. Std. RS 15-3, or a heat-proof and acid-proof flue lining joint cement.	Not less than 5/8 in.	Not less than 1/4 in. nor more than 3/4 in. between chimney walls and flue lining.
Concrete	6 inches ^c	ditto	ditto	ditto	ditto
Radial brick	7 1/2 inches	Full height from chimney base to 4 in. above chimney wall.	Firebrick Type G, RS 15-6, laid in medium refractory mortar, RS 15-7, or acid resistant brick Type H or L, Ref. Std. RS 15-8.	4 1/2 inches	....
Brick type H or L, RS 15-7	8 inches	Not required	....	....	....

Notes for Table 15-4:

^aMetal chimneys shall be of riveted, bolted or welded construction and made gas tight.

^bExterior metal chimneys shall be galvanized, or painted on the exterior surface with a heat resisting paint or be constructed of equal corrosion resistive alloys.

^cIn buildings in residential occupancy group J3, of four stories or less, and in other buildings not over two stories high and not in high hazard occupancy group A, providing the flue areas are not more than 200 sq. in. the walls of masonry or concrete chimneys may be reduced to 4 in. with fire clay flue lining. Flue linings shall be set ahead of chimney walls, and carefully bedded in fire clay mortar or in cement mortar. Chimney walls shall be provided with mortar spacer ties every 10 ft. of height. Mortar ties shall not be continuous around the flue linings.

***TABLE 15-5 MEDIUM TEMPERATURE CHIMNEY CONSTRUCTIONS**

Material	Thickness	Lining Required	Type of Lining	Thickness	Air Space
Steel	Same as for low temp. chimney	Lining is required for full height of chimney.	Incinerators only- Castable refractory CI A, RS 15-5 Medium-duty fireclay refractory brick (ASTM C64) or the equivalent laid in medium-duty refractory mortar (ASTM C105) or the equivalent, RS 15-6.	2 inches The lining shall be at least 2 ½ in. thick for chimneys having a diameter or greatest cross-section dimension of 18 in. or less. The lining shall have a thickness of not less than 4 ½ in. laid on a full bed for chimneys having a diameter or greatest cross-section dimension greater than 18 in.	None required
Brick or masonry units	8 inches	Full height from chimney base to 4 in. above chimney wall.	Firebrick Type G, RS 15-6 laid in medium refractory mortar, RS 15-7, or acid resistant brick Type H or L, Ref. Std. RS 15-8.	4 ½ inches	None required
Concrete	6 inches	ditto	ditto	ditto	ditto
Stone	12 inches	ditto	ditto	ditto	ditto
Radial brick	7 ½ inches	Full height from chimney base to 4 in. above chimney wall.	ditto	ditto	ditto
Brick masonry units, stone, or concrete	Double wall construction, each wall 8 inches thick	From 2 feet below to a height of 25 feet above the point of entry if connector, the inner wall shall be lined.	Fire clay flue lining, as required for low temperature masonry chimneys.	5/8 inch	2 in. air space between each 8 in. wall, fire-stopped at each floor with non-combustible material.

**Local Law 80-1989.*

***§[1501.8] 27-863 Chimney construction for low, medium, and high temperature equipment.-**

- (a) Unlisted chimneys for low temperature equipment shall be constructed in accordance with table 15-4.
- (b) Unlisted chimneys for medium temperature equipment shall be constructed in accordance with table 15-5.
- (c) Unlisted chimneys for high temperature equipment shall be constructed in accordance with table 15-6.

**Local Law 80-1989.*

***§27-863.01 Chimney limitations and tests.-**

No solid fuel fireplace, fireplace stove or room heater shall be installed or altered unless connected to a chimney which complies with the limitations and testing requirements set forth in table 15-6.1.

**Local Law 80-1989.*

§[1501.9] 27-864 Chimney supports.-

- (a) Chimneys shall not be supported by the equipment they serve unless such equipment has been specifically designed for such loads.
- (b) An exterior metal chimney shall be supported on an independent substantial masonry or concrete foundation designed in accordance with the provisions of subchapters ten and eleven of this chapter. Interior metal chimneys may be supported on noncombustible construction at intermediate levels.
- (c) Masonry and concrete chimneys may be designed and constructed as free standing, or as constituting an integral part of a wall, or may be enclosed within a structure without constituting a component part thereof.

***TABLE 15-6 HIGH TEMPERATURE CHIMNEY CONSTRUCTIONS**

Material	Thickness	Lining Required	Type of Lining	Thickness	Air Space
Steel	Same as for low temp. chimney	For full height of chimney	High-duty fireclay refractory brick (ASTM C64) or the equivalent not less than 4 ½ in. thick laid on a full width bed in high-duty refractory mortar (ASTM C105) or the equivalent, RS 15-6.	4 ½ inches	None required
Brick masonry or concrete	Double wall construction with each wall 8 inches thick and an intervening air space	Inner course of inner wall shall be a firebrick, form 2 feet below connector to full height of chimney	Firebrick same as above for steel chimneys, except no castable refractory permitted.	4 ½ inches	2 in. air space required between the two 8 in. walls, fire-stopped as for medium temperature chimneys.
Steel and masonry, or concrete single wall. (Steel on inside of chimney)	Steel as above, with a single 8 in. masonry or 6 in. concrete wall and an intervening air space.	For full height of chimney	Firebrick and castable refractory, same as above for steel chimneys.	4 ½ inches 2 inches	2 in. air space required between the steel and the masonry or concrete wall, fire-stopped as per medium temperature chimneys.
Radial Brick	7 ½ inches	For full height from chimney base to 4 in. above chimney wall.	Firebrick as above for steel chimneys except no castable refractory permitted	4 ½ inches	None required

***TABLE 15-6.1 CHIMNEY LIMITATIONS AND TESTS FOR SOLID FUEL FIREPLACES, FIREPLACE STOVES AND ROOM HEATERS**

Occupancy	Reference Standard	Test Standard	Temperature	Number of Tests
J-2 & J-3 limited to 40 feet and three stories	RS 15-15	UL 127, as Modified	1700°F	1 test
J-2 & J-3 limited to 75 feet	RS 15-9	UL 103HT	2100 °F —10 min.	3 tests
	RS 15-12	ULC 629M	2100 °F —30 min.	3 tests
All other occupancies and all buildings greater than 75 feet in height	RS 15-10	UL 959	2100 °F to Equilibrium and 2300 °F —30 min.	1 test 3 tests
	Table 15-6 of subdivision (c) of section 27-863 and Section 27-861	No Standard	Unlisted High Temp. Chimney with Required Thickness listed in Table 15-6	No test

Notes for Table 15-6.1:

Chimneys accepted pursuant to reference standard RS 14-10 or Table 15-6 may be used in lieu of chimneys accepted pursuant to reference standards RS 15-9, RS 15-12, and RS 15-15.

Chimneys accepted pursuant to reference standards RS 15-9 or RS 15-12 may be used in lieu of chimneys accepted pursuant to reference standard RS 15-15.

***Local Law 80-1989.**

(d) Masonry and concrete chimneys shall be wholly supported on noncombustible construction that shall conform to the requirements of subchapters ten and eleven of this chapter, and shall not be required to support any direct load other than the weight of the chimney. No supports shall project into the chimney flue or flue lining.

*(e) Supports for listed chimneys shall be listed and installed in accordance with the listing and acceptance.

**Local Law 80-1989.*

§[1501.10] 27-865 Chimney caps.- All masonry chimneys shall be capped with concrete, cement wash, terra cotta tile, or other equivalent material.

§[1501.11] 27-866 Corbelling of chimneys. -Walls less than twelve inches thick shall not be corbelled. The maximum horizontal projection in any corbel shall be one inch for each two inches of vertical projection and in all cases the total projection shall not be greater than one-third of the minimum thickness of the wall to be corbelled. In no case shall the total projection be more than six inches. No masonry chimney shall be corbelled from hollow or cavity wall masonry units.

***§[1501.12] 27-867 Clearances from masonry and concrete chimneys.** -

(a) All wood beams, joists, and studs shall be framed away from chimneys. Headers, beams, joists, and studs shall be at least two inches from the outside face of a chimney or from masonry enclosing a flue. Trimmers shall be not less than five inches from the inside face of the concrete or masonry chimney wall. Finished flooring shall have at least one-half inch clearance from chimney walls.

(b) A clearance of at least four inches shall be provided between the exterior surfaces of masonry or concrete chimneys for commercial and industrial type incinerators and combustible material.

(c) A clearance of at least two inches shall be provided between the exterior surfaces of interior masonry or concrete chimneys for all wood burning appliances.

(d) No combustible lathing, furring, or plaster grounds shall be placed against a chimney at any point more than one and one-half inches from the corner of the chimney; but this shall not prevent plastering directly on masonry or on metal lath and metal furring nor shall it prevent placing chimneys for low temperature equipment entirely on the exterior of a building against the sheathing.

(e) All spaces between chimneys and wood joists, beams, or headers shall be firestopped in accordance with the provisions of subchapter five of this chapter.

(f) No change in the size or shape of a chimney shall be made within six inches of the roof framing through which it passes.

**Local Law 80-1989.*

§[1501.13] 27-868 Smoke test. -

(a) **General.** -When required by the commissioner to determine the tightness of chimney constructions, a smoke test shall be made in accordance with the following conditions and requirements:

(1) The equipment, materials, power and labor necessary for such test shall be furnished by, and at the expense of, the owner or holder of the work permit.

(2) If the test shows any evidence of leakage or other defects, such defects shall be corrected in accordance with the requirement of this subchapter and the test shall be repeated until the results are satisfactory.

(b) **Method of test.** -The chimney shall be filled with a thick penetrating smoke produced by one or more smoke machines, or smoke bombs, or other equivalent method. As the smoke appears at the stack opening on the roof, such opening shall be tightly closed and a pressure equivalent to a one-half inch column of water measured at the base of the stack, shall be applied. The test shall be applied for a length of time sufficient to permit the inspection of the chimney.

§[1501.14] 27-869 Exhaust gases from internal combustion engines. -

(a) **Exhaust pipe construction.** -The exhaust pipe from internal combustion engines shall be constructed in accordance with the requirements for metal chimneys based on the temperature of the gases entering the exhaust pipe, and in accordance with the following:

(1) The requirements for at least a medium temperature chimney shall apply.

(2) The exhaust pipe shall be constructed of at least three-sixteenths inch steel, or of other equivalent metal of similar strength and resistance to the temperature and corrosive action of the exhaust gases.

(3) No lining shall be required.

(4) Where the exhaust pipe runs inside a building, it shall be insulated with an insulation adequate for the temperature of the pipe, so that the surface temperature shall be not more than two hundred degrees Fahrenheit.

(5) All joints shall be constructed so as to be gastight under all operating conditions. No threaded joints shall be permitted in pipe sizes over four inches or in pipe of a thickness less than that of schedule 40 steel pipe.

(b) **Location of discharge opening.** -The location of the discharge opening of the exhaust pipe shall comply with the requirements of subdivision (d) of section 27-776 of article one of subchapter thirteen of this chapter, and, in addition, the opening shall be located or arranged so that it cannot cause condensate leaving the outlet to come in contact with people. The exhaust pipe may be connected to a chimney used for other equipment, provided that the operation of the engine does not adversely affect the operation of the other equipment so as to cause a fire or health hazard, or to cause the emissions from the chimney to be in violation of the air pollution control code.

§27-869.01 Factory-built chimneys. -

(a) **Residential occupancy.** In residential occupancy groups J-2 and J-3:

(1) Factory-built chimneys servicing liquid or gas fueled appliances shall be listed and accepted in accordance with reference standard RS 15-8[A].*

***Copy in brackets not enacted but probably intended.*

(2) Factory-built chimneys servicing wood burning fireplaces or stoves and inserts shall be listed and accepted in accordance with reference standards RS 15-9, RS 15-10, RS 15-12 or RS 15-15.

(3) Factory-built chimneys servicing factory-built fireplaces shall be listed and accepted in accordance with reference standard RS 15-15.

(b) Other occupancies. In all other occupancy groups:

(1) Factory-built chimneys servicing liquid or gas fueled appliances shall be listed and accepted in accordance with reference standard RS 15-10 or RS 15-11.

(2) Factory-built chimneys servicing wood burning appliances of any type shall be listed and accepted in accordance with reference standard RS 15-10.

(c) Enclosures. All factory-built chimneys shall be enclosed in accordance with the requirements of table 15-3.

(d) Height limitation: Every chimney servicing a factory-built fireplace or wood burning stove in a building of more than seventy-five feet in height shall be listed and accepted in accordance with reference standard RS 15-10, unless such chimney is an unlisted high temperature chimney constructed in accordance with the requirements of section 27-861 and of table 15-6 of subdivision (c) of section 27-863, and is installed to serve the appliance.

**Local Law 80-1989.*

***§27-869.02 Changes in appliance fuels. -**

(a) Conversion from gas to fuel oil or wood for heating appliances shall be made only if:

(1) the chimney design meets the requirements of this subchapter for the conversion fuel; and

(2) the chimney size is adequate to vent the combustion products from the new fuel.

(b) Conversion from solid or liquid fuels to natural gas fuels for heating appliances shall be made only if:

(1) the chimney design meets the requirements of this subchapter for the conversion fuel;

(2) the chimney is thoroughly cleaned prior to the conversion to remove collected flue deposits, which can spall off when gas is used as a fuel;

(3) the chimney size is recalculated for the new fuel;

(4) drains are installed to remove condensed water; and

(5) gas vents are installed within the chimney for venting purposes if required by the appliance listing.

**Local Law 80-1989.*

*** §27-869.03 Reduction in flue size. -**Conversion from one fuel to another or the use of an existing chimney to service a fireplace or wood burning appliance may require a flue size change for proper operation. This may be done if the redesigned flue meets the criteria for the fuel and chimney type to be used as set forth in this subchapter.

(a) Individual fireclay flue linings, in conformance with reference standard RS 15-14 or the equivalent not less than five-eighths inch thick, may be used but shall be carefully bedded one on the other in medium-duty fireclay refractory mortar in conformance with reference standard RS 15-6 or the equivalent as determined by the commissioner, with close fitting joints left smooth on the inside. Linings shall be separate from the chimney

wall and the space between the liner and masonry shall not be filled; only enough mortar shall be used to make a good joint and hold the liners in position.

(b) Cast in place chimney linings. -

(1) Cast in place linings shall be installed in accordance with reference standard RS 15-16 and with their listing and acceptance.

(2) The applicant prior to the installation of the lining shall verify that the chimney meets the requirements of reference standard RS 15-4 and is in a sound and uncracked condition, that spalling has been removed and that there are no carbon or creosote deposits.

**Local Law 80-1989.*

ARTICLE 3 CHIMNEY CONNECTORS

§[1502.1] 27-870 Chimney connector construction. -

Chimney connectors except those serving incinerators shall be constructed of galvanized steel of thickness conforming to the requirements listed in subdivision (a) of this section or of equivalent materials. Cleanout doors of the same material as the connector or other equivalent means shall be provided for the cleaning of connectors. Tile pipe shall not be used as a chimney connector.

(a) Thickness of metal. -The thickness of galvanized steel for chimney connectors shall be not less than that given in table 15-7.

(b) General. -All chimney connectors shall be as short and as straight as possible consistent with their use and the required draft conditions. No chimney connector shall pass through a floor or ceiling construction.

TABLE 15-7 REQUIRED THICKNESS OF GALVANIZED STEEL FOR CONNECTORS

Galvanized Sheet Gage [<i>sic</i>]	No. Area of Connector Sq. In.
24	less than 79
22	80 to 154
20	155 to 200
16	Over 200

§[1502.2] 27-871 Chimney connection. -In entering a flue in a masonry or metal chimney, the chimney connector shall be installed above the extreme bottom to avoid stoppage and in such manner or by such means as to prevent the chimney connector from entering so far as to restrict the space between its end and the opposite wall of the chimney. The chimney connector shall be firmly attached or inserted into a thimble or slip joint to prevent it from falling out of place. All connectors shall fit tightly. Chimney connections to any flue shall be limited to one floor. Two or more chimney connectors may be joined to a single connection provided that the chimney connectors are on one floor level and the flue is of sufficient size to serve all of the equipment thus connected. Chimney connectors shall be inspected at the time of the initial installation by the commissioner or by a duly authorized insurance company as provided in section two hundred four of the labor law.

§[1502.3] 27-872 Chimney connector clearances. -

(a) From combustible construction. -The minimum distance between the chimney connector and any combustible material or construction shall be:

(1) eighteen inches for chimney connectors from low temperature equipment.

(2) thirty-six inches for chimney connectors from medium temperature and high temperature equipment.

(b) Reduced clearances. -The above clearances may be reduced as outlined in table 15-8 in accordance with the type of protection applied to the combustible material or construction.

***TABLE 15-8 REDUCED CLEARANCES FOR CHIMNEY CONNECTORS WITH SPECIFIED FORM OF PROTECTION^{1, 2, 3, 4}**

Type of protection	Where the required clearance with no protection is:			
Applied to the combustible material and covering all surfaces within the distance specified as the required clearance with no protection. Thicknesses are minimum	36 in.	18 in.	9 in.	6 in.
(a) 0.027 in. (23 gage) [sic] sheet metal spaced out 1 in.	36 in.	18 in.	9 in.	6 in.
(b) 3 ½ in. thick masonry wall spaced out 1 in. and adequately tied to the wall being protected. (see Note 4.)	18 in.	9 in.	4 in.	2 in.
(c) 0.027 in. (23 gage) [sic] sheet metal on 1 in. mineral wool batts reinforced with wire or equivalent spaced out in 1 in.	12 in.	3 in.	2 in.	2 in.

Notes for Table 15-8:

¹ Spacers and ties shall be of noncombustible material.

² All methods of protection require adequate ventilation between protective material and adjacent combustible walls and ceilings.

³ Mineral wool batts (blanket or board) shall have a minimum density of 8 lb. per cu. ft. and a minimum melting point of 1500°F.

⁴ If a single wall connector passes through the masonry wall there shall be at least 1/2 in. open ventilated airspace between the connector and the masonry.

**Local Law 80-1989.*

§[1502.4] 27-873 Underground chimney connectors. -

Underground chimney connectors shall be covered with at least twelve inches of solid masonry or an equivalent insulation. Each cleanout opening shall be provided with double iron doors or covers, and the doors or covers shall be twelve inches apart with the intervening space filled with insulating material. The doors or covers shall be not less than 10 manufacturer's standard gage [sic]. No combustible flooring shall be permitted over such connectors.

§[1502.5] 27-874 Annual inspection of chimney connectors. -

Chimney connectors for boilers subject to section two hundred four of the labor law shall be inspected at least once a year by the commissioner or by a duly authorized insurance company, as provided in subdivision (b) of section 27-793 of article two of subchapter fourteen of this chapter and shall be subject to procedures listed therein.

ARTICLE 4 INCINERATOR CHIMNEYS AND REFUSE CHARGING CHUTES

§[1503.1] 27-875 Charging chutes for refuse reduction. -

Charging chutes shall be constructed in accordance with the following requirements:

(a) Directly connected. -When directly connected to the combustion chamber of an incinerator, the chutes shall be gas tight with smooth linings and shall conform to the following:

(1) They shall be constructed in accordance with the requirements for medium temperature chimneys.

(2) They shall extend through the building roof and be open to the outer air. The opening shall be equal to the required chute size at the top floor.

(3) If a roof damper is used it shall be constructed to open automatically under conditions of excessive pressure or temperature. The roof damper shall be electrically interlocked with the auxiliary burners.

(4) Each charging chute shall be provided with a spark arrester of corrosion resistive, noncombustible construction in which the maximum size of mesh opening shall not exceed three-quarters of an inch. The cross-sectional free area of such arrester shall be not less than that of the inside of the chute to which it is attached. The height of the spark arrester shall be such that there will be a minimum of twenty-four square feet of total free area provided for a chute height to sixty feet; thirty-six square feet for a chute height from sixty-one feet to one hundred twenty feet; and forty-four square feet for chute heights over one hundred twenty feet. In no case, however, shall the height of the spark arrester be less than one foot.

(5) Provisions shall be made for sterilizing the charging chute by heating or purging at a temperature of at least four hundred degrees Fahrenheit but not higher than one thousand degrees Fahrenheit.

(b) Not directly connected. -When not directly connected to a building service incinerator, the chutes shall be gas tight with smooth linings and shall conform to the following:

(1) They shall be constructed in accordance with the applicable requirements for shafts in table 3-5** and subchapter five of this chapter.

**As enacted but "3-4" probably intended.

(2) They shall extend through the building roof and be open to the air. The opening shall be equal to at least one square foot.

(3) If a roof damper is used it shall be constructed to open automatically under conditions of excessive pressure or temperature.

(4) Provisions shall be made for sterilizing the chute by spraying, washing, or other equivalent means.

(5) Bins, containers, or rooms for receiving rubbish shall be constructed as required by section 27-837 of article eighteen of subchapter fourteen of this chapter and sprinklers shall be provided as required by the construction provisions of subchapter seventeen of this chapter.

(c) Sizes. -

(1) The sizes of chutes directly connected to the incinerators in buildings shall conform to table 15-9.

(2) Charging chutes not directly connected to the incinerator shall have a cross-sectional free area adequate for the service intended.

(d) Charging doors. -Charging doors, service openings, or hopper doors for chutes may be located in separate rooms or compartments enclosed in non-combustible walls or partitions, floors, and ceilings having a fire resistance rating of at least one hour and a self-closing fire door with a three-quarter-hour fire-protection rating. Service openings shall, in no case, have a free area of more than one-third of the cross-sectional free area of the chute to which they give access. All such openings shall be substantially constructed of steel or the equivalent metal of sufficient thickness to prevent distortion or other damage in normal usage. The door shall be provided with counterweights, door checks, or other equivalent means for automatically closing after use and where the chute is connected directly to the combustion chamber of an incinerator, the door shall be so constructed that the chute is closed off while the hopper is being loaded. No part of the door shall project into the chute at any time. The minimum height of charging door openings shall be eleven inches, and the minimum width shall be thirteen inches.

(e) When charging chutes are located in multiple dwellings, in addition to the requirements of this subchapter, the chutes shall be constructed in accordance with the requirements for noise control of chutes in subchapter twelve of this chapter.

TABLE 15-9 MINIMUM SIZE OF CHARGING CHUTES

Building Height	Location	If Square		If Round
7 stories or less	All 7 stories	22 ½"	x 22 ½"	24" dia.
8 to 30 stories	Top 7 stories	22 ½"	x 22 ½"	24" dia.
	8 th to 30 th from the top	27"	x 27"	30" dia.
31 stories and over	Top 7 stories	22 ½"	x 22 ½"	24" dia.
	8 th to 30 th from the top	27"	x 27"	30" dia.
	Remaining lower	32"	x 32"	36" dia.

§[1503.2] 27-876 Chimneys for building service incinerators. - Chimneys for building service incinerators

shall be constructed in accordance with the requirements of this subchapter for high or medium temperature chimneys, based upon the temperature of the flue gases leaving the equipment, except that no reduction of flue gas temperature shall be recognized if such reduction is the result of using water scrubbers or barometric dampers. In addition, such chimneys shall comply with the following:

(a) Chimneys shall extend through the roof and be open to the air.

(b) Chimneys shall be provided with a spark arrester as required in paragraph four of subdivision (a) of section 27-875 of this article.

(c) Incinerators may discharge into chimneys serving other equipment provided such combined chimney is of adequate size for both uses, conforms to construction required for the highest temperature, and adequate draft control equipment is provided for each device connected to the combined chimney.

§[1503.3] 27-877 Chimneys for industrial or municipal incinerator plants. - Chimneys for central incinerator plants shall be constructed in accordance with the requirements for:

(a) Medium temperature chimneys if the incinerator is provided with a heat recovery unit or other means to assure a flue gas temperature not in excess of one thousand degrees Fahrenheit at the base of the stack.

(b) High temperature chimneys if the incinerator has no heat recovery unit or other means to assure a flue gas temperature less than one thousand degrees Fahrenheit.

§[1503.4] 27-878 Incinerator chimney connectors. -

(a) The chimney connector from the combustion chamber of an auxiliary fuel-fired incinerator shall be constructed of metal at least as heavy as no. 16 manufacturers standard gage [*sic*] when twelve inches or less in diameter or greater dimension, and of metal at least as heavy as no. 12 manufacturers standard gage [*sic*] when they exceed twelve inches in diameter or greater dimension.

(b) Chimney connectors from auxiliary fuel-fired incinerators shall be lined with firebrick, laid in fire clay mortar, at least two and one-half inches thick when they are between twelve inches and eighteen inches in diameter or greater dimension and at least four and one-half inches thick when they are larger; where no flue gas temperature reduction is effected the chimney connectors shall be equipped with a guillotine or horizontal sliding damper or butterfly damper interlocked with the fuel firing controls so that operation of the incinerator occurs when the damper is open. If chimney connectors from auxiliary fuel-fired incinerators lead into and combine with chimney connectors from other equipment, the connectors from the other equipment shall also be lined as required for direct flue connections unless the cross-sectional area of the connector into which they lead is at least four times their required cross-sectional area.

(c) Chimney connectors for an auxiliary fuel-fired incinerator to a boiler stack or chimney for [*sic*] high temperature heating equipment shall be permitted when the cross-sectional area of such stack or chimney is at least four times that of the incinerator chimney connector.

(d) The clearance of incinerator chimney connectors from combustible material or construction shall be at least thirty-six inches. This clearance may be reduced as outlined in

table 15-8 in accordance with the type of protection applied to the combustible material or construction.

ARTICLE 5 GAS VENT SYSTEMS

†§[1504.1] 27-879 General. -

(a) Vent systems of gas-fired equipment shall be so designed and constructed as to completely exhaust the products of combustion to the outdoor air.

(b) When required by the commissioner, gas vents shall be tested to determine fire safety and the adequate exhausting of the products of combustion.

(c) Vents shall be installed if required, in accordance with the applicable standards for gas-fired equipment. See reference standard RS 15-2 for a tabulation of these standards.

†*Local Law 80-1989.*

†§[1504.2] 27-880 Equipment not required to be vented.-

(a) Ranges for which a vent is not required by reference standard RS 15-2.

(b) Built-in domestic cooking units for which a vent is not required by reference standard RS 15-2.

(c) Hot plates and laundry stoves.

(d) Type 1 clothes dryers.

(*e) Water heaters with inputs not over five thousand Btu/hr. (See note below.)

(*f) Automatically controlled instantaneous water heaters that supply water to a single faucet which is attached to and made a part of the equipment.

(*g) A single booster type (automatic instantaneous) water heater when designed and used solely for the sanitizing rinse requirements of a national sanitation foundation class one, two or three dishwashing machine, provided that the input is limited to fifty thousand Btu/hr. The storage capacity is limited to twelve and one-half gallons and the heater is installed in a commercial kitchen having a mechanical exhaust system.

(*h) Refrigerators.

(*i) Counter equipment.

(*j) Room heaters for which a vent is not required by reference standard RS 15-0.

(*k) Other equipment for which a vent is not required and which are not provided with flue collars.

(*l) Specialized equipment of limited input such as laboratory burners or gas lights.

*See notes at end of Section 27-880.

†*Local Law 80-1989.*

Notes:

When any, or all, of the equipment marked with an asterisk (*) is installed so that the aggregate input rating exceeds thirty Btu/hr. per cubic foot of room or space in which it is installed, one or more pieces of the equipment shall be provided with a venting system or other equivalent means for removing the vent gases to the outdoor air so that the aggregate input rating of the remaining unvented equipment does not exceed the thirty Btu/hr. per cubic foot figure. When the room or space in which such equipment is installed is directly connected to another room or space by a doorway, archway, or other opening of comparable size, which cannot be closed, the volume of such adjacent room or space may be included in the calculations.

†§[1504.3] 27-881 Draft hoods. -

(a) All vented equipment, except dual oven type combination ranges, equipment with sealed combustion

chambers, and units designed for power burners or forced venting, shall be installed with a draft hood or with a barometric damper.

(b) The draft hood supplied with, or forming a part of, vented equipment shall be installed in accordance with the requirements of the applicable standard in reference standard RS 15-2. The draft hood shall be located in the same room as the combustion air opening of the equipment.

†*Local Law 80-1989.*

§[1504.4] 27-882 Chimneys for venting gas-fired equipment.-

When venting of gas-fired equipment is provided for by the use of chimneys, such chimneys shall be constructed in accordance with the requirements of this subchapter.

§[1504.5] 27-883 Gas equipment connected to chimneys.-

Automatically controlled gas-fired equipment connected to a chimney that also serves equipment for the combustion of solid or liquid fuel shall be equipped with an automatic pilot. A gas-fired equipment vent connector and a chimney connector from equipment burning another fuel, located on the same floor, may be connected into the same chimney through separate openings, or may be connected through a single opening if joined by a suitable fitting located as close as practicable to the chimney. If two or more openings are provided into one chimney, they shall be at different levels.

§[1504.6] 27-884 Types of gas vents. -

†(a) **Type B gas vents.** -Type B gas vents conforming to the requirements of section 27-855 of article one of this subchapter may be used to vent gas-fired equipment. Type B gas vents may be used for single-story or multi-story installations when they conform to the requirements of section 27-855 of article one of this subchapter and the gas equipment used in multi-story installations shall be accepted for such use. Type B gas vents shall be used to vent only listed gas appliances with draft hoods and other gas appliances listed for use with Type B gas vents. However, Type B gas vents shall not be used for venting:

- (1) vented wall furnaces listed for use with Type BW gas vents only;
- (2) incinerators;
- (3) appliances which may be converted readily to the use of solid or liquid fuels;
- (4) combination gas-oil burning appliances;
- (5) appliances listed for use with chimneys only.

†*Local Law 80-1989.*

†(b) **Type B-W gas vents.** -Type B-W gas vents conforming to the requirements of section 27-855 of article one of this subchapter shall be used to vent gas-fired vented recessed heaters. Type B-W gas vents may be used with single-story or multi-story installations when they conform to the requirements of section 27-855 of article one of this subchapter and the gas equipment used in multi-story installations shall be accepted for such use. Type BW vents shall be used with listed vented gas wall furnaces having a capacity not greater than that of the listed Type BW gas vent.

†*Local Law 80-1989.*

(c) **Single-wall metal vents.** -Single-wall metal vents may be used to vent gas-fired equipment and shall be constructed of not less than 16 oz. sheet copper, or No. 20 galvanized sheet gage [*sic*] steel, or of other

equivalent noncombustible corrosion-resistive material. Single-wall metal gas vents may pass through the roof or exterior wall to the outdoor air, but shall not pass through any attic or other concealed space nor through any intermediate floor construction.

(d) Connection to a common vent. -Connection of gas-fired equipment on more than one floor level to a common vent, except as provided for in subdivisions (a) and (b) of this section, shall be prohibited.

(e) Ventilating hoods. -Ventilating hoods and exhaust systems may be used to vent kitchen, laboratory, and commercial [sic] equipment.

§[1504.7] 27-885 Labeling gas vents. -Gas vents for use with gas-fired equipment, and which are not designed for use with solid or liquid fuel-fired equipment, shall be plainly and permanently identified by a metal label etched or embossed to read: "This gas vent is for equipment which burns gas only. Do not connect to incinerator or solid or liquid fuel-burning equipment." This label shall be attached to the vent at a point near where the gas vent system enters the wall, ceiling, or chimney.

§[1504.8] 27-886 Special venting arrangements. -

(a) Equipment with sealed combustion chambers. - The vent requirements contained in this subchapter do not apply to equipment having sealed combustion chambers and which are so constructed and installed that all air for combustion is derived from outside the space being heated and all flue gases are discharged by integral vent to the outdoors. Such equipment, having integral venting, shall be installed in accordance with the conditions of the applicable standard governing their use.

(b) Gas-vent exhausters and chimney exhausters. - Gas-vent exhausters and chimney exhausters may be used with gas appliances in lieu of natural draft vents. Where an exhauster is used with gas-burning equipment requiring venting, provisions shall be made to prevent the flow of gas to the main burner in the event of failure of the exhaust system. A vent connector serving gas equipment vented by natural draft shall not be connected into the discharge side of a power exhauster.

(c) Ventilating hoods and exhaust systems. - Ventilating hoods and exhaust systems may be used to vent gas equipment installed in commercial applications. When automatically operated equipment, such as water heaters, are vented through natural-draft ventilating hoods, dampers shall not be installed in the ventilating system. When the ventilating hood or exhaust system is equipped with a power-driven exhaust fan, the equipment control system shall be so interlocked as to permit equipment operation only when the power exhaust is in operation. When used, ventilating hoods shall be built and installed in accordance with the provisions of subchapter thirteen of this chapter.

§[1504.9] 27-887 Installation requirements. -

(a) The gas vent connected to equipment with a single vent shall not be less than the size of the draft hood outlet, and in no case less than two inches in diameter.

(b) When more than one piece of equipment is connected to a gas vent, the area shall be not less than the area of the largest vent connector plus fifty percent of the areas of

additional vent connectors or in accordance with the provisions of reference standard RS 15-1.

(c) Where two or more vent connectors enter a common vertical gas vent or chimney, the smaller connector shall enter at the highest level consistent with available headroom or clearance to combustible material. Two or more items of gas equipment may be vented through a common vent connector or manifold located at the highest level consistent with available headroom or clearance to combustible material. The manifold, all junction fittings, and the common vent connector shall be of a size adequate for the combined volume of the vent gases.

(d) Gas vents shall be enclosed as provided in subdivision (c) of section 27-861 of article two of this chapter.

§[1504.10] 27-888 Gas vent height and locations. - Gas vents shall extend at least two feet above the highest construction, such as a roof ridge, parapet wall, or penthouse, within ten feet of the vent outlet whether the construction is on the same building as the chimney or on another building. However, such constructions do not include chimneys or other vents, or open structural framing. The vent shall be as high as such construction which is located beyond ten feet from the vent and up to and including the distance determined by the following formula:

$$D = 2 \sqrt{A}$$

where:

D = Distance in ft., measured from the center of the vent outlet to the nearest edge of the construction.

A = Free area, in sq. in., of vent flue space.

Vents shall be subject to the following additional requirements:

(a) No gas vent shall terminate less than five feet in vertical height above the highest connected equipment draft hood outlet or flue collar.

(b) No type B-W gas vent serving a vented recessed heater shall terminate less than twelve feet in vertical height above the bottom of the heater.

(c) All gas vents shall terminate in an approved vent or cowl, which shall prevent down drafts and prevent rain and debris from entering the vent.

§[1504.11] 27-889 Adjoining gas vents. -

(a) Responsibility of owner of taller building. - Whenever a building is erected, enlarged, or increased in height so that any portion of such building, except chimneys or vents, extends above the top of a previously constructed gas vent within fifty feet, the owner of the new or altered building shall have the responsibility of altering such gas vents that have their outlets within fifty feet measured horizontally, of any part of the newly erected building. Such alterations shall be at the expense of the owner of the new or altered building and shall be accomplished by one of the following means or a combination thereof:

(1) Carry up such previously constructed vents from gas-fired equipment to the eight required in section 27-888 of this article.

(2) Offset such gas vents to a distance of more than fifty feet from the new or altered building, provided that

the new location of the outlet of the offset gas vent shall comply with the requirements of this subchapter.

(b) Protection of draft. -After the alteration of a gas vent as described in subdivision (a) of this section, it shall be the responsibility of the owner of the new or altered building to provide any mechanical devices or equipment necessary to maintain the proper draft in the equipment.

(c) Written notification. -The owner of the new or altered building shall notify the owner of the building affected in writing at least forty-five days before starting the work and request written consent to do such work. Such notice shall be accompanied by a written description or a plan showing how the proposed alterations are to be made.

(d) Approval. -The method of correction shall be subject to the approval of the commissioner.

(e) Refusal of consent. -If consent is not granted by the owner of the previously constructed or altered building to do the alteration work required by paragraph one of subdivision (a) of this section, such owner shall signify his or her refusal in writing to the owner of the new or altered building and to the commissioner, and the owner of the new or altered building has submitted plans that conform to the requirements of this section, he or she shall thereupon be released from any responsibility for the operation of his or her equipment and for any health hazard or nuisance that may occur as a result of the newly erected or modified building. Such responsibilities shall then be assumed by the owner of the previously constructed building. Likewise, should such owner neglect to grant consent within forty-five days from the date of written request or fail to signify his or her refusal, he or she shall then assume all responsibilities as prescribed above.

(f) Procedures. -It shall be the obligation of the owner of the new or altered building to:

- (1) Schedule this work so as to create a minimum of disturbance to the occupants of the affected building.
- (2) Provide such essential services as are normally supplied by the equipment while it is out of service.
- (3) Where necessary, support such extended gas vents from his or her building or carry up such vents within his or her building.
- (4) Provide for the maintenance, repair, and/or replacement of such alterations.
- (5) Make such alterations of the same material as the original gas vent except where the owner of the vent affected shall give his or her consent to do otherwise. All work shall be done in such fashion as to maintain the architectural esthetics of the existing building.

(g) Existing violations. -Any existing violations on the previously constructed equipment shall be corrected by the owner of the equipment before any equipment is added or alterations made at the expense of the owner of the new or altered building.

(h) The commissioner may grant a variance in accordance with the provisions of section 27-107 of article one of subchapter one of this chapter.

§[1504.12] 27-890 Support of gas vents. -All portions of gas vents shall be adequately supported for the weight of the material used and for the applied loads on the vent.

§[1504.13] 27-891 Prohibited termination. -Gas vents extending through outside walls shall not terminate below eaves or parapets.

ARTICLE 6 GAS VENT CONNECTORS

§[1505.1] 27-892 Construction. -Vent connectors for conversion burners without draft hoods, or other gas-fired equipment without draft hoods, shall be constructed of materials having resistance to corrosion and temperature not less than that of no. 24 galvanized sheet gage *[sic]* steel.

(a) Vent connectors used for gas-fired equipment having draft hoods and for conversion burners having draft hoods, shall be constructed of Type B gas vent material or materials having resistance to corrosion and temperature not less than that of no. 26 galvanized sheet gage *[sic]* steel.

(b) The vent connector between the equipment and the vertical gas vent or chimney shall have the greatest possible initial rise consistent with the headroom available in the equipment area and with the required clearance to combustible material. The horizontal run of the vent connector shall be as short as possible and the equipment shall be located as near the gas vent or chimney as practicable. The maximum length of an uninsulated horizontal run of vent connector shall not exceed seventy-five percent of the height of the gas vent or chimney.

(c) No vent connector shall pass through floor or ceiling construction.

§[1505.2] 27-893 Clearances. -

(a) Minimum clearances. -Minimum clearances at vent connectors to combustible materials shall not be less than those listed in table 15-10.

(b) Reduced clearances. -These clearances may be reduced when the combustible construction is protected as provided in table 15-11.

§[1505.3] 27-894 Thimbles. -

(a) When passing through combustible constructions, vent connectors constructed of type B gas vent material shall be installed so that the clearances required by the standard are maintained.

(b) Vent connections made of single-wall metal pipe shall not pass through any combustible walls or partitions unless they are guarded at the point of passage by ventilated metal thimbles not smaller than the following:

- (1) For equipment conforming to standards-four inches larger in diameter than the vent connector.
- (2) For equipment having draft hoods-six inches larger in diameter than the vent connector.
- (3) For equipment without draft hoods-twelve inches larger in diameter than the vent connector.

§[1505.4] 27-895 Size of connectors. -The vent connector shall not be smaller than the size of the flue collar or the draft hood outlet of the gas-fired equipment. Where a single item of equipment has more than one draft hood outlet, the vent connector shall equal the combined area of the draft hood outlets for which it acts as a common connector to the gas vent or chimney.

TABLE 15-10 VENT CONNECTOR CLEARANCE[S]* FOR GAS-FIRED EQUIPMENT

Minimum Distances from Combustible Materials (in.)		
	Type B Gas Vent Material	Other Than Type B Materials
Boiler	As required by Std.	6
Warm air furnace	As required by Std.	6
Water heater	As required by Std.	6
Room Heater	As required by Std.	6
Floor furnace	As required by Std.	6
Conversion burner (with draft hood)	6	9
Equipment with draft hoods	6	9
Equipment without draft hoods	Not Permitted	18

*Copy in brackets not enacted but probably intended.

TABLE 15-11 REDUCED CLEARANCES FOR VENT CONNECTORS WITH SPECIFIED FORMS OF PROTECTION^a

Specified Form of Protection ^b	Reduced Clearances Where the Required Clearance with No Protection is:		
	18 in.	9 in.	6 in.
(a) 1/4 in. asbestos millboard spaced out 1 in. ^c	12	6	3
(b) 28 gage [<i>sic</i>] sheet metal on 1/4 in. asbestos mill board	12	4	2
(c) 28 gage [<i>sic</i>] sheet metal spaced out 1 in. ^c	9	4	2
(d) 28 gage [<i>sic</i>] sheet metal on 1/8 in. asbestos millboard spaced out 1 in. ^c	9	4	2
(e) 1 1/2 in. asbestos cement covering on heating appliance	18	9	6
(f) 1/4 in. asbestos millboard on 1 in. mineral fiber bats reinforced with wire mesh or equivalent	6	4	2
(g) 22 gage [<i>sic</i>] sheet metal on 1 in. mineral fiber bats reinforced with wire or equivalent	3	2	2
(h) 1/4 in. asbestos cement board or 1/4 in. asbestos millboard	18	9	4
(i) 1/4 in. cellular asbestos	18	9	3

Notes for Table 15-11:

^aExcept for the protection described in (e) above, all clearances should be measured from the outer surface of the appliance to the combustible material disregarding any intervening protection applied to the combustible material.

^bApplied to the combustible material unless otherwise specified and covering all surfaces within the distance specified as the required clearance with no protection. Thicknesses are minimum.

^cSpacers shall be on** noncombustible material.

**As enacted but "of" probably intended.

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SUBCHAPTER 16 PLUMBING AND GAS PIPING

TABLE OF CONTENTS

[Sub-Art. or Sec.]	Art. or Sec. **	
[1600.0]	Art. 1	General
[1600.1]	896	Scope
[1600.2]	897	Standards
[1600.3]	898	Definitions
[1600.4]	899	Plans
[1600.5]	900	Permits
[1600.6]	901	General Requirements
[1600.7]	902	Use of Nonconforming Material or Equipment
[1600.8]	903	Fire Protection
[1600.9]	904	Establishing Gas Supply
[1600.10]	905	Alterations to Gas Piping Systems
[1601.0]	Art. 2	Water Supply Systems
[1601.1]	906	Public Water Supply
[1601.2]	907	Private Water Supply
[1601.3]	908	Cross-Connection of Supplies and Identification
[1602.0]	Art. 3	Drainage Systems
[1602.1]	909	Permits
[1602.2]	910	Individual Sewage Systems
[1602.3]	911	Construction
[1603.0]	Art. 4	Hospital and Institutional Plumbing
[1603.1]	912	Requirements
[1604.0]	Art. 5	Swimming Pools
[1604.1]	913	Requirements
[1604.2]	914	Construction
[1604.3]	915	Operation
[1605.0]	Art. 6	Existing Buildings and Installations
[1605.1]	916	General
[1605.2]	917	Existing Soil and Vent Stacks
[1605.3]	918	Existing Gas Meter Rooms
[1606.0]	Art. 7	Inspections and Tests
[1606.1]	919	Inspection
[1606.2]	920	Notification
[1606.3]	921	Testing of Plumbing and Gas Piping Systems
[1606.4]	922	Requirements
	Art. 8	Minimum Water Closets in Places of Public Assembly
	922.1	Definitions
	922.2	Applicability
	922.3	Minimum Requirements
	922.4	Waivers

*"C26" omitted from section numbers in this column.

**"27" omitted from section numbers in this column.

LIST OF TABLES

Table No.	
16-1	Minimum Number of Water Closets for Specified Places of Assembly

ARTICLE 1 GENERAL

§[1600.1] **27-896 Scope.**-The provisions of this subchapter shall establish and control the minimum requirements for the design, installation, alteration, repair, and maintenance of plumbing systems, including gas piping, sanitary and storm drainage, industrial and special wastes, sanitary facilities, water supplies and storm water and sewage disposal, except where specific exemptions are made in the code. All installation, alteration, repair, and maintenance work shall be performed by or under the direct supervision of a licensed master plumber, except as follows:

(a) Minor alterations and ordinary repairs as defined and delimited in article five of subchapter one of this chapter.
 (b) Installation of gas service piping and gas meter piping may be performed by a utility corporation that is subject to the jurisdiction of the public service commission, provided that the corporation maintains and services such piping.
 (c) Emergency repairs to alleviate hazardous conditions in gas distribution piping may be performed by a utility corporation which is subject to the jurisdiction of the Public Service Commission, subject to the requirements of section 27-176 of article fifteen of subchapter one of this chapter.

§[1600.2] **27-897 Standard.**-The provisions of reference standard RS-16 shall be a part of this subchapter.

§[1600.3] **27-898 Definitions.**- For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[1600.4] **27-899 Plans.**- For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[1600.5] **27-900 Permits.**-For the requirements governing application for building permits and plumbing permits, see subchapter one of this chapter.

§[1600.6] **27-901 General requirements.**-Plumbing and gas piping shall be designed and installed so as to satisfy the following conditions and the requirements of reference standard RS-16:

(a) **All occupied premises shall have potable water.**- Every building intended for human habitation, occupancy, or use shall be provided with a supply of potable water.
 (b) **Sufficient water required.**-Plumbing fixtures, devices, and appurtenances shall be supplied with water in sufficient volume and at pressures adequate to enable them to function properly. The pipes conveying the water shall be of sufficient size to provide the water required without undue pressure reduction and without undue noise under all normal conditions of use.

(c) **Water conservation.**-Plumbing shall be designed and adjusted to use the minimum quantity of water

consistent with proper performance and cleansing of the fixture or plumbing appurtenance.

(d) Safeguarding against explosion.-Devices for heating and storing water shall be designed, installed, and maintained to guard against rupture of the containing vessel through overheating.

***(e) Connection to public water supply systems and to sanitary or combined sewer systems.**

**Local Law 65-1996; For Excerpts from Local Law 7 of 1974, see end of Subchapter 1.*

(1) GENERAL.-

a. The water distribution system and system for conveying sewage from any building in which plumbing fixtures are installed shall be connected, respectively, to a public water main and a sanitary or combined sewer if either or both are available and, regarding the sewer, if the department determines that connection thereto is feasible. The department shall determine that connection is feasible if :

1. the sewer is of adequate capacity to receive all sewage flowing from the building;

2. the sewer is in adequate physical condition to receive such sewage;

3. no physical obstacles exist between the boundaries of the lot or tract of land on which the building is located and the sewer, which would make connection to the sewer impracticable;

4. the elevation of the sewer in relation to the lot or tract of land on which the building is located is such that conveyance of the sewage from the building to the sewer is not impracticable;

5. the sewer is located in the same drainage area as all or most of the lot or tract of land on which the building is located; and

6. no other factor reasonably related to the conveyance of sewage from the building to the sewer would make such connection impracticable or undesirable as a proper means of sewage disposal.

b. Where a public water main is not available, an individual potable water supply shall be provided, and where neither a sanitary nor a combined sewer is available to which the department determines that connection is feasible, a private sewer or private sewage disposal system shall be provided. All such private systems shall be provided subject to the approval of the commissioner and of any other agency or agencies having jurisdiction, and constructed in accordance with the requirements of reference standard RS-16 and, with respect to the construction of individual on site private sewage disposal systems, in accordance with the specifications and standards prescribed by the commissioner, in consultation with the commissioner of environmental protection, pursuant to section six hundred forty three of the charter.

c. Extensions of public sewers and water mains shall

be made in accordance with the regulations of the department of environmental protection.

(2) SYSTEMS AVAILABLE.-

a. A public water main, and a sanitary or combined sewer for the purpose of conveying sewage, shall be deemed available to a building in which plumbing fixtures are installed, except to a one- or two-family dwelling, if a property line of such building is within five hundred feet (measured along a street, alley, or right-of-way) of the public water supply system or the sewer. The connection shall be made in accordance with the applicable standards of the department of environmental protection.

b. A public water supply system, and a sanitary or combined sewer for the purpose of conveying sewage, shall be deemed available to a one- and two-family dwelling if a property line of such dwelling is within one hundred feet (measured along a street, alley, or right-of-way) of the public water supply system or the sewer. The connection shall be made in accordance with the applicable standards of the department of environmental protection.

c. Where two or more one- or two-family dwellings are to be constructed on a tract of land, or where a substantial improvement of any other type of building or buildings is contemplated on a tract of land, the public water supply system and/or the sanitary or combined sewer may be declared available thereto by the agencies having jurisdiction thereon even though the distances specified in subparagraphs (a) and (b) of this paragraph are exceeded.

(f) Well water systems.-No well or individual water supply may be installed for any purpose without the approval of the commissioner and of the department of health and the department of environmental protection.

(g) Design and maintenance of system for conveying sewage from building.-The system for conveying sewage from the building shall be designed, constructed and maintained to guard against fouling, deposit of solids, and clogging, and shall be provided with adequate cleanouts so arranged that the pipes may be readily cleaned.

(h) Exclusion of certain substances from the plumbing system.-

(1) DETRIMENTAL OR DANGEROUS MATERIAL.-No person shall deposit, by any means, any of the following into the building drainage system or sewer: ashes, cinders, rags, flammable, poisonous, or explosive liquids, gases, oils, grease, or any other material that could obstruct, damage, or overload such system, or that could interfere with the normal operation of the sewage treatment processes.

(2) INDUSTRIAL WASTES.-Wastes from hospitals, chemical plants, laundries, abattoirs, or any other industrial wastes that could be detrimental to the public

sewer or public health, shall be treated before such wastes are discharged into the public sewer. At the time of the filing of plumbing plans for any hospital, chemical plant, laundry, abattoir, or any other industrial structure, a statement shall be filed with the commissioner indicating the substances, ingredients, or matter, that will be discharged into the sewer, together with written approval of the department of environmental protection for the method of treatment of said substance, ingredient or matter, before it is discharged into the public sewer.

(i) Prevention of Contamination.-Plumbing fixtures, devices, and appliances shall be provided with adequate protection to prevent contamination of food, water, sterile goods, and similar materials by backflow of sewage. The fixture, device, or appliance shall be connected indirectly with the building drainage system when necessary.

(j) Drainage below street level.-The drainage of all sanitary and storm water below the crown level of the street sewer, or below a level where backflow from the street sewer is possible, shall be conveyed to a sewage ejector and/or sump through a system of sub-house drains, and lifted into the street sewer or disposal system.

****(k) Disposal of storm water.**-Storm water falling or coming to rest on property on which new buildings or substantial horizontal enlargements are to be constructed, and on all streets and other paved areas constructed or altered in connection with the construction of such new buildings or substantial horizontal enlargements, shall be disposed of in accordance with the requirements of reference standard RS-16 and the rules and regulations of the department of environmental protection. No person providing a system for disposing of storm water, as required by this subdivision, shall in any way alter, relocate or affect any existing drainage system on the property, except in accordance with the provisions of section 19-146 of title nineteen of the administrative code. Except as otherwise permitted by this code, no person shall perform land contour work, as defined in section 19-146 of this code, which work causes storm water to flow across sidewalks or onto an adjacent property. For purposes of this subdivision, the term "substantial horizontal enlargement" shall have the meaning given such term in subdivision (a) of section P110.2 of reference standard RS-16.

****Local Law 103-1989.**

***** (l) Required plumbing fixtures.** Every dwelling unit in buildings classified in occupancy groups J-2 and J-3 shall have at least one water closet, one lavatory, one kitchen-type sink, and one bathtub or shower. All other buildings shall be equipped with the number and types of plumbing fixtures required by reference standard RS-16; provided, however, that the minimum required number of water closets in any arena, bar, concert hall, convention hall, motion picture theatre, public dance hall, stadium, or theatre shall be in accordance with article eight of this subchapter.

*****Local Law 57-2005.**

(m) Smooth surfaces required.-Plumbing fixtures shall be made of smooth, nonabsorbent material and shall be free from fouling surfaces.

(n) Location of fixtures.-

(1) **LIGHT AND VENTILATION.**-For light and ventilation requirements of rooms or spaces containing plumbing fixtures, see subchapter twelve of this chapter.

(2) **LOCATION.**-Piping, fixtures, or equipment shall be located so as not to interfere with the normal operation of windows, or doors and other exit openings.

(3) **ACCESSIBILITY.**-Plumbing fixtures shall be located so that they are readily accessible to the users.

(o) Liquid-seal traps required.-Each fixture directly connected to the drainage system shall be equipped with a liquid-seal trap, except as otherwise provided in this subchapter. The drainage system shall be designed to provide adequate air circulation in all pipes with no danger of siphonage, aspiration, or forcing of trap seals under conditions of ordinary use.

(p) Exhausting of foul air to outside.-Each vent terminal shall extend to the outdoor air and be located and installed so as to minimize the possibility of clogging and the return of foul air to the building.

(q) Materials and workmanship.-All materials and equipment used in the plumbing and gas systems shall be free from defects, and shall be designed, constructed, and installed so as to give satisfactory service for their expected life.

(r) Condemned equipment.-Any plumbing materials or equipment condemned by the commissioner because of wear, damage, defects, or sanitary hazards shall not be used or re-used for plumbing purposes.

(s) Prevention of sewer flooding.-Where a plumbing drainage system is subject to backflow of sewage from the public sewer, suitable provision shall be made to prevent its overflow in the building.

(t) Test of plumbing system.-The plumbing system shall be subjected to such tests as will readily disclose all leaks and defects in the work or in the material used.

(u) Proper maintenance.-Plumbing systems shall be maintained in a safe and serviceable condition from the standpoint of both operation and health.

(v) Protection of ground and surface water.-Sewage or other waste shall not be discharged into surface or subsurface water unless it has been discharged by a method subject to the approval of the commissioner and of the department of health and the department of environmental protection.

(w) Weather protection.-Water service piping shall be installed at least four feet below exterior grade, and building house sewers shall be installed at least three feet below exterior grade. Plumbing piping in exterior building walls shall be adequately protected against freezing by insulation or heat, or by both.

(x) Structural safety.-The structural safety of a

building shall not be affected or impaired in any way as a result of the installation, alteration, renovation, or replacement of a plumbing system or any part thereof. See subchapters nine, ten, eleven and nineteen of this chapter.

(y) **Strains and stresses in pipes.**-Piping shall be installed so as to prevent strains and stresses that would exceed the structural limitations of the pipe and so as to prevent deflection or deformation that would cause the system to malfunction. Provision shall be made for expansion and contraction and for structural settlement that might affect the piping.

(z) **Installation limitations.**-

(1) **ELEVATOR SHAFTS.**-No piping shall be installed in any elevator or counterweight hoistway.

(2) **FIRE RATED CONSTRUCTION.**-No plumbing or gas piping shall be installed in any construction required to have a fire resistance rating except in accordance with the provisions of subchapter five of this chapter.

(3) **STAIR ENCLOSURES.**-No piping of any kind, with the exception of piping required or permitted under subchapter seventeen of this chapter, shall be permitted within a stair enclosure.

(aa) **Special flood hazard restrictions.**-Within special flood areas and below the regulatory flood datum as described in article ten of subchapter four of this chapter, plumbing installations shall comply with the applicable provisions of reference standard RS 4-5.

***§[1600.7] 27-902 Use of nonconforming material or equipment.-**

(a) No person shall use or install any new or used plumbing material or equipment, unless it complies with the requirements set forth in this subchapter and reference standard RS-16.

(b) No person shall use any portable equipment that utilizes mercury to test the pressure of gas piping, drainage or vent systems.

**Local Law 17-2001.*

§[1600.8] 27-903 Fire protection.-Where pipes pass through construction required to have a fire-resistance rating, they shall comply with the requirement of section 27-343 of article five of subchapter five of this chapter.

§[1600.9] 27-904 Establishing gas supply.-It shall be unlawful for any utility company to supply gas to a building, place or premises in which new meters other than replacement are required until a certificate of approval of gas installation from the department of buildings is filed with such utility company. When new gas service piping has been installed it shall be locked-off by the utility either by locking the gas service line

valve or by installing a locking device on the outside gas service line valve. The lock shall not be removed until the gas meter piping (other than utility owned) and gas distribution piping has been inspected and certified as required by the department of buildings as being ready for service.

§[1600.10] 27-905 Alterations to gas piping systems.-

When alterations, extensions or repairs to existing gas meter piping or gas distribution piping requires the shut-off of gas flow to a building, the utility shall be notified by the owner or his or her authorized representative.

ARTICLE 2 WATER SUPPLY SYSTEMS

§[1601.1] 27-906 Public water supply.-

(a) **Required capacity.**-Where the required capacity of potable water supply is available from street water mains at the site, every building shall be supplied from such mains.

(b) **Power pumps.**-When power pumps are required in the water supply system of a building, they shall take their supply from the street water mains in the manner prescribed in reference standard RS-16.

§[1601.2] 27-907 Private water supply.-Every private source of potable water supply, other than a water supply company franchised by the city of New York, shall be subject to the approval of the commissioner; and every private source of non potable water supply shall be submitted to the commissioner for approval and recording.

§[1601.3] 27-908 Cross-connection of supplies and identification.-

(a) **Cross-connection.**-No person shall connect water piping supplied directly from street water mains to other sources; and no cross-connection shall be made between the potable water distribution system and any portion of waste or soil systems, or between the potable water distribution system and fixtures or devices that may contaminate, pollute, or otherwise render the water nonpotable.

(b) **Identification.**-Water supply systems not approved as potable shall be identified at each outlet with a warning sign stating that the water is unfit, and its use prohibited, for drinking purposes. Piping carrying potable water shall be identified and distinguished from water piping carrying nonpotable water by distinctive painting or markings as prescribed in reference standard RS-16.

(c) **Construction.**-The construction of water supply systems shall be in accordance with the requirements of reference standard RS-16.

ARTICLE 3 DRAINAGE SYSTEMS

***§[1602.1] 27-909 Permits.**-In addition to the permits required under provisions of subchapter one of this chapter, the following permits shall also be required.

(a) Permits for the installation of the building house sewer from the street line to, and including, the spur connection at the street sewer shall be obtained from the department of environmental protection, except that, in conjunction with the issuance of a permit for the construction or alteration of a structure within the curblin, the commissioner may issue a permit for connection with a sewer or drain.

(b) Permits for sidewalk and street openings shall be obtained from the department of transportation.

**Local Law 65-1996.*

***§[1602.2] 27-910 **[Individual sewage systems. -]**

(a) Where public sewers are deemed not available according to subdivision (e) of section 27-901 of article one of this subchapter, an individual on site private sewage disposal system shall be installed in accordance with the requirements of this subchapter. When public sewers are made available, the individual on site private sewage disposal system shall be abandoned in a manner prescribed by the commissioner, and the building house sewer shall be connected to the available public sewer within six months of the date of notification that the sewer has been accepted to receive flow by the agency or agencies having jurisdiction.

**Local Law 65-1996.*

***Copy in brackets not enacted but probably intended.*

§[1602.3] 27-911 Construction.-The construction of drainage systems shall be in accordance with the requirements of reference standard RS-16.

ARTICLE 4 HOSPITAL AND INSTITUTIONAL PLUMBING

§[1603.1] 27-912 Requirements.- Hospital and institutional plumbing shall be installed in accordance with all of the applicable requirements for plumbing and gas piping of this subchapter and in accordance with the specific modifications of reference standard RS-16.

ARTICLE 5 SWIMMING POOLS

§[1604.1] 27-913 Requirements.-All plumbing for swimming pools, including display pools and fountains, shall be installed in accordance with the requirements of this subchapter, the requirements of reference standard RS-16, and the requirements of the New York City health code.

§[1604.2] 27-914 Construction.- For requirements covering the general construction of swimming pools, the provisions of article *sixteen of subchapter seven of this chapter shall apply.

**As enacted; "fifteen" probably intended.*

§[1604.3] 27-915 Operation.- No swimming pool regulated by the provisions of this code shall be operated without a permit from the department of health.

ARTICLE 6 EXISTING BUILDINGS AND INSTALLATIONS

§[1605.1] 27-916 General.-When alterations are made requiring the addition of two or more plumbing fixtures in an existing building, or when a building is remodeled for an extension in size or change in use in which plumbing, drainage, or gas piping work is involved, all the new work shall be made to conform to all the applicable sanitary requirements of this code and the affected portions of the system made adequate for the added load.

§[1605.2] 27-917 Existing soil and vent stacks.-

(a) When a new building is erected higher than an existing building, no operable windows or other wall openings shall be located closer than ten feet to an existing stack vent or vent stack on the lower building. Wherever necessary, the owner of the new building shall at his or her own expense and with the approval of the adjoining owner, offset the stack vent or vent stack to a distance ten feet or more from such windows or wall opening, or shall extend such stack vents or vent stacks to a height of at least three feet above the topmost opening.

(b) When the existing adjoining building is higher than the new building, all new soil, waste, or vent stacks of the new building shall be located at least ten feet from the common lot line, or shall be carried to a level above the higher existing roof, adequately supported and with the consent of the owners of both the new and existing structures.

§[1605.3] 27-918 Existing gas meter rooms.-Existing gas meter rooms shall comply with the provisions of section P 115.5(c) of the reference standard RS-16 no later than December first, nineteen hundred seventy-two.

ARTICLE 7 INSPECTION AND TESTS

***§[1606.1] 27-919 Inspection.**-Every new plumbing and gas piping system and every part of an existing system that has been altered, except for ordinary repairs, shall be inspected and tested to determine compliance with code requirements except that the

commissioner may promulgate rules authorizing a certification from a master plumber for minor work that was performed in accordance with applicable codes in lieu of the two day inspection notification requirement of section 27-920 of this article and the inspection reporting requirements of subdivision a of section 27-922 of this article. In no event shall such certification be allowed for any new installation, or any alteration to an existing gas piping system.

**Local Law 51-2001.*

§[1606.2] 27-920 Notification.- The holder of the plumbing permit shall give at least two days prior written notice to the commissioner that the plumbing work covered by the permit is ready for inspections and test.

§[1606.3] 27-921 Testing of plumbing and gas piping systems.-

(a) New, altered, extended, or repaired systems.- Every new plumbing and gas piping system and every part of an existing system that has been altered or repaired except for minor alterations and ordinary repairs, shall be tested as hereinafter prescribed to disclose leaks and defects. However, testing may be waived in the following cases:

(1) In any case that does not involve replacement, alteration, or relocation of any water supply, drainage, or vent piping.

(2) In any case where plumbing equipment may be set up temporarily for exhibition purposes.

(b) Representation at test.-

(1) Tests required by section 27-922 of this article shall be conducted in the presence of the commissioner or an authorized plumbing inspector of the department.

(2) The commissioner may also authorize such test to be witnessed by architects, engineers, master plumbers or representatives of utility companies, each of whom must be acceptable to the commissioner. Persons performing this function shall have had at least five (5) years experience in inspection and testing of gas piping systems, or hold a current master plumber's license. Such tests may be conducted without any verifying inspection or tests by members of the department, provided that verified statements and supporting inspectional and test reports are filed with the department within one working day of such tests.

(c) Exposure of work.-If any plumbing system or part thereof is enclosed before it has been inspected, tested, and accepted as prescribed in this subchapter, such system or part thereof shall be uncovered upon the direction of the commissioner.

(d) Retesting.-If, upon inspection and tests, any of the work fails to meet the test requirements, the necessary corrections shall be made before any reinspections or retests are conducted.

§[1606.4] 27-922 Requirements.-

(a) Drainage and vent systems.-

(1) **ROUGH PLUMBING.-**Except for outside leaders and perforated or open jointed drain tile (subsoil drains), the piping of plumbing drainage and venting systems shall be verified as to materials and shall be tested upon completion of the rough piping installation and proven to be watertight. The commissioner may require the removal of any cleanout plugs to ascertain that the prescribed pressure has been reached in all parts of the system.

a. **Water Test.-**A water test shall be applied to the drainage system either in its entirety or in sections after rough piping has been installed. If applied to the entire system, all openings in the piping, except the highest opening, shall be tightly closed and the system filled with water to the point of overflow. If the system is tested in sections, each opening, except the highest opening of the section under test, shall be tightly plugged and each section filled with water. No section shall be tested with less than a ten foot head of water. In testing successive sections, at least the upper ten feet of the following section shall be tested, so that no joint or pipe in the building (except the uppermost ten feet of the system) shall have been submitted to a test of less than ten foot head of water. The water shall be kept in the system or in the portion under test for a least fifteen minutes before inspection starts; the system shall then be tight at all points.

b. **Air test.-**An air test may be used only when permission for this type of test is obtained from the commissioner. The air test shall be made by attaching an air compressor testing apparatus to any suitable opening and, after closing all other inlets and outlets of the system, forcing air into the system until there is a uniform gauge pressure of * five psi. This pressure shall be held, without introducing additional air, for a period of at least fifteen minutes.

**Corrected by Local Law 17-2001.*

(2) **FINISHED PLUMBING.-**After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be verified as to materials and shall be tested and proven gastight by either a smoke test or a peppermint test.

a. **Smoke test.-**The smoke test shall be made by filling all traps with water and then introducing into the entire system a pungent, thick smoke produced by one or more smoke machines. When the smoke appears at stack openings on the roof, these openings shall be closed and a pressure equivalent to a one inch water column shall be maintained for the period of the inspection.

b. **Peppermint test.-**The peppermint test shall be made by introducing two ounces of oil of peppermint into the roof vent terminal of every line or stack to be tested. The oil of peppermint shall be followed at once

by ten quarts of hot water (one hundred sixty degrees Fahrenheit or higher), whereupon all roof vent terminals shall be sealed. The detection of the odor of peppermint at any trap or other point in the system shall determine the location of any leaks. Persons who have come in contact with oil of peppermint shall be excluded from the test area.

(b) Building house sewer.-The building house sewer shall be tested by inserting a test plug at the point of connection with the street sewer before such connection is made. The building house sewer shall then be filled with water under a head of at least ten feet. The water level at the top of the test head of water shall not drop for at least fifteen minutes.

(c) Water systems.-Upon completion of a section of a water system or of the entire water system, the completed section or system shall be verified as to materials, and shall be tested and proven tight under a water pressure of at least twenty-five percent greater than the working pressure under which it is to be used. The water used for tests shall be obtained from a potable source of supply.

***(d) Gas piping systems.**- Upon completion of the installation of a section of a gas system or of the entire gas system, and before appliances are connected thereto, the completed section or system shall be verified as to materials, and tested and proven tight as follows:

(1) Gas distribution piping:-

****a.** Distribution pressures up to one-half psig. The completed piping is to be tested with a non-mercury gauge at a pressure of three pounds per square inch gauge (psig) for a minimum of thirty minutes.

b. Distribution pressures over one-half psig through three psig. The completed piping is to be tested at fifty psig for a minimum of thirty minutes.

c. Distribution pressures over three psig through fifteen psig. The completed piping is to be tested at one hundred psig for a minimum of one hour.

d. Distribution pressures above fifteen psig. The completed piping is to be tested to twice the maximum allowable operating pressure, but not less than one hundred psig, for a minimum of one hour.

(2) Meter piping shall be pressure tested in accordance with the requirements of the serving utility. These requirements shall be either the same as those for testing distribution piping in paragraph one of this subdivision, or if different, the piping shall be certified by the local utility as being tested in compliance with their requirements.

(3) Notwithstanding the above, all coated or wrapped pipe shall be pressure tested at a minimum of ninety psig.

For testing, the piping shall be filled with air or an inert gas, and the source of pressure shall be isolated before the pressure readings are made. All test duration time periods are to be measured after stabilization of

testing medium. Fresh water may be used as the test medium only where the required test pressure exceeds one hundred psig.

**** (4)** The commissioner shall publish a list of non-mercury gauges certified by a nationally recognized testing lab or promulgate rules with standards for non-mercury gauges within one hundred and twenty days of the effective date of this paragraph.

**Local Law 18-1992.*

***Local Law 17-2001 .*

(e) Other piping systems.-All other piping systems shall be tested in accordance with the requirements prescribed in reference standard RS-16.

***ARTICLE 8

MINIMUM WATER CLOSETS IN PLACES OF PUBLIC ASSEMBLY

§ 27-922.1 Definitions. - For the purposes of this article only, the following definitions shall apply in conjunction with the definitions found in sections 27-232:

a. "Convention hall" shall mean any building or space utilized, during the major period of occupancy, for the holding of exhibitions or conventions.

†b. "Specified place of public assembly" shall mean any arena, bar, as such term is defined in section 17-502 of this code, concert hall, convention hall, motion picture theatre, public dance hall, stadium, or theatre open to the general public.

†*Editor's Note: The following definition is taken from §17-502:*

"Bar" means a business establishment or any portion of a non-profit entity, which is devoted to the selling and serving of alcoholic beverages for consumption by the public, guests, patrons, or members on the premises and in which the serving of food, if served at all, is only incidental to the sale or consumption of such beverages. For the purposes of this chapter, the term "bar": (i) shall include a restaurant bar; (ii) shall include any area located in a hotel or motel, which is devoted to the selling and serving of alcoholic beverages for consumption by the public, guests, patrons, or members on the premises and in which the serving of food, if at all, is only incidental to the sale or consumption of alcoholic beverages; and (iii) shall include a cabaret as defined in section 20-359 of the code which is required to be licensed by the department of consumer affairs pursuant to section 20-360 of the code and in which the serving of food, if at all, is only incidental to the sale or consumption of alcoholic beverages. For the purposes of this subdivision, (i) service of food shall be considered incidental to the sale or consumption of alcoholic beverages if the food service generates less than forty percent of total annual gross sales and (ii) any business establishment or any portion of a non-profit entity which is devoted to the selling and serving of alcoholic beverages for consumption by the public, guests, patrons, or members on the premises that generates forty percent or more of total annual gross sales from the sale of food for on-premises consumption shall be a restaurant.

c. "Public dance hall" shall mean any building or space utilized, during the major period of occupancy, for dancing, and where alcoholic beverages are permitted to be served.

§ 27-922.2 Applicability.- a. Notwithstanding any other provision of this code, the provisions of this article shall apply to any bathroom open to the general public in the following:

(1) Any specified place of public assembly in a new building or space;

(2) Any specified place of public assembly in an existing building or space that has been altered where the alteration of the building or space results in a change in the occupancy group classification of the building or space under the provisions of subchapter three of this chapter;

(3) Any specified place of public assembly that is altered where the cost of making alterations in any twelve-month period shall exceed thirty percent of the value of such building or space, provided such bathroom is part of the work area of such alterations; and

(4) Any specified place of public assembly that is altered where the cost of making alterations in any twelve-month period shall exceed fifty percent of the value of such building or space.

b. The cost of making alterations and the value of the building or space shall be determined in accordance with section 27-119 of this chapter.

c. This article shall not apply to any building or space classified in occupancy group G or H, or any space within any building classified in occupancy group G or H, or any building or space owned by any school or hospital and used for any educational or health purpose.

§ 27-922.3 Minimum requirements. - a. The number of water closets required for any specified place of public assembly shall be as listed in Table 16-1.

TABLE 16-1 *[MINIMUM NUMBER OF WATER CLOSETS FOR SPECIFIED PLACES OF ASSEMBLY]

Number of Persons	Number of Water Closets for Men	Number of Water Closets for Women
1-150 ^a	1	2
151-300	2	4
301-450	3	6

**Copy in brackets not enacted but probably intended .*

Note for Table 16-1:

a. The requirements for the number of water closets for occupancy by 150 persons or less shall not apply to bars except that there shall be at least one water closet for men and at least one water closet for women or an equivalent number of unisex bathrooms.

For occupancy by more than 450 persons, there shall be one water closet for men and two water closets for women for each additional 300 persons. The population used to determine the number of water closets required shall be based on the number of people to occupy the space; provided, however, that in no case shall the population be deemed less than that determined by allowing one hundred and twenty-five square feet of floor area per person.

b. Urinals may be provided in bathrooms in lieu of water closets but the number shall not exceed fifty percent of the required number of water closets.

c. Unisex bathrooms may be provided in lieu of separate bathrooms for men and women.

d. This section is only intended to change the ratio of men's and women's water closets required under title 27 of this code as provided herein, and is not intended to require more than one water closet per fifty persons for occupancy by 450 persons or less, or more than one water closet per one hundred persons for occupancy by more than 450 persons.

§ 27-922.4 Waivers. a. The commissioner may waive the requirements of this article for the alteration of existing buildings; provided, however, that such waiver is based upon a specific finding that strict compliance with these requirements:

(1) would create an undue economic burden; or

(2) would not achieve its intended objective; or

(3) would be physically or legally impossible; or

(4) would be unnecessary in light of alternatives which insure the achievement of the intended objective or which achieve the intended objective more efficiently, effectively or economically; or

(5) would entail a change so slight as to produce a negligible additional benefit consonant with the purposes of this article.

b. Each application for a waiver under subdivision a of this section shall be made to the commissioner in writing, setting forth each requirement sought to be waived and the specific reason or reasons therefor. The commissioner shall determine, under all of the circumstances presented by such application, which of such requirements may appropriately be waived. The commissioner shall render such determination in a writing which shall set forth in detail the commissioner's findings and conclusions with respect to each requirement sought to be waived. A copy of such written determination shall be forwarded to the applicant. Such written determination shall be filed with the department and shall be available for public inspection.

*****Local Law 57-2005 .**



**SUBCHAPTER 17
FIRE ALARM, DETECTION AND
EXTINGUISHING EQUIPMENT**

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**		[1703.0]	Art. 4	Automatic Sprinkler Requirements
[1700.0]	Art. 1	General			
[1700.1]	923	Scope	[1703.1]	954	Required Sprinkler
[1700.2]	924	Standards	[1703.2]	955	Smoke Detector Alternate
[1700.3]	925	Definitions	[1703.3]	956	Standard for Installation of Sprinklers
[1700.4]	926	Plans	[1703.4]	957	Sprinkler Alarm System
[1700.5]	927	Permits	[1703.5]	958	Approved Devices
[1700.6]	928	General Requirements	[1703.6]	959	Siamese Connections Required
[1700.7]	929	Retroactive Requirements	[1703.7]	960	Piping from Siamese Connection
	929.1	Retroactive Requirements for Office Buildings One Hundred Feet or More in Height	[1703.8]	961	Classification of Water Supplies
			[1703.9]	962	Sources of Water Supply for Sprinkler Systems
[1701.0]	Art. 2	Existing Buildings-Fire Extinguishing Equipment	[1703.10]	963	Direct Connection of Sprinklers to the Public Water System
[1701.1]	930	Existing Standpipes	[1703.11]	964	Sprinkler Booster Pumps
[1701.2]	931	Existing Sprinklers	[1703.12]	965	Gravity and Pressure Tanks
[1702.0]	Art. 3	Standpipe Requirements	[1703.13]	966	Protection of Sprinkler System
[1702.1]	932	When Required	[1703.14]	967	Inspections and Tests
[1702.2]	933	Yard Hydrant Systems Required	[1704.0]	Art. 5	Interior Fire Alarm and Signal System
[1702.3]	934	Standpipe Systems in Structures being Erected or Demolished	[1704.1]	968	Where Required
[1702.4]	935	Number of Standpipe Risers Required	[1704.2]	969	Approvals
[1702.5]	936	Location of Standpipe Risers	[1704.3]	970	Existing Installations
[1702.6]	937	Omission of Standpipe Service	[1704.4]	971	Classification and General Requirements of Fire Alarm Systems
[1702.7]	938	Size of Standpipe Risers	[1704.5]	972	Systems Required for Specific Occupancies
[1702.8]	939	Devices Used in System	[1704.6]	973	Location and Identification of Sending Stations and Sounding Devices
[1702.9]	940	Siamese Connections Required	[1704.7]	974	Standpipe Fireline Telephone and Signaling Systems
[1702.10]	941	Cross Connections	[1704.8]	975	Communication System and Fire Command Station
[1702.11]	942	Hose Stations	[1704.9]	976	Installation
[1702.12]	943	Maximum Pressures	[1704.10]	977	Fire Systems Electrical Tests
[1702.13]	944	Pressure Reducing Valves	[1705.0]	Art. 6	Smoke Detecting Devices
[1702.14]	945	Water Supply for Standpipe Systems	[1705.1]	978	Definitions
[1702.15]	946	Fire Pumps	[1705.2]	979	Smoke Detecting Devices; Where Required
[1702.16]	947	Direct Connections of Standpipes to the Public Water System	[1705.3]	980	Power Sources of Smoke Detecting Devices
[1702.17]	948	Installation of Private Fire Hydrants	[1705.4]	981	General Requirements for Smoke Detecting Devices
[1702.18]	949	Protection of Standpipe System		Art. 7	Carbon Monoxide Detecting Devices
[1702.19]	950	Standards for Installation		981.1	Definitions
[1702.20]	951	Inspections and Tests		981.2	Carbon Monoxide Detecting Devices; Where Required
[1702.21]	952	Standpipe Signal Systems		981.3	General Requirements for Carbon Monoxide Detecting Devices
[1702.22]	953	Elevators for Fire Department Use			

***"C26" omitted from section numbers in this column.*

***"27" omitted from section numbers in this column.*

LIST OF TABLES

Table No.

- 17-1 Size of Standpipe Risers
- 17-2 Summary of Sprinkler Requirements

ARTICLE 1 GENERAL

§[1700.1] 27-923 Scope.-The provisions of this subchapter shall establish and control the minimum requirements for the design and installation of standpipe, sprinkler, fire alarm, and fire detection systems except for fire alarm systems in factory and mercantile buildings and where specific exemption is made in this code. Alterations or additions to existing systems shall comply with the requirements of this subchapter regardless of magnitude or cost.

§[1700.2] 27-924 Standards.-The provisions of reference standard RS-17 shall be part of this subchapter.

§[1700.3] 27-925 Definitions.-For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[1700.4] 27-926 Plans.-For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[1700.5] 27-927 Permits.- For the requirements governing equipment work permits, equipment use permits, see subchapter one of this chapter.

§[1700.6] 27-928 General requirements.-All systems of standpipes, sprinklers, fire alarms, and fire detectors and all component devices thereof, as required by this subchapter specifically and by subchapters four, five, seven and eight of this chapter shall be installed in accordance with the provisions of this subchapter.

§[1700.7] *27-929 Retroactive requirements.-The provisions of this subchapter shall apply retroactively for the specific occupancies indicated in subdivisions (j) and (s) of section 27-954 and paragraph ten of subdivision (a) of section 27-968 of this subchapter. An application noting compliance shall be required to be filed on or before April thirteenth, nineteen hundred seventy-nine; and installation shall be required on or before January thirteenth, nineteen hundred eighty, except as otherwise provided in this code.

**Local Law 16-1987.*

(a) The provisions of this article shall apply retroactively for the specific occupancies and spaces indicated in subdivisions (v), (w), and (y) of section 27-954 and subdivision (j) of section 27-972. Installation of all systems required by these sections shall be completed on or before April first, nineteen hundred eighty-seven.

*(b) Notwithstanding the provisions in subdivision a of this section, an application for a permit and approval of plans for the installation of fire alarm and signal systems as required under the provisions of article five of this subchapter in buildings classified in occupancy group J-1 shall be filed with the department on or before June thirtieth, nineteen hundred eighty-seven and such installation shall be completed on or before December thirty-first, nineteen hundred eighty-seven.

** (c) Notwithstanding any other provision of this subchapter, the requirement to install a system of automatic sprinklers shall apply retroactively to any space in a basement, cellar or other location below grade subject to the provisions of subdivision aa of section 27-954 of this code. Installation of such system of automatic sprinklers shall be completed on or before April thirtieth, two thousand four.

**Local Law 16-1987.*

***Local Law 26-2002.*

****§27-929.1 Retroactive requirements for office buildings one hundred feet or more in height.**- (a) **General requirements.**- (1) **Notwithstanding any other provision of this subchapter,** all office buildings one hundred feet or more in height and buildings classified in occupancy group E one hundred feet or more in height in existence on the effective date of this subdivision shall have a full system of automatic sprinklers installed in accordance with this subchapter. Reports relating to the installation of such sprinkler systems shall be filed in accordance with subdivision (b) of section 27-228.5 of this code and installation of such sprinkler systems shall be completed on or before July 1, 2019 or, if applicable, on or before a date specified by the commissioner pursuant to paragraph (2) of subdivision (b) of section 27-228.5 of this code.

(2) **Exception.**- Where an owner of a building or portion thereof subject to such retroactive requirement demonstrates to the satisfaction of the commissioner that the installation of sprinklers in a particular, limited portion of such building is not practicable, either due to structural conditions or because of designation as an interior landmark by the New York city landmarks preservation commission, the commissioner may waive such limited portions from the requirements of this section but may require additional fire safety measures to protect the health, safety and welfare of the public.

(3) **Application to buildings with a full system of automatic sprinklers.**- The provisions of this subdivision shall not apply to buildings in existence on the October 22, 2004 in which a full system of automatic sprinklers was installed or required to be installed pursuant to any other provision of law. Nothing in this subdivision shall be construed to limit the applicability of any other provision of this code requiring sprinklers in the buildings referred to herein.

(b) **Converted buildings.**- Notwithstanding the foregoing provisions, on and after October 22, 2004, no building

of the standpipe system that are exposed to freezing shall be protected in accordance with the requirements of subdivision (a) of section 27-949 of article three of this subchapter.

(7) **PRESSURE REDUCING VALVES.**-Pressure reducing valves shall be provided as required by section 27-944 of article three of this subchapter.

(8) **DRIP VALVES.**-Drip valves shall be provided between the siamese connection and the check valve.

(b) When the building requires additional standpipe protection because of extension in height or in area, or the occupancy is changed to a use requiring additional protection, the new or altered part of the system shall comply with this subchapter.

§[1701.2] 27-931 Existing Sprinklers.-

(a) **Required sprinklers.**-Sprinkler systems and devices existing on December sixth, nineteen hundred sixty-eight shall not be required to be altered to conform to the provisions of this subchapter, except that when additional protection is required for a change in occupancy or for a building addition, the new or altered part of the system shall comply with this subchapter. Sprinklers in any extension or alteration shall be connected to, or extended from, the existing system or a separate water supply as provided in section 27-962 of article four of this subchapter. Additional heads shall not be connected to existing undersized piping.

(b) **Voluntary sprinklers.**-Sprinkler systems and devices existing on December sixth, nineteen hundred sixty-eight, but which are not required by this code, need not conform to the provisions of this subchapter, except that when a siamese hose connection is installed in the system, the siamese connection shall be installed and the entire system pressure tested as required by this subchapter.

ARTICLE 3 STANDPIPE REQUIREMENTS

§[1702.1] 27-932 When required.-

(a) Wet standpipe systems shall be installed:

(1) In all buildings or portions thereof exceeding six stories or seventy-five feet in height, except that open parking structures shall not require installation of a wet standpipe system unless they exceed ten parking levels or seventy-five feet in height.

(2) In all portions of buildings two or more stories in height that have a floor area of ten thousand square feet or more on any floor.

(b) Where standpipes are required by the height and area limitations of (a) of this section, a non-automatic or automatic dry standpipe system may be installed in lieu of the wet standpipe in all buildings classified in occupancy group G not over six stories or seventy-five feet in height. A dry standpipe system shall be installed in all open parking structures which

exceed three parking levels and contain not more than ten parking levels.

(c) A standpipe system shall be installed in all buildings exceeding three stories in height that have an area exceeding seven thousand five hundred square feet on any floor and where a standpipe system is not otherwise required by the provisions of this subchapter. A non-automatic or automatic dry system may be used in lieu of the wet standpipe.

(d) The following buildings shall be exempt from the provisions of subdivisions (a), (b) and (c) of this section:

(1) Buildings classified in occupancy groups F, G, H, and J that do not exceed two stories or thirty feet in height and an area of twenty thousand square feet on any floor and are provided with hand or portable fire extinguishers as required by the fire department.

(2) Buildings classified in occupancy groups E, F, G, H, and J that require a wet standpipe as provided in paragraph two of subdivision (a) and subdivision (c) of this section but not exceeding six stories or seventy-five feet in height and that are equipped throughout with an automatic wet or dry sprinkler system connected to a central supervisory station, and such system complies with the provision of this subchapter.

§[1702.2] 27-933 Yard hydrant systems required.-

Outdoor amusement and exhibition places, oil storage plants, lumber yards, trailer camps, industrial parks, and similar occupancies shall have yard hydrants installed so that the entire area may be reached by two hundred fifty feet of hose from a yard hydrant or a street hydrant. Single hydrant connection shall be at least in six inch I.P.S. Such hydrants shall be directly connected with city water main or private water main, or supplied from gravity tanks or pressure tanks, as provided in this subchapter.

(a) Where the area of such enclosure is more than forty thousand square feet and where the available city water service is less than that specified in paragraph one of subdivision (b) of section 27-945 of this article, the yard hydrant system shall be supplied as follows:

(1) A gravity tank of at least fifty thousand gallon capacity shall be provided and elevated so that the bottom of the tank is at least seventy-five feet above the highest grade elevation and at least twenty-five feet above the highest building in the area supplied by this tank.

(2) In lieu of paragraph one of this subdivision, there shall be provided a manual fire pump with a capacity of at least one thousand gpm, and a suction tank of at least fifty thousand gallon capacity. The suction tank shall be supplied through a six inch connection to the city water main controlled by an automatic ball float valve in the suction tank. A bypass shall be provided so that the pump may be fed directly from the city water main.

(3) The pump shall be located in a pump house at the street main side of the area or enclosure.

(4) Suction from a river or well may be permitted by the commissioner if the required quantity of reasonably clean fresh water may be obtained thereby, subject to the approvals of such other authorities as may have jurisdiction over the primary source of supply.

(b) The maximum distance between hydrants shall be two hundred fifty feet. At each yard hydrant, two hundred fifty feet of rubber lined hose, with a smooth bore of one and one-eighth inch approved play-pipe, shall be placed in a hose house painted red, and the words "Fire Hose" in six inch white letters shall be painted on the door.

(c) The approval of the fire department shall be obtained for location of any monitor nozzles that may be required in addition to yard hydrants. Not more than one monitor nozzle with remote control will be required for each forty thousand square feet of area or fraction thereof unless, in the fire department's opinion, an unusual hazard exists.

(d) Standpipes and sprinkler systems may be connected to a yard hydrant system in accordance with the requirements of this subchapter.

(e) Yard hydrant systems connected to city water mains shall be provided with post indicator valves located in an accessible position. Post indicator valves shall be locked open and be painted red.

(f) Fire extinguishing equipment, in addition to that prescribed by this section, shall be provided in accordance with requirements of chapter four of this title for oil storage plants, oil refineries, and other plants deemed by the fire commissioner to present unusual fire hazards, and also in rooms or spaces housing electrical equipment when such fire extinguishing equipment is deemed necessary.

§[1702.3] 27-934 Standpipe systems in structures being erected or demolished.-

(a) During construction or demolition of any structure for which a standpipe system is required, provision shall be made for the use of such standpipe by the fire department in accordance with the provisions of section 27-1014 of article one of subchapter nineteen and this subchapter.

(b) Temporary risers shall be at least four inches in diameter for structures less than four hundred fifty feet high and at least six inches in diameter for structures four hundred fifty feet high or more. There shall be as many risers as will be, or were, required for the permanent system. Each such riser shall be connected to a cross connection that is supplied through siamese hose connections at the street level, and shall be equipped on each floor with a two and one-half inch hose outlet valve. The installations shall be made so that each riser, cross-connection, and branch line can be plugged or capped when work is not being done on the system. The location of the siamese hose connection shall be placarded, kept free from obstruction, and identified by a red light.

§[1702.4] 27-935 Number of standpipe risers required.-

The number of standpipe risers shall be such that every point of every floor can be reached by a twenty foot stream from a nozzle attached to not more than one hundred twenty-five feet of hose connected to a riser outlet valve.

§[1702.5] 27-936 Location of standpipe risers.-

(a) Standpipe risers and two and one-half inch angle hose valves shall be located within stairway enclosures. For additional requirements see section 27-343 of article five of subchapter five and subdivision (j) of section 27-375 of article five of subchapter six of this chapter. When stairway enclosures are not available within the distance limitations of section 27-935 of this article, the standpipe risers and two and one-half inch angle hose valves shall be located as near to the enclosure as practicable, subject to the approval of the commissioner. A metal sign with one inch lettering indicating the location of the outlet shall be provided in the stair enclosure on each floor where the riser is not located in the enclosure.

(b) No standpipe riser shall be placed in any shaft containing a gas or fuel pipeline.

§[1702.6] 27-937 Omission of standpipe service.-

(a) Standpipe outlets may be omitted in portions of first floors or basements that are completely separated from the entrance hall or enclosed stairways leading to the upper floors, provided portable fire extinguishers are installed, subject to the approval of the commissioner.

(b) Standpipe protection shall be omitted from transformer vaults, high-tension switchboard rooms, and other locations where the use of hose streams would be hazardous. Any space or room that houses equipment of such nature that the use of water would be ineffective in fighting the fire, or would be hazardous, shall have a conspicuous metal sign on each door opening on such space or room stating the nature of the use and the warning: "Use No Water."

§[1702.7] 27-938 Size of standpipe risers.-The size of standpipe risers shall be in accordance with Table 17-1.

TABLE 17-1 SIZE OF STANDPIPE RISERS

Height ¹	Minimum Riser Size Required (I.P.S.)
150 ft. or less.....	4 in.
Greater than 150 ft.....	6 in.

Note for Table 17-1:

¹ The height shall be that of the individual riser to the highest hose outlet (not including manifold outlets) from the level of the entrance floor at street level at which the riser begins.

of the standpipe system that are exposed to freezing shall be protected in accordance with the requirements of subdivision (a) of section 27-949 of article three of this subchapter.

(7) **PRESSURE REDUCING VALVES.**-Pressure reducing valves shall be provided as required by section 27-944 of article three of this subchapter.

(8) **DRIP VALVES.**-Drip valves shall be provided between the siamese connection and the check valve.

(b) When the building requires additional standpipe protection because of extension in height or in area, or the occupancy is changed to a use requiring additional protection, the new or altered part of the system shall comply with this subchapter.

§[1701.2] 27-931 Existing Sprinklers.-

(a) **Required sprinklers.**-Sprinkler systems and devices existing on December sixth, nineteen hundred sixty-eight shall not be required to be altered to conform to the provisions of this subchapter, except that when additional protection is required for a change in occupancy or for a building addition, the new or altered part of the system shall comply with this subchapter. Sprinklers in any extension or alteration shall be connected to, or extended from, the existing system or a separate water supply as provided in section 27-962 of article four of this subchapter. Additional heads shall not be connected to existing undersized piping.

(b) **Voluntary sprinklers.**-Sprinkler systems and devices existing on December sixth, nineteen hundred sixty-eight, but which are not required by this code, need not conform to the provisions of this subchapter, except that when a siamese hose connection is installed in the system, the siamese connection shall be installed and the entire system pressure tested as required by this subchapter.

ARTICLE 3 STANDPIPE REQUIREMENTS

§[1702.1] 27-932 When required.-

(a) Wet standpipe systems shall be installed:

(1) In all buildings or portions thereof exceeding six stories or seventy-five feet in height, except that open parking structures shall not require installation of a wet standpipe system unless they exceed ten parking levels or seventy-five feet in height.

(2) In all portions of buildings two or more stories in height that have a floor area of ten thousand square feet or more on any floor.

(b) Where standpipes are required by the height and area limitations of (a) of this section, a non-automatic or automatic dry standpipe system may be installed in lieu of the wet standpipe in all buildings classified in occupancy group G not over six stories or seventy-five feet in height. A dry standpipe system shall be installed in all open parking structures which

exceed three parking levels and contain not more than ten parking levels.

(c) A standpipe system shall be installed in all buildings exceeding three stories in height that have an area exceeding seven thousand five hundred square feet on any floor and where a standpipe system is not otherwise required by the provisions of this subchapter. A non-automatic or automatic dry system may be used in lieu of the wet standpipe.

(d) The following buildings shall be exempt from the provisions of subdivisions (a), (b) and (c) of this section:

(1) Buildings classified in occupancy groups F, G, H, and J that do not exceed two stories or thirty feet in height and an area of twenty thousand square feet on any floor and are provided with hand or portable fire extinguishers as required by the fire department.

(2) Buildings classified in occupancy groups E, F, G, H, and J that require a wet standpipe as provided in paragraph two of subdivision (a) and subdivision (c) of this section but not exceeding six stories or seventy-five feet in height and that are equipped throughout with an automatic wet or dry sprinkler system connected to a central supervisory station, and such system complies with the provision of this subchapter.

§[1702.2] 27-933 Yard hydrant systems required.-

Outdoor amusement and exhibition places, oil storage plants, lumber yards, trailer camps, industrial parks, and similar occupancies shall have yard hydrants installed so that the entire area may be reached by two hundred fifty feet of hose from a yard hydrant or a street hydrant. Single hydrant connection shall be at least in six inch I.P.S. Such hydrants shall be directly connected with city water main or private water main, or supplied from gravity tanks or pressure tanks, as provided in this subchapter.

(a) Where the area of such enclosure is more than forty thousand square feet and where the available city water service is less than that specified in paragraph one of subdivision (b) of section 27-945 of this article, the yard hydrant system shall be supplied as follows:

(1) A gravity tank of at least fifty thousand gallon capacity shall be provided and elevated so that the bottom of the tank is at least seventy-five feet above the highest grade elevation and at least twenty-five feet above the highest building in the area supplied by this tank.

(2) In lieu of paragraph one of this subdivision, there shall be provided a manual fire pump with a capacity of at least one thousand gpm, and a suction tank of at least fifty thousand gallon capacity. The suction tank shall be supplied through a six inch connection to the city water main controlled by an automatic ball float valve in the suction tank. A bypass shall be provided so that the pump may be fed directly from the city water main.

(3) The pump shall be located in a pump house at the street main side of the area or enclosure.

(4) Suction from a river or well may be permitted by the commissioner if the required quantity of reasonably clean fresh water may be obtained thereby, subject to the approvals of such other authorities as may have jurisdiction over the primary source of supply.

(b) The maximum distance between hydrants shall be two hundred fifty feet. At each yard hydrant, two hundred fifty feet of rubber lined hose, with a smooth bore of one and one-eighth inch approved play-pipe, shall be placed in a hose house painted red, and the words "Fire Hose" in six inch white letters shall be painted on the door.

(c) The approval of the fire department shall be obtained for location of any monitor nozzles that may be required in addition to yard hydrants. Not more than one monitor nozzle with remote control will be required for each forty thousand square feet of area or fraction thereof unless, in the fire department's opinion, an unusual hazard exists.

(d) Standpipes and sprinkler systems may be connected to a yard hydrant system in accordance with the requirements of this subchapter.

(e) Yard hydrant systems connected to city water mains shall be provided with post indicator valves located in an accessible position. Post indicator valves shall be locked open and be painted red.

(f) Fire extinguishing equipment, in addition to that prescribed by this section, shall be provided in accordance with requirements of chapter four of this title for oil storage plants, oil refineries, and other plants deemed by the fire commissioner to present unusual fire hazards, and also in rooms or spaces housing electrical equipment when such fire extinguishing equipment is deemed necessary.

§[1702.3] 27-934 Standpipe systems in structures being erected or demolished.-

(a) During construction or demolition of any structure for which a standpipe system is required, provision shall be made for the use of such standpipe by the fire department in accordance with the provisions of section 27-1014 of article one of subchapter nineteen and this subchapter.

(b) Temporary risers shall be at least four inches in diameter for structures less than four hundred fifty feet high and at least six inches in diameter for structures four hundred fifty feet high or more. There shall be as many risers as will be, or were, required for the permanent system. Each such riser shall be connected to a cross connection that is supplied through siamese hose connections at the street level, and shall be equipped on each floor with a two and one-half inch hose outlet valve. The installations shall be made so that each riser, cross-connection, and branch line can be plugged or capped when work is not being done on the system. The location of the siamese hose connection shall be placarded, kept free from obstruction, and identified by a red light.

§[1702.4] 27-935 Number of standpipe risers required.-

The number of standpipe risers shall be such that every point of every floor can be reached by a twenty foot stream from a nozzle attached to not more than one hundred twenty-five feet of hose connected to a riser outlet valve.

§[1702.5] 27-936 Location of standpipe risers.-

(a) Standpipe risers and two and one-half inch angle hose valves shall be located within stairway enclosures. For additional requirements see section 27-343 of article five of subchapter five and subdivision (j) of section 27-375 of article five of subchapter six of this chapter. When stairway enclosures are not available within the distance limitations of section 27-935 of this article, the standpipe risers and two and one-half inch angle hose valves shall be located as near to the enclosure as practicable, subject to the approval of the commissioner. A metal sign with one inch lettering indicating the location of the outlet shall be provided in the stair enclosure on each floor where the riser is not located in the enclosure.

(b) No standpipe riser shall be placed in any shaft containing a gas or fuel pipeline.

§[1702.6] 27-937 Omission of standpipe service.-

(a) Standpipe outlets may be omitted in portions of first floors or basements that are completely separated from the entrance hall or enclosed stairways leading to the upper floors, provided portable fire extinguishers are installed, subject to the approval of the commissioner.

(b) Standpipe protection shall be omitted from transformer vaults, high-tension switchboard rooms, and other locations where the use of hose streams would be hazardous. Any space or room that houses equipment of such nature that the use of water would be ineffective in fighting the fire, or would be hazardous, shall have a conspicuous metal sign on each door opening on such space or room stating the nature of the use and the warning: "Use Npo Water."

§[1702.7] 27-938 Size of standpipe risers.-The size of standpipe risers shall be in accordance with Table 17-1.

TABLE 17-1 SIZE OF STANDPIPE RISERS

Height ¹	Minimum Riser Size Required (I.P.S.)
150 ft. or less.....	4 in.
Greater than 150 ft.....	6 in.

Note for Table 17-1:

¹ The height shall be that of the individual riser to the highest hose outlet (not including manifold outlets) from the level of the entrance floor at street level at which the riser begins.

§[1702.8] 27-939 Devices used in system.-No device, valve, pipe, or fitting may be used in a standpipe system unless such device, valve, pipe, or fitting has been accepted or approved in accordance with the provisions of section 27-135 of article eight of subchapter one of this chapter.

§[1702.9] 27-940 Siamese connections required.-Siamese connections shall be provided as follows:

(a) One siamese connection shall be provided for each three hundred feet of exterior building wall or fraction thereof facing upon each street or public space.

(b) Where buildings face upon two parallel streets or public spaces without an intersecting street or public space, one siamese shall be provided for each three hundred feet of exterior building wall or fraction thereof facing upon each such parallel street or public space.

(c) Where a building faces upon two intersecting streets or public spaces and the total length of the exterior building walls facing upon such streets or public spaces does not exceed three hundred feet only one siamese connection need be installed provided the siamese connection is located within fifteen feet of the corner and on the longer street.

(d) Where a building faces on three streets or public spaces, one siamese connection shall be provided for each three hundred feet of building wall or fraction thereof facing upon such streets or public spaces provided that at least one siamese connection is installed on each of the parallel streets or public spaces, and further provided that the siamese connections shall be located so that the distance between them does not exceed three hundred feet.

(e) Where a building faces upon four streets or public spaces, at least one siamese connection shall be provided on each street front or public space; however, only one siamese connection need be provided at the corner of two intersecting streets or public spaces if the siamese connection is located within fifteen feet of the corner and on the longer street or public space, and if the distances between siamese connections, in all cases, does not exceed three hundred feet.

(f) In any case where the exterior building walls of a building facing a street or public space is obstructed in part by another building, one siamese connection shall be provided for each clear three hundred feet of exterior building wall or fraction thereof facing upon such street or public space.

§[1702.10] 27-941 Cross connections.-

(a) Standpipe systems that include more than one riser shall have all risers cross-connected at, or below, the street entrance floor level, except as otherwise provided in this section.

(b) Standpipe systems in buildings required by the provisions of section 27-943 of this article to have one or more zones shall be so designed and installed that the risers supplied from each zone will be cross-connected below, or in, the story of the lowest hose outlets from the water source in each zone. Horizontal intermediate check valves shall be installed in the run of each riser continuing into a higher zone in such manner as to permit all upper zones of the system to be fed through one riser from the zone below and to prevent any lower zone of the system from being supplied from a zone above.

(c) Risers supplied by an upper level cross connection shall be provided with manual control valves or remote control valves, so arranged that risers supplied by the upper level cross connections may independently be shut off from the tank supplies.

(d) Cross connections shall be at least as large as the largest riser supplied by the cross connection. However, when supplying two, but not more than four four inch risers, the cross connection shall not be less than five inches. The cross connection shall not be less than six inches for all other riser combinations.

(e) Where there is no cellar, cross connections may be hung from the ceiling of the lowest story.

(f) Each siamese connection shall be connected to a riser or to a cross connection connecting other siamese hose connections or risers. The pipe from the siamese connection to the riser or cross connection shall be five inch I.P.S., except that a four inch pipe shall be sufficient when such pipe supplies a single four inch riser system. The pipe from the siamese connection shall be run as directly as practicable to the riser or cross connection.

§[1702.11] 27-942 Hose stations.-

(a) Hose outlet valves.-

(1) At the riser on each floor served by the riser and on the entrance floor above the riser control valve, a two and one-half inch hose outlet valve shall be provided for fire department use. Such hose outlet valve shall be readily accessible from a stairway landing or from a floor, and shall be located between five feet and six feet above the landing or floor.

(2) At the top of the highest riser, there shall be provided above the main roof level, a three-way manifold equipped with three two and one-half inch hose valves with hose valve caps. Where the manifold is located other than within a heated stair enclosure or bulkhead, the control valve shall be located in a horizontal run of piping below the roof.

(b) Location.-Hose stations shall be located at the standpipe risers located either within a stair enclosure or adjacent to the entrance to such enclosure as provided in section 27-936 of this article. When the

hose station is located outside the stair enclosure and the riser is within the stair enclosure, it shall be known as and referred to as "Auxiliary Hose Station."

(1) Hose stations shall be located so that every point in the floor area served by the hose station is within twenty feet of the end of the hose nozzle with the hose in its extended position. The maximum length of hose that shall be permitted at any hose station is one hundred twenty-five feet.

(c) Size, type and quality of hose.-Hose shall be provided on hose racks at each hose station as follows:

(1) Hose shall be one and one-half inch "flax-line" unlined linen hose or equivalent, factory coupled, in occupancy groups C, E, F, G, H, and J.

(2) Hose shall be two and one-half inch cotton rubber-line, or rubber hose or equivalent, factory coupled, in occupancy group A.

(3) Hose shall be two and one-half inch "flax-line" unlined linen hose or equivalent, factory coupled, for occupancy groups other than those in paragraphs one and two of this subdivision.

(4) Hose for auxiliary hose stations shall be one and one-half inch "flax-line" unlined hose or equivalent.

(5) Hose lines shall be made up of fifty foot factory coupled hose except that required hose lengths of less than fifty feet shall be in one section of the required length. Only one length less than fifty feet will be permitted where hose length is not of equal fifty foot increments, and no length shall be less than twenty-five feet.

(6) Hose may be omitted from hose racks in occupancy groups J-1 and J-2 whenever at least three open nozzles, two one and one-half inch, and two two and one-half inch spanner wrenches, two two and one-half by one and one-half inch non-swivel reducing couplings and three hundred seventy-five feet of one and one-half inch hose are stored and maintained in a locked cabinet located on the main entrance floor in a location near the standpipe riser enclosure subject to the approval of the commissioner, and hose valves are capped with a hose valve cap fastened to the valve with a chain. The person responsible for the maintenance of the standpipe system shall maintain on the premises a key for unlocking the storage cabinet. The key shall be kept in a location where it is readily available to authorized persons, but not available to the general public. A sign shall be placed on the storage cabinet indicating the location of the key. An additional labelled key shall be kept in a locked receptacle near the storage cabinet openable by a fire department standard key. Such receptacle shall be marked "For Fire Department Use Only." A metal sign shall be placed in each stair enclosure on the main entrance floor stating clearly where the storage cabinet is located.

(7) Hose may be omitted from hose racks for non-

automatic dry standpipe systems provided that the hose outlet valves are capped with hose valve caps which are chained to the valves.

(d) Auxiliary hose stations.-

(1) Auxiliary hose stations may be installed in those occupancies where one and one-half inch hose is permitted as specified in subdivision (c) of this section.

(2) When auxiliary hose stations are installed, the required two and one-half inch hose valve at the riser shall be installed and the valve shall be equipped with a cap fastened to the valve with a chain.

§[1702.12] 27-943 Maximum pressures.-The standpipe system shall be zoned by the use of gravity tanks, automatic fire pumps, pressure tanks, and street pressure so that the maximum pressure at the inlet of any hose valve in the zone does not exceed one hundred sixty psig.

§[1702.13] 27-944 Pressure reducing valves.-

(a) When the normal hydrostatic pressure at a two and one-half inch hose outlet valve exceeds fifty-five psig, each valve shall be equipped with an adjustable type pressure reducer so that the pressure on the downstream side will not exceed fifty psig when the discharge is at the rate of two hundred gpm from a one inch orifice nozzle attached to one hundred feet of two and one-half inch unlined hose.

(b) At one and one-half inch hose stations, an adjustable type of pressure reducer shall be provided on each hose outlet valve where the hydrostatic pressure exceeds eighty-five psig and shall be so adjusted that the pressure on the downstream side will not exceed eighty psig when seventy gpm is discharged from a one-half inch orifice nozzle attached to the length of hose to be provided at the hose station.

(c) The pressure reducing valve shall be permanently marked with the address of the premises in which it is installed and with the floor location and the setting for the location at which it is to be used.

§[1702.14] 27-945 Water supply for standpipe systems.-

(a) Primary water supply for standpipe systems.-Every standpipe system except nonautomatic dry standpipe systems shall have a primary water supply available at all times at every hose outlet, or made available automatically when the hose valve at any outlet is opened. Such primary water supply may be from one or more gravity tanks, from a pressure tank or tanks, from a direct connection to a city water main, from a connection to a private water main, or from an automatic fire pump.

(b) Method of providing water supply for standpipe systems.-Combinations of two or more of the following methods shall be used; in using such

combinations, the siamese connections shall be considered as a source of supply.

(1) Direct connections of standpipes to the city water system provided one of the following conditions is met:

a. A statement furnished by the bureau of water supply of the department of environmental protection indicates a pressure in the street main that is capable of maintaining a static pressure of at least fifteen psig. at the highest hose outlet between the hours of eight a.m. and five p.m. on a normal working day when a street level fire hydrant within two hundred fifty feet of the building is supplied from the same street main and is discharging at least five hundred gpm through a two and one-half inch hydrant butt.

b. For buildings forty feet or less in height with an area of not more than twenty thousand square feet per floor, there is a four inch direct connection to the street main that is fed two ways or there is a four inch direct connection to each of two street mains on two street fronts so installed that shutting off one service will not interfere with the supply of the other, and there is sufficient pressure in the street main to maintain a minimum static pressure of twenty-five psig. at the highest required hose outlet and the department of environmental protection states that the required street pressure is available.

(2) A private yard main when meeting the conditions of a direct water connection to the city water system.

(3) Gravity tanks provided:

a. The minimum quantity of water reserved for standpipe service is thirty-five hundred gallons in each standpipe zone.

b. The bottom of the tank shall be at least twenty-five feet above the highest hose outlet that such tank supplies, (except the roof manifold) and those hose outlets in a penthouse enclosing mechanical equipment, except as otherwise provided in subparagraph e of this paragraph.

c. Each zone of the standpipe system having three risers or more shall have a total fire reserve capacity of five thousand gallons or more from one or more gravity tanks for each zone.

d. Where a group of two or more buildings, connected or separated, is operated under a single control, a single gravity tank having a fire reserve capacity of at least five thousand gallons may be accepted as the primary water supply for the several standpipe systems of such group, provided a dead riser is carried from the bottom of the tank to an underground header or cross connection system and provided each building unit has a post indicator type control valve outside or an o.s. and y. control valve inside the building at a readily accessible location. The

underground cross connection may not cross any public street without the approval of the city departments having jurisdiction.

e. Usable [*sic*] storage or office space on penthouse floors shall be provided with a riser outlet valve within the distances stated in section 27-935 of this article. In lieu of elevating the bottom of the gravity tank twenty-five feet above these outlets, an automatic fire pump with local supervisory alarms may be installed. The pump shall be capable of delivering two hundred fifty gpm. at a pressure of twenty-five psig. above the normal static pressure at the highest outlet supplied by the pump. The pump shall take suction from the gravity tank and be so arranged as to permit the siamese connection and any required manual fire pump to supply these outlets. No more than three stories of any penthouse or of penthouse and building stories combined, may be supplied by this method.

(4) Pressure tanks shall be acceptable as the primary supply to the system provided all of the following conditions are met:

a. A pressure tank, or tanks, so proportioned and located that a pressure of at least fifteen psig will be available at the nozzle of the highest required hose station, exclusive of roof outlets, when all the water has been discharged from the pressure tank.

b. The storage quantities stated for gravity tanks in subparagraphs a, c, and d of paragraph three of this subdivision are met and an additional volume equivalent to one-half of the required water storage space is provided for the required air.

c. An air compressor is provided with suitable automatic control and of sufficient capacity to build up air pressure of at least seventy-five psig. in the tank within three hours and to maintain thereafter an air pressure between seventy and eighty psig. The automatic control shall also maintain the proper air-to-water ratio in the pressure tank.

d. Pressure tanks shall be supplied with water through a fixed pipe, independent of the standpipe riser and at least two inches in size. The water supply and connection shall be capable of supplying the tank at a rate of at least sixty-five gpm without reducing the pressure in the tank. The tank shall have a fixed water level plate on the end opposite the gauge glass, or other equivalent indicating device.

(5) An automatic fire pump shall be acceptable as the primary supply to the system provided:

a. The building is three hundred feet high or less, or if the building is higher than three hundred feet, the automatic fire pump is used only for the lower three hundred feet. The zones above three hundred feet shall be supplied by either a gravity tank conforming to paragraph three of subdivision (b) of this section or a pressure tank conforming to paragraph four of

subdivision (b) of this section and in addition shall be supplied by the manual fire pump required by section 27-946 of this article.

b. The automatic fire pump supplying the system or section has a capacity of at least five hundred gpm with a discharge pressure of at least twenty-five but not exceeding seventy psig (above the normal) static pressure at the highest hose outlet within the zone supplied by the pump plus the frictional resistance from the pump to the outlet at a flow of five hundred gpm.

c. The electrical power to the pump is connected to the street side of the building service switch.

(c) High and low risers and cross connections in standpipe systems.-When tanks are used for the primary water supply, the standpipe systems may use separate riser systems serving, respectively, low and high parts of the building. Separate gravity tanks or pressure tanks may supply each zone, but in every case the standpipe system shall be so designed that every hose outlet of the entire system can be supplied through the required cross connections from every siamese connection and from every manually operated fire pump located at or below the street level.

(d) Use of standpipe riser for sprinkler system water supply.-Standpipe risers may be used to supply water to sprinklers in buildings classified in occupancy group E, one hundred feet or more in height, and in existing office buildings, one hundred feet or more in height, in accordance with applicable provisions of this subchapter and reference standards RS 17-1 and RS 17-2.

§[1702.15] 27-946 Fire pumps.-

(a) Additional water supply.-Additional water supply shall be provided for standpipes in buildings over three hundred feet high. The primary water supply to the standpipe system shall be supplemented by one or more manually operated fire pumps as follows:

(1) Standpipe systems in buildings more than three hundred feet high shall have at least one seven hundred fifty gpm pump or two five hundred gpm pumps. Pumps shall be capable of delivering their rated capacity at a pressure of fifty psig above the normal static pressure determined from the highest hose outlet (except the roof manifold) in the building plus the frictional resistance through the pipe from the pump to the outlet.

(2) Where a group of two or more buildings, whether connected or separated, are operated under a single ownership and one or more buildings exceed three hundred feet in height, one fire pump shall be accepted as the supplemental supply for the group. The pump shall be installed in the building where the maintenance personnel are located, and a metal sign with one inch lettering shall be installed in each building at all of the hose outlets on the entrance floor indicating the location of the fire pump.

(b) Standpipe pump rooms and location.-

(1) Fire pumps shall be installed at the entrance floor level or below, in rooms enclosed by noncombustible construction having a two hour fire-resistance rating and that are adequately heated, ventilated, lighted, and drained. The pump room shall have access to the street level by a direct opening to a street or a court, or by a passageway or stairway having a fire-resistance rating of at least two hours.

(2) No person shall install other machinery or mechanical equipment in a fire pump room, unless the building is of construction class IA, IB, or IC.

******(3) No person shall place or install any equipment containing a refrigerant classified in groups A1, A2, A3, B1, B2 or B3 in subchapter thirteen of this chapter, or place or install gas piping or gas consuming devices or any other equipment within any space housing a fire pump that would create a hazardous condition.

(c) Power supply for standpipe fire pumps.-The type of fire pump and prime mover used in a standpipe system shall be suitable for the required service in a standpipe system provided for fire department use. If the prime mover employs any form of power other than an electric current supplied by a public utility, the use thereof shall be subject to the approval of the commissioner. Electrical power to the motor shall be taken from the street side of the house service switch.

(d) Combined use of fire pumps for standpipe and automatic sprinkler systems.-A fire pump that furnishes the required auxiliary water supply either to a standpipe system or to an automatic sprinkler system shall be accepted as furnishing the corresponding water supply to the other system if such pump is in the same premises, provided that in every such case of combined use, suitable relief and shutoff valves shall be installed so as to prevent the water pressure on the automatic sprinkler system resulting from any required operation of the pump for the standpipe system from becoming greater than one hundred seventy-five psig.

****Local Law 32-2004.**

§[1702.16] *27-947 Direct connections of standpipes to the public water system.-

(a) Control valve.-Each service directly supplying a standpipe system or a fire pump shall be equipped with a control valve located under the sidewalk in a flush sidewalk box located within two feet of the street line, or in such other locations as may be approved by the department of environmental protection. The purpose of each such control valve shall be clearly indicated by the words "Standpipe Supply Control," cast in the cover of such flush sidewalk box or, in lieu thereof, a metal sign with one inch lettering shall be located on the exterior building wall indicating the use and location of the valve.

(b) Water supply to standpipe fire pumps.-

(1) Any required manual or automatic fire pump shall draw from two independent street water mains in different streets, except that: (i) any manual or automatic fire pump serving a building classified in occupancy group J-2 that is fully protected by a system of automatic sprinklers may draw from a single water main; and (ii) an automatic fire pump may draw from a single water main if augmented by a suction tank or tanks, and if the valves at the meter and pump are provided with tamper switches that are wired to an approved central station of an operating fire alarm company. Where two services are installed, one service from the street water main shall be run directly to the pump, and the other service may be used for domestic water supply. The connection from water to the mains to the pumps shall be at least six inch pipe size and shall be flushed before connection is made to the system. Connections shall be in accordance with subchapter sixteen of this chapter.

(2) In the event that two separate and distinct water mains are not available as a supply or the street mains cannot produce the required supply, there shall be provided a suction tank, or tanks, suitably located and of sufficient capacity to furnish the fire pump with at least a one-half hour supply at the rated capacity of such pump. Suction tanks shall be filled by a six inch connection to the water main, controlled by an automatic ball float valve in the suction tank. A six inch bypass shall be provided so that pumps may be fed directly from the street water main.

(3) When a water service supplies both the domestic service and the manual fire pump, a remote control valve shall be placed on the domestic service connection at the point where such connection is taken from the city supply or service main. Such remote control valve shall be controlled from a point near the pump control panel. In lieu of a remote control valve, a manually operated valve may be installed to shut off the entire domestic water supply to the building, provided such valve is located in the fire pump room and is properly tagged for identification.

**Local Law 10-1999.*

§[1702.17] 27-948 Installation of private fire hydrants.-

(a) When buildings are not required to be provided with a standpipe system, at least one entrance to the building shall be located within two hundred fifty feet of a street hydrant; or, a private hydrant of the same type as the city hydrant connected to the street water main shall be provided within two hundred fifty feet of entrance. The private hydrant shall be supplied by at least an eight inch pipe, and the domestic water supply may be connected to this private supply provided a shut-off valve is installed in a curb box in the domestic

supply within six feet of the hydrant shutoff valve.

§[1702.18] 27-949 Protection of standpipe system.-

(a) All parts of the standpipe systems that may be exposed to frost shall be protected from freezing by any one of the following methods:

(1) The piping shall be frostproofed with insulation having a thermal conductance of 0.1 Btu/hr. per square foot of surface per degree F at a mean temperature of seventy to seventy-five degrees F. Insulation shall be protected to prevent water infiltration, and when exposed to the weather the insulation shall be covered with a forty-five pound roofing felt jacket or equivalent.

(2) Steam or electric tracers may be used in conjunction with the insulation.

(b) Tanks subject to freezing temperatures shall be protected.

§[1702.19] 27-950 Standards for installation.-

Details for installation, components, sizing valves, fittings, protection against freezing, etc., for standpipe systems and related equipment shall be in accordance with reference standard RS 17-1.

§[1702.20] 27-951 Inspections and tests.-

(a) **Inspections.**-Every new system and every part of an existing system that is altered, extended, renovated, or repaired, except for ordinary repairs, shall comply with the applicable requirements of this subchapter.

(b) **Notification.**-Advance notification of tests and inspections required by this section shall be given to the commissioner.

(c) **Representation at test.**-Tests required by this section shall be conducted in the presence of the commissioner or his or her authorized representative, or in lieu thereof, the commissioner may accept a signed statement of an architect or engineer, whose name is submitted with the notification in subdivision (b) of this section, declaring that he or she has witnessed the tests and that the standpipe system meets the requirements of this code. If a representative of the commissioner does not appear within two days after receipt of such report by the commissioner, the report shall be deemed to be accepted by the commissioner.

(d) **Testing equipment required.**-All equipment, material, and labor required for testing a system or part thereof shall be furnished by, and at the expense of, the person responsible for installing the work.

(e) **Testing of system.**-Systems may be tested in sections, or parts, in accordance with the requirements of this subchapter.

(f) **Acceptance.**-Before the acceptance of such system, each system shall be subjected to the tests required by this section.

(g) Standpipe system tests.-

(1) **PRESSURE TESTS.-**

a. The test shall demonstrate that the system will sustain a hydrostatic pressure of at least one hundred psig, and at least three hundred psig at the siamese connection, for a period of at least one hour at the topmost hose outlet and at the lowest fire pump supply connection to the system. In buildings not exceeding three stories or forty feet in height, the test pressures need not be more than fifty psig. in excess of the normal hydrostatic pressures at the topmost hose outlet, and this pressure must be maintained for a period of at least one hour.

b. Pressure tanks shall be tested to demonstrate that they will sustain a hydrostatic pressure of at least one hundred fifty percent of the normal maximum required operating pressure for a period of at least one hour.

(2) FLOW TEST.-The system shall be flow tested to determine that water is available at the top outlet of each riser, the lowest outlet in each riser, and through each siamese connection. The system shall be flushed to remove all foreign matter from the system. Flow shall be through at least a two and one-half inch hose without nozzle at each one of the above mentioned locations at separate times.

(3) ALTERATION TESTS.-When alterations, additions, or repairs are made to a standpipe system, the entire system shall be subjected to a hydrostatic test pressure of at least fifty psig at the highest hose outlet, and in addition, a flow test shall be made as stated in paragraph two of this subdivision through the new or altered portion of the system.

(h) Pump tests.-

(1) Fire pumps shall be tested at the factory, and a certified test curve shall be furnished with each pump.

(2) Pumps shall be tested after installation to ascertain that the pump is supplying its rated capacity at the highest required hose outlet or through the roof manifold. The test shall be performed as follows:

a. At least fifty feet of approved two and one-half inch rubber lined hose equipped with a one and one-eighth inch nozzle shall be connected to the highest two and one-half inch hose outlet valve. One of these assemblies shall be connected in parallel for each two hundred fifty gpm of rated pump capacity.

b. The nozzle or nozzles of the hose assembly shall discharge at, or above, the highest required hose outlet or through a manifold.

c. Pilot tube gauge readings shall be taken at each nozzle to determine that the required pump capacity is being discharged.

d. For manually operated fire pumps, the suction and discharge pressures shall be recorded for each step or pump speed. The pump rpm electrical current, and voltage readings shall be recorded with the specific discharge pressure for each supply condition.

e. Automatic fire pumps shall be tested to ascertain that all of the automatic controls are in good working order.

f. All of the above readings shall be noted on the required standpipe diagram or a framed chart, which shall be mounted in a visible location near the pump control panel.

g. When pumps are supplied by two independent services, the test shall be conducted from each service independent of the other and, in addition, with both services supplying the pump.

(i) Test equipment for fire pumps.-

(1) For every fire pump installation, there shall be provided for test purposes at least three fifty foot lengths of approved two and one-half inch rubber lined fire hose. Hose shall be hung in the pump room or other convenient location.

(2) Three two and one-half inch by one and one-eighth inch nozzles, three spanner wrenches, and twelve washers shall be stored with the required hose.

§[1702.21] 27-952 Standpipe signal systems.-

Standpipe signal systems shall be provided in accordance with section 27-974 of article five of this subchapter.

§[1702.22] 27-953 Elevators for fire department use.-

Elevators for fire department use shall be provided as required by section 27-989 of article one of subchapter eighteen.

ARTICLE 4 AUTOMATIC SPRINKLER REQUIREMENTS

§[1703.1] * 27-954 Required sprinklers.-A system of automatic sprinklers shall be provided in the areas listed in this section and as required in subchapters four through eight of this chapter. A summary of sprinkler requirements is given in Table 17-2.

(a) Buildings classified in high hazard occupancy group A.

(b) Spaces classified in high hazard occupancy group A.

(c) Buildings classified in storage occupancy group B-1 exceeding one thousand square feet in floor area or seventy-five feet or more in height, except as modified under subdivisions a, b, and c of section 27-455 of article ten of subchapter seven of this code.

(d) Spaces classified in storage occupancy group B-1 exceeding five hundred square feet in floor area, except as modified under subdivisions a, b, and c of section 27-455 of article ten of subchapter seven of this code.

(1) Such storage spaces less than five hundred square feet in area shall install a system of automatic sprinklers, when required by the commissioner or the fire commissioner.

(e) Buildings and spaces classified in storage occupancy group B-2 exceeding five thousand square feet in floor area, or seventy-five feet or more in height, except as modified under subdivisions a, b, and c of section 27-455 of article ten of subchapter seven of this code.

(f) Spaces in high rise buildings classified in mercantile occupancy group C, spaces classified in mercantile occupancy group C exceeding seventy-five hundred square feet in floor area or with an unenclosed stair or escalator between any two or more floors.

(g) Buildings classified in industrial occupancy group D when required by section two hundred eighty of the labor law or when seventy-five feet or more in height.

(h) Spaces classified in industrial occupancy group D-1 exceeding seventy-five hundred square feet, in floor area excluding heliports.

(i) Buildings classified in occupancy group E, one hundred feet or more in height having air-conditioning and/or mechanical ventilation systems that serve more than the floor in which the equipment is located, and on or before January eighteenth, nineteen hundred seventy-six, in existing office buildings one hundred feet or more in height having such systems, showroom spaces exceeding seventy-five hundred square feet in area located more than forty feet above curb level. The sprinkler system may be connected to the domestic water supply and/or the standpipe risers. Where connected to a standpipe riser, provision shall be made to prevent excessive pressure on the sprinkler heads. If such work is not completed within on or before July eighteenth, nineteen hundred seventy-four, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time. Such plan and schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this subdivision, or to perform the work in accordance with the time schedule, as approved by the commissioner, shall constitute a violation.

(j) Dressing rooms and property rooms used in conjunction with all places of assembly, except for F-1B places of assembly not providing live entertainment.

(k) Corridors and exit passageways of buildings classified in institutional occupancy group H where the building or building section is not otherwise required to be fully sprinklered as provided in subchapter four. Patient rooms in H-2 occupancies shall be protected with smoke detectors complying with provisions of section 27-955 of this article when not required to be sprinklered by the provisions of subchapters four through seven.

(l) Regardless of occupancy group classification, any story above grade that cannot be ventilated by at least twenty square feet of free openable area and the

first story below grade when it cannot be ventilated by at least thirty-five square feet of openable area per ten thousand cubic feet of volume. Such ventilation shall be provided by operable* windows or other natural ventilation sources complying with section 27-749 of article six of subchapter twelve of this chapter. All other stories below grade shall be sprinklered. Sprinklers may be omitted in toilets, shower rooms, stairs, and mechanical and electrical equipment rooms.

**As enacted but "openable" probably intended.*

For purposes of this subdivision fixed windows may be considered as "openable" (may be broken inward) if they are not more than one hundred feet above grade, or fifteen feet below grade; or if they are located within six feet of an accessible roof or setback; or if they are located within six feet of an operable window having at least three foot by three foot openings.

(1) Buildings classified in occupancy group J-2 with not more than three dwelling units and buildings classified in occupancy group J-3 shall be exempt from this provision provided all spaces classified in storage occupancy group B-2 exceeding one thousand square feet have been sprinklered in accordance with the requirements of this subchapter.

*(m) Rubbish chutes, laundry chutes, and chutes for similar uses. Sprinklers, protected from damage, shall be provided in accordance with reference standard RS 17-2, RS 17-2A, or RS 17-2B, as applicable.

**Local Law 10-1999.*

(n) Soiled linen collection and sorting areas.

(o) Workshops exceeding one hundred square feet except in one-and two-family dwellings.

(p) Refuse collection and disposal areas.

(q) Drying area of laundries or similar spaces in which two or more clothes drying machines are installed. Sprinklers to be spaced to cover area five feet in front, rear, and sides of machines.

(r) Sprinklers for cooling towers, where required by subchapter five of this chapter, shall be either a dry pipe or deluge system designed in accordance with the provisions of reference standard RS 17-4.

(s) (1) F-4 places of assembly used as cabarets.

(2) Stages within F-1a, F-1b, F-3 or F-4 occupancies providing live entertainment at anytime as set forth in subchapter eight of this chapter.

*(t) Buildings classified in occupancy group J-1, buildings classified in occupancy group J-2 with four or more dwelling units, spaces classified in occupancy group J-1, and spaces classified in occupancy group J-2 with four or more dwelling units.

(u) Places of assembly located within a building classified in occupancy group J-1.

*TABLE 17-2 SUMMARY OF SPRINKLER REQUIREMENTS

	Automatic Sources Required	Partial System Permitted	Connection to Domestic Permitted	Alternate Permitted (§27-955)	Siamese Required (§27-959)	Central ^a Station Required (§27-955) (§27-967)	Water ^b Flow Alarm Required (§27-957)	Automatic Dry Sprinkler Permitted (§5212 of RS-17)	Dry Non-automatic Sprinkler Permitted ^c
High Hazard Bldg. — Group A (§27-954(a))	2	No	No §27-961(c)	No	Yes	None ^a	Yes	Yes	No
High Hazard Spaces — Group A (§27-954(b)) ^b	1	Yes	No §27-961(c)	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes If over 36 heads in a fire section	Yes	No
Storage Occupancy Bldg. — Group B1 (§27-954(c))	1	No	No §27-961(c)	No	Yes	None ^a	Yes	Yes	No
**Storage Occupancy Spaces — Group B1 (§27-954(d)) And Permitted Below Grade Flammable/Combustible Storage Spaces in Mercantile Establishments (§27-954(aa))	1	Yes	Yes §27-962(c)	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes ^b If over 36 heads in a fire section	Yes	No
Storage Occupancy Spaces — Group B2 (§27-954(e))	1	Yes	No	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes ^b If over 36 heads in a fire section	Yes	No
Mercantile Occupancy Spaces — Groups C Exceeding 7,500 sq. ft. (§27-954(f))	2 sources if exceeding 20,000 sq. ft. 1 source if not more than 20,000 sq. ft.	No	No	No	Yes	None ^a	Yes	Yes	No
Industrial Occupancy Bldg.— Group D-1, When required by Labor Law (§27-954(g))	1 source if not hazardous occupancy	No	No	No	Yes	None ^a	Yes	Yes	No
Industrial Occupancy Spaces—Group D-1, exceeding 7,500 sq. ft. (§27-954(h))	1	No	No	No	Yes	None ^a	Yes	Yes	No
Business Occupancy Spaces— Group E Showrooms when Required by (§27-954(i))	1	Yes	Yes and/or Stand-pipe Riser	No	Yes	None ^a	Yes	Yes	No
Assembly Occupancy Spaces— Group F-1 ^a (§27-954(j))	1	Yes	Yes	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes ^b	No	No

Table 17-2 SUMMARY OF SPRINKLER REQUIREMENTS (continued)

Institutional Occupancy Group H — Corridors and Exit Passageway (§27-954(k))	1	Yes	Yes	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes	No	No
Unventilated Areas Above or Below Grade (§27-954(l)) ^d	1	Yes	Yes	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	§27-962(e)(8)	Yes	No
Rubbish—Laundry and Similar Chutes (§27-954(m)) ^{d,e}	1	Yes	Yes	No	No	Yes ^a	None	Yes	No
Soiled Linen—Collection and Sorting Area (§27-954(n))	1	Yes	Yes	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes §27-962(e)(8)	Yes	No
Workshops (§27-954(o)) ^d	1	Yes	Yes	Yes	§27-959 (a)(3) If over 36 heads in a fire section	Yes If smoke detector is used in lieu of sprinkler	Yes §27-962(e)(8)	Yes	No
Refuse Collection and Disposal Areas (§27-954(p))	1	Yes	Yes in Occupancy Groups E, G, J	No	§27-959 (a)(3) If over 36 heads in a fire section	None ^a	Yes §27-962(e)(8)	Yes	No
Drying Areas—Laundries or Similar Spaces (§27-954(q)) ^d	1	Yes	Yes in Occupancy Groups E, G, J	Yes	§27-959 (a)(3) If over 36 heads in a fire section	Yes If smoke detector is used in lieu of sprinkler	Yes §27-962(e)(8)	No	No
Cooling Towers (§27-954(r))	1	No	Yes	No	No	None ^a	Yes	Yes	No
Building and Spaces in Residential Occupancy Group J-1 (§27-954(t))	1	No	No ^f	No	Yes, except as provided in §27-959(a)(3)	No	Yes	No	No
Buildings and Spaces in Residential Occupancy Group J-2 with 4 or more Dwelling Units and not exceeding Six Stories or 75 Feet in Height (§27-954(t))	1	No	Yes ^g	No	Yes, except as provided in §27-959(a)(1) and §27-959(a)(5)	No	Yes	No	No
Buildings and Spaces in Residential Occupancy Group J-2 with 4 or more Dwelling Units and Exceeding Six Stories or 75 Feet in Height (§27-954(t))	1	No	No ^h	No	Yes, except as provided in §27-959(a)(3)	No	Yes if over 36 heads	No	No

Notes for Table 17-2:

- a. Central Station supervision required only when booster pump is provided under §27-964 or when non-automatic sprinkler is permitted by the commissioner.
- b. Water flow alarms required when more than 36 heads are installed in a fire section or fire area.
- c. Only when permitted by the commissioner (§27-967(c)).
- d. See §27-954(w) for requirements pertaining to these spaces located in a building classified in occupancy group J-1.
- e. See section 4-4.8 of reference standard RS 17-2.
- f. Except as provided in reference standard RS 17-2A.
- g. Notwithstanding section 27-962(i) of this chapter.
- h. Except as provided in section 27-962(i) of this chapter.

**Amended by Local Law 10-1999.*

***Amended by Local Law 26-2002*

(v) Catering establishments and banquet halls with an occupant load of three hundred or more persons.

*(w) In all existing buildings classified in occupancy group J-1 (except for "residential hotels," as such term is defined by the commissioner pursuant to rules,) all spaces listed in subdivisions (c), (d), (l), (m), (n), (o), (p) and (q) of this section, except that an approved smoke detection alarm system may be installed in those locations described under subdivisions (o) and (q) in lieu of sprinklers other than in those locations where sprinklers are required pursuant to section 27-123.2 of this chapter. Such smoke detection system shall be of the supervisory type connected to an approved central station.

(x) High rise buildings classified in occupancy group F-1, F-3, F-4, or G, or any spaces classified in such occupancy groups located within a high rise building or building section more than seventy-five feet above curb level.

(y) Spaces in existing high rise buildings classified in occupancy group C and any space in an existing building classified in occupancy group C with an unenclosed stair or escalator between any two or more floors.

(z) Notwithstanding the provisions of subdivision i of this section, high rise buildings classified in occupancy group E and low rise buildings classified in occupancy group E with a total gross floor area of one hundred thousand square feet or more.

**(aa) Regardless of occupancy group classification, in each basement, cellar or other location below grade, regardless of the floor area of such space, in any mercantile establishment in which the fire commissioner permits the storage of flammable or combustible mixtures pursuant to sections 27-4066, 27-4070 or 27-4094 of this code, except that, where such flammable or combustible mixtures are stored in such basement, cellar or other location below grade, in a room or other area that is segregated, vertically and horizontally, from surrounding spaces by a fire separation of not less than a two-hour fire-resistance rating, such system of automatic sprinklers shall be required only within such room or other area. Such system of automatic sprinklers shall conform to the requirements for automatic sprinklers for spaces classified in storage occupancy group B-1 pursuant to subdivision d of this section.

**Local Law 10-1999.*

***Local Law 26-2002 .*

§[1703.2] *27-955 Smoke detector alternate.—An approved smoke detection alarm system may be used in lieu of sprinklers in those locations described under in subdivisions (o) and (q) of section 27-954 of this article, except in buildings or spaces classified in occupancy group J-1 or J-2. Such smoke detection system shall be of the supervisory type connected to an approved central station.

**Local Law 10-1999.*

§[1703.3] *27-956 Standard for installation of sprinklers. (a) Except as herein provided in subdivision (b) of this section, the installation, components, sizing, spacing, location, clearances, position, and type of systems shall be in accordance with reference standard RS 17-2, except that sprinkler systems in one and two family dwellings may in the alternative be in accordance with reference standard RS 17-2B, and sprinkler systems in other residential buildings not exceeding six stories or seventy-five feet in height and in other residential spaces in buildings not exceeding six stories or seventy-five feet in height may in the alternative be in accordance with reference standard RS 17-2A.

(b) Notwithstanding any provision to the contrary contained in reference standards RS 17-2, RS 17-2A or RS 17-2B sprinklers may be omitted from clothes closets, linen closets, pantries, water closets, water closet compartments, bathrooms, general toilet rooms and shower rooms in buildings and spaces classified in occupancy group J-2 and J-3.

**Local Law 10-1999.*

§[1703. 4] 27-957 Sprinkler alarm system.—

*(a) A sprinkler alarm system shall be provided in accordance with the applicable provisions of reference standards RS 17-2, RS 17-2A, RS 17-2B and RS 17-3. Where the building is provided with a class E or modified class E fire alarm signal system, compliance with the applicable provisions of reference standard RS 17-3A or RS 17-3B shall be acceptable in lieu of compliance with the provisions of reference standard RS 17-3.

(b) A sprinkler alarm system shall be required when more than thirty-six heads are installed in any fire area or section. See table 17-2 for general requirements.

**Local Law 10-1999.*

§[1703.5] 27-958 Approved devices.-

No device, valve, pipe, or fitting may be used in a sprinkler system unless such device, valve, pipe, or fitting is of a type approved for such use.

§[1703.6] 27-959 Siamese connections required.-

(a) Where required.-

(1) Siamese connections shall be provided in accordance with section 27-940 of article three of this subchapter, except as modified hereinafter.

(2) In below grade sprinkler systems for garage occupancies involving the storage or repair of motor vehicles, a siamese connection shall be provided within fifty feet of every exit or entrance used by motor vehicles.

(3) Where partial sprinkler protection is required for storage spaces, one siamese connection shall be provided when more than thirty-six heads are installed in one fire section. Areas subdivided, when the subdivisions are totally enclosed by noncombustible construction having at least a two hour fire-resistance rating, shall be considered separate fire sections and the number of heads in the largest section shall determine the necessity for siamese connections.

When partial sprinkler systems are installed to protect entire floor areas, siamese connections shall be provided in accordance with section 27-940 of article three of this subchapter.

In all cases where partial sprinkler protection is provided and siamese connections installed, metal signs shall be securely fastened to, or above, the siamese connection indicating the area protected. Where the building has two or more frontages, additional metal signs shall be installed indicating the location of the siamese connection.

(4) When a sprinkler system supplies a group of buildings, siamese connections shall be provided for each building as required by paragraphs one, two and three of this subdivision.

(5) A single three-inch (seventy-six millimeter) inlet fire department connection acceptable to the fire commissioner may be provided for the sprinkler system in lieu of each required siamese connection in buildings classified in occupancy group J-2 not exceeding six stories or seventy-five feet in height and in spaces classified in occupancy group J-2 in buildings not exceeding six stories or seventy-five feet in height.

(b) Installation and construction.-The installation and construction of siamese connections shall be the same as required for fire standpipe systems, except that the caps of each automatic sprinkler siamese connection shall be painted green and the entire siamese connection of a nonautomatic sprinkler system shall be painted with aluminum paint, and except that caps of each siamese connection used for combination standpipe and sprinkler systems shall be painted yellow and signs provided as required in subdivision (b) of section two of reference standard RS 17-1.

***(c)** A siamese connection need not be provided for a sprinkler system in one and two family dwellings.

**Local Law 10-1999.*

§[1703.7] 27-960 Piping from siamese connection.-

Piping from the siamese connection shall be the same size as the riser or trunk main to which it is connected, except that it need not be more than five inches in diameter when supplying larger riser or feed mains. When more than one siamese connection is required, the piping from each siamese connection need not exceed four inches in diameter.

§[1703.8] 27-961 Classification of water supplies.-

(a) Automatic sources of water supply for sprinkler systems.-Automatic sources of water supply for sprinkler systems shall include a gravity tank, pressure tank, automatic fire pump, or direct connection to the public water systems. Automatic fire pumps where used for sprinkler supply shall comply with the applicable provisions of sections 27-946 and 27-947 except that no enclosures shall be required, and provided that when an emergency power system is provided, the electric power to the motor shall be connected to the emergency power source.

(b) Auxiliary sources of water supply for sprinkler systems.-Auxiliary sources of water supply for sprinkler systems shall include a manually actuated fire pump or siamese connection.

(c) Combination sprinkler and standpipe tank sources of water supply.-Tanks used to provide the required primary water supply to a standpipe system may also be used as a supply for an automatic sprinkler system.

(d) Nonautomatic sources of water supply for sprinkler systems.-Nonautomatic sources of supply for sprinkler systems shall include siamese connections.

§[1703.9] 27-962 Sources of water supply for sprinkler systems.-Sprinkler systems shall be provided with water from the following sources:

(a) Two automatic sources of water supply shall be provided for sprinklers in:

- (1) Buildings classified in occupancy group A.
- (2) Buildings classified in occupancy group C when the area on one floor exceeds twenty thousand square feet.
- (3) Buildings classified in occupancy group F-1a when open heads are required for stages of unlimited size.

(b) At least one automatic source of water supply shall be provided for sprinklers installed in all occupancy groups, except those listed in subdivision (a) and except as provided in subdivision (c) of this section.

**** (c)** The domestic water supply may be used to supply any sprinklers required under section 27-954 of this article when installed in buildings classified in occupancy groups E, G, H and J, or to supply any sprinklers required under subdivision (aa) of said section, regardless of occupancy group classification, provided that all the requirements stated in subdivision e of section 27-962 of this article are met.

(d) The domestic water supply may be used to supply water to sprinklers in cooling towers if provision is made to automatically stop the use of water through the domestic supply lines and provided that all of the requirements stated in subdivision (e) of this section are met.

(e) When the domestic water is used to supply sprinklers as permitted in subdivisions (c) and (d) of this section, all of the following conditions shall be met:

(1) The domestic water supply line from the tank or street supply is at least the size of the sprinkler line and that the capacity available is at least equal to the capacity required for the sprinklers.

(2) The domestic water supply line from the tank or street has the required pressure as provided in section 27-963 of this article.

(3) The domestic water supply line is of nonferrous material except when the domestic water supply is four inches or over.

*(4) An o.s. and y. valve or an approved valve having visual indication, sealed open, is installed in the sprinkler supply branch, or such other valve arrangement as may be provided for in reference standard RS 17-2A or RS 17-2B, as applicable.

(5) The pipe connecting the domestic water supply and the sprinkler control valve is of nonferrous material and not less than twelve inches long.

*(6) The number of heads in each fire section does not exceed twenty, except that the number of heads in each fire section may exceed twenty in buildings classified in occupancy group J-2 or J-3 not exceeding six stories or seventy-five feet in height and in spaces classified in occupancy group J-2 or J-3 in buildings not exceeding six stories or seventy-five feet in height, and no more than ten heads are supplied from any one domestic water riser.

(7) The connection is made at the supply or riser side of any domestic branch control valves.

*(8) In connection with the above conditions, the number of fire sections having twenty or less heads may be unlimited; and the installation of alarms in branches supplying fire sections shall be at the option of the owner, except that such alarms shall be provided where required by reference standard RS 17-2A or RS 17-2B.

*(9) A check valve is installed on the sprinkler supply branch.

(f) Nonautomatic sprinkler systems shall be provided with:

(1) Siamese connections in accordance with section 27-940 of article three of this subchapter.

(2) Malleable iron fittings approved for sprinkler installations.

(3) An approved automatic fire alarm with direct connection to a central station of an approved operating fire alarm company shall be installed in the area protected by the sprinkler system.

*(g) There shall be no more than ten sprinkler heads

connected to a plumbing riser supplying anything other than sprinkler heads, and no more than twenty sprinkler heads connected to a riser supplying only sprinkler heads in any fire section separated by two hour enclosures from adjoining fire sections. The number of sprinkler heads connected to a riser supplying only sprinkler heads may exceed twenty in buildings classified in occupancy group J-2 or J-3 that do not exceed six stories or seventy-five feet in height and in residential spaces classified in occupancy group J-2 or J-3 in buildings not exceeding six stories or seventy-five feet in height.

(h) Standpipe risers may be used to supply water to sprinklers in high rise buildings classified in occupancy groups E, G, H and J and in existing office buildings one hundred feet or more in height, in accordance with applicable provisions of this subchapter and reference standards RS 17-1 and RS 17-2.

(i) The domestic water supply in buildings classified in occupancy group J-1 or J-2 may be used for sprinklers in corridors, in refuse chutes and in other similar areas, as approved by the commissioner. The domestic water may be supplied by direct public water connection or equipment and pumps approved for water supply in accordance with reference standard RS-16.

*Local Law 10-1999.

**Local Law 26-2002

§[1703.10] * 27-963 Direct connection of sprinklers to the public water system.-Direct connection of sprinklers to a city water main shall be acceptable as an automatic water supply, provided the main is capable of maintaining a pressure of at least fifteen psig at the top of the highest sprinkler riser, with five hundred gpm of water flowing from a two and one-half inch hydrant outlet located at the street level within two hundred fifty feet of the building. The hydrant test shall be made between the hours of eight a.m. and five p.m. on a working day. If the pressure found in this test is insufficient to comply with the above requirement, a minimum of twelve psig at the top of the highest sprinkler riser shall be acceptable, provided that all piping in the affected area and supply piping thereto that is four inches and under is increased one pipe size above those sizes required by reference standard RS 17-2, RS 17-2A or RS 17-2B, as applicable. In addition to the fifteen psig or twelve psig requirements, the following requirements shall be met:

(a) The size of each connection shall be as large as that of the main riser and, except in sprinkler systems in multiple dwellings, shall be at least three inches and shall be controlled by an accessible shutoff valve.

(b) The service pipe shall be flushed out thoroughly before connecting to the sprinkler system. A flow sufficient to produce a water velocity of at least five fps shall be used.

(c) Each service shall be equipped, under the sidewalk, with a control valve in a flush sidewalk box located within two feet of the front wall of the building

or street line as required by the department of environmental protection. The location of the control valve shall be indicated by a sign placed on the structure directly opposite the sidewalk flush box, and such sign shall have a white background with one inch red letters reading: "Automatic Sprinkler Shutoff Valve ...Feet Opposite this Sign." Alternatively, brass, bronze, or other metal sign with one inch letters, raised or countersunk one-eighth of an inch may be used.

(d) The plans submitted in connection with the permit application shall be accompanied by a statement from the bureau of water supply of the department of environmental protection, stating the size of street main or mains, distance to and size of mains from which it or they are fed, the location of control valves, the static pressure on the hydrant nearest the premises, and the residual pressure in the street main taken on a hydrant near the premises when the flow from the nearest hydrant is equal to the flow required to meet the requirements of this section. A letter from the bureau of water supply of the department of environmental protection estimating available flow and residual pressure shall be acceptable to the borough superintendent when a hydrant test cannot be conducted.

**Local Law 10-1999.*

§[1703.11] 27-964 Sprinkler booster pumps.-Where the pressure from the city water main is insufficient to comply with the requirements of section 27-963 of this article but is sufficient to give at least five psig at the highest line of sprinklers as determined by test, an automatic, electrically driven pump installed for the purpose of boosting or increasing the city water pressure in the sprinkler system may be accepted subject to the following requirements:

(a) Pumps shall be of approved centrifugal type, capable of delivering at least two hundred gpm, and shall be capable of supplying twenty-five percent of the heads, in the largest area supplied, at twenty gpm, at a pressure of at least twenty-five psig at the top of the highest sprinkler riser.

(b) Pumps shall be maintained under approved automatic control with closed circuit supervisory attachment. The supervisory attachments shall be directly connected to an office where maintenance personnel are in attendance twenty-four hours a day; or, in lieu thereof, the supervisory attachment may be directly connected to the central station of an approved operating fire alarm company. The supervisory alarm services shall be arranged so as to provide positive indication at an approved central office or sprinkler alarm panel board that the pump has operated or that the source of electrical supply has failed.

(c) Such pumps shall also comply with the applicable provisions of sections 27-946 and 27-947 of article three of this subchapter, except that only one supply shall be required and no enclosure shall be required.

§[1703.12] *27-965 Gravity and pressure tanks.-When the requirements of sections 27-963 and 27-964 of this article are not met, a pressure or gravity tank or other device shall be used, complying with the provisions of subchapter sixteen of this chapter and reference standard RS 17-2, RS 17-2A or RS 17-2B.

**Local Law 10-1999.*

§[1703.13] 27-966 Protection of sprinkler system.-

(a) All parts of an automatic sprinkler system exposed to freezing temperatures shall be protected from freezing in accordance with the provisions of section 27-949 of article three of this subchapter, or in lieu thereof, an automatic drypipe system or a system filled with a nonfreezing, noncombustible solution shall be used, and when a system filled with nonfreezing solution is used and the system is connected to a potable water supply, it shall be subject to the requirements of the health department and the bureau of water supply of the department of environmental protection.

(b) Sprinkler heads subject to damage shall be protected in accordance with the applicable provisions of reference standard RS 17-2, RS 17-2A or RS 17-2B.

**Local Law 10-1999.*

§[1703.14] 27-967 Inspection and tests.-

All inspections and tests of sprinkler systems shall be conducted in accordance with the provisions of subdivisions a through f of section 27-951 of article three of this subchapter and the requirements of this article.

(a) **Automatic wet and dry systems.-**Automatic wet and dry sprinkler systems shall be subjected to a hydrostatic pressure test for a period of one hour at a pressure of at least one hundred psig at the topmost sprinkler head and at least two hundred psig at the lowest cross connection to the siamese connections.

(b) **Automatic dry pipe systems.-**In addition to the hydrostatic test in subdivision (a) of this section, the automatic dry pipe systems shall also be tested to forty psig air pressure for a twenty-four hour period with the pressure loss not to exceed one and one-half psig.

(c) **Nonautomatic sprinkler systems.-**Nonautomatic sprinkler systems shall be subjected to a hydrostatic pressure test of fifty psig at the topmost sprinkler head, with the test pressure maintained for a period of at least one hour.

(d) **Pressure tanks.-**Pressure tanks shall be hydrostatically tested to a pressure of at least one and one-half times the working pressure for a period of one hour.

(e) **Sprinkler branches and heads supplied from domestic water.-**Sprinkler branches and heads shall be tested at the pressure required by this section or at the pressure of the domestic water supply as required by subchapter sixteen of this chapter, whichever is greater.

(f) **System performance.-**A performance or operation test shall be made on each completed system to determine that all alarms, valves, indicators, pumps, deluge valves, dry pipe valves, and other appurtenances are in good working order.

(g) Supervisory service.-All components connected to a central station of an approved operating fire alarm company shall be tested to determine that they are in good working order. The test report shall be accompanied by a statement from the central supervisory agency stating that the agency has been retained to provide the required supervision; and when the services of the agency have been terminated it shall notify the commissioner in writing.

(h) Altered systems.-When additions, alterations, or repairs are made to a sprinkler system, the entire system shall be tested as stated in subdivisions (a), (b), (c), (e), and (g) of this section, except that the pressure at the top of the system need not exceed one hundred psig. In addition, a flow test of at least twenty gpm shall be made from a test connection at the end of the sprinkler header or the section altered or repaired.

(i) Pump test.-Pumps shall be tested in accordance with the applicable provisions of subdivisions (h) and (i) of section 27-951 of article three of this subchapter.

ARTICLE 5 INTERIOR FIRE ALARM AND SIGNAL SYSTEM

§[1704.1] 27-968 Where required.-

(a) A closed circuit electrically supervised fire alarm signal system shall be installed in the following types of buildings:

(1) Hotels, motels, lodging houses, dormitories, and single room occupancies having more than fifteen sleeping rooms or accommodating more than fifteen lodgers above the first or ground story.

(2) Buildings classified in occupancy group H-1 or H-2. Systems installed in buildings where persons are restrained under the jurisdiction of an agency of the city or the state of New York may be modified to comply with the regulations of such agency, when such modification is approved by the commissioner.

(3) Day care agencies having a board of health permit for the accommodation of more than thirty children. If such day care agency is located at the grade level of the building, the fire alarm system is required only in the premises of the day care agency. If the day care agency is located at other than grade level of the building, an approved fire alarm system shall be provided throughout the building.

(4) Health clubs and turkish or other special treatment bath houses where there are sleeping accommodations for more than fifteen persons on the premises.

(5) Department stores or retail sales establishments having one or more floors above the street floor to which the public is admitted or with a total floor area of twenty thousand or more gross square feet.

(6) All public schools; also all private schools and university teaching buildings more than one story in height. If a school premise is located at other than a grade level of a building, an approved fire alarm system shall be provided throughout the building.

(7) Single and multi-tenant factory buildings more than two stories in height in which more than twenty-five persons are employed above the ground floor, as provided by section two hundred seventy-nine of the labor law. In buildings where more than ten percent of the building occupancy is engaged in manufacturing, the building shall have an approved fire alarm system throughout.

(8) Buildings housing a motion picture studio.

(9) Buildings classified in occupancy group E, seventy-five feet or more in height and buildings classified in such occupancy group occupied or arranged to be occupied by an occupant load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the building.

(10) a. Stages, dressing rooms and property rooms used in conjunction with all places of assembly used as cabarets.

b. Places of assembly used as a cabaret.

(b) Areas containing gas distribution piping operating at levels above fifteen psig shall have a combustible gas detection-alarm system, and a suitable fire protection system as approved by the commissioner with the concurrence of the fire commissioner.

§[1704.2] 27-969 Approvals.-

(a) Equipment and systems shall be made of approved materials, and shall be free from defective workmanship. The requirements of reference standard RS 17-5 shall apply except as specifically qualified herein.

(b) Before any fire alarm system is installed or extended, approval shall be obtained from the commissioner.

(c) All devices and equipment that have been approved shall have securely fastened thereon a manufacturer's label indicating compliance with the requirements of section 27-135 of article eight of subchapter one of this chapter.

§[1704.3] 27-970 Existing installations.-Except as provided in subdivisions (g) and (j) of section 27-972 of this article, fire alarm systems heretofore installed in buildings in accordance with rules then in force shall be accepted for use as long as they are maintained in good working order.

§[1704.4] 27-971 Classification and general requirements of fire alarm systems.-Fire alarms shall be classified as follows and shall meet the following general requirements:

(a) Uncoded closed circuit fire alarm system.-Consisting of manually operated [pull-lever type]* sending stations and audible signaling devices, so arranged that the operation of any station will automatically sound continuously the signaling devices throughout all portions of the building.

**Copy in brackets not enacted but probably intended.*

(b) Master coded closed circuit fire alarm systems.-Consisting of manually operated pull-lever type sending stations and audible signaling devices, so

arranged that the operation of any station will automatically sound the signaling devices giving a common code of signals throughout all portions of the building. The code shall consist of four rounds of a series of single strokes of the signaling devices, each round consisting of "3-3-3-3".

(c) Individually coded closed circuit general fire alarm systems.-Consisting of manually operated pull-level type sending stations and audible signaling devices, so arranged that the operation of any station will automatically sound the signaling devices, throughout all portions of the building, for a minimum of four rounds of a distinctive code of signals particular to the station at which the signal has been initiated. The code numbers that are used shall be subject to the approval of the fire commissioner.

(d) Individually coded closed circuit presignal fire alarm systems.-Consisting of manually operated pull-lever type sending stations and signal devices so arranged that the operation of any station will cause the sound of only the signal devices located in the engine room and basement and other places in the building where the members of a fire brigade work or assemble. The signaling device shall give four rounds of the particular code signal of the station at which the signal has been initiated. Approved equipment shall be provided at each station so that the operation of any station performed with the aid of a key or plug will sound all of the signal devices located in the building with four rounds of the particular coded signal of the station initiated. The code numbers used shall be subject to the approval of the fire commissioner. The presignal key or plug shall be so designed that it can be readily identified. Presignal type systems will not generally be approved; however, approval may be obtained from the fire commissioner where special type occupancies may warrant such a system.

(e) Combination unit or zone, and general alarm coded closed circuit fire alarm systems.-Consisting of manually operated pull-lever type sending stations and signal devices so arranged that the operation of any station will cause all of the signaling devices in that unit or zone to sound four rounds of the particular coded signal of the station initiated, and simultaneously will cause all of the signaling devices on the general alarm circuit to sound four rounds of the coded signal designating the unit or zone in which the station is located. An approved register and time stamp may be used in connection with this system when approved by the fire commissioner. The register, if of the closed circuit type, shall be operated from a separate closed circuit control board or panel isolated by a barrier from the main control panel in the main fire alarm control cabinet. An approved closed circuit unit annunciator with trouble alarm circuit shall be installed as part of this system when required by the fire commissioner.

(f) Special systems.-Consisting of the above systems as required, supplemented by special circuits

for the operation of other fire alarm or detection devices in the systems, or electric control systems for stopping machinery, closing doors or ventilators, or shutting down fans as may be required by the commissioner or the code, or to call the central station of a private operating company of the fire department. Automatic fire detecting systems may be connected to operate an interior fire alarm system when connected thereto by an approved coded transmitter. In no case shall the transmitter be considered to replace the standard approved interior fire alarm station, except where a transmitter has been approved for both purposes. The special control circuits and devices shall be separate and distinct from the fire alarm system but shall be brought into action whenever the fire alarm system is set in operation.

***(g) Class E system.**-Consisting of a class E fire alarm signal system as described in subdivision (f) of section 27-972 of article five of this subchapter and reference standard RS 17-3A. Such systems shall be exempt from the provisions of section 27-973 of article five of this subchapter, except that compliance with paragraph two of subdivision (a) and subdivision (e) of such section shall be required.

***(h) Modified class E system.**-Consisting of a modified class E fire alarm signal system as described in subdivision (g) of section 27-972 of article five of this subchapter and reference standard RS 17-3B. Such systems shall be exempt from the provisions of section 27-973 of article five of this subchapter, except that compliance with paragraph two of subdivision (a) and subdivision (e) of such section shall be required.

***(i) Class C system.**-Consisting of a class C fire alarm signal system as described in subdivision (k) of section 27-972 and reference standard RS 17-3A. Such systems shall be exempt from the provisions of section 27-973 of article five of this subchapter, except that compliance with paragraph two of subdivision (a) and subdivision (e) of such section shall be required.

***(j) Class J system.**-Consisting of a class J fire alarm signal system as described in subdivision (l) of section 27-972 of article five of this subchapter and reference standard RS 17-3A. Such systems shall be exempt from the provisions of section 27-973 of article five of this subchapter, except that compliance with paragraph two of subdivision (a) and subdivision (e) of such section shall be required.

***(k) Modified class J system.**-Consisting of a modified class J fire alarm signal system as described in subdivision (m) of section 27-972 of article five of this subchapter and reference standard RS 17-3B. Such systems shall be exempt from the provisions of section 27-973 of article five of this subchapter, except that compliance with paragraph two of subdivision (a) and subdivision (e) of such section shall be required.

***(l) Modified class J-1 system.**-Consisting of a modified class J-1 fire alarm signal system as described in paragraph two of subdivision (j) of section 27-972 of

article five of this subchapter.

**Local Law 16-1987.*

§[1704.5] 27-972 Systems required for specific occupancies.-

(a) In any type of one-story building where a fire alarm system is required and where the floor area is not more than twenty-five hundred square feet, an uncoded closed circuit fire alarm system may be used.

(b) **Private and public schools.**-Master coded systems shall be used in all schools, except that schools having more than fifteen hundred students shall have an individually coded system.

(c) Single and multi-tenant factory buildings.-

(1) In factory buildings, an individually coded closed circuit fire alarm system shall be installed except as hereinafter provided. An uncoded circuit fire alarm system may be used in buildings not exceeding two stories in height, having not more than twenty-five hundred square feet in area in any one story, and having not more than one hundred persons in a single factory nor more than fifty persons in a multiple tenant factory above the first or ground floor.

(2) Special fire alarm signal systems may be designed for use in buildings subject to the approval of the commissioner.

(d) **A common coded closed circuit system may be used in a motion picture studio,** and in addition, an approved rate-of-rise or other approved thermostatic fire alarm system, with direct connections to a central office of an approved operating fire alarm company or the fire alarm telegraph central station, shall be provided for protecting the open studio door. Also there shall be one or more manual fire alarm boxes, which shall be located so as to be readily accessible from the open studio door.

(e) **Hospitals, asylums, and nursing homes.**-Buildings classified in occupancy group H-2 shall meet the following requirements:

(1) An individually coded closed circuit fire alarm system shall be provided in accordance with subdivision (c) of section 27-971 except where the fire commissioner shall have approved an individually coded closed circuit presignal fire alarm system as described in subdivision (d) of section 27-971. All fire alarm systems shall be activated by sprinkler waterflow and by all other fire detection devices installed in the building.

(2) Alarm systems shall be installed in zones of a maximum size of twenty thousand square feet.

(3) Manual fire alarm sending stations shall be at staff locations only.

(4) Where two or more buildings are served by one fire brigade, a combination unit or zone and a general alarm coded closed circuit fire alarm system shall be provided and an approved indicating annunciator installed in each building. Upon initiation of a station signal, general alarm signaling devices shall sound in engine rooms and subgrade areas of each building, and unit or

zoned alarm signaling devices shall sound throughout all areas in only the building wherein the station signal was initiated. In the building where the station signal has been initiated, an approved annunciator shall indicate the station at which the signal is initiated.

(f) **Buildings classified in occupancy group E-** One hundred feet or more in height, and existing office buildings one hundred feet or more in height except as provided in subdivision (g) of this section shall be provided with a class E fire alarm signal system as follows:

(1) It shall be special electrically supervised approved direct wire, radio or combination thereof fire alarm signal system consisting of an interior fire alarm and voice communicating system so arranged that the operation of any station will identify its location at the fire command station as required by section 27-975 of this article, at the mechanical control center and at the regularly assigned location of the fire safety director. This identification signal shall be accomplished by means of an information display system which shall be manually resettable from the fire command station only.

(2) The nomenclature used for the location identification system shall be subject to the approval of the fire commissioner.

(3) In addition to the visual devices required above, audible signal devices indicating operation of the fire alarm signal system shall be provided at the fire command station, mechanical control center and the regularly assigned location of the fire safety director. Provisions shall be made for silencing the audible signal and transferring this signal to lamp indication.

(4) Operation of a manual station shall automatically transmit a fire alarm signal to the fire department via a central office of an operating company franchised by the board of estimate, and cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

(5) The fire alarm signal may be sounded over loudspeakers [*sic*] as provided in reference standard RS 17-3A so located that their operation will be heard clearly above any ambient noise, and shall be controlled from the fire command station in such a manner that the fire alarm signal can be sounded on the individual floors or throughout the building.

(6) Provision shall be made whereby the fire command station may permit the floor station to make announcements over the loudspeaker [*sic*] system.

(7) The loudspeaker [*sic*] amplifier system shall be so designed and installed that approximately fifty (50) percent of the system shall remain operable for the transmission and audibility of signals and intelligibility of voice communication over the loudspeaker [*sic*] system throughout the building, in the event the other fifty (50) percent become inoperable. The electrical supply for this fire alarm system, including the amplifiers, shall be in accordance with applicable laws, rules and regulations.

(8) An approved product of combustion ionization detecting device or a combination of an approved smoke detecting device and an approved fixed temperature thermostatic device shall be installed at each elevator landing. The device shall be located in the ceiling immediately above a call button. The activation of this device shall have the same effect as specified in subparagraphs a through e of paragraph nine of this subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS 18-1.

(9) In buildings which are approved with air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, the activation of any of the detectors installed in such air-conditioning and/or mechanical ventilation systems in accordance with the provisions of RS 13-1 of the reference standards shall:

a. cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

b. cause a fire alarm signal to be transmitted to the fire department via a central station of a franchised operating company.

c. cause the fire alarm signal system to sound at the fire command station required by section 27-975 of this article and to sound an alarm in the mechanical control center and at the regularly assigned location of the fire safety director, and to operate an information display system as provided in paragraph one of this subdivision.

d. stop the air supply into and the air return from the floor where activated by actuation of approved remote control reversible fire shutters or by automatically shutting down the air supply fans and the air return fans of the floor where activated, notwithstanding the provisions of sections 1001 through 1005 of RS 13-1 of the reference standards relating to air supply and air return controls in case of fire.

e. cause the activation of the air exhaust fans and dampers in smoke shafts and/or the pressurizing fans in stair enclosures.

(10) A building equipped throughout with an automatic sprinkler system including a water flow alarm shall be exempt from the installation of any detectors pursuant to paragraph eight of this subdivision and section 1006 of reference standard RS 13-1 provided the activation of the sprinkler water flow alarm shall have the same effect as specified in subparagraphs a through e of paragraph nine of this subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS 18-1.

(11) In existing office buildings one hundred feet

or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraphs one through nine of this subdivision (f) and accept alternatives fulfilling the intent of these requirements.

(12) Existing office buildings one hundred feet or more in height shall comply with the requirements of this subdivision on or before September thirteenth, nineteen hundred eighty-one. Complete plans of the installation shall be filed with the commissioner on or before June thirteenth, nineteen hundred eighty. A permit shall be secured from the commissioner on or before September thirteenth, nineteen hundred eighty. Where compliance with the time requirements of this paragraph would cause undue hardship, the commissioner, with the approval of the fire commissioner, may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved permits obtained and a good faith effort towards completion of the work shall have been made.

(g) Fire alarm or communication systems installed prior to December thirteenth, nineteen hundred eighty in existing office buildings one hundred feet or more in height, may be incorporated or installed in a modified class E fire alarm signal system provided they comply with the following:

(1) It shall be a special electrically supervised approved direct wire, radio or combination thereof fire alarm signal system consisting of an interior fire alarm and voice communicating system so arranged that the operation of any station will identify its location at the fire command station as required by section 27-975 of this article, at the mechanical control center and at the regularly assigned location of the fire safety director. This identification signal shall be accomplished by means of an information display system which shall be manually resettable from the fire command station only.

(2) The nomenclature used for the location identification system shall be subject to the approval of the fire commissioner.

(3) In addition to the visual devices required above, audible signal devices indicating operation of the fire alarm signal system shall be provided in the fire command station, mechanical control center and the regularly assigned location of the fire safety director. Provisions shall be made for silencing the audible signal and transferring this signal to lamp indication.

(4) Operation of a manual station shall automatically transmit a fire alarm signal to the fire department via a central office of an operating company franchised by the board of estimate, and cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

(5) The fire alarm signal may be sounded over loudspeakers [*sic*] as provided in reference standard RS 17-3B so located that their operation will be heard clearly above any ambient noise, and shall be controlled

from the fire command station in such a manner that the fire alarm signal can be sounded on the individual floors or throughout the building.

(6) The electrical supply for this modified fire alarm system, including the amplifiers, shall be in accordance with applicable laws, rules and regulations.

(7) An approved product of combustion ionization detecting device or a combination of an approved smoke detecting device and an approved fixed temperature thermostatic device shall be installed at each elevator landing. The device shall be located in the ceiling immediately above a call button. The activation of this device shall have the same effect as specified in subparagraphs a through e of paragraph eight of this subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS 18-1.

(8) In buildings which are provided with air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, the activation of any of the detectors installed in such air-conditioning and/or mechanical ventilation systems in accordance with the provisions of RS 13-1 of the reference standards shall:

a. cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

b. cause a fire alarm signal to be transmitted to the fire department via a central station of a franchised operating company.

c. cause the fire alarm signal system to sound at the fire command station required by section 27-975 of this article and to sound an alarm in the mechanical control center and at the regularly assigned location of the fire safety director, and to operate an information display system as provided in paragraph one of this subdivision.

d. stop the air supply into and the air return from the floor where activated by actuation of approved remote control reversible fire shutters or by automatically shutting down the air supply fans and the air return fans of the floor where activated, notwithstanding the provisions of sections 1001 through 1005 of RS 13-1 of the reference standards relating to air supply and air return controls in case of fire.

e. cause the activation of the air exhaust fans and dampers in smoke shafts and/or the pressurizing fans in stair enclosures.

(9) A building equipped throughout with an automatic sprinkler system including a water flow alarm shall be exempt from the installation of any detectors pursuant to paragraph seven of this subdivision and section 1006 of reference standard RS 13-1 provided the activation of the sprinkler water flow alarm shall have the same effect as specified in subparagraphs a through e of paragraph eight of this

subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS 18-1.

(10) Existing office buildings one hundred feet or more in height shall comply with the requirements of this subdivision on or before September thirteenth, nineteen hundred eighty-one. Complete plans of the installation shall be filed with the commissioner on or before June thirteenth, nineteen hundred eighty. A permit shall be secured from the commissioner on or before September thirteenth, nineteen hundred eighty. Where compliance with the time requirements of this paragraph would cause undue hardship, the commissioner, with the approval of the fire commissioner may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved, permits obtained and a good faith effort towards completion of the work shall have been made.

(11) In existing office buildings one hundred feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraphs one through nine of this subdivision (g) and accept alternatives fulfilling the intent of these requirements.

(h) Buildings classified in occupancy group E, less than one hundred feet in height occupied or arranged to be occupied for an occupant load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building, and on or before January eighteenth, nineteen hundred seventy-five, existing office buildings less than one hundred feet in height, occupied or arranged to be occupied, as hereinabove specified, shall be provided with a system acceptable to the commissioner, which shall:

(1) consist of equipment which shall have the capability of two-way voice communication from a fire command station to the warden on each floor of the building and the mechanical control center, to be used for fire emergencies and fire drills.

(2) have the capability of transmitting a fire alarm signal from the fire command station to the fire department via a central station of a franchised operating company.

***(i) (1) High rise buildings classified in occupancy group C** shall be provided with a fire alarm and communication system meeting the requirements of subdivision (k) of this section and reference standard RS 17-3A.

2. Buildings classified in occupancy group J-1, either seventy-five feet or more in height or containing thirty or more sleeping rooms (except "residential hotels" as such term is defined by the commissioner pursuant to rules and regulations) shall be provided

with a fire alarm and communication system meeting the requirements of subdivision (l) of this section and reference standard RS 17-3A. In lieu of fire warden stations, either of the following are acceptable as a two-way voice communications system:

**Local Law 16-1987.*

1. A closed circuit supervised fire department telephone system meeting the following conditions in complying with requirements of RS 17-3 as applicable to standpipe fireline telephone and signaling system:

a. Means on every floor to communicate by telephone with the fire command station. A permanent telephone shall be located at the fire command station. All other floors near the main riser shall be provided with telephones or telephone jacks. Telephones or jacks shall be installed in locked cabinets capable of being opened with a fire department standard key.

b. At least six portable telephones with jack connections shall be provided unless permanent telephones are installed at every required location. The portable telephones shall be kept in a cabinet located near the fire command station and shall be provided with a lock capable of being opened with a fire department standard key. Such cabinet shall be locked at all times and marked portable telephones for fire department use.

c. A pilot light shall be provided at the fire command station to indicate that the telephone is in use or that its receiver is off the hook; or

2. A fire communication slotted coaxial cable radio system installed to provide adequate communication capability throughout the building. Adequate communication is defined as the capability for clear two-way communication between a fire department portable radio at the lobby command post and another fire department portable radio at any other point in the building.

Such system shall be acceptable to the fire department.

***(j) (1) Existing buildings** seventy-five feet or more in height, classified in occupancy group J-1 (except "residential hotels" as such term is defined by the commissioner pursuant to rules and regulations) shall be provided with a fire alarm and communication system meeting all the applicable requirements of subdivision (m) of this section and reference standard RS 17-3B. In lieu of fire warden stations, either of the following is acceptable as a two-way voice communication system:

1. A closed circuit supervised fire department telephone system meeting the following conditions in complying with requirements of RS 17-3 as applicable to standpipe fireline telephone and signaling system:

a. Means on every floor to communicate by telephone with the fire command station. A permanent telephone shall be located at the fire command station. All other floors near the main riser shall be provided with telephones or telephone jacks. Telephones or jacks shall be installed in locked cabinets capable of being opened with a fire department standard key.

b. At least six portable telephones with jack

connections shall be provided unless permanent telephones are installed at every required location. The portable telephones shall be kept in a cabinet located near the fire command station and shall be provided with a lock capable of being opened with a fire department standard key. Such cabinet shall be locked at all times and marked portable telephones for fire department use.

c. A pilot light shall be provided at the fire command station to indicate that the telephone is in use or that its receiver is off the hook; or

2. A fire communication slotted coaxial cable radio system installed to provide adequate communication capability throughout the building. Adequate communication is defined as the capability for clear two-way communication between a fire department portable radio at the lobby command post and another fire department portable radio at any other point in the building.

Such system shall be acceptable to the fire department.

(2) Existing buildings less than seventy-five feet in height and containing thirty or more sleeping rooms, classified in occupancy group J-1, shall be provided with a modified Class J-1 fire alarm and communications system as follows:

(a) A fire command station shall be provided at the entry floor level in accordance with the requirements of the fire commissioner.

(b) A public address system shall be provided acceptable to the fire commissioner capable of being easily heard (80 dbs at sixty feet) in all existing corridors, hallways, passageways and stairs.

(c) The approved existing interior fire alarm system shall be acceptable provided that it shall automatically transmit a fire alarm signal (when activated) to the fire department via a central station connection of an operating company which is franchised where applicable and which is acceptable to the fire department.

***(k) Buildings classified in occupancy group C**, seventy-five feet or more in height, shall be provided with a class C fire alarm and communications system which shall meet the criteria contained in paragraphs one through ten of subdivision (f) of this section and the criteria contained in subdivisions (a) and (b) of section 27-975 of this article.

***(l) Buildings classified in occupancy group J-1**, seventy-five feet or more in height or containing thirty or more sleeping rooms, shall be provided with a class J fire alarm and communication system which shall meet the criteria contained in paragraphs one through ten of subdivision (f) of this section and the criteria contained in subdivisions (a) and (b) of section 27-975 of this article.

***(m) Existing buildings classified in occupancy group J-1**, seventy-five feet or more in height, shall be provided with a modified class J fire alarm and communication system which shall meet the criteria contained in paragraphs one through nine of subdivision (g) of this section and the criteria contained in subdivisions

(a) and (b) of section 27-975 of this article.

***(n) All other occupancies** shall be provided with an individually coded closed circuit general fire alarm system when a fire alarm system is required.

**Local Law 16-1987.*

§[1704.6] 27-973 Location and identification of sending stations and sounding devices.-

(a) Location of sending stations.-

(1) There shall be at least one fire alarm sending station in each story of any building at all natural paths of egress to the street. The station shall be installed at a readily accessible location meeting the approval of the fire commissioner. The sending station shall be kept unobstructed at all times. Additional sending stations shall be installed so that no point on any floor is more than one hundred fifty feet from the nearest sending station in buildings of Group I construction and one hundred feet in buildings of Group II construction.

(2) All fire alarm stations installed or relocated after April first, nineteen hundred eighty-four, shall be installed so that the handle is approximately four feet from the floor.

(b) Location of sounding devices.-

(1) Sounding devices shall be of sufficient number so that the alarm shall be clearly audible to all the occupants of the building.

(2) The centerline of all gongs and signaling devices shall be located at least eight feet above the floor except that in locations where ceilings prevent the installation at this height, the centerline of the device shall be located six inches below the ceiling.

(3) Approved gongs shall be provided as the sounding devices. Where gongs are not audible, approved horns, chimes, or whistles may be installed subject to the approval of the fire commissioner.

(c) Location of instructions.-An approved instruction card, properly marked and framed under glass, shall be installed at each fire alarm station. Instruction cards for individually coded systems shall indicate the code designation and location of each sending station in the building.

(d) Fastening for devices.-All materials and devices used in fire alarm signal systems shall be securely fastened in position. The locations shall be selected by an architect or engineer, subject to the approval of the commissioner.

(e) Identification of equipment.-Fire alarm sending stations for all systems shall be painted red. A diagonal white stripe one inch wide from the upper left hand corner to lower right hand corner shall be painted or applied to sending stations which transmit a fire alarm signal to the fire department via a central station of a franchised operating company. The stripe shall not render any lettering illegible or obliterate the station number.

(f) Mixed occupancy buildings.-Where a building is subdivided by fire divisions, each building section may be treated as a separate building for the purpose of

fire alarm signal system installations. One control board may be used, if so arranged as to operate the signaling devices in each building section independently.

(g) Subdivided occupancy.-In buildings requiring fire alarm signal systems, and in which parts are occupied by other than factory tenants and in which the fire department has approved the use of a local fire brigade, the commissioner may accept dual operation systems.

§[1704.7] 27-974 Standpipe fireline telephone and signaling systems.-

(a) In every building more than three hundred feet high, a telephone and signaling system shall be provided for fire department use in operating the standpipe system.

(b) Such system shall permit communication by permanent telephones in the pump rooms, on the entrance floor, and in gravity tank rooms communicating with floors, and by means of permanent or portable telephones on each floor near the main standpipe riser. The system shall be a selective ringing, common talking system supplied by a twenty-four volt direct current power source.

(c) Permanent wall telephones shall be provided with six inch gongs at each instrument. The telephones in the pump room shall be equipped with a loudspeaking receiver so that a voice can be distinctly heard at a distance of at least fifteen feet from the receiver. All other floors shall be provided with jacks protected by break-glass boxes, or with permanent telephones.

(d) At least three portable telephones with jack connections shall be provided for each standpipe installation, unless permanent telephones are installed at every required location. The portable telephones shall be kept in a cabinet located in the main hall of the entrance floor and shall be provided with a lock capable of being opened with a fire department standard key. Such cabinet shall be locked at all times. The panel of the cabinet door shall be conspicuously marked "portable telephone for fire department use."

(e) A pilot light shall be provided over the standpipe telephone cabinet in the entrance floor to indicate if the telephone is in use or a receiver is off the hook.

(f) Standpipe signaling devices.-

(1) Manual type individually coded sending stations shall be located in the main corridor of the building or other location meeting the approval of the commissioner. This system shall be so arranged that a coded signal will be transmitted to the alarm sounding devices. An eight inch gong shall be provided in the pump rooms, in elevator shafts at intervals not exceeding ten floors, and at such other locations selected by the architect or engineer, subject to the approval of the commissioner. All apparatus used in connection with the signaling system shall be of an approved type and installed as required by the provisions of reference standard RS 17-3 governing the installation of interior fire alarm

systems.

(2) Adjacent to each telephone station and near the main standpipe riser, there shall be provided an approved closed circuit strap key enclosed in a sheet metal box equipped with a paracentric fire department lock and approved hinges. The strap key shall be connected in series with the box circuit of the signal sending station.

(3) A card of instructions shall be placed in the pump room giving code numbers of signaling stations, the pressure obtainable at various speeds of the fire pumping motor, and such other information as the commissioner may direct.

(g) Where the building is subject to the provisions of subdivision (f) or (g) of section 27-972 of this article with respect to the requirement for a modified class E fire alarm signal system, the standpipe fireline telephone and signaling system may be combined with such fire alarm system provided:

(1) the alarms and two-way voice communication with the fire command station include the pump room and gravity tank or pressure tank room, and

(2) a designated floor station of the modified class E fire alarm signal system is located at or near the main standpipe riser on every floor.

§[1704.8] 27-975 Communication system and fire command station.-Buildings classified in occupancy group E, seventy-five feet or more in height, or, if less than seventy-five feet in height, with a total gross area of two hundred thousand square feet or more and existing office buildings one hundred feet or more in height, shall be provided with the following:

(a) a communication system acceptable to the commissioner consisting of:

(1) loud speakers on each floor of the building, in each elevator and each stair enclosure, which shall be capable of being operated from the fire command station.

(2) a two-way voice communication capability between the fire command station and the following locations:

- a. a designated floor warden station on each floor
- b. mechanical control center
- c. elevators
- d. air-handling control rooms
- e. elevator machine rooms

(b) The fire command station shall be located in the lobby of the building on the entrance floor as part of the elevator control panel or immediately adjacent thereto. Such command station shall be adequately illuminated and shall contain the following:

(1) the loud speaker and communication capability described in subdivision (a) of this section.

(2) the audible alarm signal required in subdivision (f) and (g) of section 27-972 of this article.

(3) manually reset information display system to indicate the floor where the alarm was activated.

(4) means to control the sounding devices on any floor or throughout the building.

(5) means to manually transmit a fire alarm signal to the fire department via a central station of a franchised operating company.

(6) means for silencing the audible alarm signals when the loud speakers are in use and for activating the audible alarm systems automatically when use of the loud speakers are terminated. Switches used for this purpose shall be of the self-restoring type.

(7) display lamps to include on/off condition of air-handling systems unless such lamps are provided in the mechanical control center.

(8) means for testing the display lamps, local alarms and the connection to the central station of franchised operating company.

(c) Existing office buildings one hundred feet or more in height shall comply with the requirements of this section on or before September thirteenth, nineteen hundred eighty-one. Complete plans of the installation shall be filed with the commissioner on or before June thirteenth, nineteen hundred eighty. A permit shall be secured from the commissioner on or before September thirteenth, nineteen hundred eighty. Where compliance with the time requirements of this subdivision would cause undue hardship, the commissioner, with the approval of the fire commissioner, may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved, permits obtained and a good faith effort towards completion of the work shall have been made.

§[1704.9] 27-976 Installation.-Installation, source of energy, wiring, and other requirements shall comply with reference standard RS 17-3, RS 17-3A or RS 17-3B as applicable.

§[1704.10] 27-977 Fire systems electrical tests.-Upon completion of a fire alarm system, and other electrical systems, the installation shall be subject to a test to demonstrate the efficiency of operation of all the components in the system and to an acceptance test by the fire department.

ARTICLE 6 SMOKE DETECTING DEVICES

***§[1705.1] 27-978 Definitions.**-For the purposes of this article:

a. an existing building is one which is within occupancy group J-1, occupancy group J-2 or occupancy group J-3 and for which plans have been approved by the department on or prior to December thirty-first, nineteen hundred eighty-one.

b. an improvement or alteration is a physical change in an existing structure other than painting, repairs and normal replacement of maintenance items.

c. a building shall be deemed to have been substantially improved or altered if:

1. the cost of improvement or alteration exceeds the sum of one hundred fifty thousand dollars, or

2. in either occupancy group J-1 or occupancy group J-2, fifty percent or more of the dwelling units or square feet of the structure are improved or altered and the cost of such improvement or alteration exceeds the sum of fifteen thousand dollars per dwelling unit, or

3. there has been a change in the occupancy or use of the structure.

**Local Law 81-1989.*

****§[1705.2] 27-979 Smoke detecting devices; where required.-**

(a) On and after January first, nineteen hundred eighty-two, all dwelling units within occupancy group J-1 and occupancy group J-2, except such units which contain operational automatic wet sprinkler systems pursuant to article four of this subchapter, and dwelling units in buildings within occupancy group J-3 shall be equipped with approved and operational smoke detecting devices as hereinafter provided. Buildings within occupancy group J-1 may, in the alternative, be equipped with a line-operated zoned smoke detecting system with central annunciation and central office tie-in for all public corridors and public spaces, pursuant to rules and regulations promulgated by the commissioner. The commissioner may, upon good cause shown, extend the period of compliance for occupancy groups J-1 and J-2 to June thirtieth, nineteen hundred eighty-two.

(b) Approved and operational smoke detecting devices shall be installed in mechanical rooms, electrical switch gear rooms and electric and telephone closets over seventy-five square feet in gross floor area in all buildings in all occupancy groups.

**Local Law 81-1989.*

§[1705.3] 27-980 Power sources of smoke detecting devices.-Dwelling units shall be equipped with smoke detecting devices receiving their primary power from the building wiring and there shall be no switches in the circuit other than the over-current device protecting the branch circuit; provided, however, that dwelling units in existing buildings may, in the alternative, be equipped with battery-operated smoke detecting devices except where such buildings are substantially improved or altered on or after January first, nineteen hundred eighty-two.

****§[1705.4] 27-981 General requirements for smoke detecting devices.-**

a. All smoke detecting devices required to be provided and installed pursuant to this article shall either be accepted pursuant to rules and regulations promulgated by the commissioner or be listed by a nationally recognized independent laboratory that maintains periodic inspections of production of listed equipment and whose listing states that the equipment meets nationally recognized standards. To meet the requirements of this article, such laboratory shall be one which maintains a periodic follow-up service of the devices to ensure compliance with the original listing.

b. No device shall be deemed to be in compliance with the provisions of this article unless it is of either the

ionization chamber or photo-electric type. Such devices shall be in compliance with the requirements of reference standard RS 17-11 and shall be installed in a manner consistent with the requirements of reference standard RS 17-12 except that device within occupancy group J-1 shall be installed pursuant to rules and regulations promulgated by the commissioner.

***Local Law 49-1991.*

*****ARTICLE 7**

CARBON MONOXIDE DETECTING DEVICES

*****§27-981.1 Definitions.-** For the purpose of this article: a. "Fossil fuel" shall mean coal, kerosene, oil, wood, fuel gases and other petroleum products.

b. "Fuel gases" shall include, but not be limited to, methane, natural gas, liquefied natural gas and manufactured fuel gases.

*****§27-981.2 Carbon monoxide detecting devices; where required.-** a. Every dwelling unit in a building within occupancy groups J-1, J-2 or J-3 where a fossil fuel-burning furnace or boiler is located, and every dwelling unit in a building that is in close proximity to a source of carbon monoxide, as such proximity is established by the rules promulgated by the commissioner in consultation with the fire department and the department of health and mental hygiene, shall be equipped with an operational carbon monoxide detecting device approved in accordance with the rules promulgated by the commissioner in consultation with the fire department and the department of health and mental hygiene, provided that there shall be installed at least one approved and operational carbon monoxide detecting device within fifteen feet of each room lawfully used for sleeping purposes. Such carbon monoxide detecting device may be combined with a smoke detecting device that complies with the provisions of this title and any applicable rules promulgated thereunder.

b. In every building classified in occupancy group G or occupancy group H-2, at least one approved and operational carbon monoxide detecting device shall be installed in accordance with rules promulgated by the commissioner in consultation with the fire department and the department of health and mental hygiene.

c. The provisions of this article shall apply retroactively to every building, in accordance with the provisions of subdivision a or subdivision b of this section, irrespective of when such building was constructed or a certificate of occupancy for such building was issued.

d. The provisions of this article may be enforced by the department, the fire department, the department of health and mental hygiene and the department of housing preservation and development.

*****§27-981.3 General requirements for carbon monoxide detecting devices.-** All carbon monoxide detecting devices required to be provided and installed pursuant to this article shall be of a type authorized by rules promulgated by the commissioner.

****Local Law 7-2004.*



**SUBCHAPTER 18
ELEVATORS AND CONVEYORS**

TABLE OF CONTENTS

[Sub-Art. or Sec.]*	Art. or Sec.**	
[1800.0]	Art. 1	General
[1800.1]	982	Scope
[1800.2]	983	Standards
[1800.3]	984	Definitions
[1800.4]	985	Plans
[1800.5]	987	General Requirements
[1800.7]	988	Manlifts
[1800.8]	989	Elevator in Readiness
[1800.9]	990	Acceptance of Equipment
[1800.10]	991	Construction
[1800.11]	992	Alterations
[1800.12]	993	Prohibited devices
[1801.0]	Art. 2	Existing Installations
[1801.1]	994	Retroactive Provisions
[1801.2]	995	Existing Sidewalk Elevators
[1801.3]	996	Existing Hand Powered Freight Elevators
[1801.4]	996.1	Locks on Elevators and Elevator Hoistway Doors
[1801.5]	996.2	Fireman Service Operation in Existing Elevators
[1802.0]	Art. 3	Tests and Test Interval
[1802.1]	997	Acceptance Tests
[1802.2]	998	Periodic Inspection and Test Intervals
[1802.3]	999	Inspection and Test Requirements
[1802.4]	1000	Inspection Agencies and Elevator Repair Service
[1803.0]	Art. 4	Equipment Permits
[1803.1]	1001	Permit Required
[1803.2]	1002	Temporary Use Permits
[1803.3]	1003	Posting of Temporary Use Certificate
[1803.4]	1004	Posting of Inspection Certificate
[1804.0]	Art. 5	Equipment Operation
[1804.1]	1005	Operators
[1804.2]	1006	Accidents

*"C26" omitted from section numbers in this column.

**"27" omitted from section numbers in this column.

ARTICLE 1 GENERAL

§[C26-1800.1] 27-982 Scope.-This subchapter shall establish the minimum safety requirements for, and control the design, construction, installation, alteration, maintenance, inspection, test and operation of, all elevators, dumbwaiters, escalators, moving walks, industrial lifts and loading ramps, automotive lifts, mechanical parking garage equipment, console or stage lifts, power operated scaffolds, amusement devices, and special hoisting and conveying equipment.

§[C26-1800.2] 27-983 Standards.-The provisions of reference standard RS-18 shall be a part of this subchapter.

§[C26-1800.3] 27-984 Definitions.-For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-1800.4] 27-985 Plans.-For the requirements governing the filing of plans and the work to be shown on plans, see subchapter one of this chapter.

§[C26-1800.5] 27-986 Permits.-For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

§[C26-1800.6] 27-987 General requirements.-All of the equipment listed in section 27-982 of this article shall be designed, constructed, altered and maintained as required by the provisions of this subchapter and reference standard RS-18. No piping or ductwork of any kind shall be permitted within hoistway or elevator enclosures except (i) as may be required for the elevator installation and (ii) low voltage wiring required or permitted by subchapter seventeen of this chapter provided that such wiring shall be protected within the hoistway or elevator enclosures in accordance therewith.

(a) Construction equipment.-Except for workers' hoists the provisions of this subchapter shall not apply to materials hoisting equipment for temporary construction use. For such equipment, the requirements of subchapter nineteen of this chapter shall apply.

(b) Portable equipment.-The provisions of this subchapter shall not apply to portable elevating devices used to handle materials only except as specifically provided in reference standard RS 18-5.

***** (c) Fire protection and impact resistance.-**

(1) Fire protection.- The fire resistance rating of hoistway enclosures shall be two hours and for hoistway doors and door assemblies the fire protection shall be one and one-half hours subject to the test procedures of subchapter five of this chapter.

(a) vertical conveyors passing through floors shall be fire protected as required for shafts in subchapter five of this chapter.

(b) inclined conveyors passing through floors shall be fire protected as required in reference standard 18-1 for escalators which are not a required means of egress.

(c) horizontal conveyors passing through vertical fire divisions shall be fire protected as required in subchapter five of this chapter.

(2) Impact resistance.- Elevator enclosures serving occupancy group E spaces (office spaces) in high rise buildings constructed pursuant to applications filed on or after July 1, 2006, shall comply with rules to be promulgated by the commissioner establishing minimum impact resistance standards. Such rules shall permit compliance with assemblies comprising approved reinforced construction boards affixed onto stud framing. The commissioner shall promulgate such rules on or before January 1, 2006.

(d) Elevators required.-For provisions designating buildings in which elevators are required, see subdivision (c) of section 27-372 of article five of subchapter six of this chapter.

(e) Elevator mirrors.-In all multiple dwellings in which there are one or more self-service passenger elevators, there shall, pursuant to such regulations as the commissioner shall prescribe, be affixed and maintained in each such elevator a mirror which will enable persons prior to entering into such elevator to view the inside thereof to determine whether any person is in such elevator.

(f) Emergency signal equipment.-Elevators, other than private residence elevators, that are operated at any time without a designated operator in the car, shall be provided with emergency signal equipment in accordance with the requirements of reference standard RS 18-1.

(g) Elevators and escalators as exits.-Elevators shall not be accepted as a required means of egress. Elevators shall not be installed in a common enclosure with a stairway. Escalators shall be accepted as equivalent to stairs when they comply with the requirements of section 27-378 of article five of subchapter six of this chapter.

(h) Car switch operation.-Elevators with car switch operation shall be provided with a signal system by means of which signals can be given from any landing whenever the elevator is desired at that landing.

(i) Electrical requirements.-All electric work shall conform to the electrical code of the city of New York.

***Local Law 26-2004.

§[C26-1800.7] 27-988 Manlifts.-The installation of manlifts is governed by the requirements of reference standard RS 18-9, and such additional safety regulations as may be promulgated by the commissioner.

§[C26-1800.8] 27-989 Elevator in readiness.-

(a) Except as provided in subdivision (b) of this section, in every building seventy-five feet or more in height, all floors shall be served by at least one elevator which shall be kept available for immediate use by the fire department during all hours of the night and day, including holidays, Saturdays and Sundays. There shall be available at all times a person competent to operate the elevator, except that no attendant

shall be required for buildings between seventy-five feet and one hundred fifty feet in height having elevators with automatic or continuous pressure operation with keyed switches meeting the requirements of reference standard RS 18-1 so as to permit sole use of the elevators by the fire department.

(b) In high rise buildings classified in occupancy group A, B, C, D, E, F, G or H, in buildings classified in occupancy group E with a gross area of two hundred thousand square feet or more, in buildings classified in occupancy group J-1 or J-2, in existing high rise buildings classified in occupancy groups C, F, G and H, in existing buildings classified in occupancy group J-1 (except "residential hotels," as such term is defined by the commissioner pursuant to rules and regulations) and in existing office buildings one hundred feet or more in height the number of elevators that shall be kept available for immediate use by the fire department as provided for in subdivision (a) of this section, shall be as follows:

(1) Where a floor is serviced by three or less elevator cars, every car shall be kept available.

(2) Where a floor is serviced by more than three elevator cars, at least three elevator cars with a total rated load capacity of not less than six thousand pounds shall be kept available for every floor. Such cars shall include not more than two cars which service all floors and at least one other car in another bank servicing that floor. If the total load capacity of all cars servicing the floor is less than six thousand pounds, all such cars shall be kept available.

(3) Such elevators which have automatic or continuous pressure operation shall be controlled by keyed switches meeting the requirements of reference standard RS 18-1.

(4) In high rise buildings classified in occupancy group A, B, C, D, E, F, G or H, in low rise buildings classified in occupancy group E with a gross area of two hundred thousand square feet or more and in buildings classified in occupancy group J-1 or J-2, all other automatically operated cars shall have manual operation capability.

(c) Notwithstanding the retroactive provisions of section 27-994 of article two of this subchapter:

(1) Existing office buildings one hundred feet or more in height shall comply with the requirements of this section by September thirteenth, nineteen hundred eighty-one. Complete plans of the installation shall be filed with the commissioner by June thirteenth, nineteen hundred eighty. A permit shall be secured from the commissioner by September thirteenth, nineteen hundred eighty.

(2) Existing high-rise buildings classified in occupancy group C, F, G or H and existing buildings classified in occupancy group J-1 subject to the requirements of this section shall comply with the requirements of this section on or before April first, nineteen hundred eighty-seven.

§[C26-1800.9] 27-990 Acceptance of equipment.-All equipment and devices regulated by the provisions of this subchapter shall be accepted or approved for use in accordance with the requirements of article eight of subchapter one of this chapter.

§[C26-1800.10] **27-991 Construction.**-The construction, installation and alteration of all elevator and conveyor equipment and devices, shall be subject to the provisions of this subchapter and applicable reference standards as follows:

- (a) **Elevators, dumbwaiters, escalators and moving walks.**-reference standard RS 18-1.
- (b) **Mechanized parking garage equipment.**-reference standard RS 18-2.
- (c) **Automotive lifts.**-reference standard RS 18-3.
- (d) **Industrial lifts and hinged loading ramps.**-reference standard RS 18-4.
- (e) **Conveyors.**-reference standard RS 18-5.
- (f) **Console or stage lifts.**-reference standard RS 18-6.
- (g) **Workers' hoists.**-reference standard RS 18-7.
- (h) **Power operated scaffolds.**-reference standard RS 18-8.

§[C26-1800.11] **27-992 Alterations.**-Alterations to elevators, escalators, dumbwaiters and other equipment provided for in this subchapter shall comply with the requirements of article four of subchapter one of this chapter. Minor alterations and ordinary repairs shall comply with the requirements of article five of subchapter one of this chapter except that elevator work shall not constitute a minor alteration or an ordinary repair when it is classified as alteration by the provisions of reference standard RS 18-1.

§[C26-1800.12] **27-993 Prohibited devices.**-The installation of sidewalk elevators located outside the street line is prohibited.

ARTICLE 2 EXISTING INSTALLATIONS

§[C26-1801.1] **27-994 Retroactive provisions.**-The provisions of this subchapter are not retroactive except that the provisions of this section are retroactive. Existing elevators moved to new hoistways shall conform with all the requirements for new installations. All alteration work on existing installations required by this section must be completed no later than December sixth, nineteen hundred seventy.

(a) **Emergency interlock release switch.**-Emergency interlock release switches in elevator cars, where provided, shall be of the key-operated, continuous-pressure type and all other types now in use shall be removed or replaced with approved key-operated, continuous-pressure type switches.

(b) **Machines-belt and chain-driven.**-Single-belted and chain-driven machines shall be permitted only on freight elevators and only when equipped with electrically released, spring applied brakes and with terminal stopping devices and electrical safety devices as required in reference standard RS 18-1.

(c) **Machines-drum winding.**-Drum winding machines shall be equipped with electrical machine limits as set forth in reference standard RS 18-1.

(d) **Car gate switches-additions, replacement, or relocation of.**-Car gate electric contacts where such devices are not provided or are found to be tied or blocked so as to render them inoperative shall be added, replaced or relocated as required by the commissioner. Installation or replacement of car gate electric contacts shall conform to the requirements of reference standard RS 18-1.

(e) **Elevator hoistway-door interlocks.**- All existing elevators not presently equipped with hoistway doors having door interlocks shall be provided with hoistway landing doors equipped with approved type hoistway-door interlocks conforming to the requirements of reference standard RS 18-1. Approved-type interlock switches may be installed in connection with existing hoistway door closers, provided the combination door closers and interlocks conform to all the requirements for approved hoistway-door interlocks. The use of elevator parking devices and hoistway door unlocking devices for opening hoistway doors from the landing side shall conform to the requirements of reference standard RS 18-1. Exceptions:

Interlocks or electric contacts shall not be used on hydraulic elevator landing doors or gates except where such elevators are provided with electric control and operating devices.

(f) **Emergency signal or telephone.**-Automatic operation elevators or any elevator operated at any time without a designated operator shall be provided with an audible emergency signal, and except in buildings classified in occupancy groups J-1, and J-2, the cars shall be provided with a telephone, in accordance with the requirements of reference standard RS 18-1.

(1) Elevators with car switch operation shall be provided with a signal system by means of which signals can be given from any landing whenever the elevator is desired at the landing.

§[C26-1801.2] **27-995 Existing sidewalk elevators.**-Existing sidewalk elevators shall not be subject to the provisions of this section.

§[C26-1801.3] **27-996 Existing hand powered freight elevators.**-Existing hand powered freight elevators shall not be subject to the provisions of this article. However, adequate protection of landing openings shall be provided by hinged or sliding doors which shall remain locked at all times except when the freight elevator is in use. Auxiliary gates not less than thirty-six inches in height, substantially constructed and secured in place, of wood or metal, or equivalent metal chains shall be installed. Such gates or chains may be arranged to lift vertically, to slide horizontally, or to swing. No part of any gate or chain may project into the freight elevator shaft. Gates may be operated automatically or manually.

§[C26-1801.4] 27-996.1 Locks on elevators and elevator hoistway doors.-Notwithstanding the retroactive provisions of section 27-994 of this article, in high rise buildings and existing high rise buildings, no switch, lock or device of any kind shall be installed on any floor on or above the street floor on any elevator car or elevator hoistway door, except elevators used exclusively for freight, that shall prevent opening of such doors by anyone not having a key, unless fire department access to cars and hoistways is provided for by a city-wide standard key as described in reference standard RS 18-1.

Existing high rise buildings shall comply with the requirements of this section on or before April first, nineteen hundred eighty-seven.

§[C26-1801.5] 27-996.2 Firemen service operation in existing elevators.-

(a) Notwithstanding the retroactive provisions of section 27-994 of this article, where required by reference standard RS 18-1, firemen service operation shall be installed in all existing elevators serving any of the following:

(1) High rise buildings or building sections classified in occupancy group C.

(2) All buildings or building sections classified in occupancy group F, G, H or J-1 (except for "residential hotels," as such term is defined by the commissioner pursuant to rules and regulations).

(b) All work necessary to meet the requirements of this section shall be completed on or before April first, nineteen hundred eighty-seven.

ARTICLE 3 TESTS AND TEST INTERVAL

§[C26-1802.1] 27-997 Acceptance tests.-No new, relocated or altered equipment shall be placed in operation until it has been tested and an equipment use permit has been issued by the commissioner. Such tests shall be made as required in section 27-999 of this article and shall be conducted by the person or firm installing, relocating or altering the equipment and shall be witnessed by a representative of the commissioner.

***§[C26-1802.2] 27-998 Periodic inspection and test intervals.**-Every new and existing device listed in article one of this subchapter except elevators located, (i) in owner occupied one-family or two-family dwellings provided that the elevator services only the owner occupied dwelling unit and that such dwelling unit is not occupied by boarders, roomers or lodgers, or (ii) within convents or rectories which are not accessible to non-occupants on a regular basis, or (iii) within an owner occupied dwelling unit which is not occupied by boarders, roomers or lodgers shall be inspected and tested at least

at the following intervals:

(a) **Elevators**-five times every two years, or as otherwise provided by the commissioner and except:

(1) Car safeties and counterweight safeties, where provided, shall be inspected at intervals not exceeding one year and shall be tested at intervals not exceeding two years.

(2) Oil buffers and governors shall be periodically inspected and shall be tested at intervals not exceeding one year.

(3) Hydraulic elevator pressure tanks and the piston rods of roped hydraulic elevators every three years.

(b) **Escalators**-five times every two years.

(c) **Amusement devices**-every six months except that the commissioner may extend the periodic inspection and test for an additional two months for amusement devices located in premises which are seasonally operated.

(d) **Workers' hoists**-every three months and immediately following each increase in travel.

(e) **All other devices**-at such intervals as the commissioner may require.

(f) **Additional inspections**- in addition to the inspections required by subdivisions (a) through (e) of this section, the commissioner may make such additional inspections as required to enforce the provisions of this code. No fee shall be charged for such additional inspections.

(g) **Fees**-every owner of elevators and other devices shall pay to the department an inspection fee for each elevator or device in the amount prescribed by subdivision c of section 26-213 of title twenty-six of the administrative code.

**Local Law 48-1991; Local Law 96-1985, language juxtaposed per Ch. 907-1985.*

§[C26-1802.3] 27-999 Inspection and test requirements.-Every new and existing device listed in article one of this subchapter shall be subjected to inspections and test requirements as follows:

(a) **Elevators, dumbwaiters and escalators** to the requirements specified in the reference standard RS 18-1 except that:

(1) Governor operated elevator car safeties shall be tested with no load in the car at the lowest operating speed.

(2) Instantaneous type car safeties, without governors, operated only as a result of the breaking or slackening of the hoist ropes shall be tested with no load in the car.

(b) **Moving walks** to the requirements specified in the reference standard RS 18-1.

(c) **Lifts, conveyors, and amusement devices** shall be inspected and subjected to the test requirements of the applicable reference standards and shall be tested to confirm the load capacity and safety of operation of the equipment, including tests of all operating protective safety devices,

adequacy of the structural supports, and anchorage to floors, walls, ceilings and foundations.

(d) **All other devices** shall be subject to such inspections and tests as the commission[er]* may require.

**Copy in brackets not enacted but probably intended.*

§[C26-1802.4] 27-1000 Inspection agencies and elevator repair service.-

******(a) The required periodic inspections shall be made by the department except that two of the five inspections required every two years for elevators and escalators shall be made on behalf of the owner by an insurance company, elevator maintenance company, elevator manufacturer, elevator inspection company, or other person, each of which must be acceptable to the commissioner. The department shall promulgate rules and regulations establishing criteria as to the qualifications of such companies or persons. Such owner shall cause such inspections to be performed between January first and September fifteenth of each year. Reports by private inspection agencies shall be on such forms and in such manner as required by the commissioner. Such reports shall be delivered to the owner of each elevator or escalator inspected listing all violations of any of the provisions of this subchapter within five days of the inspection, and a signed copy of the report of each inspection shall be filed with the commissioner. The failure to have such inspection performed within the prescribed period and to file a copy of the report with the department on or before September thirtieth of each year shall be a violation of this section, which shall be punishable pursuant to the provisions of section 26-125 of title twenty-six of the administrative code. After such violation is placed the owner may file such report and the department shall enter a notation in its records of the date on which such report was received by the department. After the date of receipt by the department, the per diem penalty provided by subdivision c of section 26-125 of title twenty-six of the administrative code shall be stayed. The department shall maintain the violation on its records, with a notation of the date on which such report was received by the department. On or before October fifteenth of each year all defects as found upon such inspection shall be corrected.

(b) In addition to the requirements of subdivision (a) of this section, all reports filed on or after April first, nineteen hundred eighty-seven for existing buildings required to install stair and elevator signs pursuant to section 27-390, elevator in readiness systems pursuant to paragraph two of subdivision (c) of section 27-989 of article one of this subchapter or firemen service operation pursuant to section 27-996.02 of article two of this subchapter, shall contain a certification that the required installation has been made. The reports shall be on such forms and in such manner as the commissioner may require. Failure to file such report by such a date shall be a violation of this section, and shall be

punishable pursuant to section 26-125 of title twenty-six of the administrative code.

(c) In multiple dwellings (either J1 or J2 occupancy groups), the owner shall be required to have a contract with an elevator repair person or company authorizing the performance of emergency elevator repair work. Such repair person or company shall be one of the elevator inspection agencies or inspectors employed thereby currently acceptable to the commissioner. The name, address and telephone number of such elevator repair person or company shall be maintained on each premises, in a location readily accessible to employees of this department, and maintenance or custodial staff at the premises.

****Local Law 48-1991.**

ARTICLE 4 EQUIPMENT PERMITS

§[C26-1803.1] 27-1001 Permit required.-No construction, alteration or removal shall be commenced until a written work permit therefor shall have been issued by the commissioner in accordance with the provisions of article seventeen of subchapter one of this chapter. No equipment shall be placed in operation until an equipment use permit has been obtained in accordance with provisions of article eighteen of subchapter one of this chapter and section 27-997 of article three of this subchapter.

§[C26-1803.2] 27-1002 Temporary use permits.-Temporary use permits may be issued by the commissioner upon request in accordance with the provisions of section 27-188 of article eighteen of subchapter one of this chapter for any equipment or device regulated herein, except power operated scaffolds. Temporary use permits for elevators shall be conditioned further upon compliance with the following:

(a) The class of service to be permitted is designated on the temporary permit.

(b) The hoistway has been enclosed throughout in an enclosure complying with subdivision (b) of section 27-987 of article one of this subchapter or with a temporary enclosure in accordance with the requirements for workers' elevators (temporary elevators) of the industrial code of the state of New York, rule no. 23.

§[C26-1803.3] 27-1003 Posting of temporary use certificate.-The temporary operating certificate shall be posted in a conspicuous location on, or adjacent to, the device covered by the certificate and shall state that the device has not been finally approved by the commissioner.

*****§[C26-1803.4] 27-1004 Posting of inspection certificate.-**

a. At the time the equipment use permit is issued, an inspection certificate issued by the commissioner shall be posted. No such certificate shall be issued for elevators which are not

subject to periodic inspections pursuant to section 27-998. The certificate shall be in such form as determined by the commissioner and shall be posted in the car of every passenger and freight elevator and on or near every escalator and power operated scaffold and in a frame with a transparent cover.

b. In place of posting inspection certificates in those locations specified in subdivision a of this section, certificates may be kept in the on site building manager's office. In a building where this option is elected, there must be a building manager's office open during normal business hours, and there must be posted in each location specified in subdivision a of this section a notice in a frame with a transparent cover, or a plaque with an indelible inscription, stating that the inspection certificate is located in the building manager's office and identifying the location of such office.

****Local Law 39-1993; Local Law 96-1985, language juxtaposed per Ch. 907-1985.*

ARTICLE 5 EQUIPMENT OPERATION

§[C26-1804.1] **27-1005 Operators.**-Every power driven passenger elevator and freight elevator with a rise of more than one story, except automatic operation and continuous pressure elevators and sidewalk elevators, shall be in charge of a designated competent operator, who shall be at least eighteen years old, free from serious physical or mental defects, and selected with consideration of his or her abilities to perform his or her duties in a careful and competent manner, and who has been instructed in accordance with the requirements of the commissioner, except as otherwise specifically provided by law. Operators of amusement devices that require the services of a regular operator shall be at least eighteen years of age and shall have secured a certificate of competence from the commissioner. If the commissioner finds that any person engaged in running an elevator or amusement device is not competent to operate the elevator or device, the owner, agent or lessee of such elevator or amusement device shall, upon notice from the commissioner, discontinue the operation of such elevator or amusement device by such operator. Other devices listed in article one of this subchapter shall, when deemed necessary by the commissioner, be in charge of a designated competent operator conforming to such qualifications as the commissioner may prescribe except that operators for workers' hoists shall be assigned as required by the applicable provisions of reference standard RS 18-7.

§[C26-1804.2] **27-1006 Accidents.**-The owner or person in charge of the equipment or devices listed in article one of this subchapter shall promptly notify the commissioner of every accident involving injury to any person requiring the services of a physician or damage to property or to apparatus exceeding one hundred dollars on, about, or

in connection with such equipment, and shall afford the commissioner every facility for investigating such accident or damage. The commissioner shall make an investigation immediately thereafter, and shall prepare a full and complete report of such investigation. Such report shall give in detail all material facts and information available and the cause or causes as far as they can be determined. Such report shall be open to public inspection at all reasonable hours. When an accident involves the failure or destruction of any part of the construction or operating mechanism of such equipment, no such equipment shall be used until it has been made safe, and re-inspected by the commissioner; and the commissioner may order the discontinuance of such equipment until a new use permit has been issued by him or her for its use. No part shall be removed from the premises of the damaged construction or operating mechanism until permission to do so has been granted by the commissioner.



SUBCHAPTER 19
SAFETY OF PUBLIC AND PROPERTY DURING
CONSTRUCTION OPERATIONS

TABLE OF CONTENTS

[Sub-Art. _____ Art.
 —or Sec.]* —or Sec.**

[1900.0] — Art. 1 — General

[1900.1] — 1007 — Scope
 [1900.2] — 1008 — Definitions
 [1900.3] — 1009 — General Requirements
 [1900.4] — 1010 — Inspection
 [1900.5] — 1011 — Sizes and Stresses of
 Materials

[1900.6] — 1012 — Inspections
 [1900.7] — 1013 — Utilities
 [1900.8] — 1014 — Fire Protection
 [1900.9] — 1015 — Design
 [1900.10] — 1016 — Alternate Details and
 Procedures

**[1901.0] — Art. 2 — Maintenance of Site and
 Adjacent Areas**

[1901.1] — 1017 — Construction Equipment
 [1901.2] — 1018 — Housekeeping
 [1901.3] — 1019 — Removal and Storage of
 Material
 [1901.4] — 1020 — Obstruction of Sidewalks
 and Streets
 [1901.5] — 1021 — Protection of Sidewalks
 [1901.6] — 1022 — Safety Netting and
 Scaffolding
 [1901.7] — 1023 — Warning Signs and Lights
 [1901.8] — 1024 — Watchmen and Flagmen
 [1901.9] — 1025 — Escape Hatches Required

**[1902.0] — Art. 3 — Protection of Adjoining
 Property**

[1902.1] — 1026 — General
 [1902.2] — 1027 — Abandoned and
 Discontinued Operations
 [1902.3] — 1028 — Excavation or Filling
 Operations Affecting
 Adjoining Property
 [1902.4] — 1029 — Foundation Operations
 Affecting Adjacent
 Properties
 [1902.5] — 1030 — Protection of Trees

[1903.0] — Art. 4 — Excavation Operations

[1903.1] — 1031 — General Requirements
 [1903.2] — 1032 — Protection of Sides of
 Excavations

[1904.0] — Art. 5 — Erection Operations

[1904.1] — 1033 — Protection of Sidewalks
 [1904.2] — 1034 — Structural Steel Assembly
 [1904.3] — 1035 — Concrete Formwork

[1905.0] — Art. 6 — Demolition Operations

[1905.1] — 1036 — Preparations
 [1905.2] — 1037 — Protection of Adjacent

Structures

[1905.3] — 1038 — Protection of Sidewalks
 [1905.4] — 1039 — Demolition Operations
 [1905.5] — 1040 — Completed Demolitions

**[1906.0] — Art. 7 — Repair and Alteration
 Operations**

[1906.1] — 1041 — General Requirements

[1907.0] — Art. 8 — Scaffolds

[1907.1] — 1042 — General Provisions for all
 Scaffolds

[1907.2] — 1043 — Pole Scaffolds

[1907.3] — 1044 — Outrigger Scaffolds

[1907.4] — 1045 — General Provisions for
 Suspended Scaffolds

[1907.5] — 1046 — Two Point Suspension
 Scaffolds

[1907.6] — 1047 — Multiple Point Suspension
 Scaffolds

[1907.7] — 1048 — Manually Propelled Free
 Standing Scaffolds

[1907.8] — 1049 — Power Operated Free
 Standing Scaffolds

[1907.9] — 1050 — Standard Guard Rail and
 Toeboard

— 1050.1 — Notification of Use or
 Installation of C Hooks or
 Outrigger Beams

**[1908.0] — Art. 9 — Structural Ramps,
 Runways, and Platforms**

[1908.1] — 1051 — Ramps and Runways

[1908.2] — 1052 — Platforms

[1908.3] — 1053 — Special Requirements
 Where Power Buggies Are
 Used

**[1909.0] — Art. 10 — Material Handling and
 Hoisting Equipment**

[1909.1] — 1054 — General Requirements

[1909.2] — 1055 — Rigging, Rope, Chains,
 and Their Appurtenances
 and Fittings

[1909.3] — 1056 — Material Platform Hoists
 and Bucket Hoists

[1909.4] — 1057 — Testing Inspection;
 Approval and Use of
 Power Operated Cranes,
 Derricks and Cableways

[1909.5] — 1058 — Conveyors and Cableways

[1909.6] — 1059 — Trucks

[1909.7] — 1060 — Power Buggies

[1909.8] — 1061 — Lift and Fork Trucks

[1909.9] — 1062 — Hand Propelled Vehicles

[1909.10] — 1063 — Mixing Machines

[1909.11] — 1064 — Jacks

**[1910.0] — Art. 11 — Explosive Powered and
 Projectile Tools**

[1910.1] — 1065 — General

[1910.2] — 1066 — Explosive Powered Tools

[1910.3] — 1067 — Projectile Tools

~~[1911.0] — Art. 12 Explosives and Blasting~~

~~[1911.1] — 1068 — General~~

~~[1912.0] — Art. 13 Flammable and
Combustible Mixtures,
Compressed Gases, and
Other Hazardous
Materials~~

~~[1912.1] — 1069 — General~~

~~§1912.1 "C26" omitted from section numbers in this column.~~

~~§1912.2 "27" omitted from section numbers in this column.~~

LIST OF TABLES

Table No.

- 19-1 Minimum Sizes of Timber Bracing and Timber Sheet Piling for Trenches Four Feet Wide or Less
- 19-2 Minimum Sizes of Timber Bracing and Timber Sheet Piling for Trenches Four to Eight Feet Wide
- 19-3 Minimum Lateral Pressures to be Assumed for Fresh Concrete Weighing 150 Pounds per Cubic Foot
- 19-4 Size and Number of Nails Required for Scaffold Construction
- 19-5 Maximum Permissible Spans for Two-Inch Plank Used on Scaffolds
- 19-6 Minimum Size and Maximum Spacing of Members of Single Pole Light Duty Scaffolds
- 19-7 Minimum Size and Maximum Spacing of Members of Single Pole Medium Duty Scaffolds
- 19-8 Minimum Size and Maximum Spacing of Members of Single Pole Heavy Duty Scaffolds
- 19-9 Minimum Size and Maximum Spacing of Members of Independent Pole Light Duty Scaffolds
- 19-10 Minimum Size and Maximum Spacing of [sic] Members of Independent Pole Medium Duty Scaffolds
- 19-11 Minimum Size and Maximum Spacing of Members of Independent Pole Heavy Duty Scaffolds

ARTICLE 1 GENERAL

~~§[C26-1900.1] 27-1007 Scope.~~ The provisions of this subchapter shall govern the conduct of all construction operations with regard to the safety of the public and property. For the purposes of this subchapter, construction operations shall include excavation, erection, alteration, repair, removal and demolition as related to buildings. For regulations relating to the safety of persons employed in such construction operations, the provisions of subchapter ten of the labor law as implemented by the industrial code of the state of New York, rule no. 23, shall apply.

~~§[C26-1900.2] 27-1008 Definitions.~~ For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

~~§[C26-1900.3] 27-1009 General requirements.~~ (a)

~~A contractor engaged in building work shall institute and maintain safety measures and provide all equipment or temporary construction necessary to safeguard all persons and property affected by such contractor's operations.~~

~~(b) No structure, device, or construction equipment, whether permanent or temporary, including all partly or fully completed elements or sections of the building, shall be loaded in excess of its design capacity.~~

~~(c) At a height of no more than twelve feet above ground and on each perimeter of a construction site fronting on a public thoroughfare, a sign shall be erected no more than twenty five square feet in size which shall bear in letters no less than six inches high, the name, address and telephone number of the owner of the property, and the name, address and telephone number of the general contractor.~~

~~(d) A construction site safety coordinator must be designated and present on a construction site in accordance with department rules and regulations.~~

~~§[C26-1900.4] 27-1010 Inspection.~~ Except for the installation of underpinning and the construction of temporary retaining structures (see section 27-724 of article thirteen of subchapter eleven of this chapter) and for other operations specifically required by the provisions of this subchapter to be inspected by an engineer or an architect, inspection of operations for compliance with the provisions of this subchapter may be performed by, or under, the authority of the person superintending the work. Unless required by the provisions of this subchapter, inspection and test reports relating to operations within the scope of this subchapter need not be filed.

~~§[C26-1900.5] 27-1011 Sizes and stresses of materials.~~

~~(a) Sizes.~~ All sizes and dimensions prescribed in this subchapter are minimum requirements. Lumber sizes are nominal or commercial except where stated otherwise. ~~(b) Stresses.~~ Except where sizes are specifically prescribed in this subchapter, temporary equipment and constructions shall be designed so that the allowable stress values prescribed in subchapter ten of this subchapter are not exceeded.

~~§[C26-1900.6] 27-1012 Inspection.~~ Any construction equipment or device, except hand tools, that would affect the public safety when operated shall be inspected by the person superintending the work or by his or her designated representative before using the equipment or device on a specific job. Such inspection shall be carefully made, and every defect or unsafe condition shall be corrected before use is permitted. Any unsafe equipment or device shall be made safe immediately or removed from the site. Periodic inspection procedures

shall be instituted during construction operations, and a record of inspections shall be kept at the site for the duration of the work.

~~§[C26-1900.7] 27-1013 Utilities.~~

~~(a) Existing services.~~ The location of all existing utilities and service lines shall be determined and adequate measures taken, or devices provided, to safeguard the public and property before such utilities are disturbed. If any utility is to be removed, relocated, or have its service interrupted, the utility company or city agency affected shall be notified at least seventy-two hours in advance.

~~(b) Maintaining essential services.~~ Fire preventive, sanitary, or other facilities that have been provided for the protection of life, health, and property shall be continuously maintained and protected unless authorization is obtained from the agency having jurisdiction to temporarily or permanently disconnect such facility.

~~(c) Electrical work.~~ All temporary electrical equipment and wiring shall meet the requirements of the electrical code of the city of New York, and shall be maintained to meet such requirements. Portions of permanent electrical installations may be used for temporary operations provided the requirements of the electrical code are met. At least seventy-two hours before work is begun that may affect a power line, above or below ground, the person superintending the work shall notify the utility company affected.

~~§[C26-1900.8] 27-1014 Fire protection.~~ Fire fighting equipment at the construction site and the conduct of all construction operations affecting fire prevention and fire fighting shall meet the requirements of the fire department.

~~(a) Temporary elevator.~~ Whenever in the course of building construction the work is at a height greater than seventy-five feet, at least one elevator meeting the requirements of subchapter eighteen of this chapter shall be kept in readiness at all times for fire department use.

~~(b) Standpipe systems.~~ Standpipe systems during construction operations shall comply with the following:

~~(1)~~ If in the course of erection or alteration for which a standpipe system will be required the work reaches a height greater than seventy-five feet a permanent or temporary standpipe meeting the requirements of subchapter seventeen of this chapter shall be kept in readiness at all times for fire department use. The system shall be a dry system when freezing conditions may be encountered.

~~(2)~~ In structures undergoing demolition which have existing standpipe systems, such systems shall be maintained as dry standpipes. When demolition is started, the standpipe risers shall be capped above the outlet on the floor immediately below the floor being demolished so as to maintain the standpipe system on

all lower floors for fire department use. Standpipe hose, nozzles and spanners are not required to be maintained and may be removed at any time. Siamese hose connections shall be kept free from obstruction and shall be marked by a metal sign reading, "Standpipe Siamese Connection" and by a red light at night.

~~(3)~~ The standpipe system may be used for water supply necessary to demolition operations. In freezing weather such standpipe system shall be completely drained after use to prevent freezing. Existing standpipe systems shall not be utilized to convey compressed air unless the standpipe consists of two or more risers in which event one of the risers may be used to convey compressed air to any floor or portion of the premises upon application to and permission from the fire department.

~~(4)~~ In structures undergoing demolition which have existing sprinkler systems with siamese hose connections, such system shall be maintained as a non-automatic sprinkler system. When demolition starts, the sprinkler risers shall be capped immediately below the floor being demolished so as to maintain the sprinkler system on all lower floors for fire department use. Siamese hose connections shall be kept free from obstruction and shall be marked by a metal sign reading "Sprinkler Siamese Connection" and by a red light at night.

~~§[C26-1900.9] 27-1015 Design.~~ Whenever design is required by the provisions of this subchapter, such design shall be executed by, or under, the supervision of an engineer or an architect who shall cause his or her seal and signature to be affixed to any drawings or specifications that may be required for the work. All such documents shall be kept at the site for inspection by the commissioner for the duration of the job.

~~§[C26-1900.10] 27-1016 Alternate details and procedures.~~ Whenever "alternate" or "equivalent" details, materials or procedures are specified in this subchapter, they shall be permitted as provided in section 27-133 of article seven of subchapter one of this chapter. In the absence of specific criteria, the degree of structural safety shall be deemed to require a factor of safety against structural failure consistent with the requirements of subchapter ten of this chapter.

ARTICLE 2 MAINTENANCE OF SITE AND ADJACENT AREAS

~~§[C26-1901.1] 27-1017 Construction equipment.~~

~~(a) Machinery.~~ All exposed, electrically charged, moving or otherwise dangerous parts of machines and construction equipment shall be located, guarded, shielded, or barricaded so as to prevent contact by the public.

~~(b) Services* lines and conduits.~~ Hose lines, wires, ropes, pipes, chains, etc., shall be located so that they

~~will not constitute a tripping hazard. Where it is necessary to carry such lines across sidewalks, or any public way, either they shall be suspended at least eight feet above the walks or suitable chamfered planks or a pedestrian bridge shall be provided.~~

~~(c) Contractors sheds. Contractors sheds and offices located within thirty feet of new construction or existing buildings shall be made of metal or other noncombustible material. Fire retardant treated wood may be used when protected from the weather.~~

~~* As enacted but "Service" probably intended.~~

~~** §[C26-1901.2] 27-1018 Housekeeping.~~

~~(a) All areas used by the public shall be maintained free from ice, snow, grease, debris, equipment, materials, projections, tools, or other item, substance, or condition that may constitute a slipping, tripping, or other hazard.~~

~~*** Local Law 61-1987.~~

~~(b) When not being used, materials, equipment, and tools that might fall from levels above areas used by the public shall be kept away from edges or openings. When exterior walls are not in place, material piles shall be kept at least ten feet back from the perimeter of the building.~~

~~(c) Material may be stored within two feet of the edge of a building provided however that such material is stored not more than two stories below the stripping operation on concrete structures or the uppermost concrete floor on steel frame structures. Such material shall be secured against accidental movement. Storage of material on all other floors shall conform to paragraph (b) of this section and shall be secured when not being used.~~

~~(d) Waste dumpsters, debris boxes and skip boxes shall be secured and those containing material or debris shall be covered at the end of each work day. Such waste dumpsters, debris,*** boxes and skip boxes shall not be placed at the edge of the building at any time except when being moved from the floor or building.~~

~~(e) Sufficient containers of metal or other material acceptable to the commissioner shall be available for the storage of all garbage and debris. The containers shall be of three quarter cubic yard minimum capacity.~~

~~*** As enacted but comma probably intended to be omitted.~~

~~§[C26-1901.3] 27-1019 Removal and storage of material.~~

~~(a) Removal of waste material. Combustible waste material or combustible debris shall not be permitted to accumulate, and shall be removed from the site at reasonable intervals, in accordance with the requirements of the fire department. No material shall be dropped or thrown outside the exterior walls of a building. Precautions shall be taken to prevent concrete or mortar washings, sand, grit, or any other material that would cause clogging from entering a sewer or drain.~~

~~Provisions of the air pollution control code concerning precautions to prevent particulate matter from becoming airborne shall apply.~~

~~(b) Chutes. When chutes are used for removal of material, they shall meet the following requirements:~~

~~(1) ENCLOSURE.~~

~~a. Material chutes that are at an angle of more than forty five degrees with the horizontal shall be entirely enclosed on all sides, except for openings at the floor levels for the receiving of materials. Such openings shall not exceed forty eight inches in height, measured along the wall of the chute, and all openings, except the top opening, shall be closed and secured when not in use.~~

~~b. Chutes at an angle of less than forty five degrees with the horizontal may be open on the upper side.~~

~~(2) CONSTRUCTION.~~

~~a. Every chute used to convey waste material from a building shall be rigidly supported and braced throughout its height. Chutes less than twenty four inches in maximum dimension shall be constructed of not less than one inch (nominal) wood or one eighth inch thick steel. Chutes more than twenty four inches in maximum dimensions shall be constructed of not less than two inch (nominal) wood or three sixteenths inch thick steel.~~

~~b. Chutes shall be provided with a metal impact plate where material is forced to change direction while falling.~~

~~c. A gate shall be provided at the lower end of every chute to control the loading of material into trucks and to close the chute at all other times. Splashboards or baffles shall be erected to prevent materials from rebounding into the street or under the sidewalk shed.~~

~~d. A bumper or curb at least four inches by four inches in section shall be provided at each chute opening where such opening is level with, or below, the floor or platform. Every space between the chute and the edge of the opening in the floor or platform shall be solidly planked.~~

~~(3) FIRE RETARDANT CONSTRUCTION. All chutes, constructed of combustible material shall be covered on the exterior with corrugated steel sheeting having a minimum thickness of 24 gage [sic] through their entire height or shall be constructed of non combustible material when used in the following applications:~~

~~a. Chutes exceeding seventy five feet in height.~~

~~b. Alteration, repair or partial demolition of buildings classified in occupancy groups H1 and H2.~~

~~(4) SUPPORTS. All structural supports of material chutes shall be of noncombustible material.~~

~~(c) Storage of combustible material and equipment. Storage of combustible material and other material and equipment that present a fire hazard shall meet the requirements of the fire department.~~

~~§[C26-1901.4] 27-1020 Obstruction of sidewalks and streets.~~ The requirements of the department of transportation shall apply with regard to the closing of streets or to the obstruction of any part thereof, except as hereinafter provided. Building department personnel are authorized to consider failure to display a current department of transportation permit for any street or sidewalk closing or obstruction not authorized by this code as a violation of this section; and to direct removal thereof.

~~§[C26-1901.5] 27-1021 Protection of sidewalks.~~ Unless the street is officially closed to the public during construction operations, the following minimum safeguards shall be provided for the protection of the public:

~~(a) Types of safeguards and when required.~~

~~* (1) a. A sidewalk shed shall be erected when a structure higher than forty feet is to be constructed or a structure higher than twenty five feet is to be demolished and the horizontal distance from the structure being built or demolished to the inside edge of the permanent or temporary walkway is equal to one half or less of the height of the structure. No sidewalk shed shall be erected unless and until a special permit therefor has been issued by the department. Each applicant for a sidewalk shed permit shall state the reason the sidewalk shed is needed. The term of the sidewalk shed permit shall be one year, or upon the expiration of the contractor's insurance, if such time period is less than one year. No renewals of shed permits, except for new buildings under construction, will be given unless an architect or engineer conducts a thorough examination of that part of the premises on which work is being conducted and submits a report acceptable to the commissioner, which clearly documents the condition of the applicable part of the premises and the scope of work that has been performed thereon, and estimates the time needed to complete the work. To renew a shed permit for a new building under construction, each applicant shall file an application with the commissioner. All renewal applications shall include the name and address of the owner of the premises.~~

~~*Local Law 93-1996; Local Law 33-1991.~~

~~b. Following the receipt of a permit to erect a sidewalk shed, the permit holder shall post a sign on the sidewalk shed. Such sign shall include the name, address, telephone number, and permit number of the permit holder. The sign shall also include the date that the permit expires. The sign shall measure twenty five square feet.~~

~~(2) A sidewalk shed shall be erected regardless of the height of the structure or the horizontal distance between the structure and the sidewalk when material or debris is to be moved by a hoist, crane, derrick, or chute over a sidewalk or temporary sidewalk that is not closed to the public.~~

~~(3) A fence, in lieu of a sidewalk shed, may be constructed along the inside edge of the walkway or temporary walkway when a structure higher than forty feet is to be constructed or a structure higher than twenty five feet is to be demolished and the horizontal distance from the structure being built or demolished to the inside edge of the permanent or temporary walkway is between one half and three quarters of the height of the structure. If permission to close the sidewalk has been obtained from the department of transportation, such fence may be erected along the curb or outside of the curb to such extent as may be approved by the department of transportation. The fence shall be returned at its ends to the extent necessary to effectively close off the site.~~

~~(4) For cases that do not fall within the circumstances described in paragraphs one through three of this subdivision, a standard guard rail (section 27-1050 of article eight of subchapter nineteen of this chapter), in lieu of a sidewalk shed or fence, may be constructed along the inside edge of such walkway or temporary walkway. If permission to close the sidewalk has been obtained from the department of transportation, the railing may be constructed along the curb or outside of the curb to such extent as may be approved by the department of transportation. The railing shall be returned at its ends to the extent necessary to effectively close off the site.~~

~~***As enacted but "department" probably intended.~~

~~*(5) A sidewalk shed shall be erected when a portion of a facade over forty feet above curb level is being altered or repaired and the horizontal distance from the portion of the structure being altered or repaired to the inside edge of the temporary or permanent walkway is less than one half the height of the structure being altered or repaired. Applications for sidewalk shed permits shall meet the requirements listed in paragraph one of this subdivision. Where a sidewalk shed is erected in conjunction with the repair of an unsafe condition of a facade, or for the repair of any other violation issued by the department, and such repairs have not been made, and the sidewalk shed has not been removed within two years from the date of issuance of the original sidewalk shed permit, in addition to any of the penalties provided for in section 27-129 of this code, the owner of the building shall be liable for a civil penalty in the amount of two hundred fifty dollars per month for every month or part thereof during which such sidewalk shed is not removed, unless such owner has submitted a report in compliance with section 26-252 of this code and the commissioner determines that the unsafe condition could not be repaired within such two year period. Provided, however, that nothing in this paragraph shall be construed to prevent the commissioner, prior to the end of such two year period, from taking action against the owner of a building for failure to repair an unsafe~~

condition pursuant to section 27-129 of this code or any rules and regulations promulgated thereunder.

~~***Local Law 33-1991.~~

~~*(6) Horizontal safety netting shall be provided on the sides of a structure more than six stories or seventy-five feet in height above the adjoining ground or adjoining roof level, whichever is applicable, when, while under construction, the facade of such structure is not enclosed and there is exposure to the public or adjacent property as determined in rules and regulations promulgated by the Commissioner. Vertical safety netting or screening shall be provided at the sides of a structure more than six stories or seventy-five feet in height above the adjoining ground or adjoining roof level, whichever is applicable, when, while under construction, the facade of such structure is not enclosed and is exposed to the public or adjacent property as determined by rules and regulations promulgated by the commissioner. In addition, safety netting shall be provided as required by section 27-1022.~~

~~***Local Law 61-1987.~~

~~(b) Sidewalk sheds.~~

~~(1) Every sidewalk shed deck shall be designed and constructed to carry a live load of at least three hundred psf. However, a live load of one hundred fifty psf may be permitted for buildings less than one hundred feet in height provided there is no storage thereon. The members of the sidewalk shed shall be adequately braced and connected to prevent displacement or distortion of the framework. Where posts supporting the shed deck are placed beyond the curb, such posts shall be protected against displacement by vehicles.~~

~~(2) The deck of the sidewalk shed shall consist of planking closely laid, and made tight.~~

~~(3) Steel, or other materials having equivalent strength and suitability may be used in lieu of wood to construct sidewalk sheds.~~

~~(4) Where deemed necessary by the commissioner, the deck shall cover the entire width of the sidewalk, except for reasonably small clearances at the building line and the curb.~~

~~(5) Except as authorized by paragraph seven, sidewalk sheds shall extend at least the entire length of the property line of the structure unless constructed solely to comply with paragraph two of subdivision (a) of this section, and may extend beyond the curb to such extent as may be approved by the department of transportation.~~

~~(6) The outer side and ends of the deck of the shed shall be provided with a substantial enclosure at least three feet six inches high. Such enclosure may be vertical or inclined outward at approximately forty-five degrees, and shall consist of boards laid close together and secured to braced uprights, of galvanized wire screen not less than no. 16 steel wire gage with a one-half inch mesh, of corrugated metal, or of solid~~

~~plywood. Temporary removal of portions of the enclosure shall be permitted for handling material.~~

~~(7) a. For all buildings one hundred feet or more in height, the deck and protective guards of the sidewalk shed shall be extended parallel with the curb at least twenty feet beyond the ends of all faces of the structure [regardless of whether such extensions are in front of the property being developed or in front of adjacent]*** property. Extensions of sidewalk sheds complying with the foregoing shall be constructed so as not to unreasonably obstruct, either visually or physically, entrances, egress, driveways and show windows of adjacent properties.~~

~~***Copy in brackets not enacted but probably intended.~~

~~b. All sidewalk sheds shall provide a protection for the full width of the shed extending upward at an angle of forty-five degrees from the ends of the deck and outward a horizontal distance of at least five feet beyond the ends of the shed. Such sloping end protection shall be constructed to meet the requirements of paragraph one of this subdivision with substantial outriggers bearing on and securely attached to, the deck.~~

~~(8) The passageway shall be wide enough to accommodate pedestrian traffic normal for that location without causing congestion; but in no case shall the width be less than four feet. The passageway shall have a minimum clear ceiling height of eight feet.~~

~~(9) Unless the top deck of the sidewalk shed is built solidly against the face of the structure in such a manner that no material can fall onto the sidewalk, the side of the shed toward the structure shall be solidly sealed with wood or other suitable material for the full height of the shed. Solid sliding or inswinging gates may be provided as necessary for the proper prosecution of the work.~~

~~*(10) The underside of the sidewalk sheds shall be lighted at all times either by natural or artificial light. The level of illumination shall be the equivalent of that produced by two hundred watt, thirty-four hundred lumen minimum, standard incandescent lamps enclosed in vandal proof fixtures and spaced fifteen feet apart and eight feet above the floor level. Artificial lighting units shall be inspected nightly; and burned out or inoperative units shall be replaced or repaired immediately.~~

~~***Local Law 33-1991.~~

~~(11) When a sidewalk shed is required for the erection of a structure, construction of the structure shall stop at a height of forty feet unless, and until, the sidewalk shed has been completed. Such shed shall remain in place until the structure is enclosed, all exterior work completed and the sash is glazed above the second story, exterior of the facade is cleaned down, and all outside handling of material, equipment and machinery, and all dismantling of a material hoist, or climber or tower crane or the use of a derrick in their removal,~~

above the second story is completed.

(12) ~~When a sidewalk shed is required for the demolition of a structure, the sidewalk shed shall be completed before any demolition work is performed. Such shed shall remain in place until the structure has been razed to the height of the shed and as long as necessary to meet the requirements of paragraph two of subdivision (a) of this section.~~

(c) ~~Fences. Fences shall be at least eight feet high, and constructed of wood or other suitable material. They shall be built solid for their entire length, except for openings with solid sliding or in swinging side gates as are required for the proper prosecution of the work, and for viewing panels, which shall be blocked with plexiglass or equivalent nonfrangible material.~~

(d) ~~Openings in sidewalk sheds, fences, and railings. Openings in sidewalk sheds, fences, and railings for loading purposes shall be kept closed at all times except during actual loading operations.~~

(e) ~~Temporary walkways. Where permission has been granted by the department of transportation to locate a temporary walkway beyond the curb line, such temporary walkway shall be provided with a standard guard rail (section 27-1050 of article eight of subchapter nineteen of this chapter) on the traffic side. All temporary walkways shall be illuminated at all times as required in paragraph ten of subdivision (b) of this section.~~

(f) ~~Foot bridges.~~

(1) ~~When a temporary foot bridge is used as a sidewalk in front of a structure during construction work, the bridge shall be wide enough to accommodate normal traffic without congestion, but in no case shall it be less than four feet. The bridge, and steps or ramps, shall be designed and constructed to carry a live load of one hundred fifty psf. The walkway on such bridge shall be provided with standard guard rails for its entire length and shall be provided with steps at both ends or with inclined ramps at a maximum slope of one in four. Ramps shall have cleats to prevent slipping.~~

(2) ~~Where planks are used to pave the walkway, they shall be laid close and securely fastened to prevent displacement. Planks shall be of uniform thickness, and all exposed ends on ramps shall be provided with beveled fillers to eliminate tripping hazards.~~

(3) ~~Foot bridges shall be illuminated at all times as required in paragraph ten of subdivision (b) of this section.~~

~~** (g) Safety netting.~~

(1) ~~When required to be installed horizontally, safety netting shall include a structural mesh lined with a fine mesh of a size and strength sufficient to catch falling tools and materials.~~

(2) ~~When required to be installed vertically, safety netting or its equivalent shall include a fine mesh of a size and strength sufficient to contain falling tools and~~

materials. Such netting shall be secured and kept closed at all times except during actual loading operations or perimeter construction operations.

(3) ~~In addition to the requirements set forth in paragraphs one and two of this subdivision, required safety netting and its supports shall comply with reference standard RS-19-4 and all applicable rules and regulations promulgated by the commissioner. Scaffolding, screening or its equivalent shall comply with rules and regulations promulgated by the commissioner.~~

~~xx Local Law 61-1987.~~

~~** §[C26-1901.6] 27-1022 Safety netting and scaffolding.~~

(a) ~~When required.~~

(1) ~~When demolishing the exterior walls or the roof of a structure more than six stories or seventy five feet above the adjoining ground or adjoining roof level, whichever is applicable, horizontal safety netting shall be provided on the sides of a structure where there is exposure to the public or adjacent property as determined by rules and regulations promulgated by the Commissioner unless an exterior built up scaffold providing equivalent protection has been erected. The horizontal safety netting or scaffolding shall be required in addition to the sidewalk sheds, fences, or railing required under section 27-1021 of this article, and shall be constructed and maintained not more than two stories or thirty feet below the story from which the exterior walls and roof are being removed until such demolition has progressed to within six stories or seventy five feet of the ground level.~~

(2) ~~When exterior walls are being constructed more than six stories or seventy five feet above the adjoining ground or adjoining roof level, whichever is applicable horizontal safety netting shall be provided on the sides of the structure where the facade of such structure is not enclosed and is exposed to the public or adjacent property as determined by rules and regulations promulgated by the commissioner. Such safety netting shall be maintained at a level not more than two stories or thirty feet below the stripping operation on concrete structures or the uppermost concrete floor on steel frame structures and in addition, on such lower stories as required pursuant to rules and regulations promulgated by the commissioner.~~

(b) ~~Debris shall be removed at least daily from safety netting provided in accordance with the requirements of this section.~~

(c) ~~Storage of material. Safety netting shall not be used for storing materials.~~

~~xx Local Law 61-1987.~~

~~§[C26-1901.7] 27-1023 Warning signs and lights.~~

~~(a) Obstructions and openings.~~ Where a material pile or other obstruction, or an excavation, opening, or other hazard is located in, or adjacent to, a way open for use by persons other than workmen, such hazard shall be indicated by red flags or signs during daylight hours, and by red lanterns, red lights, oil flares, flashing beacons, lighted signs, or equivalent devices from sunset to sunrise. Such warning devices shall be located no more than thirty feet apart.

~~(b) Dangerous areas.~~ In areas where special danger to the public exists, such as at vehicle entrances and exits, hoisting areas, points of storage of explosives or highly flammable material, or discharge ends of chutes, descriptive warning signs shall be provided. Such warning signs shall contain the word "danger" in prominent letters and, where in, or adjacent to, a public way, shall be illuminated from sunset to sunrise. Barriades and/or designated personnel shall be provided to the extent necessary to keep the public away from such areas or to guide them around the areas.

~~(c) Vehicular traffic.~~ Whenever any work is being performed over, on, or in close proximity to a highway, street, or similar public way, control and protection of traffic shall be provided by barriades, signals, signs, flagmen, or other devices, equipment, and personnel in accordance with the requirements and standards of the department of transportation.

~~*§[C26-1901.8] 27-1024 Watchmen and flagmen.~~

~~(a) Watchmen.~~ Where a building being constructed or demolished occupies a ground area of more than five thousand square feet, and up to forty thousand square feet, a competent watchman shall be on duty at the site during all hours when operations are not in progress. Where the construction or demolition area occupies a ground area of more than forty thousand square feet at least one additional watchman shall be on duty for each additional forty thousand square feet of construction or demolition area, or fraction thereof. Watchmen shall be familiar with the location of street fire alarm boxes and the location and use of fire fighting equipment required to be on the job site.

~~(b) Flagmen.~~ A flagman shall be provided whenever intermittent operations are conducted on, or across, areas open to use by persons other than workmen, or when dangerous operations, such as blasting, may affect such areas.

^a *As enacted but nonexistent terms probably intended.*

~~§[C26-1901.9] 27-1025 Escape hatches required.~~

~~(a)~~ Where salamanders or other heating equipment are used to provide temporary heating during the placing of concrete for a floor, an escape hatch shall be provided from the floor where the concrete is being placed, which shall extend through at least one story immediately below

such floor. The escape hatch shall be located as near to the center of the building as shall be practical.

~~(b)~~ The escape hatch shall be constructed with at least two ladders enclosed in a metal shield. The ladders shall extend from a distance of three feet above the floor under construction to at least two stories below unless such floor is less than two stories above the lowest floor. The metal shield shall enclose the ladders on all sides from the top of the floor where the concrete is being placed to at least the top of the floor next below.

~~(c)~~ The inside dimensions between faces of the shield shall be not less than three feet eight inches.

~~(d)~~ The space between the shield and the perimeter of the opening in the floor under construction and also between the shield and the perimeter of the opening in the floor next below, shall be decked over with two inch or heavier planking covered with plywood or sheet metal so as to make the decking smoke tight. At the termination of the ladders the opening in the floor shall be covered completely with two inch planking or other material of equivalent strength.

ARTICLE 3 PROTECTION OF ADJOINING PROPERTY

~~§[C26-1902.1] 27-1026 General.~~

~~(a) License to enter adjoining premises.~~ The provisions of chapter one of title twenty-six of the administrative code, as amended, shall apply.

~~(b) Physical examination.~~

~~(1)~~ When permission to enter upon adjoining property has been obtained, a physical examination of such property shall be conducted by the person initiating the construction or demolition operations prior to the commencement of the operations and at reasonable periods during the progress of the work.

~~(2)~~ During demolition operations, the provisions of section 27-1037 of article six of this subchapter shall also apply.

~~(c) Adjoining walls.~~ When any construction operation exposes or breaches an adjoining wall, the contractor shall maintain the structural integrity of such wall and maintain all required fire exits and passageways or provide substitutions meeting the requirements of this code. Portions of the wall exposed by construction operations shall be protected against the elements, and shall be restored or left permanently protected after completion of operations.

~~(d) Weatherproof integrity of adjoining buildings.~~ Where the weatherproof integrity of an adjoining building is impaired by construction operations, the flashing shall be restored, copings replaced, or other necessary measures taken to restore the weatherproof integrity of such adjoining buildings. See paragraph three of subdivision (a) of section 27-1037 of article six of this subchapter.

~~*(e) Insurance.~~ The person or entity who obtains a permit for construction or demolition operations shall, at his or her own expense, procure and maintain for the duration of the operations, insurance of a kind and in an amount specified by rule of the department, to insure any and all adjacent property owner or owners and their lawful occupant or occupants fully for all risks of loss, damage to property or injury to or death of persons, arising out of or in connection with the performance of all work described in this article or article four of this subchapter. Such person or entity shall submit proof of insurance to the department when applying for a permit for construction or demolition work.

~~*Chapter 664 of Laws of 2007.~~

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§[C26-1902.2] 27-1027 Abandoned and discontinued operations.-

(a) **Fencing.**-If any construction operation is abandoned, discontinued or interrupted, a solid fence at least eight feet high shall be provided to protect the public from potential hazards on the site.

(b) **Filing** and grading.**-If an excavation has been completed or partly completed and discontinued or interrupted, and the required permit has expired under the provisions of section 27-196 of article nineteen of subchapter one of this chapter and a permit for a proposed building has not been issued within six months after the completion of such operations, the lot shall be filled and graded to eliminate all steep slopes, holes, obstructions, or similar sources of hazard. Fill shall consist of clean, noncombustible material. The final surface shall be graded in such a manner as to drain the lot, eliminate pockets in the fill, and prevent the accumulation of water, without damaging any foundations on the premises or on adjoining property.

****** *As enacted but "filling" probably intended.*

§[C26-1902.3] 27-1028 Excavation or filling operations affecting adjoining property.-Whenever an excavation or fill is to be made that will affect safety, stability, or usability of adjoining properties or buildings, the adjoining properties or buildings shall be protected as required by the provisions of article four of this subchapter.

§[C26-1902.4] 27-1029 Foundation operations affecting adjacent properties.-Whenever subsurface operations are conducted that may impose loads or movements on adjoining property, such as driving of piles, compaction of soils, or soil solidification, the effects of such operations on adjoining property and structures shall be considered. The owner of the property that may be affected shall be given forty-eight hours written notice of the intention to perform such operations. Where construction operations will cause changes in the ground water level under adjacent buildings, the effects of such changes on the stability and settlement of the adjacent foundations shall be investigated and provision made to prevent damage to such buildings. When in the opinion of the commissioner a potential hazard exists, elevations of the adjacent buildings shall be recorded by an architect or engineer at intervals of twenty-four hours or less as determined by the commissioner to ascertain if movement has occurred.

§[C26-1902.5] 27-1030 Protection of trees.-No trees outside the street line shall be disturbed or removed without the permission of the commissioner of parks and recreation. Protection meeting the requirements of the department of parks and recreation shall be

provided around the trunks of all such trees, and written notification shall also be made to the department of parks and recreation at least forty-eight hours prior to commencement of such work. No deleterious, caustic, or acid materials shall be dumped or mixed within ten feet of any such tree, nor shall salt for the removal of ice or snow be applied when runoff will drain to a tree.

ARTICLE 4 EXCAVATION OPERATIONS

§[C26-1903.1] 27-1031 General requirements.-The provisions of this section shall apply to all excavations, including those made for the purposes of taking earth, sand, gravel, or other material as well as for purposes of construction. The provisions of article three of this subchapter as applicable shall apply. The provisions of subchapter seven of chapter one of title twenty-six of the administrative code, as amended, shall also apply.

(a) Support of adjoining ground.-

(1) **RETAINING STRUCTURE REQUIRED.**-When the regulation of a lot requires the ground on such lot to be raised or lowered and kept higher than the ground of an adjoining lot, provided the ground of such adjoining lot is not maintained at a grade lower than in conformity with the street or streets on which it is situated, or where an excavation has been made or a fill placed on any lot meeting the curb level requirements, and the adjoining land is maintained at a grade in conformity with or lower than the street or streets on which it is situated, and is without permanent structures other than frame sheds or similar structures, a retaining structure shall be constructed as required for the safe support of the adjoining ground and unless the bank between the adjoining properties is maintained at a safe angle of repose. Any necessary retaining wall shall be built and maintained jointly by the owners on each side, unless otherwise agreed to by both owners.

(2) **SURPLUS RETAINING STRUCTURE.**-Where any owner shall insist on maintaining his or her ground either higher or lower than the legal regulation prescribed in the administrative code, the surplus retaining structure that may be necessary to support such height or provide for such excavation shall be made and maintained at the sole expense of such owner, and any additional thickness that may be required shall be built on the land of such owner.

(3) **REMOVAL OF RETAINING STRUCTURES.**-Any retaining structure erected as provided under paragraphs one and two of this subdivision, standing partly on the land of each owner, may be removed by either owner when the original reason for the erection of such retaining structure ceases to exist.

(b) Support of adjoining structures.-

(1) **EXCAVATION DEPTH MORE THAN TEN FEET.**-When an excavation is carried to a depth more than ten feet below the legally established curb level the person who causes such excavation to be made shall, at all times and at his or her own expense, preserve and

protect from injury any adjoining structures, the safety of which may be affected by such part of the excavation as exceeds ten feet below the legally established curb level provided such person is afforded a license to enter and inspect the adjoining buildings and property.

a. Such person shall support the vertical load of the adjoining structure by proper foundations, underpinning, or other equivalent means where the level of the foundations of the adjoining structure is at or above the level of the bottom of the new excavation.

b. Where the existing adjoining structure is below the level of the new construction, provision shall be made to support any increased vertical or lateral load on the existing adjoining structure caused by the new construction.

c. Where the new construction will result in a decrease in the frost protection for an existing foundation below the minimums established in subchapter eleven of this chapter, the existing foundation shall be modified as necessary to restore the required frost protection.

(2) **EXCAVATION DEPTH TEN FEET OR LESS.**-Where an excavation is carried to a depth of ten feet or less below the legally established curb level, the owner of the adjoining structure shall preserve and protect the safety of his or her structure provided such owner is afforded a license to enter and inspect the property where the excavation is to be made.

(c) **Support of party walls.**-Where a party wall will be affected by excavation, regardless of the depth, the person who causes the excavation to be made shall preserve such party wall at his or her own expense so that it shall be, and shall remain, in a safe condition.

(d) **Drainage.**-All excavations shall be drained and the drainage maintained as long as the excavation continues or remains. Where necessary, pumping shall be used. No condition shall be created as a result of construction operations that will interfere with natural surface drainage. Water courses, drainage ditches, etc., shall not be obstructed by refuse, waste building materials, earth, stones, tree stumps, branches, or other debris that may interfere with surface drainage or cause the impoundment of surface waters.

(e) **Access.**-Every excavation shall be provided with safe means of ingress and egress kept available at all times.

§[C26-1903.2] 27-1032 Protection of sides of excavations.-

(a) **Shoring and bracing and sheeting.**-With the exception of rock cuts, the sides of all excavations, including related or resulting embankments, five feet or greater in depth or height measured from the level of the adjacent ground surface to the deepest point of the excavation, shall be protected and maintained by shoring, bracing and sheeting, sheet piling, or by other retaining structures. Alternatively, excavated slopes may be inclined not steeper than forty-five degrees or stepped so that the average slope is not steeper than forty-five degrees with no step more than five feet high, provided such slope does not endanger any structure,

including subsurface structures. All sides or slopes of excavations or embankments shall be inspected after rainstorms, or any other hazard-increasing event, and safe conditions shall be restored. Sheet piling and bracing used in trench excavations shall be at least equivalent in strength to that specified in tables 19-1 and 19-2.

(b) **Guard rail.**-In addition to the requirements of section 27-1021 of article two of this subchapter, a standard guard rail or a solid enclosure at least three feet six inches high shall be provided along the open sides of excavations, except that such guard rail or solid enclosure may be omitted from a side or sides when access to the adjoining area is precluded, or where side slopes are one vertical to three horizontal or flatter.

(c) **Placing of construction material.**-Excavated material and superimposed loads such as equipment, trucks, etc., shall not be placed closer to the edge of the excavation than a distance equal to one and one-half times the depth of such excavation, unless the excavation is in rock or unless the sides of the excavation have been sloped or sheet piled (or sheeted) and shored to withstand the lateral force imposed by such superimposed loads. When sheet piling is used, it shall extend at least six inches above the natural level of the ground. In the case of open excavations with side slopes, the edge of excavation shall be taken as the toe of the slope.

(d) **Mechanical diggers.**-Where trenching more than five feet in depth is done by a mechanical digger, the required protection shall follow the boom as closely as practical.

ARTICLE 5 ERECTION OPERATIONS

§[C26-1904.1] 27-1033 Protection of sidewalks.-The provisions of section 27-1021 of article two of this subchapter as applicable shall apply.

§[C26-1904.2] 27-1034 Structural steel assembly.-

(a) **Placing of structural members.-**

(1) During the placing of a structural member, the load shall not be released from the hoisting rope until the member is securely supported.

(2) Open web steel joists that are hoisted singly shall be transferred from their place of storage directly to their permanent location and safely secured. No load shall be placed on open web steel joists until they are permanently fastened in place.

(b) **Tag lines.**-While structural members or assemblies are being hoisted, tag lines shall be used to prevent uncontrolled movement.

(c) **Erection of trusses.**-All trusses shall be laterally braced or guyed as necessary for the safety of the structure.

(d) **Erection of frames.**-All structural frames shall be properly braced with shores or guyed cables and turnbuckles as necessary for the safety of the structure.

TABLE 19-1 MINIMUM SIZES OF TIMBER BRACING AND TIMBER SHEET PILING FOR TRENCHES FOUR FEET WIDE OR LESS^a

Depth of Trench, (ft.)	Sheet Piling		Stringers		Cross Bracing	
	Size (in.)	Horizontal Spacing (ft.)	Size (in.)	Vertical Spacing (ft.)	Size (in.)	Horizontal Spacing (ft.)
Hard and solid soil						
5-10.....	2 x 6	6	2 x 6	6	2 x 6	6
10-15.....	2 x 6	4	2 x 6	6	2 x 6	4
More than 15...	2 x 6	tight	4 x 8	4	4 x 8	6
Soil likely to crack or crumble						
5-10.....	2 x 6	3	2 x 6	5	2 x 6	5
10-15.....	2 x 6	2	2 x 6	4	2 x 6	4
More than 15...	2 x 6	tight	4 x 10	4	4 x 10	6
Soft, sandy filled in loose soil						
5-10.....	2 x 6	tight	4 x 6	6	4 x 6	6
10-15.....	2 x 6	tight	4 x 6	5	4 x 6	6
More than 15...	2 x 6	tight	4 x 12	4	4 x 12	6
Where hydrostatic pressure exists						
To 10.....	2 x 6	tight	6 x 8	4	6 x 8	6
More than 10...	3 x 6	tight	6 x 10	4	6 x 10	6

Note for Table 19-1:

^a Steel sheet piling and bracing of equivalent strength may be substituted for wood sheet piling and timber bracing.**TABLE 19-2 MINIMUM SIZES OF TIMBER BRACING AND TIMBER SHEET PILING FOR TRENCHES FOUR TO EIGHT FEET WIDE^a**

Depth of trench, (ft.)	Sheet Piling		Stringers		Cross Bracing	
	Size (in.)	Horizontal Spacing (ft.)	Size (in.)	Vertical Spacing (ft.)	Size (in.)	Horizontal Spacing (ft.)
Hard and solid soil						
5-10.....	2 X 6	6	4 X 6	4	4 X 6	6
10-20.....	2 X 6	tight	6 X 6	4	6 X 6	6
More than 20...	2 X 6	tight	6 X 8	4	6 X 8	6
Soil likely to crack or crumble						
5-10.....	2 X 6	3	4 X 6	4	4 X 6	6
10-20.....	2 X 6	tight	6 X 6	4	6 X 6	6
More than 20...	2 X 6	tight	6 X 8	4	6 X 8	6
Soft, sandy filled in loose soil						
5-10.....	2 X 6	tight	4 X 6	4	4 X 6	6
10-20.....	2 X 6	tight	6 X 6	4	6 X 6	6
More than 20...	2 X 6	tight	6 X 8	4	6 X 8	6
Where hydrostatic pressure exists						
To 10.....	2 X 6	tight	6 X 8	4	6 X 8	6
More than 10...	3 X 6	tight	6 X 10	4	6 X 10	6

Note for Table 19-2:

^a Steel sheet piling and bracing of equivalent strength may be substituted for wood sheet piling and timber bracing.~~§(C26 1904.3) 27-1035 Concrete formwork.~~~~(a) General requirements.~~

~~(1) Formwork, including all related braces, shoring, framing, and auxiliary construction shall be proportioned, erected, supported, braced, and maintained so that it will safely support all vertical and lateral loads that might be~~

~~applied until such loads can be supported by the permanent construction.~~

~~(2) Vertical and lateral loads shall be carried to the ground by the formwork system, by the new construction after it has attained adequate strength for that purpose, or by existing structures.~~

(3) Forms shall be properly braced or tied together so as to maintain position and shape, and shall conform to the sizes and shapes of members as shown on the design drawings.

(4) Ramps and runways shall meet the requirements of article nine of this subchapter.

(b) Inspection.

(1) Formwork, including shores, reshores, braces, and other supports, shall be inspected by an engineer or architect to verify the sizes of the concrete members being formed, as provided in article five of subchapter ten of this chapter. In addition, such forms shall be inspected for conformance with the form design drawings, when such drawings are required by the provisions of subdivision (c) of this section, and/or conformance with the provisions of this section. Such inspections may be made by the person superintending the work. Both such inspections shall be made prior to placement of reinforcing steel. Subsequently, inspections shall be made by the person superintending the work periodically during the placement of concrete to detect incipient problems.

(2) During and after concreting, the elevations, camber, and vertical alignment of formwork systems shall be checked using tell tale devices.

(3) A record of all such inspections shall be kept at the site available to the commissioner, and the names of the

persons doing the inspecting and the name of the foreman in charge of formwork shall be posted in the field office.

(c) **Design of concrete formwork.** Wherever the shore height exceeds fourteen feet or the total load on the forms exceeds one hundred fifty psf, or wherever power buggies or two stage shores are used, the forms, including shoring foundation, shall be designed as provided in section 27-1015 of article one of this subchapter, and shall be constructed in conformance with such design. Formwork drawings shall be prepared. The allowable stresses for design shall meet the requirements of subchapter ten of this chapter. A copy of the design drawings and any construction drawings and specifications shall be kept on the job available to the commissioner.

(1) **VERTICAL LOADS.** Vertical loads shall include the total dead and live loads. Dead load shall include the weight of formwork plus the weight of the reinforcement and fresh concrete. Live load shall allow for the weight of workers and equipment, with allowance for impact, but in no case shall less than twenty psf be allowed.

(2) **LATERAL CONCRETE PRESSURE.** Design of forms, ties, and bracing shall assume that minimum lateral pressures of fresh concrete are as shown in table 19-3.

TABLE 19-3 MINIMUM LATERAL PRESSURES TO BE ASSUMED FOR FRESH CONCRETE WEIGHING 150 POUNDS PER CUBIC FOOT

Type of Work	Minimum Lateral Pressure Assumed (psf)	Limitations
Columns: Ordinary work with normal internal vibration	$p = 150 + \frac{9000R}{T}$	Maximum 3,000 psf or 150h, whichever is less
Walls: Rate of placement at 7 ft. per hr. or less	$p = 150 + \frac{9000R}{T}$	Maximum 2,000 psf or 150h, whichever is less
Walls: Rate of placement at greater than 7 feet per hr.	$p = 150 + \frac{43400}{T} + \frac{2800R}{T}$	Maximum 2,000 psf or 150h, whichever is less
Slabs	$p = 150h$	None

Where:

R = rate of placement, ft. per hr.

T = temperature of concrete in the forms, deg. F.

h = height of fresh concrete above point considered, ft.

Notes for Table 19-3:

^a Allowances for change in lateral pressure shall be made for concrete weighing [sic] other than one hundred fifty pcf; for concrete containing pozzolanic additions or cements other than type I, for concrete having slump greater than six in., or for concrete consolidated by revibration or external vibration of forms.

^b Where retarding admixtures are employed under hot weather conditions an effective value of temperature less than that of the concrete in the forms shall be used in the above formulae.

^c If retarding admixtures are used in cold weather, the lateral pressure may be assumed as that exerted by a fluid weighing [sic] one hundred fifty pcf.

(3) EXTERNAL LATERAL LOADS.-

a. Braces and shores shall be designed to resist all external lateral loads such as wind, cable tensions, inclined supports, dumping of concrete, and starting and stopping of equipment.

b. In no case shall the assumed value of lateral load due to wind, dumping of concrete, and equipment acting in any direction at each floorline be less than one hundred plf edge or two percent of total dead load of the floor, whichever is greater.

c. Except for foundation walls that are poured against a rigid backing, wall forms shall be designed for a minimum lateral load of ten psf, and bracing for wall forms shall be designed for a lateral load of at least one hundred plf of wall, applied at the top. The lateral load acting on walls greater than fourteen feet high shall be determined by analysis of conditions applicable to the site and building.

(4) SPECIAL LOADS.-The formwork shall be designed for any special conditions of construction likely to occur, such as unsymmetrical placement of concrete, impact of machine-delivered concrete, uplift, and concentrated loads.

(5) SHORING AND BRACING.-

a. When patented or commercial devices that are not susceptible to design are used for shoring, bracing, or splicing, they shall be approved.

b. Splices shall develop the full strength of the spliced members.

c. Where shore height exceeds ten feet, or when necessary to provide structural stability, diagonal bracing shall be provided. Struts, anchored into masonry or to panel joints of adjacent braced bays, may be used to prevent buckling of individual members not supported by the diagonal bracing; but, bracing an entire tier of shores with struts without diagonal bracing will not be permitted unless the system can be demonstrated to be braced by other rigid construction.

d. The unbraced length of shores shall not exceed the maximum length determined in accordance with the applicable reference standard in subchapter ten of this chapter for the structural material used.

(6) FOUNDATIONS.-Foundations for shores more than ten feet high and supported on the ground shall be designed.

(7) SETTLEMENT.-Falsework shall be so constructed that vertical adjustments can be made to compensate for take-up and settlements. Wedges, jacks, or other positive means shall be provided for this purpose.

(8) POWER BUGGIES.-For special requirements for runways, ramps, and platforms used by power buggies, see section 27-1053 of article nine of this subchapter.

(d) Construction.-

(1) Field constructed lap splices, other than approved devices, shall not be used more often than for every other shore under slabs or for every third shore under

beams, and shall develop the full strength of the members. Such spliced shores shall be uniformly distributed throughout the work. Splices shall not be located near the midheight of the shores unless lateral support is provided, nor midway between points of lateral support.

(2) Vertical shores for multifloor forms shall be set plumb and in alignment with lower tiers so that loads from upper tiers are transferred directly to the lower tiers, or adequate transfer members shall be provided. Provision shall be made to transfer the lateral loads to the ground or to completed construction of adequate strength.

(3) Vertical shores shall be so erected that they cannot tilt, and shall have firm bearing. Inclined shores and the bearing ends of all shores shall be braced against slipping or sliding. The bearing surfaces shall be cut square and have a tight fit at splices.

(4) Runways for moving equipment shall be provided with struts or legs as required, and shall be supported directly on the formwork or structural member and not on the reinforcement.

(5) Any unsafe condition or necessary adjustment revealed by inspection shall be remedied immediately. If, during construction, any weakness develops and the falsework shows any undue settlement or distortion, the work shall be stopped, the affected construction removed if permanently damaged, and the falsework strengthened.

(e) Removal of forms and shoring.-

(1) Forms shall be removed in such a manner as to assure the complete safety of the structure.

(2) Where the structure as a whole is supported on shores, then beam and girder sides, columns, and similar vertical forms may be removed after twenty-four hours provided the concrete is sufficiently hard to withstand damage thereby. In no case shall the supporting forms or shoring be removed until the members have acquired sufficient strength to support safely their weight and the load thereon.

(3) The results of control tests, including concrete cylinder specimens prepared in accordance with reference standard RS 10-52, cast-in-place cores, or other device which will produce test specimens representative of the condition of the concrete in place, of suitable size and proportions, and approved by the architect or engineer shall be deemed evidence that the concrete has attained sufficient strength or such strength as may be specified on the drawings. The contractor may submit alternate methods of stripping, reshoring, and strength control for approval by the architect or engineer and subject to review by the commissioner.

(f) Reshoring.-Reshoring shall be provided to support the construction where forms and shores are stripped before the concrete has gained adequate strength to support the superimposed loads due to construction above.

***(1) INSTALLATION LIMITATIONS.**-Reshores of wood or metal shall be screw adjusted or jacked and locked or wedged. Wedges shall not be used within ten feet of the facade or at such other locations as determined by rules and regulations promulgated by the commissioner. Reshores shall not be jacked or screwed so tight that they preload the floor below or remove the normal deflection of the slab above. In no case shall shores be so located as to significantly alter the pattern of stresses determined in the original structural analysis or to induce tensile stresses where reinforcing bars are not provided. Reshores within ten feet of the facade shall be secured.

**Local Law 61-1987.*

(2) BRACING. - Lateral bracing shall be provided during reshoring operations, and reshores shall be located as close as practical to the same position on each floor to provide continuous support from floor to floor.

(3) RESHORIZING BEAM AND GIRDER CONSTRUCTION.-

Where reshoring of beam and girder construction is required, the forms shall not be removed from more than one girder at a time, and the girder shall be reshored before any other supports are removed. After the supporting girders are reshored, the form shall be removed from one beam with its adjacent slabs and the beam shall be reshored before any other supports are removed. Slabs spanning ten feet or more shall be reshored along the center line of the span.

(4) RESHORIZING FLAT SLABS.-Where reshoring of flat slab construction is required, the shores for the area within the intersection of the middle strips of each panel shall be left in place at all times until the concrete has attained sufficient strength to support the loading to which it will be subjected. After the other shores in each panel have been removed, reshores shall be placed on the column lines at [sic] the mid-points between columns, before the next panel is stripped.

(g) Slip form construction.-

(1) The applicable provisions of subdivision (c) of section 27-1035 of this article shall apply.

(2) All slip forms shall be designed, and the construction and sliding operations shall be carried out under the personal supervision of the person superintending the work or his or her designated representative.

(3) Lateral and diagonal bracing for forms shall be provided to insure that the shape of the structure will not be unduly distorted during the sliding operation.

(4) Jacks shall be spaced, anchored, and operated in such a manner that the vertical load on all jacks is approximately equal and does not exceed the capacity of any jack. Jacks shall be provided with automatic holding devices.

(5) Forms shall be leveled before and after they are filled, and shall be maintained level throughout the slide. Drifting of the forms from alignment or designed

dimensions, and torsional movement shall be prevented. Horizontal and vertical alignment of structure shall be checked at least once during every twenty-four hours that the slide is in operation.

(h) Lift method construction.-

(1) The casting bed and supporting construction shall be designed to carry the dead load of the stacked slabs and any live load that may be imposed.

(2) Slabs shall not be lifted until the concrete has attained adequate strength to support its own weight and any superimposed loads without exceeding the stress values established in subchapter ten of this chapter.

(3) Lifting of all parts of the slab shall be approximately simultaneous and at a uniform rate. The lifting equipment shall be constantly engaged to prevent slippage or retrogression of the slab during lifting operations.

(4) Care shall be taken to insure that collar keyholes or other lifting attachment openings are in direct vertical alignment for all slabs. Wedges shall be inserted between the collar opening and column to maintain clearance on all sides of the column. Blockouts shall be provided to prevent concrete from entering space between collar and column as well as the lifting attachment openings.

(5) Temporary bracing for lateral support of columns shall be provided during lifting operations and shall remain in place until its function can be assumed by permanent connections of slabs to columns, permanent bracing walls, or other means of lateral support, unless it can be shown that all columns, their base connections to footings, the footings, and soil are adequate as a cantilever system to resist all prescribed lateral forces.

(6) The assumed value of lateral forces in lift slab construction due to unsymmetrical loads, lifting reactions, or wind shall be at least fifty plf of floor edge or one percent of the total load lifted, whichever is greater.

(7) No person shall be allowed to enter the area immediately under slabs during the actual movement of lifting nor shall any construction operations be commenced in this area, other than fixing the connections of slabs to columns or providing other positive supports, until such connections or supports are completed and the load of all lifted slabs has been transferred from lifting equipment thereto.

(i) Prestressed construction.-Solid safety shields shall be provided at end anchorages of prestressing beds, or where necessary, for protection against breakage of prestressing strands, cables, or other assemblies during prestressing or casting operations.

ARTICLE 6 DEMOLITION OPERATIONS

§[C26-1905.1] 27-1036 Preparations.-

(a) Utilities and service lines.-The provisions of section 27-1013 of article one of this subchapter and article fourteen of subchapter one of this chapter shall apply.

~~(b) Condition of structure.~~ Where a structure to be demolished has been partially wrecked or weakened by fire, flood, explosion, age, or other causes, it shall be shored or braced to the extent necessary to permit orderly demolition without collapse. The necessary measures shall be determined by the contractor subject to approval by the commissioner.

~~(c) Hazards to be removed.~~

~~(1) Before commencement of actual demolition, all glass in windows, doors, skylights, and fixtures shall be removed.~~

~~(2) In any structure more than twenty five feet high, any window or other exterior wall opening that is within twenty feet of a floor opening used for the passage of debris from floors above shall be solidly boarded up or otherwise substantially covered, unless such window or opening is so located as to preclude the possibility of any person being injured by material that may fall from such window or opening. See section 27-1022 of article two of this subchapter.~~

~~(3) Before demolition is started, the cellar and all floors shall be thoroughly cleaned of combustible materials and debris. All fixtures and equipment that would cause voids in the fill shall be removed. If the cellar is to be filled to grade, the first floor construction shall be removed and the existing cellar floor shall be broken up to the extent necessary to provide ground drainage and prevent accumulation of water. If the cellar is not to be filled, positive cellar drainage shall be provided.~~

~~(d) Examination and procedure.~~ Before any material is stored on any floor, the existing flooring adjacent to the bearing walls shall be removed and ends of floor beams in the bearing walls shall be carefully examined to ascertain their condition and the amount of bearing on the bearing wall. If they are found to be in poor condition or to have insufficient bearing, no material shall be deposited on the floor until these beams are shored from the cellar floor through each successive floor. No bearing partition shall be removed from any floor until the floor beams on the floor above have been removed and lowered. All header beams and headers at stair openings and chimneys shall be carefully examined, and where required shall be shored from the cellar floor through successive floors. All operations shall be continually inspected as the work progresses to detect any hazards that may develop.

~~§[C26-1905.2] 27-1037 Protection of adjacent structures.~~ The applicable provisions of article three of this subchapter shall apply.

~~(a) Adjoining walls.~~

~~(1) All beams in party walls shall be cut off close to the walls, stub ends removed without weakening existing masonry, and beam pockets cleaned of loose mortar. The owner of the demolished structure shall, at his or her own expense, bend over all wall anchors at the beam ends in the standing wall and shall brick up all~~

~~open beam holes with sound brick and cement mortar.~~

~~(2) The stability and condition of the remaining walls shall be investigated and all necessary steps taken to protect same. Where the floor beams of the adjacent building bear on the party wall, the person causing the demolition to be made shall ascertain that such beams are anchored into the wall and, where such anchorage is lacking, shall provide anchorage or otherwise brace the standing wall.~~

~~(3) Roofing material of adjoining buildings shall be bent over and flashed. All door or other openings in party walls shall be sealed and weatherproofed. Cornices, where cut, shall be properly sealed. Parapets and any walls that have been disturbed shall be pointed up and made weathertight. All exposed furring, lath, and plaster on party walls shall be removed, and any loose wall material shall be firmly anchored or removed and replaced.~~

~~(4) All unnecessary chimney breasts, projections and any other debris exposed on party walls shall be removed by the person causing the demolition of the structure and all openings shall be bricked up flush on the exterior side of the party wall. All masonry which is in poor condition shall be pointed and patched.~~

~~(b) Party wall exits.~~ No party wall balcony or horizontal fire exit shall be demolished, removed, or obstructed in any manner that would destroy the full effectiveness of such fire exit as means of egress, unless a substitute means of egress meeting the requirements of this code has been provided.

~~§[C26-1905.3] 27-1038 Protection of sidewalks.~~ The provisions of section 27-1021 of article two of this subchapter as applicable shall apply.

~~§[C26-1905.4] 27-1039 Demolition operations.~~

~~(a) Walls.~~

~~(1) Demolition of walls and partitions shall proceed in a systematic manner, and all work above each tier of floor beams shall be completed before any of the supporting structural members are disturbed.~~

~~(2) Sections of masonry walls shall not be loosened or permitted to fall in such masses as to affect the carrying capacity of floors or the stability of structural supports.~~

~~(3) No wall, chimney, or other structural part shall be left in such condition that it may collapse or be toppled by wind, vibration or any other cause.~~

~~(4) No section of wall with a height more than twenty-two times its thickness shall be permitted to stand without bracing.~~

~~(5) Where brick or masonry chimneys cannot be safely toppled or dropped, all materials shall be dropped down on the inside of such chimneys.~~

~~(6) All enclosed vertical shafts and stairs shall be maintained enclosed at all floors except the uppermost floor being demolished, and all work on the uppermost floor shall be completed before stair and shaft enclosures on the floor below are disturbed. All hand rails and banisters~~

~~shall be left in place until actual demolition of such floor is in progress.~~

~~(b) Structural steel and heavy timbers.-~~

~~(1) Steel and heavy timber construction shall be demolished column length by column length and tier by tier. Any structural member that is being dismembered shall not be supporting any load other than its own weight, and such member shall be chained or lashed in place to prevent any uncontrolled swing or drop.~~

~~(2) Structural members shall not be thrown or dropped from the building, but shall be slowly and carefully lowered by hoists equipped with adequate brakes and non-reversing safety devices.~~

~~(c) Use of derricks. Where a derrick is used for demolition, an investigation of the floor on which the derrick rests shall be made by an engineer or architect to determine its adequacy for the loading to be imposed; strengthening shall be designed and added as required to limit the imposed stresses to the values permitted by the provisions of subchapter ten of this chapter. A report summarizing such investigation and design shall be prepared and kept at the site available to the commissioner.~~

~~(d) Mechanical methods of demolition. The mechanical method of demolition, whereby the wrecking of a building or part thereof is accomplished by smashing the walls or floors with a heavy weight suspended by a cable, or whereby the walls are collapsed by the use of a power shovel, tractor, or other mechanical contrivance, shall be permitted only upon issuance of a special permit by the department and in accordance with the following requirements:~~

~~(1) The building or structure, or remaining portion thereof, shall not be more than eighty feet in height.~~

~~(2) A safety zone, as determined by the commissioner, shall be provided around the demolition area. Fences constructed as required in section 27-1021 of article two of this subchapter shall be erected to prevent persons other than workers from entering such safety zone.~~

~~(3) Unless permitted by the commissioner, the mechanical method of demolition shall not be used where any building, or portion thereof, occupied by one or more persons is located within the safety zone.~~

~~(4) Where a swinging weight is used, two or more separate cable slings shall be used to attach the ball to a safety or mouse hook and the supporting cable shall be of such length or so restrained that it is not possible for the weight to swing against any structure other than the structure being demolished.~~

~~(5) Where mechanical demolition operations may involve a street, the requirements of the department of transportation shall be met.~~

~~(e) Removal and storage of material.-~~

~~(1) PHYSICAL REMOVAL. Debris, bricks, and similar material shall be removed by means of chutes, buckets, or hoists or through openings in the floors of the structure. Openings in any floor shall not aggregate more than twenty-five percent of the area of that floor~~

~~unless it can be shown to the satisfaction of the commissioner that larger openings will not impair the stability of the structure.~~

~~a. Every opening used for the removal of debris in every floor except the top or working floor, shall be provided with a tight enclosure from floor to floor, equivalent to that afforded by planking not less than two inches in thickness. As an alternative in buildings when not more than six stories in height, such openings may be protected by a tight temporary covering equivalent to that afforded by planks not less than two inches in thickness and laid close. Wherever such covering has been temporarily removed to permit debris removal floor openings shall be protected by standard guard rails or railings. Such covering shall be promptly replaced in position upon the ceasing of such work at the end of each work day.~~

~~b. Every opening not used for the removal of debris in any floor shall be solidly planked over.~~

~~(2) STORAGE OF MATERIAL.-~~

~~a. Material shall not be stored on catch platforms, working platforms, floors, or stairways of any structure except that any one floor of a building to be demolished may be used for the temporary storage of material when such floor can be shown to be of adequate strength to support one and one-half times the load to be superimposed.~~

~~b. Storage spaces shall not interfere with access to any stairway or passageway, and suitable barricades shall be provided so as to prevent material from sliding or rebounding into any space accessible to the public. All material shall be safely piled in such storage locations in a manner that will not overload any part of the structure or create any hazard.~~

~~c. In buildings of noncombustible construction, floor slabs to an elevation of not more than twenty-five feet above the legally established curb level may be removed to provide temporary storage for debris, provided that: (1) the stored debris is piled with sufficient uniformity to prevent lateral displacement of interior walls or columns; (2) the height of the piled material will not burst the exterior walls due to accumulated pressure; and (3) the operation does not otherwise endanger the stability of the structure.~~

~~d. Debris stored in the cellar shall not be piled above the level of the adjacent exterior grade unless the contractor provides sheet piling, shoring, bracing, or such other means necessary to insure the stability of the walls and to prevent any wall from collapsing due to the pressure of accumulated material.~~

~~(f) Dust. Dust-producing operations shall be wetted down to the extent necessary to lay the dust.~~

~~(g) Use of explosives. The use of explosives in demolition operations shall conform to the requirements and limitations imposed by the fire department. The toppling of buildings by the use of explosives is prohibited except where such procedure is permitted by the commissioner.~~

~~(h) Temporary elevators. Whenever, in the course of~~

building demolition, the work is at a height greater than seventy-five feet, at least one elevator meeting the requirements of subchapter eighteen of this chapter shall be kept in readiness at all times for fire department use.

§[C26-1905.5] 27-1040 Completed demolitions.-At the completion of demolition operations, unless new construction is to follow within a period of thirty calendar days, the site shall be graded, drained, or otherwise protected as provided in section 27-1027 of article three of this subchapter.

ARTICLE 7 REPAIR AND ALTERATION OPERATIONS

§[C26-1906.1] 27-1041 General requirements.-Building repair or alteration operations shall be considered as construction operations and shall be governed by the regulations established in this subchapter. Where alterations are conducted in occupied buildings, barricades, signs, drop cloths, etc., shall be erected as required to provide reasonable protection for the occupants against hazard and nuisance.

ARTICLE 8 SCAFFOLDS

§[C26-1907.1] 27-1042 General provisions for all scaffolds.-All scaffolds shall be erected and maintained so that the safety of public and property will not be impaired by falling material, tools or debris or by collapse of the scaffold.

(a) Materials and construction.-

(1) All lumber used in scaffolds or their supports shall be at least equal in strength and quality to construction grade Douglas fir.

TABLE 19-4 SIZE AND NUMBER OF NAILS REQUIRED FOR SCAFFOLD CONSTRUCTION

Thickness of Smaller Member (in.)	Trade Size of Nail	Length of Nail (in.)
1	8d	2 ½
2	20d	4
3	60d	6
4	—	8
Width of Smaller Member (in.)	Minimum Number of Nails Required	
4	2	
6	3	
8	4	
10	5	
12	5	

(b) Loading and design.-

(1) **DESIGN REQUIRED.**-All exterior pole scaffolds over seventy-five feet high and all multiple-point suspension scaffolds, including all supports, fastenings,

connections, and details, shall be designed. Design drawings shall be prepared and kept at the site available to the commissioner. The construction shall be executed in accordance with such design. All other scaffolding shall be constructed of sizes and numbers of members as hereinafter required or, in the absence of such requirements shall be demonstrated to be capable of supporting, without collapse, not less than four times the maximum weight required to be suspended therefrom or placed thereon when in use.

(2) **LOADING.**-No standard scaffold as defined herein, shall be loaded in excess of the maximum load for which it is designated in paragraph three of this subdivision. Loads shall not be concentrated so as to cause stresses in excess of the allowable values designated in subchapter ten of this chapter.

(3) STANDARD SCAFFOLD DESIGNATIONS.-

a. **Light duty scaffold.**-The light duty scaffold is to be used for loads up to twenty-five psf, and is intended for use by carpenters, painters, or others of similar trades. It shall not be used to support loads more severe than those imposed by such workers and a minimum amount of lightweight materials.

b. **Medium duty scaffold.**-The medium [duty]* scaffold is to be used for loads up to fifty psf, and is intended for use by bricklayers or plasterers. It shall not be used to support loads more severe than those imposed by such workers and a moderate amount of their materials.

**Copy in brackets not enacted but probably intended.*

c. **Heavy duty scaffold.**-The heavy duty scaffold is to be used for loads up to seventy-five psf, and is intended for use by stone masons. It shall not be used to support loads more severe than those imposed by such workers and a reasonable supply of their materials.

(4) **FOOTINGS AND ANCHORAGE.**-The footings and anchorage for every scaffold shall be sound and rigid, capable of carrying the maximum load without settlement or deformation, and secure against movement in any direction. Supports such as barrels, boxes, loose brick, loose stone, or other unstable constructions shall not be used.

(c) Planking.-

(1) The minimum width of every planked platform shall be eighteen inches, except as otherwise noted hereinafter. Unless otherwise indicated, the sizes in this subchapter for load-bearing planks shall denote undressed lumber, full thickness.

(2) Except as otherwise indicated in this section, planks shall overhang their end supports at least six inches, or they shall be securely fastened to prevent dislodgment. In no case shall the overhang exceed eighteen inches. Planks shall be laid tight, and inclined planking shall be fastened in place.

(3) The maximum permissible spans for two inch plank shall be as shown in table 19-5.

(4) The maximum permissible span for one and one-

quarter inch plank of full thickness shall be six feet. The maximum permissible working load shall be fifty psf.

(d) Erection and removal.-Only workers with experience in erecting or removing scaffolds shall be

employed. They shall work under the supervision of a designated superintendent or foreman who shall enforce such measures as necessary for the protection of public and property.

TABLE 19-5 MAXIMUM PERMISSIBLE SPANS FOR TWO-INCH PLANK USED ON SCAFFOLDS

Material	Full Thickness			Lumber of		
	Undressed Lumber			Nominal Thickness		
Working Load (psf).....	25	50	75	25	50	75
Permissible Span (ft.)...	10	8	6	8	6	5

(e) Maintenance and repair.-All scaffolds shall be maintained in safe condition. No scaffold shall be altered, removed, or partially dismantled while it is in active use. Every damaged or weakened scaffold shall be immediately repaired and shall not be used until such repairs have been completed, and, in the case of suspended scaffolds, tested as required under subdivision (b) of section 27-1045 of this article.

(f) Fire retardant construction.-With the exception of the planking, all scaffolds shall be noncombustible material when used in the following applications:

- (1) Exterior scaffolds exceeding seventy-five feet in height.
- (2) Interior scaffolds exceeding twenty-one feet in height.
- (3) All scaffolds used in the alteration, repair, or partial demolition of buildings in occupancy groups H-1 and H-2.

(g) Guard rails and toeboards.-

- (1) Except for scaffold platforms ten feet or less above the ground or for scaffolds used on the interior of a building at a height ten feet or less above a floor, the open sides and ends of every scaffold platform shall be provided with a standard guard rail and toeboard as described in section 27-1050 of this article, unless otherwise specified for the particular type of scaffold.
- (2) Where it is possible for the public to pass under, or next to a scaffold, the space between the top rail and toeboard shall be enclosed with a wire screen composed of not less than no. 18 steel wire gage with a maximum one-half inch mesh.
- (3) Toeboards shall be installed so that no open space exists between the platform and the toeboard.

§[C26-1907.2] 27-1043 Pole scaffolds.-

(a) Poles.-Scaffold poles shall be plumb and the foot ends shall be secured against lateral movement. Where wood poles are spliced, the squared end of the upper section shall bear uniformly on the squared end of the lower section, and the two ends shall be rigidly fastened together with two or more wood splice plates, each at least four feet in length. The plates shall be placed at right angles to each other, shall overlap the abutting ends of the pole equally, and shall have a combined sectional area not less than fifty percent of the cross sectional area of the pole. Splicing of adjacent poles

shall be staggered. Splices shall be close to ledgers, but so located as not to interfere with the fastenings.

(b) Bracing.-Pole scaffolds shall be braced and stayed to prevent movement away from the building. Diagonal or equivalent bracing shall be provided to prevent the poles from moving in a direction parallel to the building face, and shall be so installed that every spliced section of every pole is braced to adjacent poles.

(c) Planking.-

(1) Where planks are butted end to end, parallel putlogs or bearers shall be provided not more than eight inches apart so that butted ends rest on separate putlogs or bearers. Ends shall be nailed or cleated.

(2) Where platform planks are used with overlapping ends, the ends of both the upper and lower planks shall overlap the putlog or bearer by a[t]* least six inches.

**Copy in brackets not enacted but probably intended.*

(3) Planks shall be laid close together and shall be of sufficient length to extend over three bearers.

(d) Connections.-

(1) Ledgers shall not be spliced between poles but shall overlap the poles at each end by at least four inches. Where ledgers lap each other, bearing-blocks attached to the pole shall be provided to support the ledger.

(2) The ends of all wooden braces shall overlap the nailed fastenings an amount sufficient to prevent the ends of the braces from splitting.

(e) Putlogs for single pole scaffolds.-All putlogs shall be set with the greater dimension vertical and shall be long enough to project beyond the outer edge of the poles by at least twelve inches. Putlogs shall be supported on the ledger and located against the side of the poles and fastened to either the pole or the ledger. The other end of the putlog shall rest in the wall of the building, with at least four inch bearing, and shall not be notched or cut down, except for light duty scaffolds, which may be notched or cut down to fit into a space made by the removal of a brick. In such cases, the notch shall be made on the top of the putlog just deep enough to permit it to be inserted in the hole in the wall.

(f) Bearers for independent pole scaffolds.-Bearers shall be set with their greater dimensions vertical, and shall be long enough to project over the ledgers beyond the outer row of poles by at least twelve inches and beyond the inner row of poles by at least two inches.

Bearers shall be supported on the ledgers, and located against the sides of the poles and fastened to them.

(g) Free standing scaffolds.—Unless guyed, free standing scaffolds shall have a minimum base dimension of at least twenty-five percent of the height of the scaffold.

(h) Erection and removal.—When a new working level is desired, the existing planks shall be left undisturbed until the new working level is framed. As the platform level is abandoned with the progress of the work, all

members other than the planking, railing, and toeboards shall be left intact. When removing a scaffold, the sequence of removing the members shall be the reverse of that used in erection.

(i) Standard designs.—All wood pole scaffolds seventy-five feet high or less shall be constructed in accordance with the minimum nominal sizes and maximum spacings shown in tables 19-6 through 19-11. For pole scaffolds more than seventy-five feet high, see paragraph one of subdivision (b) of section 27-1042 of this article.

TABLE 19-6 MINIMUM SIZE AND MAXIMUM SPACING OF MEMBERS OF SINGLE POLE LIGHT DUTY SCAFFOLDS

Uniformly Distributed Load	Not to Exceed 25 psf				
Max. height of scaffold.....	20'	40'	60'	75'	
Poles or uprights (min.).....	2" x 4"	3" x 4"	4" x 4"	Top 60' 4" x 4"	Lower Sect. 4" x 6"
Pole foundation (min.).....			2" x 9"		
Max. pole spacing (longitudinal).			10' - 0"		
Max. width of scaffold.....			5' - 0"		
Bearers or putlogs (min.).....		3" x 4" or 2" x 6" (on edge)			
Ledgers (minimum):					
With 6'-0" pole space.....			1" x 6" (on edge)		
With 10'-0" pole space.....			1 1/4" x 9" (on edge)		
Vertical spacing of ledgers (max.)			7'-0"		
Non-supporting stringers.....			1" x 4"		
Tie-ins.....			1" x 4"		
Bracing.....			1" x 4"		
Planking:					
Not more than 6' span.....			1 1/4" x 9"		
Up to 10' span.....			2" x 9"		
Toeboards.....			1" x 6"		
Guard rails.....			2" x 4"		

§[C26-1907.3] 27-1044 Outrigger scaffolds.—

Outrigger scaffolds shall not be used for loading in excess of fifty psf (medium duty).

(a) Outrigger beams.—Outrigger beams shall not extend more than six feet beyond the face of the building. The inboard end of outrigger beams, measured from the fulcrum point to the extreme point of support, shall be at least one and one-half times the outboard end in length. The fulcrum point of the beam shall rest on a secure bearing at least six inches in each horizontal dimension. The beam shall be secured against movement and shall be securely braced against tipping at both fulcrum point and inboard end. Outriggers shall not be less than three inches by ten inches set on edge, plumb, and spaced not to exceed six feet on centers for light and medium duty scaffolds.

(b) Inboard supports.—The inboard ends of outrigger beams shall be securely fixed to resist all vertical, horizontal, and torsional forces.

(c) Platform.—The platform shall be constructed of at least two inch by nine inch planks, securely fastened to the outriggers, and laid tight to within three inch[es]* of

the face of the building.

(d) Guard rail and toeboard.—The railing posts for the required standard guard rail and toeboard shall be securely braced to the outriggers.

**Copy in brackets not enacted but probably intended.*

(e) Superstructures.—Supports for superstructures placed on outrigger scaffolds shall be set directly over the outrigger beams and shall be secured in place. Such structures shall not exceed six feet in height. Horses shall not be used as supports for such superstructures.

§[C26-1907.4] 27-1045 General provisions for suspended scaffolds.—

(a) Installation and use.—Suspended scaffolds shall be erected and operated in such a manner that suspension elements are vertical and in a plane parallel to the wall at all times. The installation or change of position of any suspended scaffold shall be performed under the supervision of a designated superintendent or foreman who shall enforce such measures as may be required for the safe execution of such operation.

TABLE 19-7 MINIMUM SIZE AND MAXIMUM SPACING OF MEMBERS OF SINGLE POLE MEDIUM DUTY SCAFFOLDS

Uniformly Distributed Load	Not to exceed 50 psf				
Max. height of scaffold.....	20'	40'	60'	75'	
				Top 60'	Lower Sect.
Poles or uprights (min.).....	3" x 4" or 2" x 6"	4" x 4"	4" x 6"	4" x 6"	4" x 6"
Pole foundation (min.).....			2" x 9"		
Max. pole spacing (longitudinal)...			8' - 0"		
Max. width of scaffold.....		5' - 0"		8' - 0"	
Bearers or putlogs (min.).....	3" x 4" or 2" x 8" (on edge)			3" x 5" or 2" x 9" (on edge)	
Max. spacing of bearers or putlogs.			8' - 0"		
Ledgers (minimum).....			2" x 9" (on edge)		
Vertical spacing of ledgers (max.)..			7' - 0"		
Non-supporting stringers.....		1" x 6"	or 1 1/4" x 4"		
Tie-ins.....			1" x 6"		
Bracing.....			1" x 6"		
Planking:					
Not more than 6' span.....			1 1/4" x 9"		
Up to 8' span.....			2" x 9"		
Toeboards.....			2" x 9"		
Guard rails.....			2" x 4"		

***As enacted but 6" x 6" probably intended.*

TABLE 19-8 MINIMUM SIZE AND MAXIMUM SPACING OF MEMBERS OF SINGLE POLE HEAVY DUTY SCAFFOLDS

Uniformly Distributed Load	Not to exceed 75 psf				
Max. height of scaffold.....	20'	40'	60'	75'	
				Top 60'	Lower Sect.
Poles or uprights (min.).....	3" x 4" or 2" x 6"	4" x 4"	4" x 6"	4" x 6"	6" x 6"
Pole foundation (min.).....			2" x 9"		
Max. pole spacing (longitudinal)...			6' - 0"		
Max. width of scaffold.....		5' - 0"		8' - 0"	
Bearers or putlogs (min.).....		3" x 5"		3" x 6" or 2" x 9"	
Max. spacing of bearers or putlogs.			6' - 0"		
Ledgers (minimum).....			2" x 9" (on edge)		
Vertical spacing of ledgers (max.)..			7' - 0"		
Non-supporting stringers.....			2" x 4"		
Tie-ins.....			1" x 6"		
Bracing.....			1" x 6"		
Planking.....			2" x 9"		
Toeboards.....			2" x 9"		
Guard rails.....			2" x 4"		

(b) Tests and inspections required.-All suspended scaffolds shall be inspected daily by the user before use. A record of such inspections shall be kept and maintained at the field office of the user. Upon delivery of the scaffold equipment to the site, the supplier of such equipment shall furnish a certificate from an independent testing laboratory or a licensed professional

engineer stating that physical tests of a prototype of the equipment were conducted and that such equipment is capable of withstanding at least four times the maximum allowable live loads. Such certificates shall be kept at the field office of the user and shall be available for inspection by a representative of the department of buildings. This section, however, shall

not be construed to reduce the factors of safety specified elsewhere in this code for various appurtenances to this equipment. In addition, tests prescribed in section 27-998 of article three of subchapter eighteen shall be performed with the full rated live load on the scaffold at the test intervals specified therein and at such other intervals as the commissioner may require.

(c) Tie-ins.-Scaffolds shall be tied into the building or structure, and means therefor shall be provided. Window cleaners anchors, window frames, millions*, or similar elements shall not be used as tie-in anchors or brace-back points.

(d) Wire rope.-Wire rope used for support of suspended scaffolds shall be capable of supporting six times the actual applied load without failure, but shall not be less than five-sixteenths of an inch in diameter for use with light duty platforms or one-half inch in diameter for use with medium or heavy duty platforms. Wire rope shall be rigged to blocks of proper size or to other approved devices. For other provisions concerning wire rope, see section 27-1055 of article ten of this subchapter.

**As enacted but "mullions" probably intended.*

TABLE 19-9 MINIMUM SIZE AND MAXIMUM SPACING OF MEMBERS OF INDEPENDENT POLE LIGHT DUTY SCAFFOLDS

Uniformly Distributed Load			Not to exceed 25 psf		
Max. height of scaffold.....	20'	40'	60'	Top 60'	75' Lower Sect.
Poles or uprights (min.).....	2" x 4"	3" x 4" or 2" x 6"	4" x 4"	4" x 4"	4" x 6"
Pole foundation (min.).....			2" x 9"		
Max. pole spacing (longitudinal):					
With 1 1/4" x 9" ledgers.....			6' - 0"		
With 2" x 9" ledgers.....			10' - 0"		
Max. pole spacing (transverse)....			10' - 0" ^a		
Ledgers (minimum).....		1 1/4" x 9" (on edge) or 2" x 9"			
Vertical spacing of ledgers (max.)		7' - 0"			
Bearers (minimum).....		1 1/4" x 9" (on edge)			
Non-supporting stringers.....		1" x 4"			
Bracing.....		1" x 4"			
Planking:					
Not more than 6' span.....		1 1/4" x 9"			
Up to 10' span.....		2" x 9"			
Toeboards.....		1" x 6"			
Guard rails.....		2" x 4"			

Note for Table 19-9:

^a Total base dimension in both directions to be at least 25 per cent of height.

§[C26-1907.5] 27-1046 Two-point suspension scaffolds.-

(a) Width and support.-Two-point suspension platforms shall be at least twenty inches but not more than thirty inches in width. Each end of the platform shall be supported by an approved stirrup or hanger, and the platform shall be securely fastened thereto. Not more than two hangers or stirrups shall be used to support one scaffold.

(b) Hangers.-Hangers or stirrups shall be of steel or wrought iron. Each such hanger shall be formed to properly fit the platform, and shall be provided with a loop or eye at the top for securing the supporting hook on the block, and with loops or equivalent means to support the top rail and midrail. The hanger or stirrup shall be placed at least six inches but not more than eighteen inches from the end of the platform.

(c) Roof irons.-Roof irons or hooks shall be of steel or wrought iron not less than seven-eighths of an inch in diameter or other size of equivalent strength and shall be securely anchored. Where the upper block hook does not directly engage the roof iron, the connection shall be made with wire rope of required strength but in no case shall the wire rope be less than one-half inch in diameter.

(d) Fibre rope.-

(1) The use of fibre rope shall be limited to light duty two-point suspension scaffolds. Fibre rope shall be at least equivalent in strength and suitability to three-quarter inch first quality unspliced manila rope.

(2) Fibre rope shall not be permitted for or near any work involving the use of corrosive substances or where the upper block is more than one hundred feet

above the platform.

(3) All blocks shall fit the size of rope they carry, and shall be so constructed as not to chafe the rope.

(e) Use.-

(1) Needle beam scaffolds shall not be used over areas used by the public.

(2) Two or more two-point suspension scaffolds shall not be combined into one by bridging the distance between them or by any form of connection.

(3) Not more than two workers shall be permitted to work on one scaffold at one time.

(4) Every two-point suspension scaffold shall be equipped with an approved device to raise, lower, and hold the scaffold in position.

(f) Platforms.-The platforms of every two-point suspension scaffold shall be one of the following types, or an approved equivalent.

(1) **LADDER TYPE PLATFORM.-**consisting of boards upon a horizontal ladder, the sides of which are parallel. The ladder shall be capable of sustaining, without failure in any part, at least four times the maximum load allowed to be placed thereon, and rungs shall be at least one and one-eighth inches in diameter with seven-eighths inch tenons mortised into the side stringers at least seven-eighths of an inch and spaced at not more than eighteen inches. Stringers shall be tied together with metal rods at least one-quarter inch in diameter located not more than five feet apart and which pass through the stringers and are riveted up tight against washers at both ends. The platform shall consist of at least one-half inch by three inch planks, shall fill the space between the sides of the hangers, and shall be securely fastened to the hangers by U-bolts passing around the hangers and bolted up tight on the inside face of the stringers.

(2) **PLANK TYPE PLATFORM.-**consisting of planks supported on stirrups or hangers. The planks shall have a uniform thickness of at least two inches and a width of at least nine inches. The planks shall extend at least six inches but not more than eighteen inches beyond the supporting hangers, and a bar shall be nailed across the platform on the underside at each end to prevent the platform from slipping off the hanger. Where two or more planks are used, they shall be fastened together by cleats not less than one inch by six inches nailed on the underside at intervals of four feet or less. Planks shall not be spliced.

(3) **BEAM TYPE PLATFORM.-**consisting of longitudinal side stringers with cross beams on which longitudinal platform planks are laid. Beam platforms shall have side stringers not less than two inches by eight inches. The stringers shall be supported on the hangers, located to fill the full width of the hangers, and the clear span between hangers shall not exceed twenty-four feet. The ends of the stringers shall extend at least six inches but not more than eighteen inches beyond the

hangers, and shall be fastened to the hangers by U-bolts passing around the hangers and bolted up tight on the inside face of the stringers. The platform shall be supported on two inch by six inch cross beams, on edge, set between the side stringers, securely nailed thereto, and spaced not more than four feet on centers. The platform boards shall consist of material not less than one inch by six inches, nailed tight together, and extended to the outside face of the stringers. The ends of all platform boards shall rest on the cross beams and shall be nailed securely thereto.

(g) Guard rail and toeboard.-The outside edge of the platform, and the open ends (when stirrups do not afford adequate protection) shall be provided with a two-rail guard rail and a toeboard securely fastened at intervals not exceeding ten feet. Where there is a space between the scaffold and the structure greater than six inches, a similar guard rail shall be provided at the inside of the platform.

§[C26-1907.6] 27-1047 Multiple-point suspension scaffolds.-

(a) General.-

(1) All multiple-point suspension scaffolds shall be supported by wire ropes. The use of fibre ropes is not permitted.

(2) Provision shall be made to prevent supports from slipping off the ends of outrigger beams.

(3) Outrigger beams and platform bearers shall be of metal.

(b) Outrigger beams.-

(1) The overhang of outrigger beams shall not exceed that specified by the design, and the inboard length of beam shall be at least one and one-half times the outboard length.

(2) Outrigger beams shall be anchored and braced at both fulcrum point and inboard end to resist all vertical, horizontal, and torsional forces.

(3) Supporting points for outrigger beams shall be level, smooth, and of sufficient area (at least six inches by six inches) to provide a firm seat.

(4) The wire rope suspenders shall be securely fastened to the outrigger beams by steel shackles or equivalent means. The shackles and outrigger beams shall be so located that the ropes will hang vertically.

(5) Outrigger beams shall be of the sizes required for the design, but shall be at least equivalent in strength to a standard 7 I 15.3 [sic] steel I-beam, and shall be spaced not more than ten feet center-to-center.

(c) Hoisting machines.-

(1) Suspended scaffolds shall be provided with an approved hoisting machine of either the platform or overhead type.

(2) At least four turns of rope shall at all times remain on the hoisting drum, and the end of the rope shall be properly secured to the drum.

(3) The hoisting rope shall be inspected regularly,

maintained, and lubricated.

(d) Platform.-

- (1) Platform widths shall be limited to eight feet.
- (2) Platform planking shall be laid tight and securely fastened to the bearers, shall overlap the supporting bearers at each end of the scaffold at least six inches but

not more than eighteen inches, and shall not be supported across more than two bearers.

- (3) Platform bearers shall be at least the equivalent of a pair of two and one-half inch by two and one-half inch by one-quarter inch standard angles.

TABLE 19-10 MINIMUM SIZE AND MAXIMUM SPACING OF MEMBERS OF INDEPENDENT POLE MEDIUM DUTY SCAFFOLDS

Uniformly Distributed Load	Not to exceed 50 psf				
Max. height of scaffold.....	20'	40'	60'	Top 60'	75' Lower Sect.
Poles or uprights (min.).....	3" x 4" or 2" x 6"	4" x 4"	4" x 6"	4" x 6"	6" x 6"
Pole foundation (min.).....			2" x 9"		
Max. pole spacing (longitudinal)...			8' - 0"		
Max. pole spacing (transverse)....			10' - 0" ^a		
Ledgers (minimum).....			2" x 9" (on edge)		
Vertical spacing of ledgers (max.)			6' - 0"		
Bearers (minimum).....			2" x 9" (on edge)		
Non-supporting stringers.....			1 1/4" x 4" or 1" x 6"		
Bracing.....			1" x 6"		
Planking:					
Not more than 6' span.....			1 1/4" x 9"		
More than 6' span.....			2" x 9"		
Toeboards.....			2" x 9"		
Guard rails.....			2" x 4"		

Note for Table 19-10:

^a Total base dimension in both directions to be at least 25 per cent of height.

TABLE 19-11 MINIMUM SIZE AND MAXIMUM SPACING OF MEMBERS OF INDEPENDENT POLE HEAVY DUTY SCAFFOLDS

Uniformly Distributed Load	Not to exceed 75 psf				
Max. height of scaffold.....	20'	40'	60'	Top 60'	75' Lower Sect.
Poles or uprights (min.).....	4" x 4"	4" x 4"	4" x 6"	4" x 6"	6" x 6"
Pole foundation (min.).....			2" x 9"		
Max. pole spacing (longitudinal)...			6' - 0" ^a		
Max. pole spacing (transverse)....			10' - 0" ^a		
Ledgers (minimum).....			2" x 9" (on edge)		
Vertical spacing of ledgers (max.)			5' - 0"		
Bearers (minimum).....			2" x 9" (on edge)		
Non-supporting stringers.....			1 1/4" x 9"		
Bracing.....			1" x 6"		
Planking.....			2" x 9"		
Toeboards.....			2" x 9"		
Guard rails.....			2" x 4"		

Note for Table 19-11:

^a Total base dimension in both directions to be at least 25 per cent of height.

- (e) Guard rail and toeboard.-**The outside edge of the platform and open ends shall be provided with a

standard guard rail and toeboard (section 27-1050 of this article) except that spacing of the vertical supports may be increased to not more than ten feet. Where there is a space between the scaffold and the structure in excess of six inches, a similar guard rail shall be provided at the inside edge of the platform.

(f) Erection and removal.-

(1) Multiple-point suspension scaffolds shall be installed, relocated, and raised or lowered under the supervision of a designated superintendent or foreman who shall enforce such measures as may be required for the safe execution of such operations.

(2) During raising or lowering, the levels of the various sections of the scaffolds shall be kept uniform and the differential height between sections minimized.

§[C26-1907.7] 27-1048 Manually-propelled free standing scaffolds. - All manually propelled free standing scaffolds shall meet the following requirements and shall be approved:

(1) Work platforms shall be tightly planked for the full width of the scaffold except for necessary entrance openings. Planks shall be secured in place.

(2) Platforms shall have a guard railing.

(3) Where a ladder is used to approach a platform, the ladder shall be secured to the scaffold.

(4) Handholds shall be provided for safe passage from the ladder to the platform.

(5) Unless temporarily braced to adjacent structure, the ratio of the platform height to the least base dimension shall be such as to assure stability, but in no case shall such height be more than four times the least base dimension.

(6) Provision shall be made to prevent the scaffold from falling during movement from one location to another.

(7) While the scaffold is in use by any person, it shall rest upon a stable footing and shall stand plumb. The casters or wheels shall be locked in position.

(8) While the scaffold is being moved, no person shall be suffered or permitted to ride, and all tools, equipment, and material shall be removed.

§[C26-1907.8] 27-1049 Power operated free standing scaffolds.-Records of the inspection, servicing, and maintenance of all power operated free standing scaffolds shall be kept by the user. These records are to be submitted on forms furnished by the commissioner and are to be made available whenever called for by the commissioner. All power operated scaffolds whether free standing or suspended shall meet the applicable requirements of subchapter eighteen of this chapter.

§[C26-1907.9] 27-1050 Standard guard rail and

toeboard.-

(a) Standard guard rail.-

(1) **GENERAL REQUIREMENTS.**-A standard guard rail shall consist of a two inch by four inch wood top rail (S4S) not less than three feet nor more than three feet six inches above the platform and a one inch by four inch wood intermediate rail (S4S) midway between the top rail and the floor or toeboard, both supported by two inch by four inch wood posts (S4S) spaced not more than eight feet apart.

(2) **ALTERNATE METAL RAILING.**-In lieu of wood construction, posts and rails may be constructed of at least one and one-quarter inch diameter standard pipe or of at least two inch by two inch by one-quarter inch angles. Spacing of rails and posts shall be as required in paragraph one of this subdivision.

(3) **REMOVABLE SECTIONS OF RAILING.**-To provide necessary openings for intermittent operations, one or more sections of a required railing may be hinged or supported in sockets. When supported in sockets, rails shall be so constructed that they cannot be jolted out. A button or hook may be used to hold the rail in fixed position. Substantial chains or ropes may be used to guard such openings in standard railings. Where so used, the chains or ropes shall be taut at the same height as the rails of the standard railing.

(b) Standard toeboard.-A standard toeboard shall be at least five and one-half inches high and constructed of metal, wood, or other substantial material. It shall be installed, where required, along the edge of any floor, opening, platform, ramp, or runway. Such toeboard shall be securely fastened to the posts and so installed that no open space exists between the floor and the toeboard.

ARTICLE 9 STRUCTURAL RAMPS, RUNWAYS, AND PLATFORMS

§[C26-1908.1] 27-1051 Ramps and runways (including elevated walkways).-

(a) Construction.-All runways and ramps shall be constructed, braced and supported to resist lateral displacement and all vertical loads, including impact.

(b) For motor vehicle use.-Runways and ramps for the use of motor vehicles may consist of an earthfill or may be structurally supported. They shall have a clear width of not less than twelve feet with timber curbs at least eight inches by eight inches placed parallel to, and secured to, the sides of the runway or ramp. The flooring of structurally supported ramps shall consist of no smaller than three inch planking full size, undressed, or equivalent material, with spans designed for the loads to be imposed.

(c) For use of workers only.-Runways and ramps for the use of workers shall be at least one foot six inches in clear width. Where used for wheelbarrows, hand-

~~(c) **Stop work order.** In addition to the penalties set forth in this section, the commissioner shall issue a stop work order if there is a failure to provide notice as required in this section and if (1) the rigger is unlicensed, (2) the workers lack certificates of fitness as required by the department's rules or (3) the rigger failed to file with the department satisfactory evidence of the required insurance and/or bond. Upon issuance of such stop work order, the work shall immediately be stopped for a minimum of two business days. The work shall not recommence until the stop work order has been lifted. In addition, the penalties set forth in section 26-181.1 shall also be assessed, as applicable.~~

~~*Local Law 17-2007.~~

~~ARTICLE 9 STRUCTURAL RAMPS, RUNWAYS, AND PLATFORMS~~

~~§[C26-1908.1] 27-1051 Ramps and runways (including elevated walkways).-~~

~~(a) **Construction.** All runways and ramps shall be constructed, braced and supported to resist lateral displacement and all vertical loads, including impact.~~

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~~(c) **For use of workers only.** Runways and ramps for the use of workers shall be at least one foot six inches in clear width. Where used for wheelbarrows, hand-~~

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~~carts, or hand trucks, runways and ramps shall be at least three feet in clear width. Flooring shall consist of at least two inch planking spanning as permitted by table 19-5, laid close, butt joined, and securely fastened.~~

~~(d) Slope limitations. Ramps shall have a slope not steeper than one in four. If the slope is steeper than one in eight, the ramp shall be provided with cleats spaced not more than fourteen inches apart and securely fastened to the planking to afford a foothold. Spaces in the cleats may be provided for the passage of the wheels of vehicles. The total rise of a continuous ramp used by workers carrying material or using wheelbarrows, hand carts, or hand trucks shall not exceed twelve feet unless broken by horizontal landings at least four feet in length.~~

~~(e) Guard rail required.~~

~~(1) All runways and ramps located more than five feet above the ground or floor shall be provided with a standard guard rail and toeboard (section 27-1050 of article eight of this subchapter) on open sides.~~

~~(2) Where it is possible for the public to pass under, or next to, runways or ramps, the space between the top rail and the toeboard shall be enclosed with a wire screen composed of not less than no. 18 steel wire gage with a maximum one half inch mesh.~~

~~§[C26-1908.2] 27-1052 Platforms.~~

~~(a) Planking. Platforms used as working areas, or for the unloading of wheelbarrows, hand trucks, or carts shall have a floor consisting of at least two inch planking spanning as permitted by table 19-5. Platforms for the use of motor trucks shall have a floor of at least three inch planking, full size, undressed or equivalent materials with spans designed for the loads to be imposed. Planking shall be laid close and shall be butt joined and securely fastened.~~

~~(b) Guard rail required.~~

~~(1) Every platform more than five feet above the ground or above a floor shall be provided with a standard guard rail and toeboard (section 27-1050 of article eight of this subchapter), except that the side of the platform used for the loading or unloading of vehicles may be protected by a timber curb at least eight inches by eight inches for motor trucks or four inches by four inches for wheelbarrows and hand trucks in lieu of the standard guard rail and toeboard.~~

~~(2) Where it is possible for the public to pass under, or next to, platforms, the space between the top rail and the toeboard shall be enclosed with a wire screen composed of not less than no. 18 steel wire gage with a maximum one half inch mesh.~~

~~§[C26-1908.3] 27-1053 Special requirements where power buggies are used. Runways, ramps, platforms, and other surfaces upon which power buggies are operated shall meet the following minimum requirements:~~

~~(1) They shall be designed.~~

~~(2) They shall be able to sustain, without failure, at least four times the maximum live load for which they are intended.~~

~~(3) The minimum width, inside of curbs, for any ramp, runway, or platform shall be two feet wider than the outside width of any power buggy operated thereon without passing, and three feet wider than twice such buggy width in the places where passing occurs.~~

~~(4) All runways shall be essentially level transversely.~~

~~(5) Curbs shall be furnished along all buggy traffic paths that are nearer than ten feet horizontally to any unenclosed area, shaft, or other open space into which or through which, a fall of more than twelve inches from such surface is possible, except as set forth in subdivision seven of this section.~~

~~(6) Where curbs are not required because the buggy is operated on a surface not over twelve inches above another surface, the lower surface shall be strong enough to sustain the loaded vehicle in the event of a fall thereon.~~

~~(7) Curbs may be omitted at actual dumping points more than twelve inches above other surfaces if the edge over which dumping occurs is provided with bumpers or other means that will effectively stop the buggy from running over the edge while dumping.~~

~~(8) Curbs must be at least seven inches high, securely fastened, and capable of resisting side impact, and shall be equivalent to at least two inch by eight inch plank set on edge against uprights securely fastened and braced at not more than four foot intervals.~~

ARTICLE 10 MATERIAL HANDLING AND HOISTING EQUIPMENT

~~§[C26-1909.1] 27-1054 General requirements. Material handling and hoisting equipment shall be installed, operated, and maintained to eliminate hazard to the public or to property. It shall be unlawful to operate any such equipment which is not provided with a positive means for preventing the unauthorized operation of such machine. The means whereby such machines may be made inoperative shall be determined by the commissioner.~~

~~(a) Operation. Only operators designated by the person causing such machinery to be used shall operate hoisting or material handling machinery. Operators and signalmen shall be experienced at the operation they perform. Riggers and hoisting machine operators shall be licensed as required under chapter one of title twenty-six of the administrative code. The operator shall be responsible for making the machine inoperative before he or she leaves the machine.~~

~~(b) Loading. Material handling and hoisting equipment shall not be loaded in excess of the rated load specified~~

by the manufacturer, except for power-operated cranes and derricks where the provisions of section 27-1057 of this article are controlling. Except for power-operated cranes and derricks if such data are not available, the safe loads and, where applicable, charts of reach vs. capacity, shall be established by an engineer or architect. All loads shall be properly trimmed to prevent the dislodgement of any part during raising, lowering, swinging or transit. Suspended loads shall be securely slung and properly balanced before they are set in motion. Rated load capacities and required charts shall be conspicuously posted on all material handling and hoisting machinery or on the job site and shall be available to the commissioner at all times.

(c) ~~Refueling.~~ Open lights, flames, or spark-producing devices shall be kept at a safe distance while refueling an internal combustion engine, and no person shall smoke or carry lighted smoking material in the immediate vicinity of the refueling area. The engine shall be stopped during refueling. Fuel shall be kept in containers that meet the requirements of the fire department. "No smoking" signs shall be conspicuously posted in all fueling or fuel storage areas.

~~§[C26-1909.2] 27-1055 Rigging, rope, chains, and their appurtenances and fittings.~~

(a) ~~Hoisting line.~~ Only wire rope shall be used with power-driven hoisting machinery, except that either wire or fibre rope may be used on winchheads or capstan hoists.

~~(b) Wire rope or cable.~~

(1) All hoisting cable shall be at least one-half inch diameter ~~plow steel grade.~~

(2) Wire cable shall not be used under the following conditions:

a. When it is knotted or kinked.

b. When more than ten percent of the total wires are broken in any lay, a lay being that distance measured along the cable in which one strand makes a complete revolution around the cable axis.

c. When the wires on the crown of the strands are worn down or rusted to less than sixty percent of their original cross-sectional area.

d. When any combination of broken wires, rust, or abrasion has reduced the strength of the cable to eighty percent or less of its original strength.

(3) At least four turns of the cable shall remain on the hoist drum at all times.

(4) Wire cable fastenings shall conform to the provisions of article eleven of subchapter ten of this chapter, and shall consist of zinc-filled sockets, wedge sockets with at least one cable clip above the socket, thimble and splice connections, or thimble and cable slips².

(5) Where cable clips are used, the minimum number shall conform to the following:

²As enacted but "clips" probably intended.

Diameter of wire rope	No. of clips
Up to and incl. 3/4 in.	3
From 3/4 in. up to and incl. 1 in.	4
From 1 in. up to and incl. 1 1/4 in.	5
From 1 1/4 in. up to and incl. 2 1/2 in.	6

(6) Clip spacing shall be at least six times the diameter of the cable, and the "U" part of the clip shall be placed over the short end of the cable. After the rope is in service and while it is under tension, the nuts on the clips shall be retightened.

(7) Cables and blocks used to change the direction of cables shall not be located in any area used by the public.

~~(c) Fibre rope.~~

(1) Fibre rope shall be equal in strength, durability and quality to long fibered manila hemp rope, and shall be used and maintained in accordance with the recommendations of the manufacturer.

(2) Before rope is used it shall be carefully inspected for abrasions and severe wear. Rope that has been exposed to acid shall be destroyed and not used.

(3) Frozen rope shall be thawed out and inspected before being used.

(4) Rope shall not be made fast to sharp objects or surfaces, and sharp bends shall be avoided.

(5) Rope shall be stored in a dry place and protected.

~~(d) Sheaves.~~

(1) Load-bearing sheaves shall be of diameter and grooving as recommended by the manufacturer to accommodate the particular rope under the proposed conditions of use.

(2) Sheaves and blocks that are worn, chipped, or otherwise damaged shall not be used.

(3) Sheaves and blocks intended for use with fibre rope shall not be used for wire rope.

~~(e) Fittings.~~

(1) All wire rope fittings, including sockets, thimbles, clips, blocks, shackles, etc. shall be of the standard size, diameter, and grooving to fit the size of and to develop the breaking load capacity of the rope on which they are to be installed.

(2) Hooks, shackles, or other fittings deformed due to wear, over-stress, or other cause shall not be used.

(3) Safety hooks or open-type hooks with wire mousings shall be used where loads may be accidentally unhooked.

~~(f) Chains.~~

(1) Chains having deformed links or links that are stretched from their original length shall not be used. Defective links or portions of the chain shall be replaced only by links or sections furnished by the manufacturer for the particular chain involved, unless a substitute link can be shown to be equivalent in strength and suitability. All repairs to chains shall be made by an experienced blacksmith or chainwright, except that alloy steel chains shall be repaired only by the

manufacturer of such chains.

(2) When in constant use, steel chains should be normalized and wrought iron chains should be annealed at intervals not to exceed six months. The annealing or normalizing shall be done by the manufacturer or in strict accordance with such manufacturers specifications.

(3) Chains shall not be used as slings in hoisting operations. Chains shall not be knotted, nor shall they be shortened or spliced, by the use of nails or bolts.

(g) Slings.

(1) Blocks or heavy padding shall be used at corners of the load to protect the sling from sharp bending.

(2) When lifting a load with multiple slings, the slings shall be so arranged as to equalize the load between the slings.

(3) The ends of slings made of wire or fibre shall be properly spliced to form the eyes. Eyes for wire rope shall be formed using thimbles.

(4) Wire rope slings shall be frequently inspected and lubricated.

*** (h) Accidents.** The owner or person directly in charge of any rigging equipment shall immediately notify the commissioner following any accident involving such equipment. When an accident involves the failure or destruction of any part of the rigging equipment, no person shall use or operate such equipment or any part thereof or remove such equipment or any part thereof from the immediate area of the job site without the permission of the commissioner.

**Local Law 15-1993.*

[C26-1909.3] 27-1056 Material platform hoists and bucket hoists. As used in this section, a material platform or bucket hoist means a power or manually operated suspended platform or bucket contained by guide rails and used for raising or lowering material exclusively, and controlled from a point outside the conveyance.

(a) Construction of material hoist towers.

(1) Where the design of material hoist towers utilizes standard manufactured elements the loading shall not exceed the rated values established by the manufacturer. If specifically designed for the given installation, the design shall be prepared by an engineer or architect, and the construction shall conform to that design. For all material hoist towers more than six stories high, whether of manufactured units or specifically designed for the site, plans showing the design, including the guying, bracing, and foundations shall be submitted to the commissioner for approval prior to construction. Approval of such plans is subject to the provisions established in article nine of subchapter one of this chapter for approval of plans for new construction.

(2) Standard guard rails and toeboards shall be placed on the open sides of runways connecting the tower to the structure.

(3) The provisions of subdivision (f) of section 27-1042 of article eight of this subchapter relating to fire retardant construction of scaffolds shall apply to the construction of hoist towers.

(4) An enclosure shall be installed around the hoistway below the lowest landing to prevent unauthorized access to the space under any hoist.

(5) Exterior hoist towers may be used with or without an enclosure on all sides. When a hoist tower is enclosed, except for entrance and exit openings, it shall be enclosed on all sides for the entire height, with a screen enclosure with one half inch mesh, No. 18 U.S. gage [sic] wires. When a hoist tower is not enclosed, the hoist platform or ear shall be totally enclosed on all four sides for the full height between the floor and the overhead protective covering with one half inch mesh of No. 14 U.S. gage [sic] wire or the equivalent. The hoist platform enclosure shall include the required gates for loading and unloading.

(b) Hoist cars. Platforms for material hoist cars shall have sufficient strength to support five times the rated capacity, and the wire rope supporting material hoist cars or bucket hoists shall be capable of supporting eight times the rated capacity. The rated capacity shall be conspicuously posted and maintained on the cross head or side members. On the top of every material hoist cage there shall be an overhead protective cover of two inch planking, three quarters inch plywood or other material of equivalent strength.

(c) Hoist machinery.

(1) The car and counterweight, if provided, shall be equipped with safety devices capable of stopping and sustaining the counterweight and/or sustaining the car with its capacity load in the event of breakage of the hoisting or counterweight ropes.

(2) A sign or plate giving the maximum load capacity shall be posted in a conspicuous place near every hoist engine.

[C26-1909.4] 27-1057 Testing inspection, approval and use of power operated cranes, derricks and cableways. No owner or other person shall authorize or permit the operation of any power operated crane or derrick without a certificate of approval, a certificate of operation and a certificate of on-site inspection. No owner or other person shall authorize or permit the operation of any cableway without a certificate of on-site inspection.

(a) Exceptions.

(1) The requirements of this section shall not apply to excavating or earth moving equipment, except cranes used with clamshells.

(2) The requirements of this section shall not apply to cranes or derricks performing an emergency use pursuant to the lawful order of the head of any department.

(3) The requirements of this section shall not apply to truck cranes with telescopic, hydraulic or folding booms, including jibs and any other extensions to the boom, not exceeding one hundred thirty-five feet in length with a manufacturer's rated capacity of three tons or less, except that a certificate of operation, as provided for in this section and in reference standard RS 19-2 shall be required for such cranes with jibs and any other extensions to the boom exceeding fifty feet in length. The above requirement for a certificate of operation shall not apply to a crane used exclusively as a man basket.

(4) The requirements of this section shall not apply to a mobile crane with a boom, including jibs and any other extensions to the boom, not exceeding fifty feet in length with a rated capacity of three tons or less. The commissioner may, by rule and regulation, exempt other mobile cranes of limited size and capacity from any or all of the requirements of this section.

(5) The requirements of this section shall not apply to hoisting machines permanently mounted on the bed of material delivery trucks which are used exclusively for loading and unloading such trucks, provided that the length of boom does not exceed the length of the truck bed by more than five feet and that any material transported thereon shall not be raised more than two feet in the unloading process. Operators of such equipment shall be exempt from licensing requirements prescribed in section 26-166 of title twenty-six of the administrative code.

(b) Certificate of approval-

(1) The owner of such crane or derrick shall file an application for a certificate of approval on a form prescribed by the department, together with such information as set forth in reference standard RS 19-2 and shall contain the various boom lengths and applicable load ratings for which approval is requested.

(2) Upon the approval by the department of information submitted pursuant to reference standard RS 19-2 and an inspection of the equipment, the department shall issue a certificate of approval for the equipment. Said equipment may be used with pile driving leads, mounted compressors, boilers, magnets, hammers, pile hammers, extractors, jetting equipment, augers, drills, vibrating hammers, mandrels, hoe rams and other similar attachments. A new certificate of approval shall be required when a crane is modified or altered to increase the boom length, jibs or any extensions to the boom beyond the maximum approval length or when the load ratings are increased.

(c) Certificate of operation-

(1) Upon issuance of a certificate of approval, the department shall also issue the initial certificate of operation which shall expire one year from the date of issuance. The owner of such crane or derrick shall renew the certificate of operation each year.

(2) The commissioner shall approve the crane or

derrick if he or she is satisfied after inspections and tests that said crane or derrick is in a safe operating condition.

(3) If the owner applies for renewal of a certificate of operation within not more than sixty or less than thirty days prior to the date of expiration of his or her certificate, such owner may continue to use his or her crane or derrick until the department grants or denies him or her a new certificate.

(4) No change in such crane or derrick not provided for in the certificate of operation may be made until the owner obtains a new certificate of operation.

(d) Certificate of on-site inspection-

(1) The owner of the premises, building or structure, or his or her designated representative, shall obtain a certificate of on-site inspection for the use of any power operated crane, derrick or cableway used for construction purposes at each job site. Such owner or his or her designated representative shall file an application for a certificate of on-site inspection on a form prescribed by the department, and the fee for such application shall be as provided in section 26-215 of title twenty-six of the administrative code. The applicant shall specify the date when the equipment will be at the job site for use, which date shall be not less than three regular working days from the date of filing said application. Such application shall include the information as set forth in the applicable provisions of reference standards RS 19-2 and RS 19-3.

(2) Upon approval of the application, a copy of said approval shall be given to the applicant. It shall have noted thereon that the equipment shall not be operated prior to the date indicated, which date shall be not less than three regular working days from the filing of the application unless otherwise provided in the applicable provisions of reference standard RS 19-2. It shall be unlawful to operate the aforesaid equipment before the specified date, unless it has been inspected and found to be satisfactory by the department. If the equipment has not been inspected by the department on or before the said date, then the equipment may be operated, pending inspection, provided that the conditions and statements contained in the approved application are complied with. Upon inspection by the department and a finding of satisfactory compliance, the approval shall be deemed to be a certificate of on-site inspection.

(3) The certificate of on-site inspection is only valid if the conditions and statements contained in the approved application are complied with and the hoisting machine is operated in conformance with the provisions of this section and the rules and regulations applicable thereto.

(4) No certificate of on-site inspection shall be required where any article is hoisted or lowered on the outside of any completed building, or for the installation of boilers and tanks, or for the erection, maintenance or removal of signs or sign structures, under the supervision of a

master or special rigger or a master or special sign hanger in conformance with the provisions of chapter one of title twenty six of the administrative code.

~~(e) The commissioner shall inquire into the cause of any accident involving hoisting machinery.~~ The owner or person directly in charge of any hoisting machinery shall immediately notify the administrator and the commissioner following any accident involving hoisting machinery. When an accident involves the failure or destruction of any part of a hoisting machine, no person shall do either of the following, without the permission of the commissioner:

- (1) use such hoisting machine, or
- (2) remove the hoisting machine or any part thereof from the area of the job site.

~~(f) Any person who wilfully violates any provision of this section shall be guilty of an offense and shall be subject to a fine not exceeding one thousand dollars.~~

~~***As enacted but "wilfully" probably intended.~~

~~(g) The commissioner may issue temporary certificates of approval, operation and on site inspection for any power-operated crane during the pendency of an application for certificates of approval and operation upon inspection and upon such analysis and testing as the commissioner may deem necessary. The commissioner may revoke such temporary certificates if the application is denied.~~

~~(h) Special requirements for cranes and derricks.~~ The construction, installation, inspection, maintenance and use of power-operated cranes and derricks shall be in conformance with reference standard RS 19-2.

~~(i) Special requirements for cableways.~~ The construction, installation, inspection, maintenance and use of cableways shall be in conformance with reference standards RS 18-5 and RS 19-3.

~~§[C26-1909.5] 27-1058 Conveyors and cableways.~~

~~(a) Walkways.~~ Walkways along belt conveyors or bucket conveyors shall be kept free of materials and, where five feet or more above the ground, shall be provided with a standard guard rail and toeboard along the outside of the walkway. The guard rail and toeboard may be omitted on the side toward the belt if the walkway is located adjacent to the conveyor.

~~(b) Trippers.~~ Where trippers are used to control discharge, a device for throwing the belt or bucket drive into neutral shall be installed at each end of the runway.

~~(c) Spillage.~~ Where conveyor belts cross any traveled way, trays shall be installed to catch spillage and overhead protection shall be provided for persons or traffic passing beneath.

~~§[C26-1909.6] 27-1059 Trucks.~~

~~(a) Maintenance.~~ All parts and accessories of trucks shall be kept in repair. Brakes shall be so maintained that the vehicle with full load may be held on any grade that may be encountered on the job. Provision shall be made for the immediate application of wheel blocks to trucks traversing ramps steeper than one in ten.

~~(b) Loading.~~ Trucks shall not be loaded beyond the manufacturer's rated capacity, nor beyond the legal load limit, where applicable. The loads shall be trimmed before the truck is set in motion to prevent spillage. Loads that project beyond the sides of the truck, or that may be dislodged in transit, shall be removed or securely lashed in place.

~~§[C26-1909.7] 27-1060 Power buggies.~~ As used in this section, the term "power buggy" shall mean an automotive vehicle designed or used for the transportation of materials on or about construction sites. It shall not include automobiles, motor trucks, general purpose tractors, or excavating or material handling machinery.

~~(a) Responsibility of employers and workers.~~

~~(1) Every person causing a power buggy to be used shall provide trained and competent operators and shall carry out or enforce all provisions of this section pertaining to the use, operation, and maintenance thereof.~~

~~(2) No person other than the operator assigned by the employer shall operate a power buggy. A power buggy shall be in charge and custody of the operator assigned, and no other person shall in any way interfere with or handle it, nor shall the operator cause or permit any other person to do so.~~

~~(3) No power buggy shall be operated unless it is in good operating condition and is so constructed that it is stable under conditions of normal use.~~

~~(b) Operation and Construction.~~

~~(1) BRAKES.~~ Every power buggy shall be provided with brakes and tire surfaces capable of bringing it to a full stop within twenty five feet on a level surface that is similar to the one on which it will be used and at full rated load and maximum design speed. Brakes shall be capable of being fixed in engagement to hold the full load stationary on a twenty five percent grade.

~~(2) ACCIDENTAL STARTING.~~ All movement controls of every power buggy shall be so arranged or shielded that they cannot be inadvertently engaged or the buggy accidentally set in motion.

~~(3) PARKING ON GRADES.~~ No power buggy shall be left unattended on any grade sufficiently steep to cause it to coast if free of engine and brake resistance.

~~(4) USE ON RAMPS, RUNWAYS AND PLATFORMS.~~ Power buggies shall not be used on ramps, runways, or platforms that do not meet the requirements of section 27-1053 of article nine of this subchapter.

~~§[C26-1909.8] 27-1061 Lift and fork trucks.~~

~~(a) Load capacity.~~ A metal plate with readily legible etched or stamped figures giving the capacity rating in pounds shall be attached to every lift or fork truck.

~~(b) Maintenance.~~ All parts and accessories of lift or fork trucks shall be kept in repair and with brakes adequate to maintain the fully loaded vehicle on any grade that may be encountered on the job.

~~(c) Loading.~~ No lift or fork truck shall be loaded beyond its capacity rating. No hand operated pallet

truck loaded so that any point on the load is at a greater height than four feet six inches above the floor shall be moved by pushing unless handled by two persons.

(d) Prohibited use. No lift or fork truck shall be in motion when the loaded forks are elevated higher than necessary to clear obstructions, except as may be required for positioning, picking up, or depositing the load.

§[C26-1909.9] 27-1062 Hand propelled vehicles. Hand propelled vehicles shall be constructed and braked to withstand the loads to be carried and shall be maintained in repair. Vehicles with loose parts shall not be used.

§[C26-1909.10] 27-1063 Mixing machines. Where the public may have access to the working area near charging skips, guard rails shall be erected to enclose the area under the raised skip and the mixing machine. Each time before raising or lowering the charging skip, the operator shall ascertain that no one is in the danger zone.

§[C26-1909.11] 27-1064 Jacks.

(a) Marking. The rated capacity of every jack shall be legibly marked in a prominent location on the jack by casting or stamping. The manufacturer shall designate the intended supporting point of the load and the maximum permissible length of lever and force applied.

(b) Overtravel to be limited. Every jack shall, where practicable, be provided with a positive stop to prevent overtravel; otherwise an indicator to clearly show overtravel shall be provided on the jack.

(c) Maintenance. Lubrication and operation of jacks shall be in accordance with the recommendations of the manufacturer.

(d) Foundations. Jacks shall rest on a firm, level foundation adequate to support the load.

(e) Blocking required. When the object has been lifted to the desired height, blocking or cribbing shall be immediately placed under it.

ARTICLE 11 EXPLOSIVE POWERED AND PROJECTILE TOOLS

§[C26-1910.1] 27-1065 General. All explosive powered and projectile tools shall be approved.

§[C26-1910.2] 27-1066 Explosive powered tools.

(a) The provisions of reference standard RS 19-1 shall apply.

(b) The care and storage of explosives shall meet the requirements of the fire department.

§[C26-1910.3] 27-1067 Projectile tools.

(a) Basic requirements.

(1) Unless in a particular case the board shall otherwise determine, design and construction must be such as to retain safely all internal pressures which may occur during operation, the discharge mechanism shall be such that the projectile ~~can not be discharged by dropping the tool, the discharge mechanism shall be~~

~~such that the discharge of each projectile shall be dependent on a separate and distinct act by the operator, and all safety features shall be durable.~~

~~As enacted but "cannot" probably intended.~~

(2) A tool shall have such other characteristics as the board may find necessary or proper to provide safety, alternative or in addition to the foregoing. Such other characteristics may include devices and materials external to the tool itself but associated with its function, and may also include in respect to high velocity projectile tools the basic requirements set forth above for explosive powered tools which discharge projectiles with comparable velocities.

(b) Maintenance.

Every projectile tool shall be properly maintained. No such tool shall be used if any part thereof necessary to retain internal pressures or to prevent accidental discharge of a projectile is not in sound and operable condition.

(c) Operation.

(1) A projectile [tool]* shall be operated only by an authorized operator who shall be the owner, lessee, or other person having proprietary custody of the tool or any other person whom he or she may authorize to operate it.

(2) While a projectile tool is in the care and custody of an authorized operator, no other person shall handle or in any way molest it.

(3) No authorized operator of a projectile tool shall leave it unattended while it is in a condition to discharge a projectile.

(4) No person shall use a projectile tool for any purpose other than that for which it was manufactured, nor shall such person point it at another person or hold it at an angle permitting the projectile to fly free.

(5) No person shall use a projectile tool in such a way as to endanger persons who may be in the vicinity.

~~*Copy in brackets not enacted but probably intended.~~

ARTICLE 12 EXPLOSIVES AND BLASTING

§[C26-1911.1] 27-1068 General.

All handling, transporting, and use of explosives shall meet the requirements of the fire department.

ARTICLE 13 FLAMMABLE AND COMBUSTIBLE MIXTURES, COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS

§[C26-1912.1] 27-1069 General. The transportation, handling, storage, and use of all volatile flammable oils, flammable and combustible mixtures, compressed gases, and other hazardous materials shall meet the requirements of the fire department. Also, see subdivision (b) of section 27-1023 of article two of this subchapter, warning signs and lights.

SUBJECT INDEX
Title 26, Housing and Buildings
CHAPTER 1, DEPARTMENT OF BUILDINGS
SUBCHAPTER 1 GENERAL PROVISIONS
SUBCHAPTER 2 LICENSES
SUBCHAPTER 3 BUILDING CONSTRUCTION
SUBCHAPTER 4 REGULATION OF OUTDOOR SIGNS

A

Affidavits, proofs and oaths, 26-106
Annual report, 26-109
Application for license, 26-132
 Record of application, 26-129
Awnings, violations, 26-125 (g), 26-126(d)

B

Borough superintendents, 26-130

C

Certificate of commissioner, 26-121
Certificate of Occupancy, 26- 224
 Issuance and filing of certificate of
 occupancy, 26-224
 Occupancy of existing buildings, 26-223
 Requirement of certificate of occupancy, 26-222
Complaint book, 26-107
Contents of notices and orders, 26-116
Concrete testing laboratory license,
 License applications, 26-201
 License conditions, 26-204
 License fees, 26-203
 License qualifications, 26-202
 Requirement of license, 26-200

D

Dangerous buildings, places and things;
 nuisance, 26-127
Definitions, building, 26-101
Demolition work without permit on one-or-two-
 family dwellings, 26-248(j)

E

Enforcement proceedings, 26-120
Environmental Control Board,
civil penalties, 26-126.1
 proceedings, 26-126.2
 order to certify correction, 26-126.2
 penalty for failure to certify correction of
 violation, 26-126.3
 power of commissioner to designate provisions
 enforceable by environmental control board, 26-126.4
Examination of applicant, 26-134
Exemptions from examination, 26-135
Exits, workplace, 252.1

F

False statements in certificates, forms, written statements,
 applications or reports, 26-124
Falsely impersonating an officer, 26-112
Fees, 26-210
 Computation, for work permits, 26-212
 For approval of plans and work permits, 26-211
 For cranes, derricks and cableways, testing, approval,
 inspection and use, 26-215
 For equipment use permits, 26-213
 Liens on premises, 26-128
 Requirement of fee, 26-210
 Special fees, 26-214
 Special fees, asbestos, 26-214.1
 Testing, 26-215

G

General contractor registration, Subchapter 2, Article 11

H

High-pressure boiler operating engineer and portable
 high-pressure boiler operating engineer licenses, 26-159
 Definition, 26-160
 License applications, 26-161
 License conditions, 26-164
 License fees, 26-163
 Licensing of existing operating engineers, 26-165
 License qualifications, 26-162
 Requirement of license, 26-159
Hoisting machine operator license, 26-166
 Classification of licenses, 26-168
 License applications, 26-167
 License conditions, 26-171
 License fees, 26-170
 License qualifications, 26-169

I

Illegal practices in the sale or use of lumber for
 construction purposes prohibited, 26-251
Inspections, 26-216
 Of building work, 26-217
 Of completed buildings, 26-218
 Of construction machinery and equipment, etc. 26-219
 Of signs, 26-220
 Reports, 26-221
 Right of entry and inspection, 26-216
Issuance of license, 26-136

Index

L

Licenses, General, 26-131

- Application, 26-132
- Examination, 26-134
- Exemptions from examination, 26-135
- Fees, 26-146
- Issuance, 26-136
- Qualifications, 26-133
- Renewal and term of, 26-137
- Revocation of, 26-139
- Violations and penalties, 26-140
- Use of, 26-138

Licenses, Specific, see each category

Liens, upon building, 26-105

Lis pendens, 26-119

Lumber, prohibited, 26-251

M

Matters covered in Subchapter 3, 26-205

Master plumber license; Master Fire

Suppression Piping Contractor License, 26-141

- Business operation, 26-149
- Certificate application, 26-145
- Certificate of competence, 26-148
- Definitions, 26-141
- Examination waiver, 26-153.1
- Exemption, 26-143
- License
 - board, 26-144
 - expiration and renewal, 26-150
 - fees, 26-147
 - qualifications, 26-146
 - requirements, 26-142
 - suspension and revocation, 26-151
- Practice without license, other violations, etc., 26-152
- Publication of roster of licensees, 26-153
- Renewals, 26-150.1

Multiple dwelling, defined, 26-101

N

New work to conform, 26-206

Non-compliance with orders: execution of work - by department, 26-123

- Punishments; penalty, 26-122

Notices and orders, 26-115

O

Oil-Burning equipment installer licenses, 26-192

- Bond requirement, 26-197
- Class A oil-burning equipment installer
 - qualifications, 26-195
- Class B oil-burning equipment installer
 - qualifications, 26-196

Classification of oil-burning equipment installer - licenses, 26-193

License applications, 26-194

License conditions, 26-199

License fees, 26-198

Requirement of license, 26-192

Orders, non-compliance with,

Execution of work, by dept., 26-123

Punishments; penalty, 26-122

Orders, judicial, 26-247

service of, 26-117

stop-work, 26-118

Outdoor advertising,

illegal outdoor signs, 26-127.3

regulation of outdoor signs, Chapter 1, Subchapter 4, - Articles 1 and 2

Outside work, employment and financial interests - prohibited, 26-114

P

Penalties,

Civil, Environmental Control Board, 26-126.1, 26-126.3

Illegal apartment conversions, 26-125

Licensed riggers, 26-181.1

Work without a permit, 26-212.1

Permits,

Approval of plans, 26-208

Copies to tax dept., 26-130

Requirement of permit, 26-207

Signature to permit, 26-209

Projections beyond street line, 26-225

Existing projections beyond street line, 26-226

General restrictions on projections beyond street line, 26-225

Rules governing projections beyond street line, 26-227

Proofs, affidavits and oaths, 26-106

Publication of statistics and other data, 26-110

R

Record of applications, 26-129

Records in department, 26-103

Renewal of license, 26-137

Master Plumber and Fire

Suppression Piping Contractor License, 26-150.1

Reports from different institutions and agencies, 26-108

Revocation of licenses, 26-139

Rigger licenses, 26-172

Bond requirements, 26-178

Classification of rigger licenses, 26-174

Exemptions, 26-173

License applications, 26-175

License conditions, 26-181

License fees, 26-180

Master rigger qualifications, 26-176

Requirement of license, 26-172

Special rigger qualifications, 26-177

Workmen's compensation, 26-179

Index

S

Safety in building operations, 26-228
General safety requirements, 26-228
Maintenance and repair of protection fences and retaining walls, 26-233
Protection of roofs, skylights, etc., 26-230
Regulation of lots, 26-231
Report and inspection of unsafe buildings and property, 26-234
Retaining walls, 26-232
Safety requirements during excavation operations, 26-229
Scaffolds, supported, Subchapter 2, Article 10
Seal; judicial notice, 26-102
Service equipment, defined, 26-101
Service of notices and orders, 26-117
Sidewalk sheds, fences, railings, etc., 26-252
Sign hanger licenses,
Bond requirements, 26-188
Classification of sign hanger licenses, 26-183
Exemptions, 26-184
License applications, 26-185
License conditions, 26-191
License fees, 26-190
Master sign hanger qualifications, 26-186
Requirement of license, 26-182
Special sign hanger qualifications, 26-187
Workmen's compensation, 26-189
Signs, fees, 26-212(6)a
Illegal outdoor signs, 26-127.3
Regulation of outdoor signs, Chapter 1, Subchapter 4, Articles 1 and 2
Stop-work notices and orders, 26-118
Subordinates; discipline of, 26-113

T

Taxpayers' requests for institution of actions, 26-105
Term of license: renewal, 26-137

U

Uniforms and badges, 26-111
Unsafe buildings and property, 26-243
Fallen structures and structures imminently dangerous, 26-243
Judicial review of survey, 26-239
Provision for expense of executing precept, 26-241
Record and notice of unsafe structures or premises, 26-236
Removal or repair of structures, 26-235
Repair or removal under precept—
a. Execution of precept, 26-240
Return of precept; reimbursement of city, 26-242
Survey, 26-238

Voluntary abatement of unsafe or dangerous conditions, 26-237

V

Violations and penalties, 26-140
Violations and punishments,
Appeal, 26-250
Emergency measures, 26-245
Judicial orders, 26-247
Judicial remedies, 26-246
Notices of requirements or of violations, 26-244
Punishments, 26-248
Violations of building laws: punishments; penalties, 26-125
Cranes; Derricks: illegal operation, 26-125.1
Violations of peremptory orders, 26-249
Violations of zoning resolutions, 26-126
Residential districts; public nuisance; order of closure, 26-127.2

W

Welders licenses, 26-154
License applications, 26-155
License conditions, 26-158
License fees, 26-157
License qualifications, 26-156
Requirement of license, 26-154

SUBJECT INDEX
Title 27, Construction and Maintenance
CHAPTER 1, BUILDING CODE
AND REFERENCE STANDARDS, (RS)
All references are to subchapter or section numbers.
“27” is omitted from section numbers in this index.

A

Abandoned operations, see Discontinued operations

Abbreviations, 233

Absorption tests, masonry, 3.2.1(b) (RS 10-1A)

Academies, Occupancy Classification, Table 3-2 (G)

Acceptance requirements, construction materials,
see Construction materials, acceptance requirements

Acceptance tests, boilers, 793(a)
elevators, 997

Access, building, fire department, Subchapter 4,
Art. 2, Subart.1

Access, building, for people with physical disabilities,
Subchapter 4, Art. 2, Subart. 2

Access, building, wheelchairs, 308, 357(d)

Access panels, 292(a), 292(c)

Access stairs, 375(i)(2)

Accessory additions, 109

Accessory buildings, Inside Fire Districts, 297(d)

Adjoining buildings, protection of, 1026(d)

Adjoining properties,
caissons, 724
cofferdams, 724
construction required, 724
excavations, 724, 1028
filling operations, 1028
foundation operations, 1029
inspection, 1026(b)
license to enter, 1026(a)
physical examination, 1026(b)
protection of, Subchapter 19, Art. 3
underpinning, 724

Adjoining structures, 1031(b)
frost protection, 1031(b)(1)c
license to enter, 1031(b)(1)
protection of, 1037

Adjoining walls, protection of, 1026(c)

Admixtures, 608

Adsorption devices, mechanical ventilation, 755

Air blower systems, construction, 777(e)

Airborne noise, 769(a)

Air-conditioned rooms, 754(b)

Air conditioning systems, Subchapter 12, Art. 7, 771
city water, use of, 777(g)
construction, 777(a)
installation, 756
operation, 756
permits, 775

plans, 774
ventilating systems, 777(a)

Air cooling, 771

permits, 775
plans, 774

Air hammers, 700(c)(1)

Air heating, 771

plans, 774
permits, 755

Air Pollution Control Code, 1019(a)

Air supply, 807

gas fuels, 807(b)
oil fuels, 807(a)
solid fuels, 807(c)

Air-supported structures, Subchapter 7, Art. 19, 524

blowers for, 516(a)
certificate of occupancy, 517
construction, 514(b)
flame resistance, 515(b)
heat for, 516(a)
height, 510
location, 510
pressurization system, 516
separations, 511

Aisles, assembly spaces, 532

capacity, 532(a)(1)
lighting, 532(a)(9)
steps, 532(a)(7)
tapered, 532(a)(3)
uniform, 532(a)(4)
width, 532(a)(2)

Alarm systems, fire, see Fire Alarm systems, sprinkler
systems, 957, see also Sprinkler systems

Alcoves, natural ventilation, 747

Alterations, 992, 1007, Subchapter 19, Art. 7,
and repair slip, 175, 184.1
barricades, 1041
between 30 and 60 percent of building value, 116
of building value, 119
cost, 119
dumbwaiters, 992
escalators, 992
exceeding 60 percent of building value, 115
high hazard occupancies, 123
illegal, 118.1
minor alterations, 124, 126
multi-family dwellings, 731, 120
occupancy change, 118

Index

- requiring facilities for people with physical disabilities, 123.1
 - permits, 148(b), 147
 - residence buildings, 121
 - seasonal to year-round, 122
 - signs, 1041
 - under 30 percent of building value, 117
 - use, change in, 118
 - requiring facilities for people having physical disabilities, 123.1
 - Aluminum, identification, 626**
 - inspection, materials and assemblies requirements, Table 10-1
 - inspection, methods of construction requirements, Table 10-2
 - quality control, 627
 - structural design, Subchapter 10, Art. 8
 - welding operations, 627(b)
 - Amusement devices, (RS 18-10)**
 - Amusement parks, 548(e)**
 - Anchors, masonry 3.3 (RS 10-1A), 9 (RS 10-1A), Section 3 (RS 10-1B), 9.8 (RS 10-1B)**
 - Anesthetic agents, storage, 405**
 - Antenna supports, combustible construction, 338(j)**
 - Antennas, cellular, list of permits, 191.1**
 - Apartment houses, Occupancy Classification, Subchapter 3, Art. 11**
 - Arches, flat, 12.1(RS 10-1A), 10.15.1.3 (RS 10-1B)**
 - Inside Fire Districts, 297(g)
 - Areas of refuge, doors, locking, 372(d)**
 - exits, 372(c)
 - floor area, 372(b)
 - separation, 372(a)
 - Artificial lighting, see Lighting, artificial**
 - Ash storage pits, 422**
 - boiler rooms, 422
 - Assemblies, controlled inspection, Table 10-1**
 - Assembly, places of; see Places of assembly**
 - Assembly, classification Occupancy Group F**
 - places of assembly, 254
 - Assembly Occupancy Classification, see Occupancy Classification, assembly**
 - Assembly rooms, ventilation, 765(c)**
 - Assembly spaces, aisles, 532**
 - bench seating, 531(a)(4)
 - bleacher seating, 531(a)(2) aisles, 531(2)c
 - box, 531(a)(1)
 - chair seating, 531(a)(1)
 - cross aisles, 532
 - counter seating, 531(a)(6)
 - curtains, 546(b)(9)
 - directional signs, 541
 - exit, 534(e)
 - emergency lighting, 542
 - exit doors, 534(f)
 - exit opening, 534
 - classification, 534(c)
 - distribution, 534(d)
 - location, 534(e)
 - width, 534(b)
 - exit signs, 541
 - loge, 531(a)(1)
 - movable chairs, 531(a)(1)
 - normal entry, 534, 534(c)
 - occupancy classification, Table 3-2 (F), Subchapter 3, Art. 8
 - pew seating, 531(a)(4)
 - platform seating, 531(a)(3)
 - posted capacity, 527
 - protective guards, 531(a)(8)
 - safe areas, 535
 - collecting, 535(a)(1)
 - dimensions, 535(a)(3)
 - doors, 535(a)(7)
 - exits, 535(a)(6)
 - lighting, 540(a)
 - near grade, 535(a)(4)
 - occupied load, 535(a)(2)
 - ramps and steps, 535(a)(5)
 - seating plans, 528(a)
 - standee areas, 531(a)(7)
 - table and chair seating, 531(a)(5)
 - travel distance, 533
 - vomitories, 532(a)(10)
- Assembly structures, moving live loads, 562(i)**
- Asylums, fire alarm systems, 972(e)**
- Atomic energy, Federal Regulations, 414**
- Atriums, Subchapter 7, Art. 21**
- Auditoria, ventilation, 765(c)**
- Automotive lifts, construction, 991(c)**
 - plans, 985
 - permits, 986
- Automotive repair shops, Subchapter 7, Art. 9**
 - boilers, 419(b)
 - classification, 444
 - heating equipment, 448
 - Occupancy Classification, Table 3-2 (D-1)
 - pits, 446(b)
 - sprinkler system, 447
 - ventilation, 446
- Automotive service stations, Subchapter 7, Art. 8**
 - classification, 439
 - gasoline pumps, canopy, 441
 - location, 441
 - gasoline storage, 440
 - heating equipment, 442
 - Occupancy Classification, Table 3-2 (E)
- Auxiliary spaces, stages, see Stages, auxiliary spaces**
- Awnings, canvas, 336(j)**
 - slow-burning plastic, 336(j)
- Axial loads, pile foundations, allowable, 700**

B

- Backflow**, 901(s), P107.18 (RS 16)
- Baking plants, Occupancy Classification**, Table 3-2 (D-1)
- Balconies, construction**, 369(h)(2)
 - exit doors, 369(g)(4)
 - horizontal exits, 373(c)
 - lighting, 381(a)
 - live loads, 558(b)(1)
 - natural ventilation, 748
- Ballrooms, Occupancy Classification**, Table 3-2 (F-4)
- Bandstands, Occupancy Classification**, Table 3-2 (F-2)
- Banks, Occupancy Classification**, Table 3-2 (E)
- Banquet rooms, Occupancy Classification**, Table 3-2 (F-4)
- Barbecue grilles**, 826.01
- Barber shops, Occupancy Classification**, Table 3-2 (E)
- Barometric damper**, 881(a)
- Barricades**, 1041
 - alterations, 1041
 - dangerous areas, 1023(b)
 - repairs, 1041
 - vehicular traffic, control of, 1023(c)
 - walkways, 1020
- Basements**, automatic sprinkler requirements, 929(c), 954 (aa)
- Batching equipment, automated**, 605(b)(5), 606
- Batch inspection, concrete**, 605(a)(5)
- Batch plant**, 605(a)(5)
- Bathrooms, artificial lighting**, 738
 - minimum water closets, Subchapter 16, article 8
 - required plumbing fixtures, 901 (1)
 - ventilation, 759
- Batter piles**, 694(b)(6)
- Bay windows, combustible construction**, 336
 - Inside Fire Districts, 297(c)
- Beacons, flashing**, 1023(a)
- Beams, first protection**, 324
 - notches, 622(c)(3)
 - tail, 622(c)(4)b
- Bearing materials, nominally**
 - unsatisfactory, 677
 - report required, 679
 - satisfactory, 676
- Beauty shops, Occupancy Classification**, Table 3-2 (E)
- Belt conveyors**, 1057, 1058(a)
- Belt courses, combustible construction**, 335
- Bench seating**, 531(a)(4)
- Bent piles**, 691(c)
- Betatrons**, 416
- Bevatrons**, 416
- Billiard parlors, Occupancy Classification**, Table 3-2 (F-3)
 - occupant load, Table 6-2
- Bins, Inside Fire Districts**, 297(h)
 - loads, 571
 - material, Inside Fire Districts, 297(h)
- Blasting**, Subchapter 19, Art.12
- Bleachers, seating**, 531(a)(2)
- Blower systems, air, construction**, 777(e)
 - for air-supported structures, 516(a)
- Boiler breeching, noise control**, 770(b)(1)b
- Boiler piping, noise control**, 770(b)(1)b
- Boiler rooms**, Subchapter 7, Art. 5
 - ash storage pits, 422
 - enclosure, 419
 - exit requirements, 423
 - location, 420
 - noise control, 770(b)(1)a
 - Occupancy Classification, Table 3-2 (D-2)
 - ventilation, 424
- Boilers**, 793, Subchapter 14, Art. 14
 - acceptance tests, 793(a)
 - annual use statements, 793(c)
 - automotive repair shops, 419(b)
 - hot water,
 - fuel cut-off, (RS 14-5A)
 - inspection, 793(b), 798
 - noise control, 770(b)a
 - one-family dwellings, 419
 - operator's license, 795
 - public garages, 419(b)
 - two-family dwellings, 419
- Bonding**, 7 (RS 10-1A), 9.7 (RS 10-1B)
- Booster pumps, sprinkler systems**, 964
- Borings**, Subchapter 11, Art. 2
 - auger, 665(b)
 - boring data, 663(e)
 - core, 663(c)(2)
 - depth, 663(c)
 - inspections, 720
 - location, 663(b)
 - mud slurry, 665(a)
 - number required, 663
 - one-family dwellings, 663(a)(1)
 - probings, 666(a)
 - rock cores, 666(a)
 - report, 663(e)
 - report required, 720(a)
 - soil, 663(d)(1)
 - two-family dwellings, 663(a)(1)
 - uncased, 665(a)
- Borrowed lights**, 369(i)
- Bowling alleys, Occupancy Classification**, Table 3-2 (F-3)
 - occupant load, Table 6-2
- Bracing**, 592, 1035(c)(5)
 - demolition operations, 1039(e)(2)d
 - pile, 694(a), 694(b)
 - structural design, 592
- Breweries, Occupancy Classification**, Table 3-2 (D-1)
- Bridge rope**, 636(a)(3)
- Bridges, foot**, 1017(b), 1021(f)
 - lighting, 1021(f)(3)
 - live loads, 1021(f)(1)
 - horizontal exits, 373(c)
 - lighting, 381(a)
 - pedestrian, see Pedestrian bridges
- Bridge strand**, 636(a)(2)
- Bridging**, 622(a)(6), 622(c)(2)
- Bucket conveyors**, 1058(a)
- Bucket hoists**, 1056

Index

Building access, fire department, 292
fire department, Subchapter 4, Art. 2, Subart. 1
people with physical disabilities, Subchapter 4,
Art. 2, Subart. 2

Building classifications, 234, 270
building section, 240
fire divisions, 240
fire index, 239

**Building code, effective date, option to comply
with prior code**, 105
requirements, 105
enforcement by Commissioner of Buildings, 106
enforcement by Commissioner of Marine and Aviation, 106
enforcement by Fire Commissioner, 106
interpretation conflicting state and federal laws, 104
variations by Board of Standards and Appeals, 107
variations by Commissioner of Buildings, 107

Building limitations, Subchapter 4
area limitations, Subchapter 4, Art. 6
fire department access, Subchapter 4, Art. 2
fire districts, Subchapter 4, Art. 3
general, Subchapter 4, Art. 1
general projection limitations, Subchapter 4, Art. 8
height limitations, 305
limitations inside the fire districts, Subchapter 4, Art. 4
limitations outside the fire districts, Subchapter 4, Art. 5
permissible projections beyond street lines, Subchapter 4, Art. 9
physical disabilities, people with access, Subchapter 4,
Art. 2, Subart. 2

Building sections, area limitations, 301

Bulkheads, construction, 338(b)
roof structures, 338

Bumpers, live loads, 558(b)(4)
open parking lots, 481(a)

Bunkers, loads, 571

Business Classification, Occupancy Group E, 253

Business Occupancy Classifications, see Occupancy
Classifications, business

C

C-hooks, outrigger beams, 1050.1

Cabarets, Occupancy Classification, Table 3-2 (F-4)
fire protection, 549(a)(3), 549(b)

Cable, wire, see Wire Cable

Cableways, 1057

Cafeterias, Occupancy Classification, Table 3-2 (F-4)

Caissons, 724
drilled-in, 663(c)(2)
piles, 713

Canopies, combustible construction, 333(a)(2)(3)
fire, 331(f)
gasoline pump, 441

Caps, chimney, 865

Carbon Monoxide, Detecting Devices and Systems,
981.1, 981.2, 981.3, RS 17-13, RS-17-14

Car frames, elevators, fire protection, 325

“Casing-off,” 700(d)(7)

Cast-in-place concrete piles, 709

Catch platforms, 1022, 1039(e)(2)
design, 1022(b)
material storage, 1022(d)
scaffolds, 1022(a)(1)

Ceilings, construction, 350
fire protection, 327
firestopping, 327
joists, 622(c)(5)
luminous, see Luminous ceilings, 350(a)
openings, 327(a)

Ceiling spaces, firestopping, 345(d)

Cellars, height limitations, see Subchapter 2, Definitions
automatic sprinkler requirements, 929(c), 954 (aa)

Cellular antennas, list of permits, 191.1

Cement factor, concrete mixes, method I, 605
method II, 605(b)(2)
method III, 605(c)
minimum, 605(a)(1)

Ceramic veneer, 3.2.1(RS 10-1A), 10.14 (RS 10-1B)

Cereal mills, Occupancy Classification, Table 3-2 (A)

Certificates of occupancy, 213, 214

Certificates of occupancy, applications, 219
Environmental protection administration, 219
Transportation administration, 219

Chains, 1055(f)

Chairs, movable, 531(a)(1), 531(a)(5)

Chair seating, 531(a)(1)

Charging chutes, 834(a), 840,
Subchapter 15, Art. 4
doors, 875(d)
incinerator, 834(a), 840, 875
noise control, 770(b)(2)
sizes, 875(c)
sprinkler heads, 875(b)(4)

Charging gates, 841

Chases 10.1 (RS 10-1A), 9.9.1 & 10.1 (RS 10-1B)

Chimney connectors, incinerator, 878

Chimneys, 12.2 (RS 10-1A), Subchapter 15, Art. 2
adjoining, 860
altering, 860
caps, 865
classifications, 857
cleanouts, 858
clearances, 867
condensation, 854(b)
connections, 871
connectors, see Connectors, chimneys
construction, 856(b), 863
corbelling, 866
draft protection, 860(b)
factory-built, 855, 869.01
flue size, reduction in, 869.03
fuels, appliance, changes in, 869.02
gas-fired equipment, 882
gas vents, 882, 883
height, 859
limitations, 306(d)

Index

- incinerator connectors, 878
- industrial incinerator, 877
- inspection and repair, 861(c)(2)
- limitations & tests, 863.01, Table 15-6.1
- locations, 859
- maintenance, 858
- materials, 862
- metal, 861
 - clearances, 861(b)
 - enclosure, 861(c)
- municipal incinerator, 877
- oil burner, 832
 - requirements, 856(a)
- service incinerators, 876
- smoke test, 856(e), 868
- standards, 850
- steel, 861(f),(g)
- supports, 864
- temperature, 854(a)
- test run, 856(d)
- Churches, Occupancy Classification**, Table 3-2 (F-1b)
- Chutes, charging**, see Charging chutes
- Chutes, waste material**, 1019(b)
- City Health Code**, radiological hazards, 414
- Civic administration buildings, Occupancy Classification**, Table 3-2 (E)
- Classrooms, occupant load**, Table 6-2
 - ventilation, 765(a)
- Clay**, 675(b)(3)
 - allowable bearing pressure, Table 11-2, Notes: (7)
- Cleanouts**, 858
 - doors, 870
- Clinics, Occupancy Classifications**, Table 3-2 (H-2)
- Coal bins, Inside Fire Districts**, 297(h)
- Coal pockets, Occupancy Classification**, Table 3-2 (B-1)
- Coatings**, 349
- Coffee houses, Occupancy Classification**, Table 3-2 (F-4)
- Cofferdams**, 724
- Column enclosures, firestopping**, 345
- Columns, fire protection**, 324
- Combustible appendages, exterior separation**, 336(c)
 - roof covering, 336(h)
- Combustible construction, bay windows**, 336
 - belt courses, 335
 - canopies, 333(a)(2)(3)
 - cornices, 335
 - enclosures, storm, 336
 - leaders, 335
 - porches, 336
 - porticos, 336
 - shutters, 335
 - storm enclosure, 336
 - roof coverings, 337
- Combustible materials**, 321
 - sign construction, 507
 - storage, 1019(c)
 - use of, 321, 507
- Combustible mixtures**, Subchapter 19, Art. 13
- Combustion chambers**, 886(a)
- Combustion equipment**, 787
 - clearances, Subchapter 14, Art. 8
 - reduction, 806
 - dampers, 808
 - foundation mountings, 804
 - high temperature, 803
 - low temperature, 801
 - medium temperature, 802
 - piping, 792
- Compacted concrete piles**, 710
- Compaction**, 679(a)(1)(d)
- Comparison piles**, 700(c)(3)a
- Composite piles**, 714
- Compressed gases**, Subchapter 19, Art. 13
- Compressors, noise control**, 770(b)(6)
- Concert halls, Occupancy Classification**, Table 3-2 (F-1b)
- Concrete**, Subchapter 10, Art. 5
 - admixtures, 608
 - batch inspection, 605(a)(5)
 - belt, 1058
 - cast-in-place-piles, 709
 - compacted piles, 710
 - controlled inspection, 607(a)
 - core tests, 596, 598
 - inspection, 607(a)
 - requirements, Table 10-1, Table 10-2
 - licensed testing laboratories, 609
 - lightweight aggregate, 605(b)(3)b
 - load test limitations, 599(b)(6)
 - pneumatically placed, 611
 - precast, 603, (RS 10-4)
 - preplaced aggregate, 613
 - quality control, 605(a)(5)
 - reinforced gypsum, Subchapter 10, Art. 9
 - inspection requirements, Table 10-1, Table 10-2
 - reinforcement identification, 604
 - short-span construction, 610
 - strength test, 607(a)(1)
 - test cylinder procedures, 607(a)(1)
- Concrete footings, design**, 684(d)(1)
- Concrete formwork**, 612, 1035
 - design, 1035(a)(3), 1035(c)
 - drawings required, 1035(b)(1)
 - inspection, 1035(b), 1035(d)(5)
 - record, 1035(b)(3)
 - live loads, 1035(c)(1)
 - removal, 1035(e)
 - slumps, Table 19-3, (Notes)
- Concrete mixes, documentation**, 606
 - cement factor, method I, 605(a)
 - method II, 605(b)
 - method III, 605(c)
 - method I, 605(a)
 - cement factor, 605(a)(1)
 - controlled inspection, 605(a)(3)

Index

- water-cement ratio, 605(a)(2)
- cylinder strength test, 605(a)(3)
- method II, 605(b)
 - automatic batching equipment, 605(b)(5)
 - cement factor, 605(b)(2)
 - materials, 605(b)(4)
 - quality control, 605(b)(6)
 - water-cement ratio, 605(b)(3)a
- method III, 605(c)
- on-site inspection, 607
- Concrete piles, cast-in-place**, 709
 - compacted, 710
 - precast, 708
- Condensation, gas vents**, 854(b)
- Conduits**, 1017(b)
 - embedment in fire protection, 324(a)
- Connections, chimney**, 871
 - cross, standpipe, 941
 - plumbing, to public water, 901(e)
 - to sewer systems, 901(e)
 - siamese, see Siamese connections
- Connectors, chimney**, Subchapter 15, Art. 3
 - construction, 870
 - underground, 873
 - gas vent, Subchapter 15, Art. 6
 - incinerator chimneys, 878
 - inspections, Subchapter 15, Art. 3, 874
- Conservation, water**, 901(c)
- Console lifts, construction**, 991(f)
- Construction**,
 - air blower systems, 777(e)
 - air conditioning systems, 777(a)
 - air-supported structures, 514(b)
 - automotive lifts, 991(c)
 - balconies, 369(h)(2)
 - building matters covered, 109
 - bulkheads, 338(b)
 - cable-supported, Subchapter 10, Art. 11
 - ceiling, 350
 - chimneys, 856(b), 863
 - classifications, Subchapter 3, Art. 14
 - combustible, see Combustible construction
 - concrete, core tests, 598
 - console lifts, 991(f)
 - conveyors, 991(e)
 - dry cleaning establishments, 427
 - dumbwaiters, 991(a)
 - elevators, 991(a),
 - uniform and concentrated live loads, (RS 9-2)
 - escalators, 991(a)
 - exhaust systems, 777(e)
 - exterior stairs, 376(c)
 - failure of performance, 597
 - fire escapes, 380(e)
 - fire-retardant scaffolds, 1042(f)
 - fire-retardant treated wood, 1019(b)(3)
 - folded-plate, Subchapter 10, Art. 10
 - footings, 687
 - foundation piers, 687
 - foundation walls, 687
 - fuel oil tanks, 828(a)(1)
 - buried, 828(a)(4)
 - furring, 346
 - grandstands, 548(b)(1)
 - heavy timber, 623
 - heliports, 434
 - hinged loading ramps, 991(d)
 - hoists, 991(g)
 - hoist towers, 1056(a)
 - inadequate, 597
 - incinerators, 843
 - industrial lifts, 991(d)
 - industrial failure, 597
 - laboratories using radioactive materials, 415(a)
 - landings, 375(h)
 - lift method, 1035(h)
 - live loads, 1035(h)(6)
 - mechanized parking garage equipment, 991(b)
 - moving walks, 991(a)
 - nailing schedule, Table 10-4
 - open parking structures, 462
 - partitions, 346
 - penthouses, 338
 - plans, approval, Subchapter 1, Art. 9
 - platforms, 375(h)
 - power-operated scaffolds, 991(h)
 - prestressed concrete, 1035(i)
 - public garages, 452
 - questionable construction, 597
 - radio and television towers, 496
 - refrigeration systems, 777(f)
 - risers, 375(h)
 - scissor stairs, 375(h)
 - service equipment, Subchapter 1, Art. 8
 - short-span concrete floor, 610
 - signs, combustible materials, 507
 - slow-burning plastics, 507(b)
 - site maintenance, Subchapter 19, Art. 2
 - skylights, 338(b)
 - slip form, 1035(g)
 - jacks, 1035(g)(4)
 - stage floor, 546(b)(2)
 - stage lifts, 991(f)
 - stages, 548(c)
 - stringers, 375(h)
 - swimming pools, 489
 - temporary, inspection, 1010
 - thin shell, Subchapter 10, Art. 10
 - treads, 375(h)
 - ventilating systems, 777(a)
 - warm air heating systems, Subchapter 14, Art. 11
- Construction classifications**, Subchapter 3, Art. 14, 269,
 - Table 3-4
 - reference standards, 235
- Construction elements, beams, fire-resistance ratings**, Table 3-4

Index

- bearing partitions, fire-resistance ratings, Table 3-4
- bearing walls, fire-resistance ratings, Table 3-4
- cable-supported rooms, fire-resistance ratings, Table 3-4
- columns, fire-resistance ratings, Table 3-4
- domes, fire-resistance ratings, Table 3-4
- exit passageways, fire-resistance ratings, Table 3-4
- exterior walls, fire-resistance ratings, Table 3-4
- floor construction, fire-resistance ratings, Table 3-4
- girders, fire-resistance ratings, Table 3-4
- hoistways, fire-resistance ratings, Table 3-4
- interior walls, fire-resistance ratings, Table 3-4
- roof construction, fire-resistance ratings, Table 3-4
- roof decks, fire-resistance ratings, Table 3-4
- shafts, fire-resistance ratings, Table 3-4
- shells, fire-resistance ratings, Table 3-4
- trusses, fire-resistance ratings, Table 3-4
- vertical exits, fire-resistance ratings, Table 3-4
- Construction Group I, noncombustible class**, Subchapter 3, Art. 15
 - noncombustible classification, 274, Table 3-4
 - construction Class 1-A, 275
 - construction Class 1-B, 276
 - construction Class 1-C, 277
 - construction Class 1-D, 278
 - construction Class 1-E, 279
- Construction Group II, combustible class**, Subchapter 3, Art. 16
 - construction classification, 280, Table 3-4
 - construction Class II-A, heavy timber construction, 281
 - construction Class II-B, 282
 - construction Class II-C, 283
 - construction Class II-D, 284
 - construction Class II-E, 285
- Construction materials, acceptance requirements**, 131
 - acceptable laboratories, 131(c)
 - accepted materials, 131(b)
 - accepted materials certification, 131(f)
 - Board's resolution of approval, 131(a)(2)
 - code test method under engineer, 131(a)(1)
 - code test method, manufacturer's certificate, 131(a)(1)
 - code test method, test report, 131(a)(1)
 - code test method by testing laboratory, 131(a)(1)
 - code test method under architect, 131(a)(1)
 - material retesting, 131(g)
 - test results, conflicting, 131(h)
 - alternate materials, 133
 - equivalent materials, 133
 - general requirements, 130
 - inspection requirements, controlled inspection, special requirements, 132(a)
 - controlled inspection, statement of compliance, 132(a)
 - controlled inspection by architect, 132(a)
 - controlled inspection by engineer, 132(a)
 - off-site inspection, 132(c)
 - semicontrolled inspection, statement of compliance, 132(b)
 - semicontrolled inspection by architect, 132(b)
 - semicontrolled inspection by engineer, 132(b)
 - semicontrolled inspection by person superintending use of material, 132(b)
- Construction walkways, lighting**, 1020(e)
- Contractor offices**, 1017(c)
 - fire retardant wood, 1017(c)
- Contractor responsibility**, 1009(a)
- Contractor sheds**, 1017(c)
 - fire-retardant wood, 1017(c)
 - live loads, 1021(b)
 - sidewalk, 1021(a)(1), 1021(b)
 - lighting, 1021(b)(10)
- Control valves**, 941(a)
- Convention halls, Occupancy Classification**, Table 3-2 (F-1b)
- Convents, Occupancy Classification**, Table 3-2 (J-3)
- Conveying equipment, permits**, 986
 - plans, 985
- Conveyors**, 1058
 - belt, 1058(a)
 - bucket, 1058(a)
 - construction, 1058
 - guard rail, 1058(a)
 - inspection requirements, 999(c)
 - vertical, fire protection, 987(c)(1)
- Cooking equipment, restaurant, ventilation**, 777(d)
- Cooling towers**, 338(i)
 - inside Fire Districts, 297(g)
 - noise control, 770(b)(7)
- Corbelling**, 10.2 (RS 10-1A), 10.4 (RS 10-1B)
 - chimneys, 866
- Core borings**, 663(c)(2)
- Core drilling**, 663(e)
 - rock borings, 663(d)(2)
- Cores, rock, disposition**, 663(f)
- Core samples, rock borings**, 663(d)(2)
- Core test, concrete**, 598
- Cornices, combustible construction**, 335
 - firestopping, 332, 345(e)
- Corridor doors**, 371(b), 371(j)(1)a
 - locks, 371(j)(1)a.1.
 - louvers, 371(b)
 - mail slots, 371(b)
 - power operated, 371(l)
- Corridors, dead end**, 369(d), length, Table 6-1
 - exit capacity, Table 6-1
 - exit width, Table 6-1
 - exterior, construction, 369(f), 369(h)
 - as fire canopies, 369(f)
 - guards, 369(f)
 - parapets, 369(f)
 - interior construction, 369(h)
 - interior finish, 348(d), 369(k)
 - level changes, 369(e)
 - lighting, 381(a)
 - in places of assembly, Table 8-1
 - ventilation, 369(j), 761
 - wire glass, 369(i)
- Counter seating**, 531(a)(6)
- Court rooms, Occupancy Classification**, Table 3-2 (F-1b)

Index

Cranes, Testing Inspection, 1057
inspection, on-site, 1057(d)(1)
live loads, moving, 562(e)
special requirements, 1057(i)
Crawl spaces, ventilation, 762
Cross aisles, assembly spaces, 532
capacity, 532(a)(1)
lighting, 532(a)(9)
width, 532(a)(2)
Cross connections, standpipe, 941
Curb cuts, 109
open parking lots, 480
Curbs, open parking lots, 481(a)
Curtains, draft, Table 5-1 (Notes) (2)
stages in places of assembly, 546(b)(9)
Cyclotrons, 416

D

Dampers, barometric, 881(a)
combustion equipment, 808
fireplace, 848.07(e)
flue, 808
Dance floors, occupant load, Table 6-2
Dance halls, Occupancy Classification, Table 3-2 (F-4)
Dangerous areas, 1023(b)
barricades, 1023(b)
Day nurseries, Occupancy Classification, Table 3-2 (H-2)
Dead ends, corridors, 369(d)
length, 369(d)
measurement, 369(d)
Dead loads, building materials, RS 9-1, unit weights, 553
elevators, 555(b)
equivalent uniform loads, 555(b)
partitions, 555
service equipment, air conditioning, 554
equipment, 554
elevators, 554
flues, 554
heating equipment, 554
piping, 554
plumbing stacks, 554
reference to mechanical articles, 554
stairs, 555(b)
toilet rooms, 555(b)
Demolition Operations, 103, 1007,
Subchapter 19, Art. 6, 1039
bracing, 1039(e)(2)d.
building code, 109
catch platforms, 1022
derrick, use, report, 1039(c)
drainage, 1036(c)(3)
dust, 1039(f)
explosives, 1039(g)
inspection, 1012, 1036(d)
materials storage, 1039(e)(2)
mechanical, 1039(d)
permits, demolition applications, Subchapter 1, Art. 14
photographs required, 171
property examination, 1036(d)
sheet-piling, 1039(e)(2)d.
shoring, 1039(e)(2)d.
window boarding, 1036(c)(2)
Department inspections, completed buildings,
administrative code, 211
final, 210
general provisions, 207
inspector identification, 206
preliminary, 208
reports, record, 212
writing requirement, 212
right of entry and inspection, 205
work progress, 209
Department stores, marquees, 313(a)(4)
Derricks, 1039(c), 1057
capacity chart, 1054(b)
inspection, 1012, 1057
special requirements, 1057(i)
Designs, drawings, 1015
specifications, 1015
structural, 596
Diesel hammers, 700(c)(1)
Diffusers, noise control, 770(d)
Diggers, mechanical, trench excavation, 1032(d)
Dining spaces, occupant load, Table 6-2
Dip finishing, Subchapter 7, Art. 3
Dipping spaces, sprinklers, 412
ventilation, 410
Dip tanks, 409(b)
Discharge openings, internal combustion engine, 869(b)
Discontinued operations, 1027
drainage, 1027(b), 1031(d)
fencing, 1027(a)
filling, 1027(b)
grading, 1027(b)
water accumulation, 1027(b)
Display structure, Subchapter 7, Art. 17
Distilleries, Occupancy Classification, 243
Diving Boards, 489(h)
Door assemblies, hoistway, fire protection, 987(c)
Door hardware, 371(j)
Door heights, 371(f)
Door openings, floor level, 371(h)
widths, 371(e)
Doors, charging chutes, 875(d)
Corridor, see Corridor doors
exit capacity, Table 6-1
exits, 371(a)
folding, partition, 347
hoistway, fire protection, 987(c)
horizontal exits, 371(d)
horizontally sliding, 371(d)
power-operated, 371(l)
prohibited, 371(d)
ramps, 377(c)(4)
revolving, 371(m)
safe areas, 535
inspection, 371(m)(3)

Index

- smoke stop, 371(c)
- stair, 375(g)
- trap, shafts, 343(e)
- Door swings**, 371(g)
- Dormers**, 338(g)
 - roof, 338(g)
- Dormitory buildings, school, Occupancy Classifications**, Table 3-2 (J-2)
- Doubtful occupancies classification**, 268
- Draft control, incinerators**, 839
- Draft curtains**, 342(b)
 - Table 5-2, Notes, d.(2)
- Draft hoods**, 881
 - gas vents, 884
- Draft protection**, 860(b)
- Drainage, abandoned construction**, 1027(b)
 - below street level, 901(j)
 - demolition operations, 1036
 - design, 901(g)
 - discontinued operations, 1027(b)
 - excavations, 1027(b), 1031(d)
 - maintenance, 901(g)
 - open parking lots, 481(b)
 - permits, 909
 - sanitary, 896
 - general requirements, 901
 - permits, 900
 - plans, 899
 - standards, 897
 - swimming pools, 492
 - storm, 896
 - general requirements, 901
 - permits, 900
 - plans, 899
 - standards, 897
 - testing methods, 922
- Drawings, A.E. approval required**, 590
- Dressing facilities, swimming pools**, 490
- Dressing rooms**, 546(b)(11)
 - occupant load, 546(b)(11)c
- Drillings, core, records**, 663(e)
- Drive-in theaters**, 548(c)(4)d
- Occupancy Classification**, Table 3-2 (F-2)
 - projection machines, 548(c)(4)d
- Driveways, building code**, 109
 - live loads, 558
- Dry cleaning establishments, classification**, 426
 - construction requirements, 427
 - direct-fired dryers, 431
 - floor finish, 427(b)
 - high hazard, 426(a)
 - low hazard, 426(c)
 - machines, 427(d)
 - moderate hazard, 426(b)
 - sprinkler systems, 430
 - carbon dioxide system, 430
 - ventilation, 428
- Dry cleaning units, coin-operated**,
 - ventilation, 429

- Drying spaces, sprinklers**, 412
- Duct connections, noise control, fan equipment**, 770(b)(9)
- Duct linings**, 769(a)(5)
- Ducts, embedment in fire protection**, 324(a)
 - noise control, 770(a)(3)
 - maximum permissible air velocities, 770(c)
 - piercing ceilings, 327(a)
 - through rated construction, 343
- Duckboarding, combustible construction**, 338(j)
- Dumbwaiters, alterations**, 992
 - construction, 991(a)
 - filing by owners, 1000
 - permits, 986
 - plans, 985
 - temporary use permits, 1002
 - work permits, 1001
- Dust, demolition operations**, 1039(f)
- Dwelling, unit doors, locks**, 371(j)(2)b
 - viewing devices, 371(j)(2)b

E

- Earthquake loads**, 569 (b), (RS 9-6, RS 10-1A, RS 10-1B, RS 10-5C, RS 10-58)
- Earthwork applications, permits**, Subchapter 1, Art. 13
- Eaves, combustible construction**, 335
 - firestopping, 333, 345(e)
- Eccentricity**, 671
- Educational Occupancy Classifications**, Table 3-2 (G)
- Egress, Means**, 530
 - photoluminescent exit path markings, RS 6-1, 6-1A
- Electrical work, utilities**, 1013(c)
- Electronic equipment in seating sections**, 546(a)(2)
- Elevators, acceptance tests**, 997
 - alterations, 992
 - car frames, fire protection, 325
 - construction, 991(a)
 - dead loads, 554
 - emergency signal equipment, 987(f)
 - as exits, 987(g)
 - filing by owners, 1000
 - firemen service operation, 996.2
 - for fire department use, 953
 - freight, hand powered, 996
 - freight, retroactive provisions, 994(b)
 - grain, Occupancy Classification, Table 3-2 (A)
 - impact resistance, 987(c)
 - inspections, 998, 999, 1000
 - locks, 996.1
 - machinery, noise control, 770(b)(10)
 - manlifts, 988
 - mirrors, 987(e)
 - open parking structures, 471
 - operators, 1005
 - permits, 986
 - plans, 985
 - required, 368, 987(d)
 - retroactive provisions, 994
 - belt machines, 994(b)
 - car gate switches, 994(d)

Index

- chain-driven machines, 994(b)
- drum winding machines, 994(c)
- emergency interlock release switch, 994(a)
- emergency signal, 994(f)
 - hoistway-door interlocks, 994(e)
 - hydraulic landing doors, 994(e)
- sidewalk, 988
- smoke protection plan, 353.1
- temporary, fire protection, 1014(a)
- temporary use permits, 1002
- tests, acceptance, 997
- intervals, 998
- use by Fire Department, 989
- work permits, 1001
- Embankment, slope limitation, 1032(a)**
- Emergency control panel,**
 - F-1a Places of assembly, 546(b)(10)
 - F-1b Places of assembly, 547(b)(4)
 - F-2 Places of assembly, 548(c)(4)
- Emergency lighting, assembly spaces, 542**
- Emergency power, Subchapter 6, Art. 11**
- Emergency signal equipment, elevators, 987(f)**
- Emission control, incinerators, 835**
- Enclosures, boiler rooms, 419**
 - column, firestopping, 345
 - hoistways, fire protection, 987(c)
 - metal chimneys, 861(c)
 - in places of assembly, 529
 - stair, 375(i)
 - storm, combustible construction, 336
 - inside Fire Districts, 297(c)
 - swimming pools, 493(b)
 - walkways, 379(d)
- Engines, internal combustion, 869**
 - exhaust pipe, 869(a)
- Entrances, combustible construction, 336**
 - public garages, 453
- Entry, right of, 205**
- Equipment applications, permit requirements, 180**
- Equipment use applications, permits, see Permits,**
 - equipment use applications
- Equipment use permits, 148(h)**
- Equipment work applications, permits, see Permits,**
 - equipment work applications
- Equipment work permits, 148(g)**
- Equipment rooms, Occupancy Classification,**
 - Table 3-2 (D-2)
- Equivalent outdoor air, 754(b)(2)**
- Erections, 1007, Subchapter 19, Art. 5**
- Escalators, alteration, 992**
 - capacity, 378(a)
 - construction, 991(a)
 - exit capacity, Table 6-1
 - as exits, 987(g)
 - filing by owners, 1000
 - inspection, 998, 999, 1000
 - lighting, 381(a)
 - permits, 986
 - in places of assembly, Table 8-1
 - plans, 985
 - smoke protection plan, 353.1
 - width, 378(a)
 - work permits, 1001
 - temporary use permits, 1002
- Essential services, disconnection of, 1013(b)**
 - maintaining, 1013(b)
 - utilities, 1013
- Established Market Area, marquees, 313(a)(4)**
- Evaporative Condensers, noise control, 770(b)(8)**
- Excavations, 109, 660(b), 1007, Subchapter 19, Art. 4**
 - adjoining properties, 724, 1028
 - building code, 109
 - drainage, 1027(b), 1031(d)
 - inspection, 1012
 - retaining structures, 1031(a)(1), 1032(a)
 - removal, 1031(a)(3)
 - seepage, 661(b)
 - sheeting, 1032(a)
 - shoring, 1032(a)
 - warning signs, lights, 1023(a)
- Exhaust flues, 840**
 - incinerator, 840
- Exhaust systems, construction, 777(c)**
 - cooking, construction, 777(c)
 - gas vents, 886(b), 886(c)
- Exhibition halls, Occupancy Classification, Table 3-4 (F-3)**
- Exhibition spaces, occupant load, Table 6-2**
- Exits, area of refuge, 372(c)**
 - from auxiliary stage spaces, 546(11)
 - balconies, 369(g)
 - doors, 369(g)(4)
 - guards, 369(g)(2)
 - parapets, 369(g)(2)
 - privacy screens, 369(g)(3)
 - capacity, 359
 - corridors, capacity, 369(a)
 - height, 369(b)
 - length, 369(c)
 - corridors, projections, 369(a)
 - width, 369(a)
 - discharge, 364
 - doors, 371(a)
 - assembly spaces, 534(f)
 - hardware, 371(j)(1)a
 - locks, 371(j)(1)a. 1 and (2)a
 - power-operated, 371(1)(c)
 - escalators, 378(a), 378(b)
 - false, 387
 - fire escapes, 368
 - fire exits, adjoining walls, 1026(c)
 - furnace rooms, 423
 - heliport, 436
 - horizontal, travel distance, 360(a)
 - inadequate, 356

Index

- interior finish, 348
- lighting, Subchapter 6, Art. 6
 - in places of assembly, 540
- location, Subchapter 6, Art. 3
- moving walkways, 379
- number, Subchapter 6, Art. 4
 - floors, 366
 - rooms, 365
 - spaces, 365
- open parking structures, 469(a)
- openings, assembly spaces, 540
 - assembly spaces, distribution of, 534(d)
 - assembly spaces, location of, 534(e)
 - capacity, 534(a)
 - classification, 534(c)
 - serving a stage, 546(b)(4)
 - width, 534(b)
- party walls, 1037(b)
- passageways, capacity, 370(a)
 - height, 370(c)
 - interior finish, 370(g)
 - level changes, 370(d)
 - lighting, 381(a)
 - openings, 370(f)
 - in places of assembly, 537
 - projections, 370(b)
 - width, 370(b)
 - projection booths, 543(d)
- photoluminescent markings, 383
- public garages, 457
- reduction of, 367
- requirements, Table 6-1
 - boiler rooms, 423
 - building access, wheelchairs, 357(d)
 - capacity, corridors, Table 6-1
 - capacity, doors, Table 6-1
 - capacity, escalators, Table 6-1
 - capacity, exit passageway, Table 6-1
 - capacity, horizontal exits, Table 6-1
 - capacity, ramps, Table 6-1
 - capacity, stairs, Table 6-1
 - corridors, dead end length, Table 6-1
 - corridors, width, Table 6-1
 - incidental occupancies, 357(b)
 - mixed occupancy, 357(a)
 - multiple occupancy, 357(c)
 - in places of assembly, 537
 - travel distance, Table 6-1
- safe areas, 535(a)(6)
- signs, Subchapter 6, Art. 7, 534(e), 541
 - directional, 386
 - obstruction, 499
 - retroactive, Subchapter 6, Art. 8
- stage exits, 546(b)(4)
- stairs, curving, 375(e)(4)
 - skewed stairs, 375(e)(4)
 - winders, 375(e)(3)
- street floor lobbies, 370(h)
 - candy and tobacco stands, 370(h)(4)
 - doors, 370(h)(3)a
 - information booths, 370(h)(4)
 - newsstands, 370(h)(4)
 - openings between, 370(h)(3)
 - show windows, 370(h)(3)d.(c)
 - width of, 370(h)(2)
- supplemental vertical, 374
- tenant spaces, 362
- types, Subchapter 6, Art. 5
- vertical, 357
 - in places of assembly, 538
 - separation of, 364
 - travel distance, 360(a)
- width, units of, 359
- Expeditors,**
 - registration requirements, 140.1
- Explosion hazard,** 401
- Explosion powered tools,** Subchapter 19, Art. 11
- Explosives,** Subchapter 19, Art. 12
 - demolition operations, 1039(g)
- Exterior mechanical equipment, noise control,** Table 12-5
- Exterior openings, permitted area,** Table 3-4
 - protection, Table 3-4
- Exterior open parking structures,** 463
- Exterior pilasters, combustible construction,** 335
- Exterior spaces, lighting,** 540(b)
- Exterior stairs, capacity,** 376(a)
 - construction, 376(c)
 - discharge, 376(f)
 - height, 376(b)
 - landings, 376(c)
 - location, 376(e)
 - openings, 376(d)
 - platforms, 376(c)
 - risers, 376(c)
 - travel distance, 360(a)
 - treads, 376(c)
- Exterior trim,** 335
 - combustible, 335
 - exterior separation, 335(a)(2)
 - firestopping, 335(a)
- Exterior wall openings,** Table 3-5, 331(a)
- Exterior walls, opening protectives,** 331(b)
 - openings, 331(a), Table 3-5
 - parapets, 333
 - vertical spacing of openings, 331(f)

F

- Factories, fire alarm systems,** 972(c)
- False exits,** 387
- Fan coil units, noise control,** 770(d)
- Fan, noise control,** 770(b)(4)
 - duct connections, 770(b)(9)
- Fascias, combustible construction,** 335

Index

Feed mills, Occupancy Classification, Table 3-2 (A)

Fencing, Subchapter 7, Art. 18, 1021(c)

- discontinued operations, 1027(a)
- inside Fire Districts, 297(b)
- Occupancy Classification, Table 3-2 (K)
- parks, 509
- permitted heights, 509
- public playgrounds, 509
- school yards, 509
- on roofs, 334
- viewing panels, 1021(c)

Fiber rope, 1046(d), 1055(c)

- scaffolds, 1046(d)

Fill, see Fill Materials

Filling, adjoining properties, 1028

- affecting adjoining property, 1028
- building code, 109
- discontinued operations, 1027(b)

Fill materials, 678(a)(b)

- allowable soil bearing pressure, 678
- controlled, 678(a)(1)
- uncontrolled, 678(a)(2)

Filters, ventilating systems, maintenance, 782

Finish, interior, 348

Finish flooring, 348(c), 351

Fire alarms, interior, Subchapter 17, Art. 5

- where required, 968
- buildings, occupancy group E, 968(a)(9)
- closed circuit electrically supervised, 968(a)
- day care agencies, 968(a)(3)
- department stores, retail sales
- establishments, 968(a)(5)
- health clubs, bath houses, 968(a)(4)
- hotels, motels, lodging houses, dormitories,
- single rooms, 968(a)(1)
- permits, 927
- plans, 926
- public and private hospitals, sanitariums, nursing
- homes, homes for the aged, 968(a)(2)
- public schools, 968(a)(6)
- single and multi-tenant factory buildings, 968(a)(7)
- standards, 924

Fire alarm systems, 923, Subchapter 17, Art. 5, 972(h), 975

- approvals, 969
- asylums, 972(e)
- classification, 971
- class C system, 971(i)
- class J system, 971(j)
- class J system, modified, 971(k)
- class J-1 system, modified, 971(l)
- class E system, 971(g)
- class E system, modified, 971(h)
- combination unit or zone, 971(e)
- existing installations, 970
- factory buildings, 972(c)
- general requirements, 971
- heliports, 437

hospitals, 972(e)

identification of equipment, 973(e)

individually coded, 971(c)

general, 971(c)

presignal, 971(d)

location of instructions, 973(c)

location of sending station, 973(a)

location of sounding device, 973(b)

master coded, 971(b)

mixed occupancy buildings, 973(e)

nursing homes, 972(e)

required for specific occupancies, 972

buildings, existing, 972(j)

buildings, group E, 100 feet or more, 972(f)

buildings, group E, less than 100 feet, 972(h)

buildings, group C, 972(k)

buildings, group C, high rise, 972(i)

buildings, group J-1, 972(l)

buildings, group J-1, existing, 972(m)

other occupancies, 972(n)

communication system and fire command station, 975

fire alarm communication systems, 972(g)

schools, 972(b)

special, 971(f)

standpipe fireline telephone and signaling system, 974(g)

subdivided occupancy buildings, 973(g)

uncoded, 971(a)

Fire canopy, 333(a)(3)

Firecutting, 621(a)

Fire dampers, 327(a), 343(d)

Fire department access, Subchapter 4, Art. 2

Fire detection systems, 923

permits, 927

standards, 924

Fire districts, Bronx, 293(b)

Brooklyn, 293(c)

limitations, Subchapter 4, Art. 4

Manhattan, 293(a)

mixed, 295

Queens, 293(d)

Richmond, 293(d)

Fire divisions, 340

building classifications, 239

firestopping, 340(i)

horizontal exit, 342(a)

mixed construction, 286

Fire escapes, 368, 380

access, 380(f)

capacity, 380(a)

construction, 380(e)

discharge, 380(g)

guards, 380(d)

handrails, 380(d)

landings, 380(c)

stairs, 380(b)

Fire exit bolts, 371(k)(1)

Fire exits, 1026(c)

Index

Fire fighting equipment, 1014

Fire hydrants, private installation, 948

Fire index, 237

Fireline systems, see Standpipe systems,
Subchapter 17, Art. 3

building classifications, 239

Fireplaces, Subchapter 14, Art. 19

clearances, 848.06(g)

dampers, 848.06(e)

factory-built, 848.09

hearths, 848.09

heat exchangers, 848.10

imitation, 848.11

masonry, 848.07

precautionary requirements, 848.12

smoke detecting devices for, 848.12(a)

stovepipe, 848.09(e)(1)

stoves, 848.02(c), 848.03

Fire prevention, utilities, 1013(a)

Fire protection, 324, 326

beams, 324

cavity walls, structural members, 324(c)

ceilings, 327

columns, 324

door assemblies, 987(c)

elevator car frames, 325

elevators, temporary, 1014(a)

embedment in, 324(a)

filing requirements, special,

Subchapter 1, Art. 26

fire fighting equipment, 1014

fueling, 1014

hoistway doors, 987(c)

hoistway enclosures, 987(c)

horizontal conveyors, 987(c)(3)

inclined conveyors, 987(c)(2)

lintels, 326

permits, 1014

sprayed-on, 324(f), (g)

sprinkler systems, 1014(4)

standpipe systems, 1014(b)

structural design, 587

structural members, 324

vertical conveyors, 987(c)(1)

Fire-protection plan, Subchapter 1, Art. 25

Fire-protection rating, tests, 322

Fire pumps, 946

automatic, 945(b)(5)

standpipe systems, see Standpipe systems, fire
pumps

wiring, 5(b)(1)(RS 17-1), 2-5.5 (RS 17-2)

Fire-rated construction, plumbing, 901(z)(2)

Fire-resistance ratings,

beams, Table 3-4

bearing partitions, Table 3-4

bearing walls, Table 3-4

cable-supported roofs, Table 3-4

columns, Table 3-4

construction assemblies, 323

domes, Table 3-4

exit passageways, Table 3-4

exterior walls, Table 3-4

floor construction, Table 3-4

girders, Table 3-4

hoistways, Table 3-4

interior walls, Table 3-4

party wall, 332

roof construction, Table 3-4

roof decks, Table 3-4

shafts, Table 3-4

shells, Table 3-4

tests, 322, 323

trusses, Table 3-4

vertical exits, Table 3-4

Fire-resistant construction, plumbing, 903

scaffolds, 1042(f)

Fire-retardant treatment, tests, 322

Fire-retardant treated wood, 328, 1019(b)(3), Table 3-5

acceptance, 328(b)

allowable stresses, 328(c)

area increase, 328(e)

construction, 1019(b)(3)

in construction Group 1, 328(d)

contractor offices, 1017(c)

contractor sheds, 1017(c)

in construction Group 11, 328(e)

fabrication after treatment, 328(c)

furring, 328(d)

labelling, 328(b)

in lieu of untreated wood, 328(e)

partitions, 328(d)(2), 346

stage construction in F-2 places of assembly, 548(c)(2)

use, 328(a)(c)

where permitted, 328(d),(e)

Fire segregation, 339

compartmentation, 339(c)

divisions, 339(a)

separations, 339(b)

Fire separations, 341

horizontal exit, 342(a)

Fire towers, 376.1

Firestopping, 324(a), 345, 810

ceilings, 327

ceiling spaces, 345(d)

column enclosures, 345

combustible exterior trim, 335(a)

cornices, 332, 345(e)

eaves, 332

fire divisions, 340(i)

inspection, 345(g)

insulation, 335.1

materials, 345(a)

partitions, 345

pipe spaces, 345

Index

- roofs, 345
- smoke and heating venting, 353
- stairs, 345, 345(c)
- Fittings, rope**, 1055(e)
- Fixtures, plumbing**, see Plumbing, fixtures required, 901(1)
- Flagmen**, 1024
 - vehicular traffic control, 1023(c)
- Flagpoles, combustible construction**, 338(j)
- Flame resistance, air-supported structures**, 515(b)
 - tents, 515(a)
- Flame-spread rating, tests**, 322
- Flame-spread retardants**, 349
- Flammable mixtures**, Subchapter 19, Art. 13
- Flammable paints**, 406
 - storage, 405
- Flares, oil**, 1023(a)
- Flashing beacons**, 1023(a)
- Flat arches**, 12.1 (RS 10-1A), 10.15.1.3 (RS 10-1B)
- Flat plates, live loads**, 567
- Flat slabs**, 1035(f)(4)
 - live loads, 567
- Flood hazard areas**, 196, 288, Subchapter 4, Art. 10, 316, 316.1, 317, 317.1, 317.2, 550, 580, 652, 771, 787, 901(aa)
- Flood insurance rate map**, (RS 4 & RS 4-4)
- Floor finish, dry cleaning establishments**, 427(b)
- Floor furnaces**, Subchapter 14, Art. 13
- Floors, firestopping**, 345
 - laboratories using radioactive materials, 415(b)
 - live loads, 557
 - occupant, load, 357
 - private garages, 477
 - stage, 546(b)(2)
 - wood, 622(c)
- Flour mills, Occupancy Classification**, Table 3-2 (A)
- Flow control, fuel oil tanks**, 830(h)
- Flue dampers**, 808
- Flues**, 856(c)
 - dead loads, 554
 - exhaust, 840
 - incinerator, 840
 - size, reduction in, 869.03
- Fly galleries**, 546(b)(6)
- Folding doors**, 347
- Folding partitions**, 347
- Food waste disposals**, list (RS-16)
- Foot bridges**, 1017(b), 1021(f)
 - lighting, 1021(f)(3)
 - live loads, 1021(f)(1)
- Footings**, Subchapter 11, Art. 6
 - concrete, 684(d)(1)
 - construction, 687
 - masonry, 684(d)(2)
 - poles, 684(b)
 - wood, 684(a)
- Fork lift trucks**, 1061
 - rated capacity, 1061
- Formwork**, 612
 - concrete, 1035
 - inspection, 1035(d)(5)
 - design, 1035(c)
 - inspection, 1035(b)
 - live loads, 1035(c)(1)
 - removal, 1035(e)
 - slumps, Table 19-3 (Notes)
 - inspections, 1012
- Foundation and earthwork permits**, 148(c)
- Foundation applications, permit requirements**, 163
- Foundation mountings, combustion equipment**, 804
- Foundation piers**, Subchapter 11, Art. 6
 - construction, 687
 - design, 685
 - metal shells, 685(c)
- Foundations**, 1035(c)(6)
 - adjoining properties, 1029
 - affecting adjoining properties, 1029
 - construction, 661
 - cold weather, 661(a)
 - seepage, 661(b)
 - depth, 658
 - frost, 658(a)(5)
 - grade beams, 658(b)
 - piles, 658(a)(5)
 - different levels, 659
 - frost, 658(a)
 - loads, Subchapter 11, Art. 3
 - pavement, 658(a)(4)
 - pile, see Pile foundations
 - pole, 684(b)
 - portable buildings, 658(a)(4)
 - slabs on grade, 660
 - structural design, 591
- Foundation walls**, Subchapter 11, Art. 6
 - construction, 687
 - design, 686
- Foundries, Occupancy Classification**, Table 3-2 (D-1)
- Framework, inspection**, 1012
- Freight depots, Occupancy Classification**, Table 3-2 (B-1)
- Freight elevators**, 994(b)
- Frontage**, 291, 303
- Frontage space**, 291, 292(a)
- Frost protection, adjoining structures**, 1031(b)(1)c
- Fuel burning equipment inspections**, 798
 - inspection, 794(b)
 - instruction cards, 794(d)
 - temporary use permits, 794(c)
- Fueling, fire protection**, 1014
- Fuel oil equipment**, Subchapter 14, Art. 17
- Fuel oil heaters, piping**, 830
- Fuel oil storage, approval of**, 797
- Fuel oil tanks**, 828
- Fuel pumps, open parking structures**, 467
- Fuel storage**, 405
- Fuels, solid**, 807(c)
- Fuel storage equipment**, 787

Index

- field tests, 794(a)
- piping, 792
- Furnace rooms**, Subchapter 7, Art. 5
 - ash storage pits, 422
 - enclosure, 419
 - exit requirements, 423
 - location, 420
 - Occupancy Classification, Table 3-2 (D-2)
 - ventilation, 424
- Furnaces**, 411, Subchapter 14, Art. 13
 - automotive repair shops, 419(b)
 - duct temperature, 821
 - floor, Subchapter 14, Art. 13
 - enclosures, 818
 - location, 817
 - pit clearances, 819(a)
 - pit waterproofing, 819(b)
 - supports, 819
 - public garages, 419(b)
- Furring, construction**, 346
 - fire-retardant wood, 328(a), 328(e), 346
 - firestopping, 345
- G**
- Galleries, Occupancy Classification**, Table 3-2 (F-3)
- Garage doors as exits**, 371(d)
- Garages, concentrated live loads**, 561(d)(3)
 - occupant load, Table 6-2
 - private, Subchapter 7, Art. 12
 - public, 419(b), Subchapter 7, Art. 10
- Gas burning equipment, standards**, 800
 - Gases, compressed, Subchapter 19, Art. 13
- Gas-fired equipment**, Subchapter 14, Art. 16
 - chimneys, 882
- Gas fuels**, 807(b)
 - air supply, 807(b)
- Gasoline pumps, canopies**, 441
 - location, 441
 - open parking lots, 482(a)
- Gasoline storage**, 440
- Gas, establishing supply**, 904
- Gas piping**, 896
 - general requirements, 901
 - installation, 826
 - outside gas service line valves, P 115.5(a)(RS-16)
 - permits, 900
 - plans, 899
 - pressure, 922(l)(b)
 - standards, 897
- Gas meter rooms, existing**, 918
- Gas systems, testing**, Subchapter 16, Art. 7
- Gas vents**, Subchapter 15, Art. 5
 - adjoining, 889
 - altering, 889(a)
 - chimneys, 882, 883
 - condensation, 854(b)
 - connectors, Subchapter 15, Art. 6, 895
 - clearances, 893
 - draft hoods, 881
 - draft protection, 889(b)
 - equipment not vented, 880
 - exhaust systems, 886(c)
 - height, 888
 - installation, 879(c)
 - installation requirements, 887
 - labeling, 885
 - location, 888
 - prohibited terminations, 891
 - sealed combustion chambers, 886(a)
 - size, 895
 - special venting, 886
 - standards, 850
 - supports, 890
 - temperature, 854(a)
 - tests, 879(b)
 - thimbles, 894
 - types, 884
 - B and BW, 855
- Gates, charging**, 841
- Gauges**,
 - non-mercury, 922 (d)(4)
 - utilizing mercury, 902 (b)
- Girders, fire protection**, 324
- Glass block**, 10.5 (RS 10-1A), 10.13 (RS 10-1B)
- Glass panels**, Subchapter 10, Art. 12
 - structural design, 643
- Glazing, slow-burning plastic**, 331(e)
 - skylights, 338(d)(2)
- Grade beams**, 658(b)
- Grading, discontinuous operations**, 1027(b)
- Grain elevators, Occupancy Classification**, Table 3-2 (A)
- Grandstands**, 548(b)
 - construction, 548(b)(1)
 - live loads, moving, 562(i)
 - motor vehicle parking, 548(b)(4)
 - Occupancy Classification, Table 3-2 (F-2)
 - parking, 548(b)(4)
- Gravity tanks**, 945(b)(3), 965
- Greenhouses, glazing**, 338(e)
 - inside Fire Districts, 297(f)
 - Occupancy Classification, Table 3-2 (B-2)
 - roof structures, 338(e)
- Greenrooms**, 546(b)(11)
- Gridirons, places of assembly**, 546(b)(6)
- Grillages**, 684(c)
- Grilles, noise control**, 770(d)
- Grist mills, Occupancy Classification**, Table 3-2 (A)
- Ground signs**, 500, 506(a)
 - inside Fire districts, 297(i)
 - location, 500
 - supports, 500(c)
- Ground water**, 661(b)
- Group Homes (definition)**, 232, Table 3-2, 375(i)(1)(b), 380
- Grout**, 3.4 (RS 10-1A), Section 4 (RS 10-1B)

Index

Grouted masonry, 8 (RS 10-1A), 2.2.3 (RS 10-1B)

Guard rails, conveyor, 1058(a)
multiple-point suspension scaffolds, 1047(f)(1)
outrigger scaffolds, 1044(d)
platforms, structural, 1052(b)
public garages, 454
scaffolds, 1042(g)
standard, 1021(a)(4), 1021(f)(1), 1032(b), 1050
scaffolds, 1050
suspended scaffold, standard, 1046(g)

Guards, fire escapes, 380(d)
interior stairs, 375(f)
protective assembly spaces, 531(a)(8)
standee areas, 531(a)(8)

Gutters, combustible construction, 335

Gymnasiums, Occupancy Classification, Table 3-2 (F-3)
occupant load, Table 6-2

H

Habitable rooms, natural ventilation, 746

Half-timber work, combustible construction, 335

Hammers, air, 700(c)(1)
diesel, 700(c)(1)
hydraulic, 700(c)(1)
steam, 700(c)(1)
testing, 690
vibrating, 700(c)(3)

Handrails, fire escapes, 380(d)
interior stairs, 375(f)

Hangers, 1046(b)

Hardpan, 675(b)(2)

Hardware, door, 371(j)
exit doors, 371(j)(1)a
panic, 371(k)
window, 371(j)

Headers, 622(a)(9), 622(c)(4)

Headroom, interior stairs, 375(c)

Health center, government operated, RS 3-3
(Occupancy Group)

Hearths, fireplace, 848.07(d)

Heat, 725

Heaters, fireplace, 816
recessed, 815
room, 848.02(d), 848.03
space, 419(d)
unit, Subchapter 14, Art. 12
supports, 814
water, safeguarding against explosion, 901(d)

Heating coils, fuel oil tanks, 830(g)

Heating equipment, 787
automatic service station, 442
clearances, 805
reduction, 806
dead loads, 554
foundation mountings, 804
piping, 792

public garages, 459

Heating requirements, 740

Heating systems, design, 744

warm air, Subchapter 14, Art. 11.

Heavy-duty scaffolds, 1042(b)(3)c

Heliports, Subchapter 7, Art. 7

classification, 433

construction, 434

exits, 436

fire protection, fire alarm facilities, 437

foam extinguishing equipment, 437

standpipe systems, 437(a)

live loads, 562(i)

Occupancy Classifications, 243

refueling facilities, 435

High hazard occupancies, Subchapter 7, Art. 2

Group A, 419(b)

location, 403

sprinkler requirements, 404

High hazard occupancy classifications, 243

Hinged loading ramps, construction, 991(d)

Hoist cars, 1056(b)

Hoisting equipment, Subchapter 19, Art. 10

fueling, 1054(b)

inspection, 1054(b)

loading, 1054(b)

operation, 1044(a)

permits, 986

plans, 985

testing inspection, power operated derricks and
cableways, 1057

Hoisting machines, 1045

scaffolds, 1045(a)

Hoisting ropes, inspection, 1012, 1055

Hoists, bucket, 1056

construction, 991(g)

filing by owners, 1056(a)(1)

inspection, 998(d)

platform, 1056

temporary use permits, 1002

work permits, 1001

Hoist towers, 1056(a)

back structures, uniform and concentrated live loads, (RS 9-2)

construction, 1056(a)

Hoistway doors, locks, 996.1

Homes for the aged, Occupancy Classification, Table 3-2 (H-2)

Hoods, draft, 881

Horizontal exits, balconies, 373(c)

bridges, 373(c)

capacity, 373

door requirements, 373(b)

travel distance, 360(a)

tunnels, 373(c)

Horizontal loads, load distribution, 579

shear walls, 579(a)

partitions, 579(d)

walls, 579(d)

Index

Horizontally sliding doors, 371(d)
Hose outlet valves, 942(a)
Hose stations, 942
 auxiliary, 942(d)
 hose quality, 942(c)
 hose size, 942(c)
 hose type, 942(c)6
 length of hose, 942(b)(1)
 location, 942(b)
 outlet valves, 942(a)
Hospitals, fire alarm systems, 972(e)
 Occupancy Classification, Table 3-2 (H-2)
 plumbing, 912
Hot water piping, Subchapter 14, Art. 10
Hotels, marquees, 313(a)(4)
 Occupancy Classifications, Table 3-2, (J-1)
Hydrants, yard, 933
Hydraulic hammers, 700(c)(1)
Hydrostatic pressures, lateral loads, 670(a)

I

Illuminated signs, 505
 ground signs, 505(a)
 marquee signs, 505(a)
 projecting signs, 505(a)
 roof signs, 505(a)
 wall signs, 505(a)
Impact Noise Rating (INR), 769(b)(1)
Impact protection, structural member, 324(b)
Incinerators, Subchapter 14, Art. 18
 auxiliary heat, 842
 charging chutes, 834(a), 840
 noise control, 770(b)(2)
 charging gates, 841
 chimney connectors, 878
 combined chimney, 876(c)
 connectors, chimneys, 878
 construction, 843
 draft control, 839
 emission control, 835
 emissions, 835
 exhaust flues, 840
 industrial chimneys, 877
 instruction posting, 848
 masonry, 843(a)
 municipal chimneys, 877
 performance, 836
 permitted types, 835
 required types, 835
 rooms, 837
 fixed ventilation, 838
 service, chimneys, 876
 steel-cased, 843(b)
Index pile, 700(c)(3)b
Induction units, noise control, 770(d)
Industrial Code Labor Law, 1007

Industrial incinerators, chimneys, 877
Industrial lifts, construction, 991(d)
 permits, 986
 plans, 985
Industrial Occupancy Classifications, see
 Occupancy Classifications, industrial
Industrial smoke houses, Occupancy Classification,
 Table 3-2 (A)
Industrial wastes, 896, 901(h)(2)
Inside Fire Districts, 293
 bay windows, 297(c)
 bins, 297(h)
 coal bins, 297(h)
 cooling towers, 297(g)
 parking lot offices, 297(d)
 roof signs, 297(i)
 roof structures, 297(g)
 storm enclosures, 297(c)
Inspection certificate, posting, 1004
Inspection failure, remedies and possibilities, 597
Inspections, foundations, Subchapter 11, Art. 13
 adjoining property, 1026(b)
 boilers, 793(b), 798
 boring operations, 720
 commissioner direction, 207
 concrete, 607(a)
 controlled, 607(a)
 requirements, Table 10-1, Table 10-2
 concrete formwork, 1035(b), 1035(d)(5)
 concrete mixes, 605
 construction materials, 132
 controlled, pilings, 721
 refrigeration systems, 781(a)
 report required 720(a)
 soil load bearing tests,
 Subchapter 11, Art. 5
 structural materials, Table 10-1
 conveyors, requirements, 999(c)
 cranes, 1012, 1057(d)(1)
 demolition operations, 1012, 1036(d)
 department, see Department Inspections
 derricks, 1012, 1057(d)(1)
 dumbwaiters, requirements, 999(a)
 elevators, 998
 agencies, 1000
 amusement, 998(c)
 car safeties, 998(a)(1)
 counterweight safeties, 998(a)(1)
 hydraulic, 998(a)(3)
 oil buffers, 998(a)(2)
 requirements, 999
 escalators, 998(b)
 agencies, 1000
 requirements, 999(a)
 excavation, 1012, 1032(a)
 exterior walls, 129(a)
 framework, 1012

Index

- fuel burning equipment, 794(b), 798
 - gas piping, 919
 - hoisting ropes, 1012, 1047(c)(3)
 - lifts, requirements, 999(c)
 - masonry requirements, Table 10-1
 - pilings, 721
 - plumbing, 919
 - notification, 920
 - power-operated scaffolds, 998(e), 1049
 - refrigeration systems, 781(a)
 - reports, commissioner acceptance, 207
 - retaining structures, 1010
 - revolving doors, 371(m)(3)
 - right of, 205
 - scaffolds, 1000, 1045(b)
 - shoring, 1010
 - signs, 508(b)
 - sprinkler systems, 967
 - standpipe systems, 951
 - steel requirements, Table 10-2
 - structural design, failure of performance, 597
 - subgrade, 723
 - suspended scaffolds, 1045(b)
 - temporary construction, 1010
 - test expense, 207
 - underpinning, 1010
 - unreinforced masonry requirements, Table 10-2
 - unsafe conditions, 1012
 - Inspector identification**, 206
 - Installation, sprinkler systems**, 959(b)
 - standards, 956
 - standpipe systems standards, 950
 - Installer license, oil-burning equipment**, 796
 - Institutional Occupancy Classification**, Table 3-2 (H-1)
 - Institutional plumbing**, 912
 - Insulation, combustible roof**, 337(c)
 - materials, 811
 - Interior finish**, 348
 - classification, 348(b)
 - Class II-A construction, 348(c)(3)
 - corridors, 348(c)(4)(d), 369(k)
 - exits, 348(d)
 - flame-spread rating, 348(b)
 - floor coverings, 348(c)(1)
 - flooring, 348(c)(1)
 - in place of assembly, 529
 - paint, 348(c)(2)
 - laboratories using radioactive materials, 415(f)
 - toxicity, 348(e)
 - wallpaper, 348(c)(2)
 - Interior stairs**, 375
 - capacity, 375(a)
 - guards, 375(f)
 - handrails, 375(f)
 - headroom, 375(c)
 - interior finish, 375(i)(3)
 - landings, 375(d)
 - platforms, 375(d)
 - width, 375(b)
 - Irritants, airborne, ventilation of rooms with**, 766
- ## J
- Jacks**, 1064
 - rated capacity, 1064(a)
 - slip form construction, 1035(g)(4)
 - Jails, Occupancy Classification**, Table 3-2 (H-1)
 - Jetting**, 705(b)
 - Joists, steel**, 1034(a)(2)
 - ceiling, 622(c)(5)
 - open web steel, 614(c)
- ## K
- Kindergartens, occupant load**, Table 6-2
 - Kitchens, industrial, Occupancy Classification**, Table 3-2 (D-1)
 - occupant load, Table 6-2
 - ventilation, 758
- ## L
- Laboratories, industrial, Occupancy Classification**, Table 3-2 (D-2)
 - occupant load, Table 6-2
 - using radioactive materials, construction, 415(a)
 - electrical controls, 415(e)
 - floors, 415(b)
 - interior finish, 415(c)
 - plumbing, 415(g)
 - sprinkler protection, 415(d)
 - ventilation, 415(f)
 - Labor law**, 1007
 - Lacquers**, 406
 - Ladders, swimming pools**, 489(c)
 - Landings, construction**, 375(h)
 - exterior stairs, 376(c)
 - fire escape, 380(c)
 - interior stairs, 375(d)
 - lighting, 381(a)
 - Lanterns**, 1023(a)
 - Lateral loads, earth pressures**, 670(a)
 - hydrostatic pressures, 670(a)
 - piles, 701
 - surcharges, 670(a)
 - wind, 670(b)
 - Laundries, industrial, Occupancy Classification**, Table 3-2 (D-2)
 - Leaders, combustible construction**, 335
 - Lecture halls, Occupancy Classification**, Table 3-2 (F-Ib)
 - Libraries, Occupancy Classification**, Table 3-2 (G)
 - occupant load, Table 6-2
 - Lift method construction**, 1035(h)
 - live loads, 1035(h)(6)

Index

- Lifts, automotive**, 991(c)
 - console, construction, 991(f)
 - industrial construction, 991(d)
 - stage, 546(b)(2)b, 991(f)
 - temporary use permits, 1002
 - work permits, 1001
- Light duty scaffolds**, 1042(b)(3)a
- Lighting**, 725
 - aisle, 532(a)(9)
 - artificial, Subchapter 12, Art. 4
 - bathrooms, 738
 - places of assembly, 737
 - toilet rooms, 738
 - balcony, 381(a)
 - borrowed, 369(i)
 - bridge, 381(a)
 - construction walkway, 1020
 - corridor, 381(a)
 - cross aisle, 532(a)(9)
 - emergency, assembly spaces, 542
 - escalator, 381(a)
 - exit, Subchapter 6, Art. 6
 - passageways, 381(a)
 - in places of assembly, 540
 - exterior space, 540(b)
 - footbridge, 1021(f)(3)
 - landings, 381(a)
 - motion picture projections, 543
 - natural, Subchapter 12, Art. 13
 - pedestrian bridges, 1021(f)(3)
 - platforms, 381(a)
 - projection machines, 543(b)
 - ramps, 381(a)
 - red, 1023(a)
 - safe areas, 540(a)
 - spotlights, 543(c)
 - stage, 546(b)(12)
 - in places of assembly, 547(b)(4)
 - stairs, 381(a)
 - temporary sidewalks, 1021(e)
 - tunnels, 381(a)
 - walkways, 1021(e)
 - warning, 1023
- Light projection**, 543
- Linear accelerators**, 416
- Lintels, fire protection**, 324, 326
 - stone, fire protection, 326
- Liquid-seal traps**, 901(o)
- Live loads**, Subchapter 9, Art. 3, 566
 - areaways, 558(b)(1)
 - balconies, 558(b)(1)
 - bumpers, 558(b)(4)
 - catch platforms, 1022(b)
 - concentrated, 557(b)
 - concrete formwork, 1035(c)(1)
 - construction elevator, (RS 9-2)
 - conformance, 557(d)
 - contractor sheds, 1021(b)
 - contributory floor areas, columns, 567(c)
 - flat plates, 567(b)
 - flat slabs, 567(b)
 - foundations, 568
 - girders, 567(c)
 - joists, 567(d)
 - minor framing, 567(d)
 - one-way slabs, 567(a)
 - ribbed slabs, 567(a)
 - trusses, 567(c)
 - two-way slabs, 567(a)
 - Department of Highways, 558(a)(1)
 - driveways, 558
 - flat plates, 566(c)
 - flat slabs, 566(c)
 - floor, 557
 - footbridges, 1021(f)(1)
 - garages, concentrated loads, 561(d)(3)
 - heliports, 562(j)
 - lift method construction, 1035(h)(6)
 - marquees, 561
 - material hoist tower back structures, (RS 9-2)
 - moving, 562, 563(b)
 - assembly structures, 562(i)
 - cranes, 562(e)
 - grandstands, 562(i)
 - machinery supports, 562(h)
 - monorails, 562(f)
 - railroad equipment, 562(d)
 - stadiums, 562(i)
 - truck, 562(c)
 - vehicles, 562(b)
 - nonconcurrence, 557(c)
 - parapets, 558(b)
 - parking areas, 559
 - partial loading, 563
 - load combination, 563(a)(1)b
 - pedestrian bridges, 1021(f)(1), 1021(f)(3)
 - places of assembly, 558(b)(1)
 - railings, 558, 558(b)
 - dwellings, 558(b)(1)
 - reduction of, Subchapter 9, Art. 4
 - contributory areas, 567
 - roofs, 558(b)(1), 561
 - service equipment, 557(b)(2)
 - sidewalks, 558
 - stairwells, 558(b)(1)
 - theaters, balconies, 558(b)(1)
 - scenery, 560
 - stage areas, 560
 - wind load, 561(b), 561(d), 562(i), 569(a)
- Load bearing tests**, see Test, load bearing
- Load distribution**, Subchapter 9, Art. 7
 - horizontal loads, 579
 - shear walls, 579(a)
 - piles, 700(a)(3)

Index

Loading, hoisting equipment, 1054

- ladder type platforms, 1046(f)(1)
- limitations, 1009(b)
- outrigger scaffolds, 1044
- platforms, load bearing tests, 682(b)(1)
- ramps, 1053
 - hinged construction, 991(d)
 - permits, 986
 - plans, 985
- runways, 1053
- scaffolds, 1042(b)(2)
- trucks, 1059
- wire rope, 1045(d)

Loads, axial, pile foundations, 700

- bin, 571
- bunker, 571
- dead, 553
- fire, building classifications, 239
- horizontal wall, 578(d)
- ice, 575
- lateral, see Lateral loads
- live, see Live Loads
- partition, 555
- pile, load, Subchapter 11, Art. 8
- pile foundation, Subchapter 11, Art. 8
- posting, 564
- scaffold, 1042(b)(2)
- standard, 1042(b)(3)
- shrinkage, 577
- thermal forces, 576

Load tests, 596, 599, 700(e)(2)a

- completed construction, 599(b)
- deflection requirement, 599(b)(2)
- concrete limitations, 599(b)(6)
- deflection requirement, 599(a)(4)
- models, 599(a)(5)
- prequalifying, 599(a)
- strength requirements, 599(a)(3)
- structural design, Subchapter 10, Art. 3
- unidentified materials, 588
- used materials, 588

Lobbies, street floor, candy and tobacco stand

exits, 370(h)(4)

- exits, 370(h), 370(h)(3)a
- information booth exits, 370(h)(4)

Locker rooms, occupant load, 358(c), Table 6-2

- ventilation, 760

Lockers, ventilation, 765(b)

Locks, building entrance doors, 371(j)(2)a

- corridor doors, 371(j)(1)a
- dwelling unit doors, 371(j)(2)b
- exit doors, 371(j)(1) and (2)
- openable windows, 371(j)(2)c

Lodging houses, Occupancy Classifications,

- Table 3-2, (J-1)

Loges, 531(a)(1)

- seating in, 531(a)(1)

Lot survey, occupancy certificate application, 219

Louvers, corridor doors, 371(b)

Lumber, 617(a)

- and timber construction (RS 10-8)

- glued-laminated, 617(c)

Luminous ceilings, 350(a)

- in exits, 350(a)(2)a

- glass, 350(a)(1)a

- slow-burning plastic, 350(a)(2)d

M

Machine rooms, 344(f)

Machinery supports, moving live loads, 562(h)

Mail slots corridor doors, 371(b)

Mains, private yard, 945(b)(2)

Maintenance, 109

- chimney, 858

- construction site, 1018(a)

- exterior walls, 129

- plumbing system, 901(t)

- refrigeration system, Subchapter 13, Art. 3

- requirements, 127

- owner responsibility, 128

- sign, 508(a)

Malls, Subchapter 7, Art. 22

Manlifts, 988

Mansard roofs, 338(f)

Market area, established, 313(a)(4)

Markets, Occupancy Classification, Table 3-2(c)

Marquees, 313(a)(4)

- department store, 296(a)(4)

- hotel, 313(a)(4)

- live loads, 561

- market, 313(a)(4)

- multi-family dwelling, 313(a)(4)

- projection beyond street level, 313(a)(4)

- public building, 313(a)(4)

- skylights, 313(a)(4)

- supermarket, 313(a)(4)

- terminal, 313(a)(4)

- theater, 313(a)(4)

- warehouse, 313(a)(4)

Marquee signs, 504, 505(a)

- supports, 504(c)

Masonry, 1 (RS 10-1A), (RS 10-1B)

- absorption tests, 3.2.1(b) (RS 10-1A)

- allowable stresses, Table RS 10-1.5 (RS 10-1A),

- Tables 9.4.2 & 10.12.3 (RS 10-1B)

- anchors, 3.3 (RS 10-1A) 9. (RS 10-1A), Section 3 (RS 10-1B), 9.8 (RS 10-1B)

- bearing stresses, 4.7 (RS 10-1B), 5.12.2 (RS 10-1B)

- bonding, 7 (RS 10-1A), 9.7 (RS 10-1B)

- column design, 4.4 (RS 10-1A), 5.9 (RS 10-1B)

- compressive strength determination, 4.2.2 (RS 10-1A),

- 1.6 (RS 10-1B)

- design, 4 (RS 10-1A), Chapter 5 (RS 10-1B)

- empirical provisions, 6. (RS 10-1A), Chapter 9 (RS 10-1B)

Index

- filled cell, 8. (RS 10-1A)
- footings, 684(d)(2)
- frost protection, 10.14 (RS 10-1A), 2.3.2.2 (RS 10-1B)
- glass block, 10.5 (RS 10-1A), 10.13 (RS 10-1B)
- grouted, 8. (RS 10-1A), 2.2.3 (RS 10-1B)
- height limitations, 5.2 (RS 10-1A), 9.2 (RS 10-1B),
Tables 1.6.3.3(b), 1.6.3.3(c) (RS 10-1B)
- identification of units, 601(a)
- incinerators, 843(a)
- inspection requirements, Table 10-1, 1.5.1 (RS 10-1B)
- joint reinforcement, 3.3.1 (RS 10-1A),
3.2.1.1.2 (RS 10-1B)
- lateral support, 5. (RS 10-1A), 9.5 (RS 10-1B)
- minimum thickness, Table RS 10-1.3 (RS 10-1A),
Table 10.14.1.1 (RS 10-1B)
- prism tests, 4.2.2(a) (RS 10-1A), 1.63 (RS 10-1B)
- reinforced, 600(b), Chapter 7 (RS 10-1B)
inspection requirements, Table 10-2
- slenderness ratio, 4.4.1 (RS 10-1A)
- stack bond, 7.7 (RS 10-1A), 10.12 (RS 10-1B)
- thickness limitations, 5.2 (RS 10-1A), (9.6 of RS 10-1B)
- ties, 3.3 (RS 10-1A), (9 of RS 10-1B)
- units, 3.2 (RS 10-1A), (2.2.1 of RS 10-1B), 2.3.3.3
(RS 10-1B)
- unit tests, 4.2.2(b) (RS 10-1A), 1.6.2 (RS 10-1B)
- unreinforced, 600(a), Table 10-2, Chapter 6 (RS 10-1B)
inspection requirements, Table 10-2
- use of existing walls, 10.7 (RS 10-1A), 10.9 (RS 10-1B)
- vener, 11. (RS 10-1A), 10.14 (RS 10-1B)
- wall design, 4.4 (RS 10-1A), 5.8 (RS 10-1B)
- walls, 1022(a)(2), (10.6 of RS 10-1B), 9.6 (RS 10-1B)
- Material bins, inside Fire Districts, 297(h)**
- Materials, bearing, see Bearing materials**
 - chimney, 862
 - combustible, 321
 - sign construction, 507
 - storage, 1019(c)
 - construction, see Construction materials
 - fill, see Fill materials
 - insulation, 811
 - noncombustible, 321
 - nonconforming, 902 (a)(b)
 - plumbing, 901(q)
 - condemned, 901(r)
 - radioactive, see Radioactive materials
 - removal chutes, 1019(b)
 - slow burning plastic, 330
 - storage, 1019, 1039(e)(2)
 - catch platforms, 1022(d)
 - demolition operations, 1039(c)
 - structural, see Structural materials
 - structural elements, 586
 - ungraded, 588
 - unidentified, 588
 - used, 588
 - waste removal, 1019(a)
- Mechanical diggers, trench excavation, 1032(d)**
- Mechanical equipment, exterior, noise control, 770(a)(4), Table 12-5**
 - noise control, multiple dwellings, Subchapter 12, Art. 9
- Mechanical ventilation, Subchapter 12, Art. 7, 771**
 - adsorption devices, 755
 - air conditioning & refrigeration systems, RS 13-6
 - index for ventilation, 753
 - make-up air, 754(d)
 - noise control, 776(b)
 - outdoor air intakes, 754(f)
 - permits, 775
 - plans, 774
 - recirculated air, prohibited use, 754(e)
 - required exhaust, 754(c)
 - water closet compartments, 755(c)
- Mechanized parking garage equipment, 991(b)**
 - construction, 991(b)
 - permits, 1001
 - plans, 985
- Medium duty scaffolds, 1042(b)(3)b**
- Meeting rooms, occupant load, 358(c)**
- Mental institutions, Occupancy Classification, Table 3-2 (H-1)**
- Mercantile, Occupancy Classification, Table 3-2 (C)**
- Metal chimneys, 861**
- Metal signs, sprinkler systems, 959(a)(3)**
- Mills, cereal, Occupancy Classification, Table 3-2 (A)**
 - feed, Occupancy Classification, Table 3-2 (A)
 - flour, Occupancy Classification, Table. 3-2 (A)
 - grist, Occupancy Classification, Table 3-2 (A)
 - starch, Occupancy Classification, Table 3-2 (A)
 - sugar, Occupancy Classification, Table 3-2 (A)
- Minor alterations, 124**
- Mirrors, elevator, 987(e)**
- Mixed construction, building section, 286**
 - classifications, 286
 - fire divisions, 286
- Mixed districts, fire districts, 295**
- Mixing machines, 1063**
- Monorails, moving live loads, 562(f)**
- Mortar, 3.4 (RS 10-1A), 2.3.2.5 & 2.3.3.3 (RS 10-1B),**
types permitted, Table RS 10-1.2 (RS 10-1A), 2.2.2.1
(RS 10-1B)
- Motels, Occupancy Classification, Table 3-2 (J-1)**
- Motion picture film, RS-8**
- Motion picture projection, 543(b)**
- Motion picture projectors in seating section, 546(a)(2)**
- Motion picture screens, 544**
- Motion picture theaters, Occupancy Classification, Table 3-2 (F-1b)**
- Motor vehicle parking at grandstands, 548(b)(4)**
- Moving walk, 379**
 - construction, 991(a)
 - permits, 986
 - plans, 985
 - temporary use permits, 1002
 - work permits, 1001
- Mud slurry, borings, 665(a)**
- Multi-family dwellings, alteration, 731**

Index

marquees, 313(a)(4)
Multiple dwellings, noise control, Subchapter 12, Art. 9
Multiple occupancy, 242
Municipal incinerators, chimneys, 877
Museums, Occupancy Classification, Table 3-2, (F-3)

N

Nailing schedule, Table 19-4
Nailing schedule, construction, Table 10-4
Natural lighting, Subchapter 12, Art. 3
Natural ventilation, Subchapter 12, Art. 6
 alcoves, 747
 balconies, 748
 habitable rooms, 746
 occupiable rooms, 745
 sources, 749
 ventilating openings, 749
Netting, safety, 1022
New building permits, 148(a)
Night clubs, Occupancy Classification, Table 3-2 (F-4)
Nitric acid, Subchapter 7, Art. 20
Noise, airborne, 769(a) structure-borne, 769(b)
Noise control, 725
 airborne noise, 770(a)
 boiler breeching, 770(b)(1)b
 boiler piping, 770(b)(1)b
 boiler rooms, 770(a)(1)
 boilers, 770(b)(1)a
 compressors, 770(b)(6)
 cooling towers, 770(b)(7)
 diffusers, 770(d)
 duct connections, fan equipment, 770(b)(9)
 ducts, 770(a)(3)
 maximum permissible air velocities, 770(c)
 elevator machinery, 770(b)(10)
 evaporative condensers, 770(b)(8)
 exterior mechanical equipment, 770(a)(4)
 fan coil units, 770(d)
 fan duct connections, 770(b)(9)
 fans, 770(b)(4)
 field testing, 768(a)
 grilles, 770(d)
 incinerator charging chutes, 770(b)(2)
 induction units, 770(d)
 mechanical equipment, 770
 spaces, 770(a)(2)
 mechanical ventilation, 776(b)
 multiple dwellings, Subchapter 12, Art. 9
 noise output limitations, exterior
 mechanical equipment, Table 12-5
 piping, 770(b)(3)
 pumps, 770(b)(5)
 pure tone generation, Table 12-3 (Notes)
 registers, 770(d)
 requirements, 771
 sound power levels, Table 12-3

 maximum permitted for exterior mechanical
 equipment adjoining building, Table 12-4
 structure-borne noise, 770(b)
 vibration isolation, 770(b)

Noise output limitations, exterior mechanical equipment,
Table 12-5

Noncombustible materials, 321

Noncombustibles, tests, 322

Nursing homes, fire alarm systems, 972(e)
Occupancy Classification, Table 3-2, (H-2)

O

Obstructions, 1023(a)

 service lines, 1013

 sidewalks, 1020

 street, 1019, 1020

Occupancy, high hazard, see High hazard occupancies

 incidental exit requirements, 357(b)

 mixed exit requirements, 357(a)

 multiple, 242

 exit requirements, 357

 temporary, Occupancy Certificate, 218

Occupancy certificates, altered buildings, 215

 applicant, 220

 applications, lot survey, 219

 waiver of lot survey, 219

 change of occupancy, 217

 change of use, 217

 compliance statement, 221

 contents, maximum permissible live load, 223(b)

 occupancy group, 223(a)

 record, 224

 environmental protection administration, 219

 existing buildings, 216

 waterfront property, 216

 general provisions, charter requirements, 213

 issuance time, limitations, 222

 new buildings, 214

 separations, 240

 temporary occupancy, certificate, 218

 transportation administration, 219

Occupancy Classification, Subchapter 3, Art. 2

 amusement, attractions, and devices, Table 3-2 (F-2)

 ballroom, Table 3-2 (F-4)

 bandstands, Table 3-2 (F-2)

 banquet rooms, Table 3-2 (F-4)

 billiard parlors, Table 3-2 (F-3)

 bowling alleys, Table 3-2 (F-3)

 cabarets, Table 3-2 (F-4)

 cafeterias, Table 3-2 (F-4)

 churches, Table 3-2 (F-1b)

 coffee houses, Table 3-2 (F-4)

 concert halls, Table 3-2 (F-1b)

 convention halls, Table 3-2 (F-1b)

 court rooms, Table 3-2 (F-1b)

 dance halls, Table 3-2 (F-4)

Index

- drive-in-theaters, Table 3-2 (F-2)
- exhibition halls, Table 3-2 (F-3)
- galleries, Table 3-2 (F-3)
- grandstands, Table 3-2 (F-2)
- gymnasiums, Table 3-2 (F-3)
- lecture halls, Table 3-2 (F-1b)
- motion picture theaters, Table 3-2 (F-1b)
- museums, Table 3-2 (F-3)
- night clubs, Table 3-2 (F-4)
- opera houses, Table 3-2 (F-1a)
- passenger terminals, Table 3-2 (F-3)
- planetariums, Table 3-2 (F-1b)
- playhouses, Table 3-2 (F-1a)
- restaurants, Table 3-2 (F-4)
- skating rinks, Table 3-2 (F-2)
- snack bars, Table 3-2 (F-4)
- sports arenas, Table 3-2 (F-1b)
- taverns, Table 3-2 (F-4)
- theaters, Table 3-2 (F-1a)
- business, banks, Table 3-2 (E)
 - barber and beauty shops, Table 3-2 (E)
 - civic administration buildings, Table 3-2 (E)
 - office buildings, Table 3-2 (E)
 - radio and television stations, Table 3-2 (E)
 - telephone exchanges, Table 3-2 (E)
- doubtful, 268
- educational, academies, Table 3-2 (G)
 - libraries, Table 3-2 (G)
 - schools, Table 3-2 (G)
 - universities, Table 3-2 (G)
- high hazard, Subchapter 3, Art. 3
 - cereal mills, Table 3-2 (A)
 - distilleries, Table 3-2 (A)
 - explosion hazard, 401
 - feed mills, Table 3-2 (A)
 - flour mills, Table 3-2 (A)
 - grain elevators, Table 3-2 (A)
 - grist mills, Table 3-2 (A)
 - industrial smoke houses, Table 3-2 (A)
 - paint shops and storerooms, Table 3-2 (A)
 - starch mills, Table 3-2 (A)
 - sugar mills, Table 3-2 (A)
 - tanneries, Table 3-2 (A)
 - unlisted, 401
- industrial, automotive repair shops, Table 3-2 (D-1)
 - automotive service stations, Table 3-2 (D-1)
 - baking plants, Table 3-2 (D-1)
 - boiler and furnace rooms, Table 3-2 (D-2)
 - breweries, Table 3-2 (D-1)
 - equipment rooms, Table 3-2 (D-2)
 - foundries, Table 3-2 (D-1)
 - heliports, Table 3-2 (D-1)
 - kitchens, Table 3-2 (D-2)
 - laboratories, Table 3-2 (D-2)
 - laundries, Table 3-2 (D-2)
 - power plants, Table 3-2 (D-2)
 - scenery shops, Table 3-2 (D-1)
 - vocational training shops, Table 3-2 (D-2)
- institutional clinics, Table 3-2 (H-2)
 - day nurseries, Table 3-2 (H-2)
 - homes for the aged, Table 3-2 (H-2)
 - hospitals, Table 3-2 (H-2)
 - jails, Table 3-2 (H-2)
 - mental institutions, Table 3-2 (H-1)
 - nursing homes, Table 3-2 (H-2)
 - orphanages, Table 3-2 (H-2)
 - prisons, Table 3-2 (H-1)
 - reformatories, Table 3-2 (H-1)
 - sanitariums, Table 3-2 (H-2)
- mercantile markets, Table 3-2 (C)
 - retail stores, Table 3-2 (C)
 - sales rooms, Table 3-2 (C)
 - shops, Table 3-2 (C)
- miscellaneous, fences, Table 3-2 (K)
 - sheds, Table 3-2 (K)
 - signs, Table 3-2 (K)
- residential, apartment houses, Table 3-2 (J-2)
 - convents, Table 3-2 (J-3)
 - hotels, Table 3-2 (J-1)
 - lodging houses, Table 3-2 (J-1)
 - motels, Table 3-2 (J-1)
 - one-family dwellings, Table 3-2 (J-3)
 - rectories, Table 3-2 (J-3)
 - rooming houses, Table 3-2 (J-1)
 - school dormitory buildings, Table 3-2 (J-2)
 - two-family dwellings, Table 3-2 (J-3)
- storage, coal pockets, Table 3-2 (B-1)
 - freight depots, Table 3-2 (B-1)
 - greenhouses, Table 3-2 (B-2)
 - private garages, Table 3-2 (B-2)
 - public garages, Table 3-2 (B-2)
 - stables, Table 3-2 (B-1)
 - storerooms, Table 3-2 (B-1)
 - warehouses, Table 3-2 (B-1)
- Occupancy groups, 237**
 - assembly classification, places of assembly, 254
 - business classification, 253
 - education classification, 259
 - industrial classification, 249
 - institutional classification, 260
 - mercantile classification, 248
 - miscellaneous classification, 267
 - reference standards, 235
 - residential classification, 263
 - storage classification, 245
- Occupant load, 358**
 - billiard rooms, Table 6-2
 - bowling alleys, Table 6-2
 - classrooms, Table 6-2
 - dance floors, Table 6-2
 - dining spaces, Table 6-2
 - dressng rooms, 546(b)(11)c
 - employee cafeterias, 358(c)
 - exhibition spaces, Table 6-2

Index

- floors, 357
 - garages, Table 6-2
 - gymnasiums, Table 6-2
 - habitable rooms, Table 6-2
 - industrial shops, Table 6-2
 - institutional sleeping rooms, Table 6-2
 - kindergartens, Table 6-2
 - kitchens, Table 6-2
 - laboratories, Table 6-2
 - libraries, Table 6-2
 - locker rooms, 358(c), Table 6-2
 - meeting rooms, 358(c)
 - modifications, 358(b)
 - nonsimultaneous occupancy, 358(c)
 - offices, Table 6-2
 - open parking structures, Table 6-2
 - passenger terminals, Table 6-2
 - safe areas, 535(a)(2)
 - sales areas, Table 6-2
 - seating areas, Table 6-2
 - skating rinks, Table 6-2
 - standing room, Table 6-2
 - storage rooms, 358(c), Table 6-2
 - toilets, 358(c)
 - Odors, ventilation of rooms with, 766**
 - Office buildings, Occupancy Classification, Table 3-2 (E)**
 - Office buildings, signs, stair and elevator, Subchapter 6, Art. 9**
 - Offices, occupant load, Table 6-2**
 - open parking lots, 482
 - Oil burners, chimneys, 832**
 - controls, 831
 - operator, certificate of fitness, 797(a)
 - Oil burning equipment, certificates, 797**
 - installer license, 796
 - standards, 800
 - Oil flares, 1023(a)**
 - Oil fuels, 807(a)**
 - air supply, 807(a)
 - Oil level indicator, fuel oil tanks, 830(i)(1)(2)**
 - Oil storage, 405**
 - One-family dwellings, boilers, 419**
 - borings, 663(a)(1)
 - Occupancy Classification, 243**
 - Openable windows, locks, 371(j)(2)c**
 - Opening protectives, 329**
 - acceptance, 329
 - automatic sprinklers over, 331(b)
 - certification, 329
 - exterior walls, 331(b)
 - fire divisions, 342
 - in shafts, 344(b)
 - tests, 329
 - Openings, conveyor, 342(b)**
 - door widths, 371(e)
 - exit, 534
 - exterior wall, 331(a)
 - vertical separation, 331(f)
 - fire divisions, 342
 - in shafts, 344
 - stair enclosures, 375(j)
 - supplemental vertical exits, 374(d)
 - unprotected, 331(e)
 - construction, 331 (e)
 - Open parking lots, Subchapter 7, Art. 13**
 - bumpers, 481(a)
 - curb cuts, 480
 - curbs, 481(a)
 - drainage, 481(b)
 - gasoline pumps, 482(a)
 - offices, 482
 - Open parking structures, Subchapter 7, Art. 11**
 - area limitations, 461
 - bumpers, 464
 - construction, 462
 - curbs, 464
 - elevators, 471
 - exits, 469(a)
 - exterior walls, 463
 - floor openings, 466
 - height limitations, 461
 - mechanical parking, 468, 469(b)
 - motor fuel pumps, 467
 - railings, 465
 - ramps, 470
 - standpipes, 472
 - Opera houses, Occupancy Classifications, Table 3-2 (F-1a)**
 - Operators, elevator, 1005**
 - boiler, 795
 - oil burner, certificate of fitness, 797(a)
 - Oriel windows, combustible construction, 336**
 - Orphanages, Occupancy Classifications, Table 3-2 (H-2)**
 - Outdoor signs, Subchapter 7, Art. 17**
 - general requirements, 177
 - Outrigger beams, multiple point suspension scaffolds, 1047(b), 1050.1**
 - Outrigger scaffolds, 1044**
 - guard rails, 1044(d)
 - loading, 1044
 - Outrigger beams, 1044(a)**
 - Outside Fire Districts, 294**
 - limitations, Subchapter 4, Art. 5
 - Ovens, 411**
 - Overhead garage doors as exits, 371(d)**
 - Overstress, 585, 594**
 - structural design, 585, Subchapter 10, Art. 3
- P**
- Paints, flammable, 406**
 - Paint shops, Occupancy Classification, Table 3-2 (A)**
 - Panels, access, 292(a)**
 - fire department access, stair enclosures, 375(j)
 - glass, Subchapter 10, Art. 12
 - viewing, 1021(c)
 - Panic hardware, 371(k)**
 - Pantries, ventilations, 758(c)**

Index

- Parapets**, 333, 340(c)
 - exterior corridors, 369(f)
 - live loads, 558(b)
 - protective guards, 334
 - walls, height limitations, 306(e)
 - public garages, 454
- Parking, grandstand**, 548(b)(4)
 - mechanical open parking structures, 468, 469(b)
- Parking areas, live loads**, 559
- Parking lots, offices, Inside Fire Districts**, 297(d)
 - open, Subchapter 7, Art. 13
- Parking structures, open**, see Open parking structures, Subchapter 7, Art. 13
- Parks, amusement**, 548(e)
 - fencing, 509
- Particle accelerators**, 416
- Partitions, construction**, 346
 - dead loads, 555
 - fire-retardant wood, 328(c)(2)(3), 346
 - firestopping, 345
 - folding, 347
 - horizontal loads, 578(d)
 - loads, 555
 - wood, 622(a)
- Party walls**, 1031(c), 1037(a)(3)
 - exits, 1037(b)
 - fire-resistance rating, 332
- Passageways, exit, in places of assembly**, 537
- Passenger terminals, occupant load**, Table 6-2
 - Occupancy Classification, Table 3-2 (F-3)
- Patio covers, canvas**, 336(j)
 - slow burning plastic, 336(j)
- Pavement, foundations**, 658(a)(4)
- Pedestrian bridges**, 1017(b), 1021(f)
 - lighting, 1021(f)(3)
 - live loads, 1021(f)(1)
- Penetration resistance**, 700(d)(4)a
- Penetration-test piles**, 700(d)(4)a
- Penthouses, construction**, 338
 - roof structures, 338
 - roofs, 338(a)
- Permits**,
 - air conditioning, 180
 - air cooling, 180
 - air heating, 180
 - alterations, 148(b)
 - applicant, 151
 - applications, 150
 - amendments, 154
 - filing, 153
 - other requirements, 152
 - time limitation, 155
 - time limitation, extension by Commissioner, 155
 - alternative procedure for certain permits,
 - subchapter 1, Art.27
 - building alterations, general requirements, 161
 - plans required, 162
 - building code, classifications, 148
 - burning at site, 1019(c)
 - cellular telephone antennas, 191.1
 - classifications, 148
 - conditions, application compliance, 201
 - where asbestos projects performed, 198.1
 - code compliance, 200
 - lot diagram adherence, 202
 - payment of fees, 199
 - plans appliance, 201
 - safety requirements compliance, 203
 - conveying equipment, 1001
 - demolition applications, adjoining
 - properties, protection, 170
 - certification requirements, 168
 - general requirements, 167
 - lot protection, 170
 - notice to adjoining owners, 169
 - photographs required, 171
 - drainage systems, 909
 - earthwork application, general requirements, 163
 - notice to adjoining owners, 165
 - plans required, 164
 - protection of adjoining properties, 166
 - equipment applications, requirements, 180
 - equipment use, refrigeration systems, 778, 781
 - refrigeration systems, temporary, 781(b)
 - equipment use applications, air conditioning and ventilating system, 185(a)
 - boilers, 185(f)
 - dumbwaiters, 185(b)
 - elevators, 185(b)
 - escalators, 185(b)
 - fuel burning equipment, 185(c)
 - fuel oil storage equipment, 185(c)
 - heating systems, 185(e)
 - inspections, 187
 - moving walks, 185(b)
 - permit duration, 190
 - permit renewal, 190
 - refrigeration systems, 185(d)
 - requirements, 186
 - requirements, exemptions, 189
 - stairways, 185(b)
 - temporary use permit, 188
 - tests, 187
 - equipment work applications, air conditioning and ventilating systems, 180(a), 182(a)
 - boilers, 180(f), 182(f)
 - dumbwaiters, 180(b), 182(b)
 - elevators, 180(b), 182(b)
 - escalators, 180(b), 182(b)
 - fuel burning equipment, 180(c), 182(c)
 - fuel oil storage equipment, 180(c), 182(c)
 - heating systems, 180(e), 182(e)
 - moving walks, 180(b), 182(b)
 - permit requirements, exemptions, 184

Index

- plan requirements, exemption, 183
- refrigeration systems, 180(d), 182(d)
- requirements, 181
- sprinkler systems, 180(h), 182(h)
- stairways, 180(b), 182(b)
- standpipe systems, 180(g), 182(g)
- fire alarms, 927, Subchapter 17, Art. 5
- fire detection systems, 927, Subchapter 17, Art. 5
- fire protection, 1014
- flammable film, 543(a)
- foundation applications, general requirements, 163
 - notice to adjoining owners, 165
 - plans required, 164
 - protection of adjoining properties, 166
- issuance, application approval, 191
 - application in part approval, 192
 - commencement of work notice, 195
 - expiration, 196
 - posting of permit, 194
 - revocation, 197
 - signature to permit, 193
- lifts, temporary use, 1002
- loading ramps, 1001
- mechanical ventilation, 771, Subchapter 13, Art. 2
- mechanized parked garage equipment, 1001
 - moving walks, 1001
 - temporary use, 1002
- new building, 148, 148(a)
 - architectural plans, 157(a)
 - datum, 158
 - information required by Commissioner, 159
 - mechanical plans, 157(c)
 - plans required, 157
 - requirements, 156
 - requirements, Workmen's Compensation Law compliance, 156
 - structural plans, 157(b)
- plumbing, 148(e), 900
- plumbing applications, alteration slip, 175
 - exemptions, 176, 179
 - general requirements, 172
 - plans required, 173
 - plans required, exemption, 174
 - repair slip, 172
- power-operated scaffolds, 998(e)
- refrigeration, 771, 781
- removal applications, adjoining properties protection, 170
 - lot protection, 170
 - certification requirements, 168
 - general requirements, 167
 - notice to adjoining owners, 169
- separate permit requirements, 149
- sign, 148(f)
- sign applications, general requirements, 177
 - plans required, 178
- single room occupancy multiple dwellings, 198
 - conversion, alteration and demolition prohibited, 198.2
 - relocation of tenants, 198.3
 - sprinkler systems, 180(h), 928
 - standpipe systems, 180(g), 928
 - work, lifts, 1001
 - moving walks, 1001
- Pew seating**, 531(a)(4)
- Photographs required**, 171
- Photoluminescent markings**, 383 (b), RS 6-1, RS 6-1A
- Physical disabilities, people with**, 123.1, 232, 308, 357, 371(e)(7), 377(c)(7), 459.1, 472.1, 483, 493.1, 531(a)(1)h., RS 4-6, RS 16
 - facilities for, Subchapter 4, Art. 2, Subart. 2
 - facilities for required, 123.1
- Piers**, Subchapter 11, Art. 6
 - equivalent unbraced length, 685(a)
 - foundation, see Foundation piers
- Pilasters, exterior, combustible construction**, 335
- Pile caps, design**, 694(a)(4)
 - reinforcements, 694(a)(3)
 - slab-on-grade concrete, 694(b)(3)
- Pile driving equipment**, 704
- Pile driving operations**, Subchapter 11, Art. 9
- Pile foundations**, Subchapter 11, Art. 7
 - allowable axial load, 700
 - loads, Subchapter 11, Art. 8
- Pile materials, compressive strength allowable**, Table 11-3
 - protection, 696(c)
- Pile penetrations**, 689
- Piles**, 658(a)(5), 663(c)(2)
 - alternate methods, report required, 698
 - battered, 694(b)(6)
 - bearing capacity, 700(b)(1)
 - bearing pressure, allowable, 700(b)
 - bracing, 694(b)
 - caisson, 713
 - capacity, 700(c)
 - cast-in-place concrete, 709
 - compacted concrete, 710
 - comparison, 700(c)(3)a
 - composite, 714
 - concrete-filled pipe, 712
 - damaged, 696(b)
 - eccentricity, 691(b)
 - existing, 690
 - heaved, 705(d)
 - installation by jacking, 700(c)(2)
 - lateral loads, 701
 - load distribution, 700(a)(3)
 - loads, maximum allowable, 700(e)
 - nominal maximum, Table 11-6
 - load tests, procedure, 700(d)(4)
 - record to be filed, 700(d)(4)
 - minimum driving resistance & hammer energy, Table 11-4 and 11-5
 - minimum section, 693
 - penetration test, 700(d)(4)a
 - precast concrete, 708

Index

- plan to be filed, 688(a)
- record required, 688(b)
- spacing, 692
- steel, 711
 - end bearing, 711(b)
- timber, 707
- tolerances, 691
- types, Subchapter 11, Art. 10
- uncased concrete pile shafts, 697
- uplift, 702
- Pile splices**, 695
- Pilings, controlled inspection**, 721
 - inspection requirements, Table 10-2, 721
- Pipe piles, concrete-filled**, 712
- Pipe spaces, firestopping**, 345
- Piping, clearances**, 809
 - combustion equipment, 792
 - concrete-filled piles, 712
 - dead loads, 554
 - embedment in fire protection, 324(a)
 - fill, fuel oil tanks, 830(e)
 - fuel oil heaters, 830(c)
 - fuel oil tanks, 830
 - gas, 896
 - inspection, 919
 - installation, 827
 - testing, 921
 - hot water, Subchapter 14, Art. 10
 - installation, 901(z)
 - insulation, 809
 - noise control, 770(b)(3)
 - piercing ceilings, 327(a)
 - stair enclosures, 375(j)
 - steam, Subchapter 14, Art. 10
 - through rated construction, 343
 - weather protection, 901(w)
- Pit clearances**, 819(a)
- Pit waterproofing**, 819(b)
- Pits, ash storage**, 422
 - boiler rooms, 422
 - automotive repair shops, 446(b), 449
 - public garages, 456(a)
 - test, 664
- Places of assembly**, Subchapter 8, Art. 1, 525
 - approved seating plans, 528
 - artificial lighting, 737
 - corridors, 536
 - enclosure, 529
 - exit lighting, 540
 - exit passageways, 537
 - exit requirements, 530
 - fly galleries, 546(b)(6)
 - F-1, Subchapter 8, Art. 3
 - F-1a, performing area, 546(b)(1), stages, 546
 - F-1b, 547
 - F-2, Subchapter 8, Art. 4
 - F-3, 549
 - F-4, 549
 - gridirons, 546(b)(6)
 - interior finish, 529
 - live loads, 558(b)(1)
 - location, 526
 - outdoor, 548(a)
 - ramps, 538(d)
 - rigging lofts, 546(b)(6)
 - safe areas, 535
 - scenery, 546(a)(1), 546(b)(5)
 - seating plans, 528
 - seating requirements, 531(a)
 - seating sections, 546
 - stage lighting, 546(b)(12)
 - stairs, 538
- Plan approval, applicant**, 140
 - applicant's statement, 142
 - application examination, 143
 - architectural, structural and mechanical
 - drawings application, 139(d)
 - composite, 157
 - conditional, 145
 - content, 141
 - copies, 141
 - endorsement, 146
 - floor and roof plans application, 139(c)
 - forms, 141
 - foundation plans application, 139(b)
 - lot diagram application, 139(a)
 - plan examination, 143
 - time limitations, 144
- Planetariums, Occupancy Classification**, Table 3-2 (F-1b)
- Planking**, 1042(c) maximum permissible spans, Table 19-5
 - platforms, structural, 1052(a)
 - scaffold, 1043(c)
- Plans, air conditioning**, 774
 - air cooling, 774
 - air heating, 774
 - data required on, 590
 - fire alarms, 926
 - mechanical ventilation, 774
 - refrigeration, 774
 - sprinklers, 926
 - standpipe systems, 926
- Plastic, in skylights**, 338(d)(1)
 - slow burning, 330
- Platform hoists**, 1056
- Platforms, construction**, 375(h)
 - exterior stairs, 376(c)
 - interior stairs, 375(d)
 - lighting, 381(a)
 - loading, load bearing tests, 682(b)(1)
 - ramps, 377(c)(3)
 - seating, 531(a)(3)
 - in seating sections, 546(a)(2)
 - structural, 1052
 - guard rail, 1052(b)

Index

- planking, 1052(a)
- Playgrounds, public fencing**, 509
- Playhouses, Occupancy Classification**, Table 3-2 (1a)
- Plumbing**, 896
 - condemned materials, 901(r)
 - connections, public water, 901(e)
 - sewer system, 901(e)
 - definitions, 898
 - existing, 916
 - fire-rated construction, 901(z)(2)
 - through fire-resistant construction, 903
 - fixtures, location, 901(n)
 - required, 901(l)
 - smooth-surfaced, 901(m)
 - general requirements, 901
 - hospital, 912
 - inspection, 919
 - notification, 920
 - installation limitation, 901(z)
 - institutional, 912
 - laboratories using radioactive materials, 415(g)
- Plumbing maintenance**, 901(u)
 - materials, 901(q)
 - condemned, 901(r)
 - nonconforming, 902
 - permits, see Permits plumbing and Permits,
 - plumbing applications
 - plans, 899
 - prohibited substances, 901(h)
 - required fixtures, 901(l)
 - stacks, dead loads, 554
 - standards, 897
 - single room occupancy multiple dwellings, 198
 - tests, 901(t), 921
 - water conservation, 901(c)
 - weather protection, 901(w)
- Plywood**, 617(b), RS 10-9
- Pole foundations**, 684(b)
- Poles, footings**, 684(b)
- Pole scaffolds**, see Scaffolds, pole
- Pollution control, air, Code**, 1019(a)
- Pools, requirement**, 913
 - swimming, see Swimming pools
- Porches, combustible construction**, 336
- Porticos, combustible construction**, 336
- Posted capacity**, 527
- Posting buildings, posted occupancy and use**, 225
 - posted signs replacement, 226
- Potable water**, 901(a)
 - identification, 908(b)
 - supply requirements, 901(b)
- Power buggies**, 1035(c)(8), 1053, 1059
- Power, emergency**, Subchapter 6, Art. 11
- Power lines, notice required**, 1013(c)
- Power-operated cranes & derricks**, RS 19-2
- Power-operated doors**, 371(l)
- Power-operated scaffolds, inspection**, 1012
- Power plants, Occupancy Classification**, Table 3-2 (D-2)
- Precast concrete**, 603
- Precast concrete piles**, 708
- Prestressed concrete**, 1035(i)
- Pressure tanks**, 945(b)(4), 965
 - sprinkler systems, 965
- Pressure vessels, unfired**, Subchapter 14, Art. 15
- Pressurization systems, air-supported structures**, 516
- Prestressed construction**, 1035(i)
- Prism tests, masonry**, 4.4.4 (RS 10-1A), 1.63 (RS 10-1B)
- Prisons, Occupancy Classification**, Table 3-2 (H-1)
- Private garages**, Subchapter 7, Art. 12
 - breezeway, 476
 - carport, 475
 - classification, 474
 - floors, 477
 - ventilation, 478
- Prohibited doors, folding doors**, 371(d)
 - rolling shutters, 371(d)
 - vertically sliding doors, 371(d)
- Projecting signs**, 502
 - location, 502(a)
 - supports, 502(d)
- Projection booths, exits**, 543(d)
 - ventilation, 543(d)
- Projection machines, drive-in theaters**, 548(c)(4)d
- Projections**, 109
 - beyond street lines, 307
 - above grade, 313
 - air conditioning unit, 313(a)(2)
 - awning, 313(b)
 - balcony, 313(a)(3)
 - band course, 313(a)(2)
 - base, 313(a)(2)
 - below grade, 314
 - bridge, 313(d)
 - door, 313(a)(1)
 - drop awning, 313(b)(2)
 - entrance details, 313(a)
 - existing, 311
 - existing alterations, 311(a)
 - fire escapes, 313(a)(3)
 - fixed, 313(a)
 - flagpole, 313(a)(6)
 - footing, 309, 314(a)
 - foundation wall, 314(b)
 - grill, 313(a)(2)
 - header, 313(a)(2)
 - light fixture, 313(a)(5)
 - main cornice, 313(a)(2)
 - marquee, 313(a)(4)
 - rake, 313(a)(2)
 - removable, 309
 - restrictions, 308
 - roof eave, 313(a)(2)
 - rustications, 313(a)(2)
 - sculpture, 313(a)(2)

Index

- sign, 313(a)(8)
- sill, 313(a)(2)
- step, 313(a)(1)
- store front awning, 313(b)(1)
- storm enclosure, 313(c)
- sun control device, 313(a)(2)
- tunnel, 314(d)
- vault, 314(c)
- veneer, 313(a)
- wall sign, 313(a)(7)
- window, 313(a)(2)
- building code, 109
- Properties, adjoining**, see Adjoining properties
- Public address systems, fire control station**, 546(b)(10)c
- Public buildings, marquees**, 313(a)(4)
- Public garages**, 419(b), Subchapter 7, Art. 10
 - classification, 451
 - construction, floor, 452
 - entrances, 453
 - exits, 457
 - furnaces, 419(b)
 - heating equipment, 459
 - pits, 456(a),(d)
 - railings, 452
 - ramps, 458
 - roof parking, 454, 457(c)
 - guard rail, 454
 - parapet wall, 454
 - sprinkler systems, 455
 - ventilation, 456
- Public playgrounds, fencing**, 509
- Pump rooms, standpipe systems**, 946(b)
- Pumps, booster, sprinkler systems**, 964
 - fire, 946
 - automatic, 945(b)(5)
 - gasoline, 441
 - open parking lots, 482(a)
 - noise control, 770(b)(5)
 - transfer, fuel oil tanks, 829(b)(2)
- Putlogs**, 1043(c)(1)
- Q**
- Quality control, aluminum**, 627
 - concrete, 605(a)(5)
 - steel, 616
- R**
- Radiation machines**, 416
- Radiation-producing equipment**, see Subchapter 7, Art. 4
- Radiation protection, state industrial code**, 414
- Radioactive materials**, Subchapter 7, Art. 4
 - storage, 417
 - vaults, 417
- Radio and television towers, access**, 495
 - construction, 496
 - location, 495
- Radiological hazards, City Health Code**, 414
- Radio stations, Occupancy Classification**, Table 3-2 (E)
- Rafters, wood**, 622(c)(5)
- Railings, live loads**, 558, 558(b)
 - open parking structures, 465
 - public garages, 452
 - ramps, 377(c)(5)
 - roof, 334
 - around skylights, 338(d)(2)c.I.
 - standard guard, 1021(a)(4), 1021(f)(1), 1032(b)
 - swimming pools, 493
- Railroad equipment, live loads, moving**, 562(d)
- Ramps, capacity**, 377(a)
 - direction change, 377(c)(1)
 - doors, 377(c)(4)
 - exit capacities, see Table 6-1
 - guards, 377(c)(5)
 - length, 377(c)(2)
 - lighting, 381(a)
 - loading, 1053
 - maximum grade, 377(b)
 - parking structures, 470
 - in places of assembly, 538
 - platforms, 377(c)(3)
 - projection beyond street lines, 308
 - public garages, 458
 - safe areas, 535(a)(5)
 - structural, 1051(b)
 - railings, 377(c)(5)
 - guard rail, 1051(e)
 - surface, 377(c)(6)
- Rectories, Occupancy Classification**, Table 3-2 (J-3)
- Red lanterns, warning signs**, 1023(a)
- Reformatories, Occupancy Classification**, Table 3-2 (H-1)
- Refrigeration systems**, 771
 - construction, 777(f)
 - controlled inspection, 781(a)
 - equipment use permit, 778, 781
 - temporary, 781(b)
 - operation and maintenance, Subchapter 13, Art. 3
 - operator's qualifications, 786
 - plans, 774
 - safety standard, RS 13-6
 - test and inspection, 781(a)
 - use of city water, 777(g)
- Refueling facilities, heliports**, 435
- Refuge, area of**, see Areas of refuge
- Refuse chute, sign**, 848(b)
- Registered architects and professional engineers**,
 - probation, 143.1
 - sanctioning, 143.2
- Registers, noise control**, 770(d)
- Reinforced gypsum concrete**, Subchapter 10, Art. 9
 - inspection requirements, Table 10- 1, Table 10-2
- Removal applications**, 148(d)
- Repairs**, 1007, Subchapter 19, Art. 7
 - barricades, 1041
 - signs, 1041
- Repair shops, automotive**, Subchapter 7, Art. 9
 - Occupancy Classification, Table 3-2 (E)
- Reshoring**, 1035(f)

Index

Residential classification, Occupancy Group J, 263

Residential Occupancy Classifications, see

Occupancy Classifications, residential

Restaurants, cooking equipment ventilation, 777(d)

Occupancy Classification, Subchapter 3, Art. 2

Retail stores, Occupancy Classification, Table 3-2 (C)

Retaining structures, 1031(a)(1)

excavation, 1032(a)

inspection, 1010

removal, 1031(a)(3)

Retardants, admixtures, Table 19-3

Revolving doors, 371(m)

inspection, 371(m)(3)

Rigging lofts, automatic sprinkler system, 546(b)(7)

places of assembly, 546(b)(7)

Right of entry, 205

Right of inspection, 205

Risers, construction, 375(h)

exterior stairs, 376(c)

standpipe systems, see Standpipe systems, risers

and treads, 375(e)

Rock borings, core drilling, 663(d)(2)

core samples, 663(d)(2)

Rock characteristics, 675(a)

Rock cores, 663(f)

Rock socket, 713(c)

Roof access, 375(k)

Roof coverings, classification, 337

combustible appendages, 336(h)

combustible decking, 337(b)

combustible insulation, 337(c)

limitations of use, 337(a)

Roof framing, wood, 622(c)

Roof irons, 1046(c)

Roof monitors, 338(d)

Roof parking, public garages, see Public garages,

roof parking

Roofs, construction, abutting fire,

divisions, 340(a)

dormer, 338(g)

fencing, 334

firestopping, 345

live loads, 561

mansard, 338(f)

penthouses, 338(a)

railings, 334

sawtooth, 338(d)

Roof signs, 503, 505(a)

inside Fire Districts, 297(i)

location, 503(a)

supports, 503(c)

Roof stairs, 375(k)

Roof structures, 338

bulkheads, 338(b)

dormers, 338(g)

greenhouses, 338(e)

height limitations, 306(c)

inside Fire Districts, 297(g)

penthouses, 338(a)

scuttles, 338(c)

skylights, 338(d)

Roof tanks, height limitations, 306(a)

Roof vents, 353

Rooming houses, Occupancy Classifications, Table 3-2 (J-1)

Rooms, gas meter, existing, 918

Rooms, gas meter, RS-16, P115.5(c)

Rooms, habitable, natural ventilation, 746

occupant load, Table 6-2

machine, 344(f)

meeting, occupant load, 358(c)

occupiable, natural ventilation, 745

sleeping, institutional, occupant load, Table 6-2

Ropes, bridge, 636(a)(3)

fibre, 1046(d), 1055(c)

fittings, 1055(e)

hoisting, inspection, 1012, 1055

wire, 1055(b)

Runways, loading, 1051, 1053

in seating section, 546(a)(2)

structural, Subchapter 19, Art. 9

S

Safe areas, assembly spaces, see Assembly

spaces, safe areas

doors from, 535(a)(7)

lighting, 540(a)

Safety netting, see Netting, safety

Sales areas, occupant load, Table 6-2

Sales rooms, Occupancy Classification, Table 3-2(c)

Sanitariums, Occupancy Classification, Table 3-2 (H-2)

Sanitary drainage, 896, Subchapter 16, Art. 3

Scaffolds, Subchapter 19, Art. 8, 1042(b), 1022

c-hooks, 1050.1

design, 1042(b)(1)

fibre rope, 1046(d)

fire-retardant construction, 1042(f)

free-standing, 1043(g)

general provisions, 1042

guard rails, 1042(g)

heavy duty, 1042(b)(3)c

inspection, 1012, 1045(b)

light duty, 1042(b)(3)a

loading, 1042(b)(2)

manually-propelled free-standing, 1048

medium duty, 1042(b)(3)b

needle beam, 1046(e)(1)

outrigger, 1044, 1050.1

loading, 1044

planking, 1043(c)

pole, 1042(b)1, 1043

putlogs, 1043(e)

power-operated, construction, 991(h)

inspection, 998(c), 1012

permits, 986

plans, 985

Index

- power-operated free-standing, 1049
- required in structure demolition, 1022(a)(1)
- standard, 1042(b)(3)
 - heavy duty, 1042(b)(3)c
 - light duty, 1042(b)(3)a
 - medium duty, 1042(b)(3)b
- standard designs, 1043(i)
- standard guard rail, 1050
- standard toeboards, 1050
- tests, inspections, 1045(b)
- Scenery, storage**, 546(b)(2)
 - in places of assembly, 546(a)(1), 546(b)(5)
- Scenery shops, Occupancy Classification**, Table 3-2 (D-1)
- Schools, fire alarm systems**, 972(b)
 - Occupancy Classification, Table 3-2 (G)
 - ventilation, 765
- School yards, fencing**, 509
- Screens, motion picture**, 544
 - under skylights, 338(d)(4)
- Scissor stairs, construction**, 375(h)
- Scuttles**, 338(c)
 - roof structures, 338
- Seating bench**, 531(a)(4)
 - bleacher, 531(a)(2)
 - chair, 531(a)(1)
 - counter, 531(a)(6)
 - movable, 531(a)(1)c
 - platform, 531(a)(3)
 - requirements, 531
 - table and chair, 531(a)(5)
- Seating areas, occupant load**, Table 6-2
- Seating plans, approved**, 528
 - assembly spaces, 528(a)
 - in places of assembly, 528
 - safe areas, 528(b)
 - stage areas, 528(c)
- Seating requirements, in places of assembly**, 531
- Seating sections, in places of assembly**, 546
 - platforms, 546(a)(2)
 - runways, 546(a)(2)
- Seepage**, 661(b)
 - bearing pressure, 678, Table 11-2
 - disturbed soil, 679(a)
- Segregation, fire**, see Fire Segregation
- Sending station, fire alarm systems**, 973(a)
- Separations, air-supported structures**, 511
 - fire, see Fire separations
 - tents, 511
- Service equipment, acceptance**
 - requirements, 135
 - alternate equipment, 137
 - dead loads, 554
 - equivalent equipment, 137
 - general requirements, 134
 - inspection requirements, 136
 - live loads, 557(b)(2)
- Service facilities, embedment in fire protection**, 324(a)
- Service incinerators, chimneys**, 876
- Service lines, differential settlement**, 680
 - obstructions, 1017(b)
 - temporary, 1017(c)
 - utilities, 1013(a)
- Services, essential, maintaining**, 1013(b)
 - utilities, 1013
- Service stations, automotive**, Subchapter 7, Art. 8
 - Occupancy Classification, Table 3-2 (E)
- Settlements**, 1035(c)(7)
- Sewage, private disposals**, 910
- Sewer system:**
 - combined sewer, 901(e)(1)
 - connections to public water supply systems, 901(e)(1)
 - conveying sewage, 901(e)(1), (g)
 - design of system, 901(g)
 - disposal of storm water, 901(k)
 - Environmental Protection Administration, 901(e)(1), (k)
 - adequate capacity, 901(e)(1) 1.
 - elevation, 901(e)(1) 4.
 - location, 901(e)(1) 5.
 - physical obstacles, 901(e)(1) 3.
 - maintenance of system, 901(g)
- Sewer system, prevention of flooding**, 901(s)
 - private, 157(c)(4)
 - public, 157(c)(3), 901(e)(2)
- Shafts**, 344
 - openings, 344(c)
 - smoke venting, 344(d)
 - trap doors, 344(e)
 - vents, 344(d)(e)
- Shaft vents**, 344(e)
- Shear walls, load distribution**, 579(a)
- Sheaves**, 1055(d)
- Sheds, Occupancy Classification**, Table 3-2 (K)
- Sheeting, excavations**, 1032(a)
- Sheet-piling, demolition**, 1039(e)(2)d
- Shop drawings, A.E. approval required**, 590
- Shops, industrial, occupant load**, Table 6-2
 - mercantile, Occupancy Classification, Table 3-2 (C)
- Shores**, 1035(d)
- Shoring**, 1035(c)(5), 1035(e), 1036(d)
 - demolition, 1039(e)(2)d
 - excavations, 1032(a)
 - inspection, 1010
 - reshoring, 1035(f)
- Show windows**, 331(c)
- Shutters, combustible construction**, 335
- Siamese connections**, 940
 - sprinkler systems, 959
 - construction, 959(b)
 - installation, 959(b)
- Sidewalk elevators**, 988
- Sidewalks, contractor sheds**, 1021(a)(1)
 - live loads, 558
 - obstruction, 1020
 - protection of, 1021

Index

- Department of Highways, 1020, 1021(a)(3)
- temporary, 1021(a)(2), 1021(e)
- lighting, 1021(b)(10)
- Signal systems, standpipe**, 952
- Sign construction, combustible materials**, 507
 - slow-burning plastics, 507(b)
 - sign permits, 148(f)
- Sign permits**, 148(f)
- Signs**, 109, 292(c)
 - alterations, 1041
 - annual inspection, 508(b)
 - directional, assembly spaces, 541
 - exit assembly spaces, 534(e)
 - exit signs and other markings, 383, 383.1
 - fees, see Title 26 index
 - general requirements, 177
 - ground, 500
 - illuminated, see illuminated signs
 - lighted, 1023(a)
 - maintenance, 508(a)
 - marquee, 504, 505(a)
 - supports, 504(c)
 - metal, sprinkler systems, 959(a)(3)
 - Occupancy Classification, Table 3-2 (K)
 - office buildings, (high rise) stairs and elevator,
 - Subchapter 6, Art. 9
 - applicability, 390
 - elevator landings, 391
 - existing office buildings, 396
 - floor numbering, 392
 - identification, 393
 - materials, 395
 - reentry, 394
 - owner and general contractor, 1009(c)
 - power source, 384
 - projecting, see Projecting signs
 - refuse chutes, 839
 - repairs, 1041
 - roof, see Roof signs
 - sleeping rooms, Subchapter 6, Art. 10
 - stair and elevator, Subchapter 6, Art. 9
 - temporary, 506
 - vehicular traffic control, 1023(c)
 - wall, see Wall signs
 - warning, 1023, 1054(c)
 - red lights, 1023(a)
 - red lanterns, 1023(a)
 - walkways, 1023
- Silt**, 675(b)(4)
 - allowable bearing pressure, 678
 - varved, 675(b)(5)
- Single room occupancy multiple dwellings**, 198
 - conversion, alteration & demolition, 198.2
 - relocation of tenants, 198.3
- Skewed stairs**, 375(e)(4)
- Skylights, construction**, 338(d)
 - glass, 338(d)(1)
 - glass blocks, 338(d)(1)
 - glazing 338(d)(1), 338(d)(2)
 - marquees, 313(a)(4)
 - plastic, 338(d)(1)
 - railings, 338(d)(2)c.1.
 - roof structures, 338(d)
 - screens, 338(d)(4)
 - separation from structures, 338(d)(3)
- Skating rinks, Occupancy Classification**, Table 3-2 (F-2)
 - occupant load, Table 6-2
- Sleeping rooms, institutional, occupant load**, Table 6-2
- Sleeping rooms, signs in**, Subchapter 6, Art. 10
- Slide poles**, 344
- Slip forms, construction**, 1035(g)
 - jacks, 1035(g)(4)
- Slumps, concrete formwork**, Table 19-3
- Smoke and heat vents**, 353
 - shafts, 344(d)
- Smoke barriers**, 369(c)
- Smoke control requirements**, 777.1
- Smoke curtains**, 353
- Smoke density**, 348(d)
- Smoke detector**, 955
- Smoke houses, industrial, Occupancy Classification**, Table 3-2 (A)
- Smoke protection**, 353.1, 353.2, 353.3
- Smoke shaft requirements**, 353
- Smoke stop doors**, 371(c)
 - fire-retardant wood, 371(c)
 - wire glass, 371(c)
- Smoke test**, 856(e), 868
 - method, 868(b)
- Snack bars, Occupancy Classification**, Table 3-2 (F-4)
 - ventilation, 758(c)
- Soil bearing pressure**, 668
 - allowable, Subchapter 11, Art. 4, 678
- Soil borings**, 663(d)(1)
- Soil classification**, 675
- Soil load bearing tests**, Subchapter 11, Art. 5
 - controlled inspection, 720
- Soils, treatment**, 679(c)
 - nominally unsatisfactory, 679(c)
 - nominally satisfactory, 679(c)
- Soil samples**, 663(f)
 - recovery, 663(d)(1)
- Soil stacks, existing**, 917
- Solid fuels**, 807(c)
 - air supply, 807(c)
- Solvents, storage**, 405
- Sound power levels**, Table 12-3
 - maximum permitted for exterior mechanical equipment adjoining buildings, Table 12-4
- Sound Transmission Class (STC)**, 769 (a)(1), ratings, 769(a)(2)
- Spaces, area limitations**, 302
 - classifications, 234, 238, 270
- Special occupancies, ventilation**, 767

Index

- Spiral stairs**, 375(l)
- Sports arenas, Occupancy Classification**, Table 3-2 (F-1b)
- Spotlights**, 543(c)
- Spray booths**, 409(a)
 - automatic sprinkler system, 409(a)(2)
- Spray finishing**, Subchapter 7, Art. 3
- Spraying spaces, sprinkler systems**, 412
 - ventilation, 410
- Sprinkler alarm systems**, 957
- Sprinkler heads, charging chutes**, 875(b)(4)
 - protection, 966(b)
- Sprinkler systems**, 923
 - alarm system, 957
 - automatic, auxiliary stage spaces, 546(b)(11)d, 547(b)(2)(d)
 - over opening, 331(b)
 - rigging lofts, 546(b)(6)
 - spray booths, 409(a)(2)
 - stages in places of assembly, 546(b)(7)
 - automotive repair shops, 447
 - booster pumps, 964
 - carbon dioxide systems, dry cleaning establishments, 430
 - deluge, 546(b)(7)b
 - dipping spaces, 412
 - direct connection to public water, 963
 - domestic water supply, 962(c)
 - existing, 931
 - existing buildings, 123.2
 - fire department connection, 959(5)
 - fire protection, 1014(b)
 - gravity tanks required, 965
 - inspections, 967
 - installation in residential occupancies, (RS 17-2A)
 - installation in one-and two-family dwellings and installation systems, 959(b)
 - manufactured homes, (RS 17-2B)
 - metal signs, 959(a)(3)
 - nonautomatic, requirements for, 962(f)
 - partial protection, 959(a)(3)
 - permits, 927
 - plans, 926
 - pressure tanks required, 965
 - protection, 966
 - public garages, 455
 - requirements in spaces below grade, 929(c), 954(aa)
 - requirements systems, Subchapter 17, Art. 4, 954
 - siamese connections, 959
 - smoke detector alternate, 955
 - spraying spaces, 412
 - standards, 924
 - tests, 967
 - unsprinklered buildings and spaces, Table 4-1
 - water supply, automatic sources, 961(a)
 - auxiliary sources, 961(b)
 - classification, 961
 - combination sources, 961(c)
 - domestic, 962(d)
 - required conditions, 962(d)
 - nonautomatic sources, 961(d)
 - required sources, 962
- Stability**, Subchapter 11, Art. 12
 - factor of safety, 718
 - overturning, 718(a)
 - sliding, 718(b)
- Stabilized overburden pressure**, 680
- Stables, Occupancy Classification**, Table 3-2 (B-1)
- Stack bond**, 7.7 (RS 10-1A), 10.12 (RS 10-1B)
- Stadiums, live loads, moving**, 562(i)
- Stage areas, seating plan**, 528(c)
- Stage floor, construction**, 546(b)(2)
- Stage lifts**, 546(b)(2)b
 - construction, 991(f)
- Stage lighting**, 546(b)(12)
 - in places of assembly, 546(a)(2)
- Stages, auxiliary spaces**, 546(b)(11)
 - exits, 546(b)(11)b
 - sprinklers, 546(b)(11)d
 - construction, in F-2 places of assembly, 548(c)
 - exits, 546(b)(4)
 - in F-2 places of assembly, 548(c)(3)
 - fire control station, 546(b)(10)
 - F-3 or F-4 places of assembly, 549
 - occupant load, 546(b)(4)
 - F-2 places of assembly, 548(c)(3)
- Stair doors**, 375(g)
 - locks, 371(j)(1)
- Stair enclosures**, 375(i)
 - ducts, 375(j)
 - fire department access panels, 375(j)
 - openings, 375(j)
 - pipes, 375(j)
 - windows, 375(j)
- Stairs, access**, 375(i)(2)
 - dead loads, 555(b)
 - exit capacities, Table 6-1
 - exit, see exits, stairs
 - exterior, see exterior stairs
 - fire escape, 380(b)
 - firestopping, 345, 345(c)
 - interior, see interior stairs
 - lighting, 381(a)
 - in places of assembly, 538
 - roof, 375(a), 375(k)
 - spiral, 375(l)
 - unenclosed, 375(i)(l)c
- Stairwells, live loads**, 558(b)(1)
- Standard scaffolds**, see scaffolds, standard
- Standee areas, assembly spaces**, 531(7)
 - protective guards, 531(a)(8)
- Standing room, occupant load**, Table 6-2
- Standpipes systems**, 923
 - automatic dry, 932(b)
 - connected to city water system, 945(b)(1), 962(g)

Index

- cross connections, 941
- devices used, 939
 - exempt buildings, 932(d)
- existing, 930(a)
- extension of building, 930(b)
- fireline systems, electrical tests, 977
 - communication system, 975
 - fire command station, 975
 - installation, 976
 - signaling systems, 974
 - telephone systems, where required, 974
- fire protection, 1014(b)
- fire pumps, 946
 - automatic, 945(b)(5)
 - power supply, 943(c)
 - water supply, 947(b)
- heliports, 437
- hose omission, 942(c)(5)
- inspection, 951
- installation standards, 950
- maximum pressure, 943
- nonautomatic, 932(b)
- occupancy, group E, 954(i)
- omission of service, 937
- open parking structures, 472
- permits, 927
- plans, 926
- pressure reducing valves, 944
- protection, 949
- pump rooms, 946(b)
- requirements, Subchapter 17, Art. 3, 932
- risers, high, 945(c)
 - location, 936
 - low, 945(c)
 - number of, 935
 - size of, 938
 - use for sprinkler systems, 945(d)
- siamese connections, 940
- signal systems, 952
- standards, 924
 - in structures being demolished, 934
 - in structures being erected, 934
- tests, 951
- three-way manifold, 942(a)(2)
- water supply, 945
 - additional, 946(a)
 - control valve, 947(a)
 - direct connection to, 947
 - primary, 945(a)
 - supplying, 945(b)
- wet, 932(a)
- Starch mills, Occupancy Classification, Table 3-2 (A)**
- State industrial code, radiation protection, 414**
- Steam piping, Subchapter 14, Art. 10**
- Steam hammers, 700(a)(1)**
- Steel, Subchapter 10, Art. 6**
 - identification, 615
 - inspection requirements, Table 10-2
 - light-gage cold-formed, 614(b)
 - open web steel joints, RS 10-7
 - quality control, 616
 - structural, 614(a), (RS 10-5A), (RS 10-5B)
 - structures resisting earthquake forces, (RS 10-5C)
 - welding, 616(b)
- Steel piles, 711**
 - end bearing, 711(b)
- Steps, in aisles, 532(a)(7)**
 - in safe areas, 535(a)(5)
- Stop-work order, notice, 227**
 - unlawful continuance, 228
- Storage material, see Materials, storage**
 - oil, 405
 - nitric acid, Subchapter 7, Art. 20
 - application, 518
 - construction requirements, 520
 - location, 519
 - ventilation, 521
 - scenery, 546(b)(2)
 - solvents, 405
- Storage classification, Occupancy Group B, 245**
- Storage occupancies, ventilation, 405**
- Storage Occupancy Classifications, see Occupancy Classifications, storage**
- Storage rooms, auxiliary stage space, 546(b)(11)**
 - occupant load, 358, Table 6-2
- Storerooms, paint, Occupancy Classifications, Table 3-2 (A)**
 - Occupancy Classification, Table 3-2
- Stores, retail, Occupancy Classifications, Table 3-2 (C)**
- Storm drainage, 896**
- Storm enclosures, Combustible construction, 336**
 - Inside Fire Districts, 297(c)
- Storm water, disposal, 901(k)**
- Streets, closing, 1020, 1021**
 - obstructions, 1020
- Stresses, increase of allowable,**
 - infrequent, 594
 - secondary, 593
- Stringers, construction, 375(h)**
- Structural design, adequacy, Subchapter 10, Art. 3**
 - aluminum, Subchapter 10, Art. 8
 - bracing, 592
 - deflection limitation, 595
 - foundation elements, 591
 - glass panels, Subchapter 10, Art. 12
 - inadequate construction, 597
 - infrequent stress conditions, 594
 - load tests, 599
 - overstress, 585
 - public safety, 585
 - secondary stresses, 593
 - stability, 591
 - wood, Subchapter 10, Art. 7
- Structural elements, fire-retardant wood, 328(a)**
 - materials, 586

Index

Structural materials, controlled inspection, Table 10-1
inspection requirements, Table 10-1

Structural members, in cavity walls, fire protection, 324(c)
exposed to outdoors, fire protection, 324(c)
fire protection, 324
impact protection, 324(b)

Structural platforms, see Platforms, structural

Structural steel, 614(a), (RS 10-5A, RS 10-5B)

Structure-borne noise, 769(b), 770(b)

Structures, adjoining, see adjoining structures

Structures, air-supported, see air-supported structures

Stud walls, wood, 622(a)

Sugar mills, Occupancy Classification, Table 3-2(A)

Supermarkets, marquees, 313(a)(4)

Supports,
antenna, combustible construction, 338(j)
chimney, 864
furnace floors, 819
gas vents, 890
ground signs, 500(c)
unit heaters, 814
wall signs, 501

Surcharges, lateral loads, 670(a)

Suspended scaffolds, 1045
hangers, 1046
inspection, 1045(b)
ladder type platforms, 1046(f)(1)
multiple-point suspension, 1047
needle-beam, 1046(e)(1)
roof irons, 1046(c)
tests required, 1045(b)
two-point suspension, 1046

Suspended structures, Subchapter 10, Art. 11

Suspenders, 636
bridge rope, 636(a)(3)
bridge strand, 636(a)(2)
bridge wire, 636(a)
tests, 637
wire cable, 636(a)
fittings, 640
protection, 642

Swimming pools, Subchapter 7, Art. 15
bottom slopes, 489(b)
construction, 489
drainage, 492
diving boards, 489(h)
dressing facilities, 490
enclosure, 493(b)
hand-holds, 489(e)
heating, 491
ladders, 489(c)
markings, 489(f)
people with physical disabilities, facilities, 493.1
railings, 493
requirements, 913
safety precautions, 493
spectator area, 489(g)
towers, 489(h)

ventilation, 491
walkways, 489(d)
walls, 489(a)
water circulation, 492
water treatment, 492

Synchrotrons, 416

T

Table and chair seating, 531(a)(5)

Tanks, fuel oil, 828(a)
along subway line, 829(f)
buried, construction, 828(a)(4)
coatings for, 828(a)(3)
construction, 828(a),(b)
cylindrical, 828(b)
design, 828(a)
fill pipes, 830(e)
flow control, 830(h)
heating coils, 830(g)
inside buildings, below ground, 829(c)
locations, 829
above the lowest floor, 829(b) piping to, 830(f)
on the lowest floor, 829(a)
minimum thickness, 828(d)(1), 828(e)(2)
oil level indicator, 830(i)(1)
openings in, 828(a)(6)
outside buildings, above ground, 829(e)
outside buildings, below ground, 829(d)
piping, 830
rectangular, 828(c)
transfer pump, 829(b)(2)
vent pipe, 830(d)
gravity, 945(b)(3), 965
inside Fire Districts, 297(h)
pressure, 945(b)(4), 965
water, supports for, 338(h)
heating devices, 901(d)

Tanneries, Occupation Classification, Table 3-2 (A)

Tapered aisles, 532(a)(3)

Taverns, Occupancy Classification, Table 3-2 (F-4)

Telephone exchanges, Occupancy Classification,
Table 3-2 (E)

Television stations, Occupancy Classification,
Table 3-2 (E)

Temporary occupancy, Occupancy Certificates, 218, 219

Temporary sidewalks, see Sidewalks, temporary

Temporary signs, 506

Inside Fire Districts, 297(h)

Temporary structures, Inside Fire Districts, 297(e)

Temporary use permits, fuel burning equipment, 794(e)
posting, 1003

Temporary walkways, 1021(e)

Tents, Subchapter 7, Art. 19, 524

flame resistance, 515(a)
height, 510
location, 510
separations, 511

Index

- Terminals, marquee**, 313(a)(4)
 - passenger, occupant load, Table 6-2
- Test load**, 588
- Test pits**, 664
- Tests, acceptance, elevators**, 997
 - boiler acceptance, 793(a)
 - bridge wire, 637
 - concrete, 598
 - fire protection, Subchapter 5, Art. 2
 - fuel burning installations, 794(a)
 - fuel storage installations, 794(a)
 - gas vent systems, 879(b)
 - load bearings, correlation of load test
 - behavior, 682(c)(1)
 - gross settlement, 682(c)(1)
 - load increments, 682(b)(2)
 - loading platform, 682(b)(1)
 - procedure, 682
 - report required, 682(c)(1)
 - test plate, 682(b)(1)
 - model, 599(a)(5)
 - opening protectives, 329
 - plumbing, 901(t), 921
 - settlement, 682(a)(9)
 - sketch required, 682
 - soil load bearing, Subchapter 11, Art. 5
 - sprinkler systems, 967
 - standpipe systems, 951
 - fireline, 974(g)
- Theaters, drive-in**, 548(c)(4)d
 - Occupancy Classification, Table 3-2 (F-2)
 - projection machine, 548(c)(4)d
 - live loads, see Live Loads, theaters
 - marquees, 313(a)(4)
 - motion picture, Occupancy Classification, Table 3-2 (F-1b)
 - Occupancy Classification, Table 3-2 (F-1a)
- Thimbles**, 894
 - ventilating, 861(c)(1)
- Ties, masonry**, 3.3 (RS 10-1A), 9.7.3 (RS 10-1B)
- Timber**, 617(a)
- Timber piles**, 707
 - end bearings, 707(a)(2)
 - inverted, 707(c)
 - lagging, 707(c)
- Tobacco Advertising**, Subchapter 7, Art. 17A
 - penalties, 508.7
- Toeboards**, 1042(g)
 - outrigger scaffolds, 1044(d)
 - standard, 1050
- Toilet rooms, artificial illumination**, 738
 - dead loads, 555(b)
 - ventilation, 759
- Toilets, occupant load**, 358(c)
- Tools, explosive powered**, Subchapter 19, Art. 11
 - operation, 1066
- Towers, cooling**, 338(i)
 - swimming pools, 489(h)
- Toxic substances, ventilation of rooms with**, 766
- Traffic control, flagmen**, 1023(c)
- Training shops, vocational, Occupancy Classification**, Table 3-2 (D-2)
- Transfer pump, fuel oil tanks**, 829(b)(2)
- Transoms**, 369(i)
- Trap doors, shafts**, 343(e)
- Traps, liquid-seal**, 901(o)
- Traps, stage floor**, 546(b)(2)
- Travel distance, within dwelling units**, 360(b)
 - exit requirements, Table 6-1
 - horizontal exit, 360(a)
 - interior stair, 360(a)
 - maximum, 360(a)
 - measurement, 360(c)
 - open exterior space, 360(a)
 - vertical exit, 360(a)
- Treads, exterior stairs**, 376(c)
 - construction, 375(h)
- Trees, protection of**, 1030
- Trellises, combustible construction**, 335
- Trench excavation, mechanical diggers**, 1032(d)
- Trestles, Inside Fire Districts**, 297(h)
- Trim, exterior**, see Exterior trim
 - fire-retardant treated wood, 328(a), 328(d)
- Trimmers**, 622(c)(4)
- Trucks**, 1059
 - fork lift, 1061
 - live loads, moving, 562(c)
 - loading, 1059(b)
- Trusses**, 1034(c)
 - fire protection, 324
 - horizontal exits, 373(c)
 - lighting, 381(a)
- Turnstiles**, 371(n)
- Two-family dwellings, boilers**, 419
 - borings, 663(a)(1)
 - Occupancy Classification, Table 3-2 (J-3)

U

- Uncased borings**, 665(a)
- Underpinning**, Subchapter 11, Art. 12
 - adjoining properties, 166
 - inspection, 1010
- Universities, Occupancy Classification**, Table 3-2 (G)
- Unsafe conditions, inspections**, 1012
- Uplift**, 672, 694(a)(2)
- Used materials**, 588
- Utilities**, 1013(c)
 - disconnection of, 1013(b)
 - electrical work, 1013(c)
 - essential services, 1013, 1013(b)
 - maintaining, 1013(b)
 - existing, 1013(a)
 - fire prevention facilities, maintaining, 1013(b)
 - notice required, 1013
 - power lines, 1013(c)
 - service lines, 1013(a)

V

Vacating buildings, emergency measures, see article 8-A, Title C, Part I

Valves, control, 947(a)
 bath and shower, P 107.6 (i)(RS 16)
 fuel oil control, 830(h)
 hose outlet, 942(a)
 pressure reducing, 944
 pressure mixing, P107.6(i) (RS-16)

Varnishes, 406

Vehicular traffic control, barricades, 1023(c)
 signs, 1023(c)

Veneer, ceramic, 3.21 (RS 10-1A), 10.14.1 (RS 10-1B)
 masonry, 3.2 (RS 10-1A), 10.14.3 (RS 10-1B)

Ventilating hoods, 884(e)

Ventilating systems, construction, 777(a)
 controlled inspection, 779(a)
 filter maintenance, 782
 installation, 756
 maintenance, Subchapter 13, Art. 3
 operation, 756
 required, 779
 controlled inspection, 779(a)
 equipment use permit, 778
 owner's statement, 779(c)
 tests and inspection requirements, 779
 voluntary, equipment use permit, 780
 fire extinguishing systems, 780(b)
 owner's statement, 780(c)
 test and inspection, 780

Ventilation, 725
 assembly rooms, 765(c)
 auditoria, 765(c)
 automotive repair shops, 446
 bathrooms, 759
 boiler rooms, 424
 classrooms, 765(a)
 coin-operated dry cleaning units, 429
 corridors, 369(j), 761
 crawl spaces, 762
 dipping spaces, 410
 dry cleaning establishments, 428
 emergency, in places of assembly, 546(b)(8)
 equivalent outdoor air, 754(b)(2)
 fixed, incinerator rooms, 838
 furnace rooms, 424
 J-1 buildings, existing, 777.2
 kitchens, 758
 laboratories using radioactive materials, 415(f)
 locker rooms, 760
 lockers, 765(b)
 mechanical, see Mechanical ventilation
 natural, see Natural ventilation
 pantries, 758(c)
 private garages, 478
 projection booths, 543

public garages, 456
 requirements, 776(a)
 restaurant cooking equipment, 777(d)
 rooms with airborne irritants, 766
 rooms with excessive temperatures, 766
 rooms with strong odors, 766
 rooms with toxic substances, 766
 schools, 765
 snack bars, 758(c)
 special occupancies, 767
 special spaces, Subchapter 12, Art. 8
 special uses, 767
 spraying spaces, 410
 storage occupancies, 405
 swimming pools, 491
 toilet rooms, 759
 ventilating systems, 777(a)
 wardrobes, 765(b)
 water closet compartments, 755(c)
Vents, fuel oil tanks, 830(d)
 gas, see Gas vents
 heat, 353
 to outdoor air, 901(p)
 roof, 353
 shaft, 344(d)(e)
 smoke, 353
Vent shaft, 759(a)
Vent stacks, existing, 917
Vent systems, testing methods, 922
Vertical exits, 357
 supplemental, capacity, 374(b)
 construction, 374(c)
 identification, 374(e)
 openings, 374(d)
 travel distance, 360(a)
Vibrating hammers, 700(c)(3)
Vibration isolation, noise control, 770(b)
Viewing devices, dwelling unit doors, 371(j)(2)(b)
Vocational training shops, Occupancy Classification,
 Table 3-2 (D-1)

W

Walkways, barricades, 1021(a)(4)
 capacity, 379(a)
 enclosure, 379(d)
 lighting, 1020, 1021(e)
 temporary, 1021(e)
 lighting 1021 (e)
 warning signs, 1023(b)
Walkways, construction, lighting, 1021(e),(f)
 swimming pools, 489(d)
 temporary, 1021(e)
Walls, Subchapter 11, Art. 6
 equivalent unbraced height, 686(a)
 exterior, 331
 firestopping, 345
 horizontal loads, 579(d)

Index

- party, 332
 - Walls, adjoining, protection of**, 1026(c)
 - exterior, open parking structures, 463
 - foundation, Subchapter 11, Art. 6
 - horizontal loads, 578(d)
 - Wall openings, exterior**, Table 3-5, 331(a)
 - Wall signs**, 292(c), 501, 505(a)
 - Fire Department access, 501(d)
 - Inside Fire Districts, 297(i)
 - supports, 501(c)
 - Wall thickness, unbraced height**, 686(b)(2)
 - Wardrobes, ventilation**, 765(b)
 - Warehouses, marquees**, 313(a)(4)
 - Occupancy Classification, Table 3-2 (B-1)
 - Warning lights**, see Warning signs
 - Warning signs**, 1023
 - dangerous areas, 1023(b)
 - flashing beacons, 1023(a)
 - lighted signs, 1023(a)
 - obstructions and openings, 1023(a)
 - oil flares, 1023(a)
 - red lanterns, 1023(a)
 - red lights, 1023(a)
 - refueling, 1054(c)
 - Wastes, industrial**, 896, 901(h)(2)
 - material removal, 1019(a)
 - special, 896
 - Watchmen**, 1024
 - Water, accumulation, discontinued operations**, 1027(b)
 - city, in air conditioning systems, 777(g)
 - ground, 661(b)
 - potable, identification, 908(b)
 - private supply, 907
 - public supply, 901(e)(2), 906
 - storm, disposal, 901(k)
 - supply requirements, 901(b)
 - well, 901(f)
 - Water-cement ratio, method 1 concrete**, 605(a)(2)
 - method 11 concrete, 605(b)(3)a
 - Water circulation, swimming pools**, 492
 - Water closets, minimum in places of assembly**,
 - subchapter 16, article 8
 - required, 901 (1)
 - Water closet compartments, mechanical ventilation**, 755(c)
 - Water conservation**, 901(c)
 - Water curtain, for stages in places of assembly**, 546(b)(7)b
 - Waterfront property, Occupancy Certificates**, 216
 - Waterproofing, pit**, 819(b)
 - Water spray nozzles, at conveyor openings**, 342(b)
 - Water supply, cross-connection**, 908(a)
 - sprinkler systems, see Sprinkler systems, water supply
 - standpipe systems, see Standpipe system, water supply
 - testing, 922(c)
 - Water tanks**, 338(h)
 - Water towers, Inside Fire Districts**, 297(h)
 - Welding, aluminum**, 627(b)
 - steel, 616(b)
 - Well water**, 901(f)
 - Wheelchairs, building access**, 308, 357(d)
 - Window boarding, demolition operations**, 1036(c)(2)
 - Window hardware**, 371(j)
 - party, fire-resistance rating, 332
 - shear, load distribution, 579(a)
 - stud, 622(a)
 - swimming pools, 489(a)
 - Windows, bay**, 336
 - openable, locks, 371(j)(2)c
 - oriel, 336
 - in shafts, 344(c)
 - stair enclosures, 375(j)
 - Wind loads**, Subchapter 9, Art. 5, 569(a)
 - Wire cable**, 636, 1055(b)
 - fittings, 640
 - protection, 642
 - Wire rope**, 1055(b)
 - loading, 1045(d)
 - Wires, embedment in fire protection**, 324(a)
 - Wood**, Subchapter 10, Art. 7
 - empirical provisions, 622
 - firecutting, 621(a)
 - fire-retardant, see Fire-retardant wood
 - floors, 622(c)
 - identification, 618
 - inspection requirements, Table 10-1, Table 10-2
 - non-stress grade, 619
 - protection of members, 621(b)
 - quality control, 620
 - structural design, Subchapter 10, Art. 7
 - stud walls, 622(a)
 - Wood beams, notches**, 622(c)(3)
 - Wood burning appliances**, 848.08
 - clearances, 848.08(g)
 - location of, 848.08(c)
 - mounting for fireplace stoves and room heaters, 848.08(f)
 - Wood construction**, 624
 - bracing, 622(b)
 - bridging, 622(c)(2)
 - floors, 623(a)(2)
 - lumber and timber construction, RS 10-8
 - nailing schedule, 622(d)
 - plywood construction, RS 10-9
 - sheathing, 622(b)(1)
 - Wood footings**, 684(a)
 - Wood partitions**, 622(a)
 - Work shops**, 546(b)(11)
- X
- X-ray machines**, 416
- Y
- Yard hydrants**, 933
 - required, 933
 - with special equipment, 933(f)
 - Yard main, private**, 945(b)(2)

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