LOCAL LAWS OF THE CITY OF NEW YORK FOR THE YEAR 2008

No. 8

Introduced by Council Members Dilan, Filder, Gonzalez, Stewart and White (by request of the Mayor).

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to technical corrections of the New York city construction codes and repealing paragraph 4 of subdivision a of section 27-2004 of the administrative code of the city of New York, chapter 1 of the New York city plumbing code, sections 302.1.1, 302.1.1.1 302.2, 302.2, 302.2.1, 302.3, 302.3.1, 302.3.2, 302.4, 302.5, 904.11.4, 904.11.4.1, 1626.3 and BC 2902, of the New York city building code, tables 302, 403.1, 720.1 (2), 720.1(3), 721.2.3(2), 1507.2, 2305.3.3, 2306.3.2, 2306.4.5, 2308.12.4 and figures 1609.6.2.2 and 2308.12.6(1) of the New York city building code, section 510.8.2 and table 402.2 of the New York city fuel gas code.

Be it enacted by the Council as follows:

Section 1. Paragraph 4 of subdivision a of section 27-2004 of the administrative code of the city of New York is REPEALED and a new paragraph 4 is added to read as follows:

4. A family is:

(a) A single person occupying a dwelling unit and maintaining a common household with not more than two boarders, roomers or lodgers; or

(b) Two or more persons related by blood, adoption, legal guardianship, marriage or domestic partnership; occupying a dwelling unit and maintaining a common household with not more than two boarders, roomers or lodgers; or

(c) Not more than three unrelated persons occupying a dwelling unit and maintaining a common household; or

(d) Not more than three unrelated persons occupying a dwelling unit in a congregate housing or shared living arrangement and maintaining a common household; or

(e) Members of a group home; or

(f) Foster children placed in accordance with provisions of the New York state social services law, their foster parents, and other persons related to the foster parents by blood, marriage or domestic partnership; where all residents occupy and maintain a common household with not more than two boarders, roomers or lodgers; or

(g) Up to seven unrelated students enrolled at a single accredited college or university occupying a student apartment, as such term is defined in the New York city building code, and maintaining a common household pursuant to a lease, sublease, or occupancy agreement directly with such college or university, provided that:

(i) The entire structure in which the dwelling unit is located is fully sprinklered in accordance with chapter 9 of the New York city building code; and

(ii) Such occupancy does not exceed the maximums contained in subdivision a of section 27-2075; and

(iii) Prior to commencement of such occupancy, and on an annual basis thereafter such college or university has submitted a fire safety plan containing fire safety and evacuation procedures for such dwelling unit that is acceptable to the fire commissioner and in compliance with any rules promulgated by the fire commissioner; and

(iv) The dwelling unit complies with additional occupancy and construction requirements as may be established by rule by the department of housing preservation and development or its successor.

A common household is deemed to exist if every member of the family has access to all parts of the dwelling unit. Lack of access to all parts of the dwelling unit establishes a rebuttable presumption that no common household exists.

§ 2. Section 28-101.3 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-101.3 Codes. Any reference in this title to "this code" or "the code" shall be deemed to be a reference to this title and all of the codes comprising the New York city construction codes unless the context or subject matter requires otherwise. *Whenever a section or subsection of this code is cited or referred to, subordinate consecutively numbered sections and subsections of the cited provision are deemed to be included in such reference unless the context or subject matter requires otherwise.*

§ 3. Section 28-101.5 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding the definition of "MAIN USE OR DOMINANT OCCUPANCY (OF A BUILDING)" following in alphabetical order the definition of "LIMITED STANDPIPE ALTERATIONS" to read as follows:

MAIN USE OR DOMINANT OCCUPANCY (OF A BUILDING). Refers to a single occupancy classification assigned to a structure by the department according to such structure's main use or dominant occupancy.

§ 4. The administrative code of the city of New York is amended by adding a new section 28-102.7 to read as follows:

§28-102.7 References in other laws. References to provisions of the building code of the city of New York or to chapter 1 of title 27 of the administrative code in other laws shall_be deemed to refer to equivalent provisions of the 1968 building code or the New York city construction codes as the context in which such references appear may require.

§ 5. Section 28-103.4 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

28-103.4 Appeals. An appeal from any decision or interpretation of the commissioner may be taken to the board of standards and appeals pursuant to the procedures of the board, except as provided in section 25-20[5]4 of the administrative code or as otherwise provided in this code.

§ 6. The administrative code of the city of New York is amended by adding a new section 28-103.20 to read as follows:

§28-103.20 Existing rules continued. Rules promulgated by the department in accordance with the law in effect prior to the effective date of this code shall remain in effect for the matters covered to the extent that such rules are not inconsistent with this code unless and until such rules are amended or repealed by the department.

§ 7. Section 28-104.2.1.3.2.2 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is renumbered to be section 28-104.2.1.3.2.3 and a new section 28-104.2.1.3.2.2 is added to read as follows:

§28-104.2.1.3.2.2 Mandatory permanent revocation. The commissioner shall permanently revoke, without the opportunity of restoration, the professional certification privileges of an engineer or architect who, while on probation, professionally certifies an application, plans, construction documents 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.

§ 8. Section 28-104.2.1.4 of the administrative code of city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-104.2.1.4 Database. The department shall create and maintain a database of all registered design professionals who have been excluded, suspended or otherwise sanctioned by the department. Within 7 business days of the date a sanction is imposed, the department shall post on its website and shall make available upon request, the name of the registered design professional, a description of the sanction, the initial date of the sanction, the reinstatement date, if applicable, the address of the premises for which the application associated with the sanction was submitted, and whether the sanction was imposed after a hearing or a settlement. *The department shall provide requested information concerning the exclusion, suspension or other sanction of a specific registered design professional within 30 days of such request.*

§ 9. The administrative code of the city of New York is amended by adding a new section 28-104.6.1 to read as follows:

§28-104.6.1 Verification of professional qualification required.. The department shall not accept construction documents or other documents submitted in connection with applications for construction document approval or work permits under this code by any person representing that he or she is an architect or 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 engineer in New York state.

§ 10. Section 28-104.7.10 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-104.7.10 Preparer. Each plan or drawing shall contain the [registration] *license* number, seal, signature (or equivalent as approved by the commissioner) and address of the registered design professional who prepared or supervised the preparation of the plans.

§ 11. The administrative code of the city of New York is amended by adding a new section 28-105.1.1 to read as follows:

§28-105.1.1 Notification to fire department. The commissioner, in consultation with the fire commissioner, shall establish a procedure for notifying 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 or occupancy of the premises. In no instance shall the required notice be given to the fire department more than one business day after the date of the issuance of the permit.

§ 12. The administrative code of the city of New York is amended by adding a new section 28-105.12.7.1 to read as follows:

§28-105.12.7.1 Insurance coverage for adjacent properties. A person who obtains a permit for construction or demolition operations shall, at such person's 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 owners and their lawful 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 the proposed work. Such person shall submit proof of insurance to the department when applying for a permit for construction or demolition work.

§ 13. Table 28-112.2 of chapter 1 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Table 28-112.2

Permit Type		Initial Fee	Renewal	Comments
Nei	w Ruildings		ree	
Nev two	w building work permit: One-, - or three-family dwelling	\$0.12 for each square foot, or fraction thereof, of the total floor area of the new building, but not less than \$100 for each structure	\$100.	
	Subsequent applications related to initial new building work permit application, including but not limited to elevators, filed prior to the first temporary certificate of occupancy (TCO), or the final certificate of occupancy if no TCO is issued	\$100. Each	\$100. Each	
	New building work permit: Garage for not more than three cars when accessory to and filed with plans for one-, two- or three-family dwelling to which it is accessory on the same lot	\$100.	\$100.	
New building work permit: All other new buildings		\$0.26 for each square foot, or fraction thereof, of the total floor area of the new building, but not less than \$100 for each structure annually.	\$100 annually.	
	Subsequent applications related to initial new building work permit application, including but not limited to elevators, filed prior to the first temporary certificate of occupancy (TCO), or the final certificate of occupancy if no TCO is issued	\$100 each annually.	\$100 annually.	
Alte	erations			
Alt	eration work permit: One-, two- or three-family dwelling.	\$100 for the first five thousand dollars, or fraction thereof, of the cost of alteration, excluding the cost for the installation or alteration of any plumbing or plumbing system	\$100 annually.	
	Permit to install and/or alter plumbing, plumbing system and/or fire suppression piping system in existing building: One- , two- or three-family dwelling.	or fire suppression piping system; not less than \$100 annually for subsequent years; plus \$5.15 for each one thousand dollars, or fraction thereof, of cost of alterations in excess of five thousand dollars.		
Alt	eration work permit:	\$100 for the first three thousand dollars or fraction thereof of the	\$100 annually	

Alterations in all other buildings and structures, including but not limited to aerial towers and masts, tank structures, fire escapes, etc., which are unoccupied and not easily valued by area;	cost of alteration not including the cost of the installation or alteration of any plumbing or plumbing system or fire suppression piping system; not less than \$100 annually for subsequent years; plus \$20 for each one thousand dollars,		
□ Applications related to new building work permit application, filed after the first temporary certificate of occupancy (TCO), or the final certificate of occupancy if no TCO is issued.	or fraction thereof, of the next two thousand dollars of such cost; plus \$10.30 for each one thousand dollars, or fraction thereof, of the alteration cost in excess of five thousand dollars.		
Installation or alteration of elevators, escalators, amusement devices and other devices regulated under this code, except those filed under a new building application.			
Permit to install and/or alter plumbing, plumbing system and/or fire suppression piping system in existing building: All buildings other than one-, two- or three-family dwelling.			
Permit to install or alter service equipment except plumbing and fire	Fee calculated as for respective building alteration.	\$100.	
suppression piping service equipment. Permit to install, alter or replace 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 building with a primary Business Group B. occupancy.	\$100.	\$100.	
□ In all other conditions.			
	\$50.	\$100.	
Other			

Permit for foundation, earthwork or open space 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.	\$10 for each two thousand square feet of area or fraction thereof, but not less than \$100.	\$100.	
Permit for golf driving range.	\$7.50 for each twenty thousand square feet of area or fraction thereof, but not less than \$100.	\$100.	
Accessory building to golf driving range, not to exceed one hundred forty-four square feet.	\$100.	\$100	
Permit for demolition and removal.	Multiply street frontage in feet or fraction thereof x number of stories of the building x \$2.60, but not less than \$260. For corner lot, use the longer street frontage.	\$100.	
Asbestos permits:			
 Permit for the performance of an asbestos project 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. Application for plan approval or permit 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 greater of \$100 or the fees		Specific fee to be established by the commissioner of environmental protection. Terms "asbestos project," "asbestos inspection report" and "asbestos removal plan" shall have the meanings ascribed in Section 24-146.1 of the administrative code.
to existing applications	for the additional scope or cost of work as calculated pursuant to this Table 28-112.2.		
Scaffold filing fee	\$100.		
Scaffold permit	\$30.		
Permit to erect, install or alter sign: Ground sign.	Basic fee calculated as for building alteration; plus \$5 for each one hundred square feet of surface area, or fraction thereof; but not less than \$35.	\$100.	Each face of any sign, when fronting on different streets, shall be treated as a separate sign.
Permit to erect, install or alter sign: Roof sign having a tight, closed or solid surface.	Basic fee calculated as for building alteration; plus \$15 for each one hundred square feet of surface area, or fraction thereof; but not less than \$70.	\$100.	Each face of any sign, when fronting on different streets, shall be treated as a separate sign.
Permit to erect, install or alter sign:	Basic tee calculated as for building	\$100.	Each tace of any sign, when fronting on

Roof sign without a tight, closed or solid surface, extending to a height of not more than thirty-one feet above roof level.	alteration; plus \$15 for each one hundred square feet of surface area, or fraction thereof, but not less than \$100.		different streets, shall be treated as a separate sign.
Permit to erect, install or alter sign: Roof sign without a tight, closed or solid surface, extending to a height over thirty-one feet above roof level.	Basic fee calculated as for building alteration; plus \$25 for each one hundred square feet of area, or fraction thereof, but not less than \$135.	\$100.	Each face of any sign, when fronting on different streets, shall be treated as a separate sign.
Permit to erect, install or alter sign: Illuminated sign projecting beyond street line having thirty square feet or less on one side.	Basic fee calculated as for building alteration.	\$100.	Illuminated sign is subject to annual use fee: \$45.
Permit to erect, install or alter sign: Illuminated sign projecting beyond street line having more than thirty square feet but no more than fifty square feet on one side.	Basic fee calculated as for building alteration.	\$100.	Illuminated sign is subject to annual use fee: \$70.
Permit to erect, install or alter sign: Illuminated sign projecting beyond street line and having more than fifty square feet on one side	Basic fee calculated as for building alteration.	\$100.	Illuminated sign is subject to annual use fee: \$0.75 for each square foot or part thereof annually, but not less than \$100.
Maintenance permit for outdoor signs.	As provided by rule.		
Temporary Structures			
Permit for temporary shed, fence, railing, footbridge, catch platform, building sidewalk shanty, over-the- sidewalk chute.	\$130 for each permit.	\$100.	
Sidewalk shed.	\$130 for the first twenty-five feet or fraction thereof in the length of the shed; plus\$10 for each additional twenty- five feet or fraction thereof.	\$100.	
Permit for temporary structure other than those listed above, including but not limited to tents, grandstands, stages.	\$100 for the first one thousand square feet or fraction thereof; plus \$0.10 for each square foot or fraction thereof in excess of one thousand square feet.	\$100.	
Reinstatement of			
Application/permit reinstatement fees:			
Prior to first permit.	Full fee at the rate in effect on the date of reinstatement.		
 Following first permit issuance but prior to commencing work. 	Full fee at the rate in effect on the date of reinstatement.		
Following first permit, with work partially complete.	Based upon the full fee at the rate in effect on the date of reinstatement, the percentage of the fee equal to the percentage of work remaining as determined by		

the department inspector, plus the renewal fee.		
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§ 14. Table 28-112.7.2 of chapter 1 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Table 28-112.7.2

Inspection Type	Initial Fee	Renewal Fee	Comments
Filing fee for report of critical examination of exterior walls and appurtenances thereof.	As provided by rule.	100	
□ Filing fee for periodic boiler inspection report.	\$30 for each boiler.		
Equipment inspection fee:	\$65 for each inspection, for each boiler.		
 High-pressure boiler periodically inspected as provided by section [28-116.4.] 28-303.10 Reinspection fee following a 	As provided by rule.		
violation.			
 Filing fee for report of periodic inspection of elevator and other devices. 	\$30 for each device.		
 Equipment inspection fee: Each elevator or other device regulated by this code. 	\$65 for each inspection, for each device.		

§ 15. Table 28-112.8 of chapter 1 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Table 28-112.8

Item Description	Fee	Comments
Acknowledgement.	As provided by rule.	
Accelerated plan review.	In accordance with rules promulgated by the	
	commissioner.	
Accelerated inspection.	As provided by rule.	
Certificate of occupancy.	As provided by rule.	
Accelerated certificate of occupancy request.	As provided by rule.	
Application for temporary certificate of	\$100.	\$100 renewal.
occupancy.		
Place of assembly certificate of operation.	[\$100.] <i>\$200</i> .	\$100 renewal.
Reinspection made necessary by a failure to	As provided by rule	
correct a condition or respond to a request to		
correct that results in issuance of a violation or		
other order		
Temporary place of assembly certificate of	\$100.	\$100 renewal.
operation.		
Temporary use letter for temporary structure.	\$100.	
Temporary use letter for place of assembly.	\$250.	Application shall be
		submitted at least ten
		work days prior to
		the event; late fees

		shall be imposed at \$100 for each day following required submission date that the application is received by the department.
Ordinary plumbing work.	\$100 for each report.	
Limited plumbing alteration.	Same as for alteration.	
Limited sprinkler and/or standpipe alteration.	Same as for alteration.	
Approval or acceptance of materials, assemblies and equipment		
Application for approval of materials	\$600.	
Application for amendment of prior approval of materials	\$500.	
Application for change of identification (change of ownership, corporate name or name of product) of prior approval.	\$350.	
Application for approval of materials Evaluated by an approved testing agency.	\$200.	
Other fees		
Certificate of pending violation: Multiple and private dwellings.	As provided by rule.	
Certificate of pending violation: All other buildings.	As provided by rule.	
Certified copy of license.	As provided by rule.	
Microfilming of applications for new buildings and alterations and associated documentation for certificates of occupancy, temporary certificates of occupancy and/or letters of completion, as required by rule of the commissioner.	As provided by rule.	
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.	As provided by rule.	
Half-size print from microfilm of a plan thirty-six by forty-eight inches or less. [Additional copies.]	As provided by rule.	
Half-size print from microfilm of a plan exceeding thirty-six by forty-eight inches.	As provided by rule.	
Notification of use or installation of a	\$35	
outrigger beams		
Issuance of a core certificate of completion, which indicates completion of the building structure, the elevator systems, stairs, and all fire safety systems	\$100.	
Each inspection of a temporary amusement device	\$100.	
<i>Issuance of letter of no objection to or classification of a specified occupancy of a premises, as follows:</i>		

	1, 2, or 3 family homes All other premises	\$25. \$100.	
	F F F F		
Fees for	r after-hours work variances.		
	<i>The initial application fee for an<u>after</u>-hours variance</i>	\$100.	
	<i>The renewal application fee for an after-hours variance</i>	\$100.	
	For each day for which such variance is granted or renewed	\$80.	
Applica	tion for approved agency approval	As provided by rule.	
Applica	tion for special inspector authorization	As provided by rule.	

§ 16. Section 28-116.2.3 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-116.2.3 Special inspections and other inspections required during the progress of work. After the issuance of a work permit, special inspections and other inspections required by this code to be made during the progress of the work shall be made at such times or at such stages of the work and in such manner as shall be provided by this code or as otherwise required by the commissioner. The permit application shall set forth an inspection program for the job. Such inspections may be made by approved agencies or by the department as provided in this code or in the rules of the department. Special inspections shall be performed only by individuals who are special inspectors. The permit holder shall notify the relevant special inspectors in writing at least 72 hours prior to the commencement of any work requiring special inspection. The commissioner may accept inspection and test reports from approved agencies and special inspectors and the work may, unless otherwise specifically provided by code provisions or directed by the commissioner, proceed without any verifying inspection or test by the department. The names and business addresses of special inspectors and approved agencies shall be set forth in the work permit application. All inspection reports shall be in writing and signed by the person or entity performing the inspection. A record of all inspections shall be kept by the person performing the inspection. The commissioner may require inspection reports to be filed with the department. Records of inspections made by approved agencies and special inspectors shall be maintained by such persons for a period of six years after sign-off of the job or for such other period of time as the commissioner may require and shall be made available to the department upon request.

§ 17. The administrative code of the city of New York is amended by adding new sections 28-117.4, 28-117.4.1, 28-117.4.2, 28-117.4.3 and 28-117.4.4 to read as follows:

§28-117.4 Security guards. In the case of a certificate holder that offers for sale food and/or beverages for onpremises 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 of the general business law, such certificate holder 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. §28-117.4.1 Presumption. 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 is a security guard if his or her 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 patrons of such place of assembly.

§28-117.4.1.1 Presumption not applicable to owner. The rebuttable presumption in section 28-117.4.1 shall not apply to an individual who is an owner of the establishment as described in section 28-117.4 that has received a place of assembly certificate of operation.

§28-117.4.2 Responsibility for violations. Notwithstanding any provision of this section, only the holder of a certificate of operation shall be liable for violations of this article that relate to such holder's obligations regarding security guards.

§28-117.4.3 Enforcement. 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 article regarding security guards.

§28-117.4.4 State liquor authority reporting. The enforcement agency shall report any violation of the provisions of this section relating to security guards to the state liquor authority if the holder of the certificate of operation holds a license pursuant to the alcoholic beverage control law.

§ 18. Section 28-201.2.1 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding new items 12 and 13 to read as follows:

- 12. A violation by a licensed rigger or person performing the functions and duties of a licensed rigger of the provisions of sections 28-404.1 or 28-401.9 of this code or such person's failure to ensure that workers have certificates of fitness required pursuant to this code or applicable rule or any person's violation of the provisions of section 3314.10 of the New York city building code.
- 13. A violation of any provision of chapter 4 of this title for engaging in any business or occupation without a required license or other authorization.

§ 19. Section 28-201.2.2 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new item 3 to read as follows:

3. Failure to provide the notice required by section 3314.1.1. of the New York city building code.

§ 20. The administrative code of the city of New York is amended by adding a new section 28-207.2.4 to read as follows:

§ 28-207.2.4 Mandatory stop work orders. The commissioner shall issue stop work orders in the circumstances set forth below. Upon issuance of such stop work order, the work shall immediately stop and shall not resume until the stop work order is rescinded by the department. The stop work order shall not be rescinded less than two business days after the date of issuance of such order. Nothing in the following sections shall be construed to limit the commissioner's power to issue stop work orders in other circumstances.

§ 28-207.2.4.1 Scaffold safety. A stop work order shall be issued if a permit holder or person directly in charge of any suspended scaffold supported by c-hooks or outrigger beams fails to notify the department prior to the installation or use of such equipment as required by section 3314.1.1 of the New York city Building code and either:

- 1. The rigger does not hold a license required by this code, or
- 2. The workers lack certificates of fitness as required by this code or applicable rule, or
- 3. The rigger failed to file with the department satisfactory evidence of insurance required by this code.

§ 21. The administrative code of the city of New York is amended by adding a new section 28-211.1.2 to read as follows:

§28-211.1.2 Additional penalty for false statements. In addition to any other penalty provided by law, the commissioner may refuse to accept an application or other document submitted pursuant to or in satisfaction of a requirement of this code or of a rule of any agency promulgated thereunder that bears the signature of a person who has been found, after a hearing at the office of administrative trials and hearings pursuant to the 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 code or of a rule of any agency promulgated thereunder.

§ 22. Section 28-304.2 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-304.2 Elevators, escalators, moving walkways, *material lifts, vertical reciprocating conveyors (VRC)* and dumbwaiters. Elevators, escalators, moving walkways, *material_lifts, VRC's* and dumbwaiters shall be inspected and tested in accordance with the schedule set forth in Table N1 of ASME 17.1 as referenced in chapter 35 and as may be modified in chapter 30 and appendix K of the New York city building code.

Exception: Elevators located in owner-occupied one-family, two-family or multiple-family dwellings that service only the owner-occupied dwelling unit and that are not occupied by boarders, roomers or lodgers, and elevators located within convents and rectories that are not open to non-occupants on a regular basis are not subject to periodic [test] *inspection* requirements of such reference standard.

§ 23. Section 28-401.3 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding the definition of "GENERAL CONTRACTOR" to follow in alphabetical order the definition of "FIRE SUPPRESSION PIPING SYSTEM" to read as follows:

GENERAL CONTRACTOR. An individual, corporation, partnership or other business entity that applies for a permit pursuant to this code to construct a new residential structure containing no more than three dwelling units. The term "general contractor" shall not be construed to include an individual, corporation, partnership or other business entity that holds a license pursuant to this code or subchapter twenty-two of chapter two of title twenty of the administrative code, and enters into a contract to perform work exclusively within the scope of such 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.

§ 24. Section 28-401.4 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-401.4 Requirement of license. It shall be unlawful for any person to engage in or carry on in the city any business, trade or occupation regulated by this chapter *or to hold himself or herself out as authorized to engage in or carry on such activity*, without having first obtained a license from the commissioner in accordance with and subject to the provisions of this chapter and the rules of the department. A license issued by the department for any such business, trade or occupation prior to the effective date of this code, shall 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. Any renewal of such license shall be in accordance with the provisions of this code.

§ 25. Section 28-401.15 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

§28-401.15 Schedule of fees.

License Type	Initial	Renewal Fee	Additional Fees
	ree	ф150 / ¹ 11	
Master rigger license.	\$200.	\$150 triennially.	Late-renewal fee. \$50.
	¢100	φ 7 77 () 11	Keissuance fee: \$50.
Special rigger license.	\$100.	\$75 triennially.	Late-renewal fee \$50.
	ф150	¢1.70 / ```11	Reissuance fee: \$50.
Basic hoisting machine operator license (Class	\$150.	\$150 triennially.	Late-renewal fee \$50.
	\$2 00	ф150 / ¹ 11	Reissuance fee: \$50.
Basic hoisting machine operator license with	\$200.	\$150 triennially.	Late-renewal fee \$50.
endorsement to operate hoisting machinery			Reissuance fee: \$50.
without limitation or restriction (Class B).	¢100	Φ 7 5 (Ι
Special hoisting machine operator license	\$100.	\$75 triennially.	Late-renewal fee \$50.
(Class C).	¢100	φ 7 7 11	Keissuance fee: \$50.
Concrete testing laboratory license.	\$100.	\$75 annually.	Late-renewal fee. \$50.
XX7 1 1 1'		Φ 4.5 · · · 11	Reissuance fee: \$50.
welder license.	\$50.	\$45 triennially.	Late-renewal fee. \$50.
	\$2 00	ф150 / ¹ 11	Reissuance fee: \$50.
Master plumber license (certificate of	\$200.	\$150 triennially.	Late-renewal fees:
competence).			Up to 30 days late, 50 ;
			From 31 days to five years late, \$100 for
			each year or part thereof.
Maatan alumban liaanaa alata	¢75	\$100 triongially	Reissuance iee: \$50.
Master plumber license plate.	\$/3.	\$100 triennially.	Replacement lee upon loss of plate,
Maatan alumban liaanaa aaal	\$50	\$75 triongially	W/allidavit: \$100.
Master plumber license seal.	\$30.	\$75 trienniany.	keplacement lee upon loss of seal,
	¢50		W/amdavit: \$/5.
Journeyman plumber registration.	\$200	¢150 (```11	No renewal, no reissuance.
Master fire suppression piping contractor	\$200.	\$150 triennially.	Late-renewal lees:
(class A, B of C) license (certificate of			Up to 50 days fate, $$50$, From 21 days to five years late \$100 for
competence).			FIGHT ST days to five years rate, \$100 for
			Reissuance fee: \$50
Master fire suppression piping contractor (class A B	\$75	\$100 triennially	Replacement fee upon loss of plate
or () license plate	ψ15.	\$100 thennany.	w/affidavit: \$100
Master fire suppression piping contractor (class A B	\$50	\$75 triennially	Replacement fee upon loss of seal
or C) license seal	Φ50.	\$75 theminany.	w/affidavit: \$75
Journeyman fire suppression piping	\$50		No renewal no reissuance
[contractor] <i>installer</i> registration	ψ50		i to renewal, no reissuance.
Oil-burning equipment installer License (class	\$100	\$75 triennially	Late-renewal fee \$50
A or B)	φ100.	¢,5 inclinally.	Reissuance fee: \$50
High-pressure boiler operating engineer	\$50	\$45 triennially	Late-renewal fee \$50
license	ψ50.	\$ 15 theminuny.	Reissuance fee: \$50
Portable high-pressure boiler operating	\$50	\$45 triennially	Renewal fee includes renewal fee for a
engineer license	ψ50.	\$ 15 themany.	hoisting machine operator license
			Late-renewal fee \$50
			Reissuance fee: \$50.
Master sign hanger license.	\$100	\$75 triennially	Late-renewal fee \$50
	+	<i></i>	Reissuance fee: \$50.
Special sign hanger license.	\$100	\$75 triennially	Late-renewal fee \$50.
1 - 0 - 0			Reissuance fee: \$50.

Outdoor advertising company registration.	As	As provided by	As provided by dept rules.
	provide	dept rules.	
	d by		
	dept		
	rules		
Filing representative registration.	\$50	\$[25] <i>50</i>	Late-renewal fee \$50.
		annually.	Reissuance fee: \$50.
Reinstatement of expired license, certificate of	Same as		\$100 for each year or part thereof from
competence or certification without	initial		date of expiration.
examination, if approved by commissioner, in	license		-
addition to applicable renewal fees.			
Site safety coordinator certificate	\$100	\$50	Late-renewal fee \$50.
Site safety manager certificate	\$300	\$150	Late-renewal fee \$50.
General contractor registration	\$200	\$160 biennially	Late-renewal fee \$160.
Č Č			, view of the second se
Tower crane rigger license.	\$150	\$50 triennially	Late-renewal fee \$20.

§ 26. Section 28-401.19 of the administrative code of the city of New York is amended by adding a new item 15 to read as follows:

- 15. With respect to general contractor registration, upon a finding that the applicant or registrant or a business entity in which one of the applicant's or registrant's principals, officers or directors is a principal, officer or director has engaged in any of the acts set forth in items 1 through 14 or any of the following:
 - 15.1. Fraud, misrepresentation or bribery in securing a sign-off of work or a temporary or permanent certificate of occupancy.
- 15.2. 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.
- 15.3. 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.
- 15.4. 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.
- 15.5. The applicant or registrant, or any of its principals, officers or directors has been or is a principal, officer or director of a registered general contractor whose registration has been revoked.

§ 27. The administrative code of the city of new York is amended by adding a new section 28-401.19.4 to read as follows:

§28-401.19.4 Mandatory suspension or revocation. The commissioner shall immediately suspend or revoke a license issued pursuant to this code as set forth below. Nothing in the following sections shall be construed to limit the commissioner's power to revoke or suspend licenses in other circumstances.

§28-401.19.4.1 Rigger license. Any licensed rigger who has been found guilty after proceedings before the environmental control board or other adjudicative proceedings of violating section 28-404.1 or 28-404.9 of the administrative code or section 3314.10 of the New York city building code, or of failing to insure that workers have certificates of fitness required pursuant to this code or applicable rule 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 this code.

§28-401.19.4.2 General contractor registration. 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 provisions of this code relating to a stop work order, public health or safety, structural integrity, building in compliance with approved construction documents 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.

§ 28. Chapter 4 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding new articles 418 and 419 to read as follows:

ARTICLE 418 GENERAL CONTRACTOR REGISTRATION

§28-418.1 Requirement of registration. On and after November 1, 2008 it shall be unlawful for a person to conduct business as a general contractor unless such person holds a general contractor registration in accordance with the provisions of this article.

§28-418.1.1 Expiration of registration. A general contractor 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 evenly over the course of a year.

§28-418.2 Unlawful use of general contractor title. On and after November 1, 2008 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.

§28-418.3 Application requirements. An application for a general contractor registration or renewal 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:
 - 2.1. The corporate name, address and telephone number of the applicant's principal office or place of business;
 - 2.2. The date and state of incorporation;
 - 2.3. 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;
 - 2.4. Proof that the corporation is in good standing under the laws of the state of New York;
- 3. If the applicant is a partnership:
 - 3.1. The name, address and telephone number of the applicant's principal office or place of business;

- 3.2. The name, residence address and residence telephone number of all partners;
- 4. The registration fee;
- 5. *A verified statement that 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 28-401.9;
- 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 this code or any rule adopted thereunder;
- 10. Any other information that the commissioner may require.

§28-418.3.1 Financial solvency. For the purposes of this article, financial solvency shall mean that the applicant's operating capital shall exceed twenty-five thousand dollars.

§28-418.4 Warranties. 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.

§28-418.4.1 Modification prohibited. 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.

§28-418.5 Duties and responsibilities. The general contractor shall comply with sections 28-418.5.1 through 28-418.5.3.

§28-418.5.1 Subcontractor information. The general contractor shall be responsible for providing information to the department about his or her subcontractors and the particular work they perform on jobs for which the department has issued permits to the general contractor. Such information shall be provided in a format and at the times specified in the rules of the department.

§28-418.5.2 Technical reports. 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.

§28-418.5.3 Notice of pending disciplinary actions. The general contractor shall notify all of its suppliers of any pending suspension or revocation actions against such general contractor and shall provide an affidavit to the department stating that this notification has been made.

§28-418.6 Posting of disciplinary actions. The names of all general contractors whose registration was suspended or revoked after an OATH decision shall be posted on the department's website.

ARTICLE 419 SEIZURE AND FORFEITURE

§28-419.1 General. On and after November 1, 2008 vehicles and tools used in connection with unlicensed or unregistered activity at the work site of a new residential structure containing no more than three dwelling units shall be subject to seizure and forfeiture.

§28-419.2 Definitions. For purposes of this article, the following terms shall have the following meanings.

- 1. 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. 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. 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.

§28-419.3 Seizure procedure. The following provisions shall govern seizure of vehicles and tools pursuant to this article.

§28-419.3.1 Seizure. Any police officer or authorized officer or authorized employee of the department may seize any vehicle and any tools contained therein that 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 section shall be delivered into the custody of the department or other appropriate agency.

§28-419.3.2 Written demand. 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.

§28-419.3.3 Claimant. 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.

§28-419.3.4 Determination. The OATH judge shall issue a determination within five business days after the conclusion of the hearing.

§28-419.3.5 Return pending hearing. 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.

§28-419.3.6 Return without hearing. 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 such owner or operator:

- 1. Establishes that the vehicle and/or tools were seized in error, or
- 2. Immediately applies for licensure or registration pursuant to the applicable provisions of this code and pays an amount not to exceed removal and storage fees and any fines or penalties that could have been imposed under the provisions of this code.

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.

§28-419.4 Abandoned property. Any vehicle and/or tools for which a written demand for return of the vehicle and/or tools or for a hearing pursuant to section 28-419.3.2 has not been made within thirty days of service of the notice of violation on the operator of the vehicle and/or tools or within thirty days of service of the notice of violation on the owner of the vehicle and/or tools if the owner is not the operator of the vehicle and/or tools shall be deemed abandoned and shall be disposed of by the department pursuant to applicable law.

§28-419.5 Combined hearings. The department may choose to have the underlying violation adjudicated before the office of administrative trials and hearings in accordance with sections 28- 419.5.1 through 28- 419.5.3.

§28-419.5.1 Combined hearing and determination. Upon notice to the respondent, the department may choose to have the violation underlying the seizure returnable to and heard at OATH and may combine the hearing on the underlying violation with the hearing for the return of the seized property. At such combined hearing the OATH judge shall make a determination as to both and may impose any penalty that could be imposed in a proceeding before the environmental control board for the underlying violation. The OATH judge shall issue a determination within five business days after the conclusion of the hearing.

§28-419.5.2 Release following finding of no violaiton. 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.

§28-419.5.3 Release following finding of violation. 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.

§28-419.6 Separate hearings. 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.

§28-419.7 Forfeiture procedure. The following provisions shall govern forfeiture of vehicles and tools pursuant to this article.

§28-419.7.1 Commencement of forfeiture. A forfeiture action pursuant to this article 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. Except as otherwise provided in this article, 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.

§28-419.7.2 Notice of forfeiture. 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.

§28-419.7.3 Security interest. 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.

§28-419.7.4 Forfeiture subject to security interest. Forfeiture shall be made subject to the interest of a person who claims an interest in the vehicle or tools, where such person establishes that:

- 1. 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
- 2. 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.

§28-419.7.5 Disposition. 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.

§28-419.7.6 Amount of award. In any forfeiture action commenced pursuant to this article, 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.

§ 29. The title of chapter 5 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

[SPECIAL PROVISIONS RELATING TO REGULATION OF OUTDOOR SIGNS] *MISCELLANEOUS PROVISIONS*

§ 30. Chapter 1 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is REPEALED and a new chapter 1 is added to read as follows:

CHAPTER 1 ADMINISTRATION

SECTION PC 101 GENERAL

101.1 Title. This code shall be known and may be cited as the "New York City Plumbing Code," "NYCPC" or "PC". All section numbers in this code shall be deemed to be preceded by the designation "PC".

101.2 Scope. The provisions of this code shall apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use or maintenance of plumbing systems. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel_gas-fired water heaters, and water heater venting systems shall be regulated by the New York City Fuel Gas Code.

101.3 Intent. The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing systems.

101.4 Severability. If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

SECTION PC 102 APPLICABILITY

102.1 General. The provisions of this code shall apply to all matters affecting or relating to structures and premises, as set forth in Section 101. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

102.2 Existing installations. Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by such plumbing system.

102.2.1 Existing buildings. Additions, alterations, renovations or repairs related to building or structural issues shall be governed by Chapter 1 of Title 28 of the Administrative Code, the New York City Building Code and the 1968 Building Code, as applicable.

102.3 Maintenance. Installations, both existing and new, and parts thereof shall be maintained in proper operating condition in accordance with the original design and in a safe and sanitary condition. Devices or safeguards that are required by this code shall be maintained in compliance with the applicable provisions under which they were installed. The owner or the owner's designated agent shall be responsible for maintenance of plumbing systems. To determine compliance with this provision, the commissioner shall have the authority to require any plumbing system to be inspected.

102.4 Additions, alterations or repairs. Additions, alterations, renovations or repairs to installations shall conform to that required for new installations without requiring the existing installation to comply with all of the requirements of this code. Additions, alterations or repairs shall not cause an existing installation to become unsafe, hazardous or overloaded. Minor additions, alterations, renovations and repairs to existing installations for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is approved.

102.5 Change in occupancy. Refer to Chapter 1 of Title 28 of the Administrative Code.

102.6 Reserved.

102.7 Reserved.

102.8 Referenced standards. The standards referenced in this code shall be those that are listed in Chapter 13 and such standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Refer to Article 103 of Chapter 1 of Title 28 of the Administrative Code for additional provisions relating to referenced standards.

102.9 Requirements not covered by code. Requirements necessary for the strength, stability or proper operation of an existing or proposed plumbing system, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the commissioner.

SECTION PC 103 DEPARTMENT OF BUILDINGS

103.1 Enforcement agency. Refer to the New York City Charter and Chapter 1 of Title 28 of the Administrative Code.

SECTION PC 104 DUTIES AND POWERS OF THE COMMISSIONER OF BUILDINGS

104.1 General. The commissioner shall have the authority to render interpretations and to adopt rules establishing policies, and procedures to clarify and implement the provisions of this code. Such interpretations and rules shall be in compliance with the intent and purpose of this code. See the New York City Charter and Chapter 1 of Title 28 of the Administrative Code for additional provisions relating to the authority of the Commissioner of Buildings.

104.2 Remedies for non-functioning storm water disposal systems. If the commissioner determines that a system of storm water disposal which has been previously approved under the provisions of this code or of previous codes is no longer providing adequate drainage of storm water from a lot or development, the commissioner shall order repair of such system as required by section 28-301.1 of the Administrative Code; or if, in the judgment of the commissioner, repair of such system is not sufficient to ensure adequate drainage of storm water from such lot or development, the commissioner shall order that one of the methods of storm water disposal set forth in Chapter 11 shall be used to provide such drainage. The commissioner may apply to the Board of Standards and Appeals for modification of the certificate of occupancy of any building constructed on_such lot or development to require the use of such method.

SECTION PC 105 PERMITS

105.1 General. Permits shall comply with this section, with Article 105 of Chapter 1 of Title 28 of the Administrative Code, and with requirements found elsewhere in this code.

105.2 Required. Any owner or authorized agent who intends to construct, add to, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, add to, alter, repair, remove, convert or replace any gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application for construction document approval in accordance with Chapter 1 of Title 28 of the Administrative Code and this chapter and obtain the required permit.

105.3 Work exempt from permit. Exemptions from permit requirements of this code as authorized in Chapter 1 of Title 28 of the Administrative Code and the rules of the department shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or rules.

105.4 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other law. Permits presuming to give authority to violate or cancel the provisions of this code or other law shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the commissioner from requiring the correction of errors in the construction documents and other data. The commissioner is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other law.

105.5 Mandatory sewer and catch basin work required by Section 24-526 of the Administrative Code. An applicant for a permit who is required pursuant to Section 24-526 of the Administrative Code to construct or repair defects in sewers or catch basins that lie outside the property shall submit certification from the Department of Environmental Protection in accordance with Section 105.9 of the New York City Building Code.

105.6 Other permits. In addition to any permits required by the provisions of this code, the following permits shall also be required:

- 1. Permits for all water supplies and backflow devices for all buildings shall be obtained from the Department of Environmental Protection, and the installation of the water service system from the street main up to and including the meter shall be subject to inspection and approval by such department.
- 2. Permits for the installation of the building house sewer or drain 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 curb line, the commissioner may issue a permit for connection with a sewer or drain.
- 3. Permits for sidewalk and street openings shall be obtained from the Department of *Transportation*.

SECTION PC 106 CONSTUCTION DOCUMENTS

106.1 General. Construction documents shall comply with Article 104 of Chapter 1 of Title 28 of the Administrative Code and other applicable provisions of this code and its referenced standards. Such construction documents shall be coordinated with architectural, structural and means of egress plans.

106.2 Required documents. The applicant shall submit all of the documents specified in Sections 106.3 through 106.10 as appropriate to the nature and extent of the work proposed. Construction documents shall indicate the plumbing work to be performed, so drawn as to conform to the architectural and structural aspects of the building and to show in detail compliance with this code.

106.2.1 Composite plans. Composite plans showing compliance of architectural, structural, and mechanical parts of a building may be submitted provided that a clear understanding of each part is not impaired.

106.3 Lot diagram. The lot diagram shall be provided where applicable to the work proposed, including but not limited to street connection locations and increases of impervious surfaces.

106.4 Building classification statement. Where applicable to the proposed work, the statement shall identify:

- 1. The occupancy group or groups that apply to parts of the building in accordance with Section 302 of the New York City Building Code;
- 2. The occupancy group of the main use or dominant occupancy of the building;

- 3. The construction class of the building in accordance with Section 602 of the New York City Building Code;
- 4. The structure category in accordance with Table 1604.5 of the New York City Building Code;
- 5. The height of the building as defined in Section 502.1 of the New York City Building Code;
- 6. The applicable measurements to the highest and lowest level of Fire Department access; and
- 7. Whether the building is inside or outside of the fire districts.

106.5 Plumbing plans. Construction documents for plumbing work shall contain plans which include the following data and information. Such plans shall not be required in connection with applications for limited plumbing alterations.

- 1. Riser diagrams showing the story heights, all plumbing fixtures with diagrammatic arrangement of their connections to soil, waste, and vent piping, all soil, waste, and vent stacks from the point of connection with the building drain to their termination above the roof, all leader and storm water piping from the point of connection with the building drain to the building drain to the roof drain, and all risers.
- 2. Diagrammatic floor 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.
- 3. Floor plans showing typical layouts; and stack details shown on one drawing, provided that such details are clearly identified as to location and stack number.
- 4. Plans clearly indicating all appurtenant equipment, including, but not limited to, pumps, ejectors, water tanks, and piping.
- 5. In the case of plans for new plumbing systems, and alterations of existing plumbing systems, plans indicating:
 - 5.1. The relative elevation of the lowest fixture referred to the city datum provided in Section 28-104.7.6 of the Administrative Code and the approximate inside top of the public sewers;
 - 5.2. The number, size, and location of all proposed sewer connections and relative location and size of all water mains, leaders, and risers; and
 - 5.3. A statement from the Department of Environmental Protection, giving the minimum water pressure in the main serving the building.
- 6. Seismic protection and restraint details for piping and equipment as required by Chapter 16 of the New York City Building Code.
- 7. Details showing structural supports for water tanks where required.
- 8. In areas of special flood hazards, construction documents shall comply with Appendix G of the New York City Building Code.

106.6 Sewer adequacy verification. Applications for construction document approval shall include a house/site connection application approved or accepted by the Department of Environmental Protection as to the availability of a public sewer system, and when not available, alternate provisions for disposal of storm water and sanitary sewerage.

106.6.1 Increases in existing impervious surfaces. Whenever an alteration increases impervious surfaces on the lot to greater than 20 percent of the impervious surfaces existing when the structure was constructed, the applicant shall submit a house/site connection application approved or accepted by the Department of Environmental Protection as to the availability of a public sewer system, 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.

Exception: Where the total area of impervious surfaces proposed to be increased by an alteration after the effective date of this code is less than or equal to 1,000 square feet (93 m^2) .

106.7 Private sewers. If private sewers are to be constructed pursuant to subdivision b of Section 1403 of the New York City Charter, a copy of the sewer plan shall be submitted.

106.8 *Private sewage treatment plant.* If a private sewage treatment plant is to be constructed, a copy of plans approved by the Department of Health and Mental Hygiene and the Department of Environmental Protection shall be submitted.

106.9 Private sewage disposal system. If a 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 shall be submitted in accordance with the provisions of Section 1704.20.1 of the New York City Building Code.

106.10 Energy efficiency. Construction documents shall include a statement by the registered design professional of record that: "To the best of my knowledge, belief and professional judgment, these plans and specifications are in compliance with the Energy Conservation Construction Code of New York State." In addition, the following requirements shall apply:

- 1. A lead energy professional shall be identified for each project, who shall draw the relevant information regarding envelope, mechanical systems, service water heating system and lighting and power systems from construction documents into an energy analysis. The energy analysis shall balance total energy consumption of all systems in accordance with the Energy Conservation Construction Code of New York State and shall be signed and sealed by the lead energy professional.
- 2. The format for the energy analysis shall be as established in the Energy Conservation Construction Code of New York State, or as approved by the department, and shall comprise a sheet within the drawing set. Supporting documentation shall be available within the drawing set or upon request of the department.

SECTION PC 107 INSPECTIONS AND TESTING

107.1 General. Except as otherwise specifically provided, inspections required by this code or by the department during the progress of work may be performed on behalf of the owner by approved agencies or, if applicable, by special inspectors. However, in the interest of public safety, the commissioner may direct that any of such inspections be performed by the department. All inspections shall be performed at the sole cost and expense of the owner. Refer to Article 116 of Chapter 1 of Title 28 of the Administrative Code for additional provisions relating to inspections. In addition to any inspections otherwise required by this code or applicable rules, the holder of the permit shall be responsible for the scheduling of the following required inspections:

- 1. Progress inspections:
 - 1.1. Underground inspection and/or testing shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place.
 - 1.2. Rough-in inspection and/or testing shall be made after the roof, framing, fireblocking,

firestopping, draftstopping and bracing is in place and all sanitary, storm and water distribution piping is roughed-in, and prior to the installation of wall or ceiling membranes.

- 2. Special inspections. Special inspections shall be performed in accordance with this code and Chapter 17 of the New York City Building Code, and, where applicable, Section 107.2.
- 3. Final inspection shall be made after the building is complete, all plumbing fixtures are in place and properly connected, and the structure is ready for occupancy. Refer to Article 116 of Chapter 1 of Title 28 of the Administrative Code for additional requirements.

107.1.1 Approved agencies. Refer to Articles 114 and 115 of Chapter 1 of Title 28 of the Administrative Code.

107.1.2 *Exposure of work.* It shall be the duty of the permit holder to cause the work to remain accessible and exposed for inspection purposes. Neither the commissioner_nor the city shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

107.2 Special inspections of alternative engineered design systems. Special inspections of alternative engineered design plumbing systems shall be conducted in accordance with Sections 107.2.1 and 107.2.2.

107.2.1 Periodic inspection. The registered design professional or designated inspector shall periodically inspect and observe the alternative engineered design to determine that the installation is in accordance with the approved construction documents. All discrepancies shall be brought to the immediate attention of the plumbing contractor for correction. Records shall be kept of all inspections.

107.2.2 Written report. The registered design professional shall submit a final report in writing to the commissioner upon completion of the installation, certifying that the alternative engineered design conforms to the approved construction documents.

107.3 Testing. Plumbing work and systems shall be tested as required in Section 312 and in accordance with Sections 107.3.1 through 107.3.3. Tests shall be made by the permit holder and observed by the commissioner.

107.3.1 New, altered, extended or repaired systems. New plumbing systems and parts of existing systems that have been altered, extended or repaired shall be tested as prescribed herein to disclose leaks and defects, except that testing is not required in the following cases:

- 1. In any case that does not include addition to, replacement, alteration or relocation of any water supply, drainage or vent piping.
- 2. In any case where plumbing equipment is set up temporarily for exhibition purposes.
- 3. For ordinary plumbing work, the department may accept written certification from a licensed master plumber that the job was performed in compliance with the requirements of this code and rules of the department in lieu of the inspection requirements otherwise set forth in this code.
- 4. Minor alterations and ordinary repairs.

107.3.2 Equipment, material and labor for tests. All equipment, material and labor required for testing a plumbing system or part thereof shall be furnished by the permit holder.

107.3.3 Reinspection and testing. Where any work or installation does not pass any initial test or inspection, the necessary corrections shall be made to comply with this code. The work or installation shall then be resubmitted to the commissioner for inspection and testing.

107.4 Sign-off of completed work. Refer to Article 116 of Chapter 28 of the Administrative Code.

107.5 Temporary connection. The commissioner shall have the authority to authorize the temporary connection of the building or system to the utility source for the purpose of testing plumbing systems or for use under a temporary certificate of occupancy.

SECTION PC 108 VIOLATIONS

108.1 General. Refer to Chapters 2 and 3 of Title 28 of the Administrative Code.

§ 31. The definitions of "APPROVED", "APPROVED AGENCY", "BASE FLOOD ELEVATION", "BEDPAN WASHER HOSE", "BUILDING", "COMMISSIONER", "CONSTRUCTION DOCUMENTS", "DESIGN FLOOD ELEVATION", "FLOOD HAZARD AREA", "FLUSH TANK", "OCCUPANCY", "REGISTERED DESIGN PROFESSIONAL" and "STRUCTURE" in section PC 202 of chapter 2 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, are amended to read as follows:

APPROVED. [Accepted or approved in accordance with a method prescribed in Section 28-104 of this title, except as otherwise indicated in the text.] *Acceptable to the commissioner. In reference to construction documents, the determination by the department after full examination that submitted construction documents comply with this code and other applicable laws and rules. In reference to materials, the determination by the commissioner that material is acceptable for its intended use. See Section 28-101.5 of the Administrative Code.*

APPROVED AGENCY. [An established and recognized agency approved by the commissioner and that is regularly engaged in conducting tests or furnishing inspection services.] *An established and recognized agency, or other qualified person, regularly engaged in conducting tests or furnishing inspection services, when approved pursuant to department rules as qualified to perform or witness identified testing or inspection services. See Chapter 1 of Title 28 of the Administrative Code.*

BASE FLOOD ELEVATION. [A reference point, determined in accordance with the building code, based on the depth or peak elevation of flooding, including wave height, which has a 1 percent (100-year flood) or greater chance of occurring in any given year.] *Refer to Section G201.2 of Appendix G of the New York City Building Code.*

[BEDPANWASHER HOSE] BEDPAN WASHER HOSE. A device supplied with hot and cold water and located adjacent to a water closet or clinical sink to be utilized for cleansing bedpans.

BUILDING. [Any structure occupied or intended for supporting or sheltering any occupancy.] *Any* structure used or intended for supporting or sheltering any use or occupancy. The term shall be construed as if followed by the phrase "structure, premises, lot or part thereof" unless otherwise indicated by the text. See Section 28-101.5 of the Administrative code.

COMMISSIONER. [The commissioner of buildings of the city of New York, or his or her duly authorized representative.] *The Commissioner of Buildings of the City of New York or his or her duly authorized representative. See Section 28-101.5 of the Administrative Code.*

CONSTRUCTION DOCUMENTS. [All of the written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of the project necessary for obtaining a building permit. The construction drawings shall be drawn to an appropriate scale.] *Plans and specifications and other written, graphic and pictorial documents, prepared or assembled for describing the design, location and physical characteristics of the elements of the project necessary for obtaining a building permit. See Section 28-101.5 of the Administrative Code.*

DESIGN FLOOD ELEVATION. [The elevation of the "design flood," including wave height, relative to

the datum specified on the City's legally designated flood hazard map.] Refer to Section G201.2 of Appendix G of the New York City Building Code.

FLOOD HAZARD AREA. [The greater of the following two areas:

- 1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any given year.
- 2. The area designated as a flood hazard area on a community's flood hazard map or as otherwise legally designated.] *Refer to Section G201.2 of Appendix G of the New York City Building Code.*

FLUSH TANK. A tank designed with a [ball cock] *fill valve* and flush valve to flush the contents of the bowl or usable portion of the fixture.

OCCUPANCY. [The purpose for which a building or portion thereof is utilized or occupied.] *The purpose or activity for which a building or space is used or is designed, arranged or intended to be used.*

PLUMBING. The practice, materials and fixtures utilized in the installation, maintenance, extension and alteration of all piping, fixtures, plumbing appliances, plumbing appurtenances, gas piping and limited fire protection as defined in Section [28-201.3] 28-401.3 of the Administrative Code, within or adjacent to any structure, in connection with sanitary drainage or storm drainage facilities; venting systems; and public or private water supply systems.

REGISTERED DESIGN PROFESSIONAL. [An architect or engineer as defined in Section 28-101.5 of this code] *Refer to Chapter 1 of Title 28 of the Administrative Code.*

STRUCTURE. [That which is built or constructed or a portion thereof.] *That which is built or constructed, including among others: buildings, stadia, tents, reviewing stands, platforms, stagings, observation towers, radio towers, tanks, trestles, open sheds, shelters, fences, and display signs. See Section 28-101.5 of the Administrative Code.*

§ 32. The exception in subsection 301.3 of section PC 301 of chapter 3 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

Exception: [For water conservation systems in accordance with Appendix C herein.] *Lavatories shall* not be required to discharge to the sanitary drainage system where such fixtures discharge to a water recycling system in accordance with Appendix C and that is approved by the Commissioner.

§ 33. Subsection 301.4 of section PC 301 of chapter 3 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

301.4 Connections to water supply. Every building intended for human habitation, occupancy or use shall be directly or indirectly connected to the water supply system in accordance with the provisions of this code. Every plumbing fixture, device or appliance requiring or using water for its proper operation shall be directly or indirectly connected to the water supply system in accordance with the provisions of this code.

§ 34. Subsection 303.2 of section PC 303 of chapter 3 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

303.2 Installation of materials. All materials used shall be installed in strict accordance with the standards under which the materials are [accepted and] approved. In the absence of such installation procedures, the manufacturer's installation instructions shall be followed. Where the requirements of referenced standards or manufacturer's installation instructions do not conform to minimum provisions of this code, the provisions of this code shall apply.

§ 35. Subsection 308.5 and table 308.5 of section PC 308 of chapter 3 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, are amended to read as follows:

308.5 Interval of support. Pipe shall be supported in accordance with Table 308.5.

Exception: The interval of support for piping systems designed to provide for expansion/contraction shall conform to the engineered design in accordance with Section [28-105] 28-113.2.2 of the Administrative Code.

TABLE 308.5 HANGER SPACING

PIPING	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10 ^b
Brass pipe	10	10
Cast-iron pipe	5 <u>ª</u>	At base and at each story height no greater than 20
Copper or copper-alloy pipe	12	At each story height no greater than 12
Copper or copper-allow tubing, 1 ¹ /4-inch diameter and smaller	6	At each story height no greater than 10
Copper or copper-alloy tubing, 1 ¹ / ₂ -inch diameter and larger	10	At each story height no greater than 10
Steel pipe	12	At every story height
PVC pipe	4	10 ^b
Stainless steel drainage	10	10 ^b

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10foot lengths of pipe are installed.

b. Midstory guide for sizes 2 inches and smaller.

§ 36. Subsections 309.1 and 309.2 of section PC 309 of chapter 3 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, are amended to read as follows:

309.1 General. Plumbing systems and equipment in structures erected in flood hazard areas shall be constructed in accordance with the requirements of this section and *Appendix G of* the [New York city building code] *New York City Building Code.*

309.2 Flood hazard. For structures located in flood hazard areas, the following systems and equipment shall be located at or above the design flood elevation:

Exception: [The] In accordance with Appendix G of the New York City Building_Code, the following systems are permitted to be located below the design flood elevation provided that the systems are designed and installed to prevent water from entering or accumulating within their components and the

systems are constructed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation.

- 1. All water service pipes.
- 2. Pump seals in individual water supply systems where the pump is located below the design flood elevation.
- 3. Covers on potable water wells shall be sealed, except where the top of the casing well or pipe sleeve is elevated to at least 1 foot (304.8 mm) above the design flood elevation.
- 4. All sanitary drainage piping.
- 5. All storm drainage piping.
- 6. Manhole covers shall be sealed, except where elevated to or above the design flood elevation.
- 7. All other plumbing fixtures, faucets, fixture fittings, piping systems and equipment.
- 8. Water heaters.
- 9. Vents and vent systems.

§ 37. Section PC 312 of chapter 3 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding new subsections 312.1.2 and 312.5.1 to read as follows:

312.1.2 Witnessing tests. Tests in accordance with this code shall be witnessed by department plumbing inspectors or approved agencies. The department shall prescribe qualifications for individuals who are authorized to witness such tests on behalf of approved agencies, including but not limited to the requirement that such individuals shall be licensed master plumbers or registered design professionals with not less than five years experience in the inspection and testing of piping systems. Such tests may be conducted without any verifying inspection or tests by the department, provided that verified statements and supporting inspectorial and test reports are filed with the department within one working day of such tests.

312.5.1 Water service pipe. In addition to any requirements of Section 312.5, tests for water service pipes shall comply with the following:

- 1. In the presence of the tapper or inspector of the Department of Environmental Protection, each new service pipe or repaired service pipe shall be subjected to a water test made under the street main pressure.
- 2. All such pipes and appurtenances shall remain uncovered for the duration of the test and shall show no sign of leakage.
- 3. When any question arises as to the installation conforming with these regulations, an internal hydrostatic test as specified for materials may be applied, subject to the approval of the Department of Environmental Protection.

§ 38. Table 403.1 of chapter 4 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

TABLE 403.1MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURESª
(See Sections 403.2 and 403.3)

NO.	CLASSI- FICATION	OCCUPANCY ⁱ	DESCRIPTION	WATER CLOSETS (URINALS SEE SECTION 419.2)		LAVATORIES	BATHTUBS/	DRINKING FOUNTAIN (SEE SECTION	OTHER
				MALE	FEMALE	MALE FEMALE		410.1)	
1	Assembly (see Sections 403.2, 403.5 and 403.6)	A-1	Theaters usually with fixed seats and other buildings for the performing arts and motion pictures	1 per 70 for the first 210 and 1 per 125 for the remainder exceeding 210	1 per 35 for the first 210 and 1 per 65 for the remainder exceeding 210	1 per 200	-	1 per 500	1 service sink
		A-2	Nightclubs, bars ^g , tav - erns, dance halls and buildings for similar purposes	1 per 75 ^j	1 per 40 ^j	1 per 75	-	1 per 500	1 service sink
			Restaurants ^h , banquet halls and food courts	1 per 75	1 per 75	1 per 200	-	1 per 500	1 service sink
		А-3	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lec- ture halls, libraries, preadec and	1 per 70 for the first 210 and 1 per 125 for the remainder exceeding 210	1 per 35 for the first 210 and 1 per 65 for the remainder exceeding 210	1 per 200	-	1 per 500	1 service sink
			arcades and gymnasiums						
			Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750	-	1 per 1,000	1 service sink
			Places of worship and other religious services. Churches without assembly halls	1 per 150	1 per 75	1 per 200	-	1 per 1,000	1 service sink

TABLE 403.1—continued MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections 403.2 and 403.3)

(continued)

WATER CLOSETS DRINKING (URINALS, SEE FOUNTAIN SECTION LAVATORIES (SEE BATHTUBS/ 419.2) SECTION OTHER NO. CLASSIFICATIO DESCRIPTION SHOWERS OCCUPANC 410.1) MALE FEMALE MALE FEMALE Y 1 per 75 A-4 Coliseums, arenas, per 40 for the first 1,500 first 1,500 and for the skating rinks, pools and tennis courts for and 1 per 1 service indoor sporting 1 per 1,000 per 60 for the 1 per 200 1 per 150 120 for sink events remainder the and activities exceeding remainder exceeding 1,500 1,500 1 per 40 for the 1 per 75 A-5 Stadiums, first 1,500 and for the amusement first 1,500 and 1 per per 60 for the parks, bleachers and 1 service 1 per 200 1 per 150 1 per 1,000 grandstands for remainder 120 for sink exceeding outdoor sporting events and the 1,500 activities remainder exceeding 1,500 No. of No. of No. Buildings for the 2 Business (see В persons for No. of transaction of Sections of persons business, 403.2, 403.4 and fixtures each sex professional 1 service 403.6) 1 per 100 fixtures 1-[20] 25 1 services, other sink 1-[15] 20 [21-40] 26-50 2 1 services involving [41-60] 51-75 3 16-35] 21-45 2 merchandise, office 36-55 46-70 [61-90] 76-115 4 3 buildings, banks, 56-80] 71-100 4 5 [91-125]116-160 light 81-110] 101-140 5 1 fixture for each industrial and [111-150] 141-190 6 additional [45] 60 persons similar 1 fixture for each uses additional [40] 50 persons 1 service Ε Educational facilities 1 per 100 3 Educational 1 per 50 1 per 50 sink 4 Factory and Structures in which F-1 and F-2 industrial occupants are (see Section 1 service engaged in work 1 per 100 1 per 100 1 per 400 fabricating, 411) sink assembly or processing of products or materials 5 Institutional 1 service I-1 Residential care 1 per 10 1 per 10 1 per 8 1 per 100 sink Hospitals, I-2 1 service ambulatory 1 per 15 1 per 100 1 per room^c 1 per room^c sink per nursing home floor patientsb Employees, other 1 per 25 1 per 35 1 per 100 than residential care^t -1 per 75 1 per 100 Visitors, other than -1 per 500 residential care 1 service Prisons^b I-3 1 per cell 1 per cell 1 per 15 1 per 100 sink Reformitories, I-3 1 service detention centers, 1 per 15 1 per 15 1 per 15 1 per 100) sink and Adult daycare and 1 service 15^{dper} I-4 1 per 100

1 per 15

childcare

1 per 15

sink

TABLE 403.1—continued MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a (See Sections 403.2 and 403.3)

	CLASSIFICATIO N	OCCUPANCY	, DESCRIPTION	WATER CLOSETS (URINALS, SEE SECTION 419.2)	LAVATORIES	- BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION 410.1)	
NO.				MALE FEMALE	MALE FEMALE			OTHER
6	Mercantile (see Sections 403.2, 403.5 and 403.6)	М	Retail stores, service stations, shops,	1 per 500	1 per 750	_	1 per 1,000	l service sink
7	Residential	R-1	Hotels, motels, board-	1 per guestroom	1 per guestroom	1 per		1 service sink
		R-1	Dormitories, fraternities, sororities and boarding	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		R-2	Apartment house	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit		1 kitchen sink per dwelling unit; 1 automatic clothes washer connectio n per 20 dwalling
		R-3	One-and two- family dwellings	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	_	l kitchen sink per dwelling unit; 1 automatic clothes washer connector per dwelling
			[Residential care/assisted living Facilities]	[1 per 10]	[1 per 10]	[1 per 8]	[1 per 100]	[1 service Sink]
8	Storage (see Sections 403.2 and 403.4)	S-1 and S-2	Structures for the storage of goods, warehouses, storehouse and freight depots. Low and Moderate Hazard.	1 per 100	1 per 100	1 per 1,000	See Section 411	l service sink

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated. Any fraction of the number of persons requires and additional fixture. The number of occupants shall be determined by the New York city building code.

- b. Toilet facilities for employees shall be separate from facilities for inmates or patients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient rooms shall be permitted where such room is provided with direct access from each patient room and with provisions for privacy.
- d. For day nurseries, a maximum of one bathtub shall be required.
- e. For attached one- and two-family dwellings, one automatic clothes washer connection shall be required per 20 dwelling units.
- f. Use a calculation based on 1 person/125 net square feet.
- g. For the purposes of this table only, "Bar" shall mean a business establishment or a portion of a nonprofit entity devoted primarily 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 is only incidental.

- h. The total number of occupant for a single establishment comprising a restaurant with an accessory bar shall be considered as a restaurant for the purposes of determining the minimum number of plumbing fixtures.
- i. As per the New York city building code.
- The requirements for the number of water closets for a total occupancy of 150 persons or fewer 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 at least two unisex toilet rooms.

§ 39. Section PC 403 of Chapter 4 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding a new subsection 403.1.1 to read as follows:

403.1.1 Unisex toilet and bath fixtures. Fixtures located within unisex toilet and bathing rooms complying with Section 404 are permitted to be included in determining the minimum required number of fixtures for assembly and mercantile occupancies.

§ 40. Subsection 417.1 of section PC 417 of chapter 4 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

417.1 Approval. Prefabricated showers and shower compartments shall conform to ANSI Z124.2, ASME A112.19.9M or CSA B45.5. Shower valves for individual showers shall conform to the requirements of Section [424.4] *424.3*.

§ 41. Subsections 425.4 and 425.5 of section PC 425 of chapter 4 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, are amended to read as follows:

[425.4 Not included in the IPC.]

425.[5] *4* **Flush pipes and fittings.** Flush pipes and fittings shall be of nonferrous material and shall conform to ASME A112.19.5 or CSA B125.

§ 42. Subsection 504.6.2 of section PC 504 of chapter 5 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

504.6.2 Materials. Relief valve discharge piping shall be of those materials listed in Section 605.[5]4 or shall be tested, rated and approved for such use in accordance with ASME A112.4.1. Piping from safety pan drains shall be of those materials listed in Table 605.4.

§ 43. Subsection 601.5 of section PC 601 chapter 6 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended and new subsections 601.5.1, 601.5.2, 601.5.3 and 601.6 are added to read as follows:

601.5 Water Supply. [Water supply infrastructure to the building shall be applied for and regulated by the city department of environmental protection.] *The water distribution system shall be connected to a public water main if available. Where a public water main is not available, an individual potable water supply shall be provided. Any such private_system shall be provided subject to the approval of the commissioner and of any other agency or agencies having jurisdiction.*

601.5.1 Extensions of public water mains. Extensions of public water mains shall be made in accordance with the regulations of the Department of Environmental Protection.

601.5.2 Availability of public water main to other than one- or two-family dwellings. A public water main shall be deemed available to a building, other than a one- or two-family dwelling, if a property line of such building is within 500 feet (152 m), measured along a street, alley, or right-of-way, of the

public water supply system. The extension and connection shall be made in accordance with the applicable standards of the Department of Environmental Protection.

Exception: Where a substantial improvement of a building is contemplated on a tract of land, the public water supply system may be declared available thereto by the agencies having jurisdiction thereon even though the specified distance is exceeded.

601.5.3 Availability of public water main to one- or two-family dwellings. A public water main shall be deemed available to a one- and two-family dwelling if a property line of such dwelling is within 100 feet (30 480 mm), measured along a street, alley, or right-of-way, of the public water supply system. The extension and connection shall be made in accordance with the applicable standards of the Department of Environmental Protection.

Exception: Where two or more one- or two-family dwellings are to be constructed on a tract of land, the public water supply system may be declared available thereto by the agencies having jurisdiction thereon even though the specified distance is exceeded.

601.6 Destruction of abandoned corporation stops and wet connections. All driven corporation stops, when abandoned, shall be removed and replaced by plugs. All wet connections or screw corporation stops, when abandoned, shall be destroyed in place, and all exposed portions of the service pipe shall be cut and removed. Where a corporation stop or wet connection is destroyed and the connecting service pipe is one that is equipped with a curb valve and box, the curb box shall be removed. The expense in connection with the abandonment or destruction of a corporation stop or wet connection shall be chargeable to the owner of the property into which the service pipe entered.

§ 44. Subsection 602.3 of section PC 602 of chapter 6 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized. *No well or individual water supply shall be installed for any purpose without approval of the commissioner, the Department of Health and Mental Hygiene and the Department of Environmental Protection.*

§ 45. Section PC 603 of chapter 6 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding new subsections 603.3, 603.4, 603.5, 603.5.1 and 603.5.2 to read as follows:

603.3 Installation of service pipe. Each new service pipe shall be installed in accordance with the rules of the Department of Environmental Protection.

603.4 Location of meters. The service pipe between the house control value and the meter shall be kept exposed. All meter locations shall be subject to approval by the Department of Environmental Protection.

603.5 Connections to city water mains. Connections to city water mains shall comply with the rules of the Department of Environmental Protection.

§ 46. Subsection 608.13.3 of section PC 608 of chapter 6 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

608.13.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with intermediate atmospheric vents shall conform to ASSE 1012 or CAN/CSA B64.[4]<u>3</u>. These devices shall be permitted to be installed where subject to continuous pressure conditions. The relief opening shall discharge by air gap and shall be prevented from being submerged.

§ 47. Subsection 701.2 of section PC 701 of chapter 7 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended and new subsections 701.2.1, 701.2.2, 701.2.3, 701.2.4, 701.2.5 and 701.2.6 are added to read as follows:

701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer, where available [, or an approved private sewage disposal system in accordance with applicable city department of environmental protection rules.] and where the department determines that connection thereto is feasible. 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 of Environmental Protection and of any other agency or agencies having jurisdiction.

701.2.1 Extensions of public sewers. Extensions of public sewers shall be made in accordance with the regulations of the Department of Environmental Protection.

701.2.2 Availability of public sewer to other than one- or two-family dwellings. A public sanitary or combined sewer shall be deemed available to a building if a property line of such building is within 500 feet (152 m), measured along a street, alley, or right-of-way, of the public sewer. The connection shall be made in accordance with the applicable standards of the Department of Environmental Protection.

Exception: Where a substantial improvement of a building or buildings is contemplated on a tract of land, the public sanitary or combined sewer may be declared available thereto by the agencies having jurisdiction thereon even though the specified distance is exceeded.

701.2.3 Availability of public sewer to one- or two-family dwellings. A public sanitary or combined sewer shall be deemed available to a one- and two-family dwelling if a property line of such dwelling is within 100 feet (30 480 mm), measured along a street, alley, or right-of-way, of the public sewer. The extension and connection shall be made in accordance with the applicable standards of the Department of Environmental Protection.

Exception: Where two or more one- or two-family dwellings are to be constructed on a tract of land, the public sanitary or combined sewer may be declared available thereto by the agencies having jurisdiction thereon even though the specified distance is exceeded.

701.2.4 Feasibility of connecting to an available public sewer. The department shall determine that connection to an available public sewer 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.

701.2.5 Where public sewers are made available to premises with private sewage disposal system. When public sewers are made available to premises with individual on site private disposal systems, such private sewage disposal system shall be abandoned in a manner prescribed by the commissioner, and the owner shall connect the building house sewer 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.

701.2.6 *Abandonment of existing building sewer connections.* All abandoned building sewers shall be securely sealed at a point inside the curb line and as close thereto as practicable.

§ 48. Subsections 701.4 and 701.8 of section PC 701 of chapter 7 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

701.4 Sewage treatment. [Sewage or other waste from a plumbing system that is deleterious to surface or subsurface waters shall not be discharged into the ground or into any waterway unless it has first been rendered innocuous through subjection to an approved form of treatment.] 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 Mental Hygiene and the Department of Environmental Protection.

701.8 Engineered systems. Engineered sanitary drainage systems shall conform to the provisions of [Sections 28-105] Section 28-113.2.2 of the Administrative Code and [PC] Section 714 of this code.

§ 49. Table 702.4 of chapter 7 of the New York plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe schedule 40	ASTM D 3311; CSA B181.1; ASTM D 2661
Cast iron	ASME B16.4; ASME B16.12; ASTM A 74; ASTM A 888; CISPI 301
Copper or copper alloy	ASME B16.15; ASME B16.18; ASME B16.22; ASME B16.23; ASME B16.26; ASME B16.29
Glass	ASTM C 1053
Gray iron and ductile iron	AWWA C110
High silicon iron	ASTM A 861
Malleable iron	ASME B16.3
Polyethylene (corrugated 12 inches and larger)	ASTM F 667
Polyolefin	CAN/CSA B181.3; F 1412; D 2657
Polyvinyl chloride (PVC) plastic	ASTM D 3311; ASTM D 2665; ASTM F 1866
Stainless steel drainage [V stems] systems, Types 304 and <u>316L</u>	ASME A112.3.1

TABLE 702.4PIPE FITTINGS
§ 50. Subsections 904.5 and 904.5.1 of section PC 904 of chapter 9 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, are amended and a new subsection 904.5.2 is added to read as follows:

904.5 Location of vent terminal. Locations of vent terminals shall comply with Sections_904.5.1 and 904.5.2.

904.5.1 New vent terminals. An open vent terminal from a drainage system of the <u>new</u> or altered building shall not be located directly beneath any door, operable window, or other air intake opening of the building or of an adjacent building, and any such vent terminal shall not be within 10 feet (3048 mm) horizontally of such an opening unless it is at least 3 feet (914 mm) above the top of such opening. When the consent of the owner of an adjoining taller building is obtained, the owner of the new or altered building shall be permitted to carry the new vent stack, with adequate support, to a level above the higher existing roof.

904.5.2 New openings. A door, operable window, or other air intake opening of the new or altered building shall not be located within 10 feet (3048 mm) horizontally from an open vent terminal from a drainage system of an existing adjacent building unless the existing terminal is at least 3 feet (914 mm) above such opening. Whenever necessary, the owner of the new building shall at his or her own expense, and with approval of the adjoining owner, offset the vent stack of the adjacent existing building to a distance of 10 feet (3048 mm) or more from such openings, or shall extend such vent stack to a height of at least 3 feet (924 mm) above the topmost opening.

§ 51. The second line of Table 916.5.1 of chapter 9 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

TABLE 916.5.1

SIZE AND LENGTH OF SUMP VENTS

DISCHARGE CAPACITY OF	MAXIMUM DEVELOPED LENGTH OF VENT (feet) ^a						
PUMP	Diameter of vent (inches)						
(gpm)	1¼	11/2	2	21/2	3	4	
20	[2270] 270	No limit					

§ 52. Subsection 918.1 of section PC 918 of chapter 9 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

918.1 General. Engineered vent systems shall comply with this section and Section [28-105] 28-113.2.2 of *the Administrative Code.*

§ 53. Section PC 1101 of chapter 11 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding a new subsection 1101.2.1 to read as follows:

1101.2.1 Increases in existing impervious surfaces. Whenever an alteration increases impervious surfaces on the lot to greater than 20 percent of the impervious surfaces existing when the structure was constructed, such impervious surfaces shall drain into a storm sewer system, or a combined sewer system, or to an approved place of disposal.

Exception: Where the total area of impervious surfaces proposed to be increased by an alteration after the effective date of this code is less than or equal to 1,000 square feet (93 m^2).

§ 54. Subsection 1101.5 of section PC 1101 of chapter 11 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

1101.5 [Continuous flow] *Change in size*. The size of a drainage pipe shall not be reduced in the direction of flow.

§ 55. Section PC 1101 of chapter 11 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding a new subsection 1101.11 to read as follows:

1101.11 Site grading. Except as otherwise permitted by this code, no person shall perform site grading or land contour work, as defined in section 19-146 of the Administrative Code, which work would causes storm water to flow across sidewalks or onto an adjacent property.

§ 56. Subsection 1110.1 of section PC 1110 of chapter 11 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

1110.1 General. The roof of a structure shall be designed for the storage of water where the storm drainage system is engineered for controlled flow. The controlled flow roof drain system shall be an engineered system in accordance with this section and Section [28-105] 28-113.2.2 of the Administrative Code. The controlled flow system shall be designed based on the design rainfall rate in accordance with Section 1106.1.

§ 57. Subsection 1202.1 of section PC 1202 of chapter 12 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

1202.1 Nonflammable medical gases. Nonflammable medical gas systems, inhalation anesthetic systems and vacuum piping systems shall be designed and installed in accordance with NFPA *99 and* 99C.

Exceptions:

- 1. This section shall not apply to portable systems or cylinder storage.
- 2. Vacuum system exhaust shall comply with the New York city mechanical code.

§ 58. Chapter 12 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding a new section PC 1204 to read as follows:

SECTION PC 1204 OTHER CRYOGENIC SYSTEMS

1204.1 Design and installation. Design and installation of cryogenic systems shall be in accordance with Section 1202, 1203 and the New York City Fire Code.

§ 59. The first unnumbered paragraph of chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title and the section or sections of this document that reference the standard. *Refer to the rules of the department for any subsequent modifications that may have been made to the referenced national*

standards set forth herein in accordance with the exception contained in Section 28-103.19 of the Administrative Code. The application of the referenced standards shall be as specified in Section 102.8.

§ 60. The list of referenced standards of the ASME (American Society of Mechanical Engineers) as set forth in chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended by adding standard reference number B40 to the end of the list to read as follows:

B40.100-98	Pressure Guages and Guage Attachments
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§ 60a. The list of referenced standards of the ASSE (American Society of Sanitary Engineering) as set forth in chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

ASSE	American Society of Sanitary Engineering	
	901 Canterbury Road, Suite A	
0. 1 1	Westlake, OH 44145	
Standard		Referenced
Kelerence	77.4	in code
Number	Thue	T_{-1}
1001 - 90	Performance Requirements for Fipe Applied Atmospheric Type Vacuum Dicates	Table 608.1, 608.15.6, 608.16.4.1
1002 - 99	Flush Tanks	425.3.1 Table 608.1
1003 - 95	Performance Requirements for Water Pressure Reducing Valves	604.8
1003 - 90	Performance Requirements for (Commercial Dishwashing Machines) <i>Backflow Prevention Real</i>	uirements for Commercial
1004 90	Dishwashing Machines	409 1
1005 - 99	Performance Requirements for Water Heater Drain Valves	
1006 - 89	Performance Requirements for Residential Use [(Household)] Dishwashers	
	409.1	
1007 - 92	Performance Requirements for Home Laundry Equipment	
1008 - 89	Performance Requirements for Household Food Waste Disposer Units	
1010 - 98	Performance Requirements for Water Hammer Arresters	
1011 - 95	Performance Requirements for Hose Connection Vacuum Breakers	Table 608.1, 608.13.6
1012 - 95	Performance Requirements for Backflow Preventers with	
	Intermediate Atmospheric Vent	Table 608.1, 608.13.3, 608.16.2
1013 - 99	Performance Requirements for Reduced Pressure Principle Backflow Preventers and Reduced	
	Pressure Fire Protection Principle Backflow Preventers	Table 608.1, 608.13.2, 608.16.2
1014 - 90	Performance Requirements for Handheld Showers	
1015 – 99	Performance Requirements for Double Check Backflow Prevention Assemblies	
	and Double Check Fire Protection Backflow Prevention Assemblies	Table 608.1, 608.13.7
1016 - 96	Performance Requirements for Individual Thermostatic, Pressure Balancing and	
	Combination Control Valves for [Bathing Facilities] Individual Fixture Fittings	
		424.3, 607.4, 613.1
1017 – 99	Performance Requirements for Temperature Actuated Mixing Valves for Hot Water	
	Distribution Systems	
1018 - 86	Performance Requirements for Trap Seal Primer Valves; Water Supply Fed	
1019 – 97	Performance Requirements for [Wall Hydrants, Freezeless, Automatic Draining,	
	Anti –Backflow Types]Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining	T 11 (00 1 (00 10 (
1000 00	Type	
1020 - 98	Performance Requirements for Pressure Vacuum Breaker Assembly	Table 608.1, 608.13.5
1022 - 98	Performance Requirements for Backflow Preventer for Carbonated Beverage Machines	
1024 – 98	Performance Requirements for Dual Check Valve T[u] <i>ype</i> Backflow Preventers	(05.2.1. (00.1
1025 05	(for Residential Supply Service of Individual Outlets)	
1035 - 95 1027 00	Performance Requirements for Laboratory Faucet Backflow Preventers	
1037 - 90	Performance Requirements for Pressurized Fluxing Devices for Fluxing Fixtures	
1044 - 80 1047 - 00	Performance Requirements for Deduced Program Detector Fire Protection Detector	1002.4
104/ - 99	Provention Assemblies	Table 608 1 608 12 2
1048 - 99	Derformance Dequirements for Double Check Detector Fire Protection Dealeflow	1 able 008.1, 008.15.2
10-10 - 22	Prevention Assemblies	Table 608 1 608 13 7

1052 - 94	Performance Requirements for Hose Connection Backflow Preventers	Table 608.1, 608.13.6
1055 - 9[8]7	Performance Requirements for [Backflow Devices for] Chemical Dispensing Systems	
1056 - 95	Performance Requirements for Back Siphonage Vacuum Breaker Table	608.1, 608.13.5, 608.13.8
1060 - 96	Performance for Outdoor Enclosures for Backflow Prevention Assemblies	
1062 - 97	Performance Requirements for Temperature Actuated, Flow Reduction Valves to Individual	
	Fixture Fittings	
1066 - 97	Performance Requirements for Individual Pressure Balancing In-Line Valves for Individual Fixture	Fittings
		e
5013 - 98	Performance Requirements for Testing Reduced Pressure Principle Backflow [Preventers (RP)] Proventers	evention Assembly (RPA) and
	Reduced Pressure Fire Protection Principle Backflow Preventers(RFP)	
5015 - 98	Performance Requirements for Testing Double Check Valve Backflow Prevention Assemblies (DC	VA) [and
	Double Check Fire Protection Backflow Prevention Assemblies (DCF)]	
5020 - 98	Performance Requirements for Testing Pressure Vacuum Breaker Assembly (PVBA)	
5047 - 98	Performance Requirements for Testing Reduced Pressure Detector Fire Protection Backflow	
	Prevention Assemblies (RPDF)	
5048 - 98	Performance Requirements for Testing Double Check Valve Detector Assembly (DCDA) [Detector	Fire Protection Backflow
	Prevention Assemblies (DCDF)]	
5052 - 98	Performance Requirements for Testing Hose Connection Backflow Preventers	
5056 - 98	Performance Requirements for Testing Spill Resistant Vacuum Breaker	

§ 61. Standard reference number D 2665 in the list of referenced standards of the ASTM as set forth in chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

ASTM	ASTM International
	100 Barr Harbor Drive
	West Conshohocken, PA 19428-2959
Standard	Referenced
Reference	in code
Number	Title section number
D 2665—0[0]1	Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
	Table 702.4, Table 1102.4, Table 1102.7

§ 62. Standard reference numbers B181.2 and CAN/CSA B64.3-01 in the list of referenced standards of the CSA (Canadian Standards Association) as set forth in chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, are amended to read as follows:

CSA	Canadian Standards Association 178 Rexdale Blvd.	
	Rexdale (Toronto), Ontario, Canada M9W 1R3	
Standard		Referenced
Reference		in code
Number	Title	section number
B181.2 – 99	PVC Drain, Waste, and Vent Pipe and Pipe Fittings-with Revisions through	
	December 1993	<i>Table 702.1,</i> 705.14.2, 715.2
CAN/CSA B64.3 - 01	Backflow Preventers, Dual Check Valve Type with Atmospheric Port (DCAP)	Table 608.1, <i>608.13.3</i> , 608.16.2

§ 63. The list of referenced standards of the NFPA (National Fire protection Association) as set forth in chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

NFPA	National Fire Protection Association Batterymarch Park Quincy, MA 02269	
Standard		Referenced
Reference		in code
Number	Title	section number
50-01	Bulk Oxygen Systems at Consumer Sites	1203.1
51 – 97	Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes	
99 — 99	Health Care Facilities	
99C - 99	Gas and Vacuum Systems	

§ 64. Standard reference number 3-1996 on the list of referenced standards of the NSF (National Sanitation Foundation) as set forth in chapter 13 of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows:

NSF	National Sanitation Foundation	
	789 Dixboro Road	
	Ann Arbor, MI 48105	
Standard		Referenced
Reference		in code
Number	Title	section number
3—1996 <i>a</i>	$Commercial\ Spray-Type\ Dishwashing\ and\ Glasswashing\ Machines\ .$	

§ 65. The "Note" following the title of Appendix C of the New York city plumbing code of chapter 6 of title 28 of the administrative code of the city of New York, as added by local law number 99 for the year 2005, is amended to read as follows::

APPENDIX C WATER CONSERVATION SYSTEMS

[Note: Section 301.3 of this code requires all plumbing fixtures that receive water or waste to discharge to the sanitary drainage system of the structure. In order to allow for the utilization of a water recycling system, section 301.3 should be revised to read as follows:

301.3 Connections to drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems provided for in Chapter 8.

Exception: Lavatories shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved water recycling system.]

§ 66. Items 2 and 4 of subsection 106.4 of section BC 106 of chapter 1 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

- 2. The occupancy group of the main use or dominant occupancy of the building [in accordance with Section 302.1];
- 4. The [structurel category] Structural Occupancy Category in accordance with Table 1604.5;

§ 67. Subsection 106.11 of section BC 106 of chapter 1 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

106.11 Sewer adequacy verification for increases in impervious surfaces. Whenever an alteration increases impervious surfaces on the lot to greater than 20 percent of the impervious surfaces existing when the structure was constructed, the applicant shall submit *a house/site connection application approved or accepted by the Department of Environmental Protection* as to the availability of a public sewer system, 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.

Exception: Where the total area of impervious surfaces proposed to be increased after the effective date of this code is less than or equal to 1,000 square feet (93 m²).

§ 68. Subsection 106.15 of section BC 106 of chapter 1 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new subsection 106.15 is added to read as follows:

106.15 Plumbing plans. Construction documents for plumbing work to be performed shall be submitted as per the New York City Plumbing Code.

§ 69. Section BC 202 of chapter 2 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding the definition of "CABARET" following in alphabetical order the definition of "BUTTRESS" to read as follows:

CABARET. 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.

§ 70. The definition of "**DORMITORY UNIT, STUDENT**" appearing after the definition of "**DOOR, BALANCED**" in section BC 202 of chapter 2 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York is REPEALED.

§ 71. The definition of "SUSTAINED WIND" appearing after the definition of "SUBDIAPHRAGM" in section BC 202 of chapter 2 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York is REPEALED.

§ 72. Subsections 302.1.1, 302.1.1.1 and table 302.1.1 of section BC 302 of chapter 3 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are REPEALED and a new section 302.1.1 is added to read as follows:

302.1.1 Incidental use areas and mixed occupancies including accessory occupancies. Structures with multiple occupancies or uses shall comply with Section 508.

§ 73. Subsections 302.2, 302.2.1, 302.3, 302.3.1 302.3.2, 302.4 and 302.5 and table 302.3.2 of section BC 302 of chapter 3 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are REPEALED.

§ 74. Subsection 306.4 of section BC 306 of chapter 3 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

306.4 Location restrictions. Locations of spaces classified in Factory Group F may be restricted within a building containing a Group R occupancy pursuant to Section [508.8] *509.8*.

§ 75. The first row of Table 307.7(1) of chapter 3 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

		GROUP WHEN THE		STORAGE ^b		USE-CLOSED SYSTEMS ^b		USE-OPEN SYSTEMS ^b		
		MAXIMUM								
		ALLOWABLE								
		QUANTITY IS	Solid pounds	Liquid gallons		Solid pounds	Liquid gallons		Solid pounds	Liquid gallons
MATERIAL	CLASS	EXCEEDED	(cubic feet)	(pounds)	Gas SCF	(cubic feet)	(pounds)	Gas SCF	(cubic feet)	(pounds)
Combustible liquid ^{c, i, r}	II	H-2 or H-3	N/A	120 ^{d, e}	N/A	N/A	120 ^d	N/A	N/A	30 ^d
	[IIA] IIIA	H-2 or H-3		330 ^{d, e}			330 ^d			80^{d}
	IIIB	N/A		13,200 ^{e, f}			13,200 ^{e, f}			$3,300^{\rm f}$

TABLE 307.7(1)
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD ^{a, j, m, n, q}

§ 76. Subsections 406.2.1, 406.2.3.6, 406.3.4, 406.3.5 and 406.6.2, of section BC 406 of chapter 4 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

406.2.1 Classification. Parking garages shall be either open, as per Section 406.3, or enclosed, as per Section 406.4. Parking garages shall also comply with the special provisions of Section [508] 509.

406.2.3.6 Separation. Parking garages shall be separated from other occupancies in accordance with Section [302.1.1] *508*.

406.3.4 Uses. Mixed uses shall be allowed in the same building as an open parking garage subject to the provisions of Sections [302.3] *508*, 402.7.1, 406.3.13, [508.3] *509.3*, [508.4] *509.4* and [508.7] *509.7*.

406.3.5 Area and height. Area and height of open parking garages shall be limited as set forth in Chapter 5 for Group S-2 occupancies [and as further provided for in Section 302.3].

406.6.2 Mixed uses. Mixed uses shall be allowed in the same building as a repair garage subject to the provisions of Section [302.3] *508*.

§ 77. Subsections 407.2.1, 407.2.3, 407.2.4 and 407.3.1 of section BC 407 of chapter 4 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

407.2.1 Spaces of unlimited area. Waiting areas and similar spaces constructed as required for corridors shall be permitted to be open to a corridor, only where all of the following criteria are met:

- 1. The spaces are not occupied for patient sleeping units, treatment rooms, hazardous or incidental use areas as defined in Section [302.1.1] 508.2.
- 2. The open space is protected by an automatic fire detection system installed in accordance with Section 907.
- 3. The corridors onto which the spaces open, in the same smoke compartment, are protected by an automatic fire detection system installed in accordance with Section 907, or the smoke compartment in which the spaces are located is equipped throughout with quick-response sprinklers in accordance with Section 903.3.2.
- 4. The space is arranged so as not to obstruct access to the required exits.

407.2.3 Mental health treatment areas. Areas wherein mental health patients who are not capable of self-preservation are housed, or group meeting or multipurpose therapeutic spaces other than incidental use areas as defined in Section [302.1.1] *508.2*, under continuous supervision by facility staff, shall be permitted to be open to the corridor, where the following criteria are met:

- 1. Each area does not exceed 1,500 square feet (140 m²).
- 2. The area is located to permit supervision by the facility staff.
- 3. The area is arranged so as not to obstruct any access to the required exits.
- 4. The area is equipped with an automatic fire detection system installed in accordance with Section 907.2.
- 5. Not more than one such space is permitted in any one smoke compartment.

6. The walls and ceilings of the space are constructed as required for corridors.

407.2.4 Gift shops. Gift shops less than 500 square feet (46 m²) in area shall be permitted to be open to the corridor provided the gift shop and storage areas are fully sprinklered and storage areas are protected in accordance with Section [302.1.1] *508.2*.

407.3.1 Corridor doors. Corridor doors, other than those in a wall required to be rated by Section [302.1.1] *508.2* or for the enclosure of a vertical opening or an exit, shall not have a required fire protection rating and shall not be required to be equipped with self-closing or automatic-closing devices, but shall provide an effective barrier to limit the transfer of smoke and shall be equipped with positive latching. Roller latches are not permitted. Other doors shall conform to Section 715.3.

§ 78. Subsection 410.3.1 of section BC 410 of chapter 4 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

410.3.1 Stage construction. Stage floors shall be constructed of materials as required for floors for the type of construction of the building in which such stages are located. Where areas below the stage are used for other occupancies, such stage floor shall be constructed in accordance with the requirements for separated occupancies as per Chapter [3] *5*.

Exceptions:

- 1. Stages of Type IIB or IV construction with a nominal 2-inch (51 mm) wood deck, provided that the stage is separated from other areas in accordance with Section 410.3.4.
- 2. In all types of construction, the finished floor shall be constructed of wood or approved noncombustible materials. Openings through stage floors shall be equipped with tight-fitting, solid wood trap doors with approved safety locks. 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 flame spread rating greater than 25 or that has not been rendered flameproof in accordance with the rules of the Fire Commissioner may be stored in this location at any time.

§ 79. The column heading "MAXIMUM ALLOWABLE QUANTITY PER CONTROL" of Table 414.2.4 of chapter 4 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

TABLE 414.2.4

MAXIMUM ALLOWABLE QUANTITY PER INDOOR AND OUTDOOR CONTROL AREA IN GROUP M AND S OCCUPANCIES NONFLAMMABLE SOLIDS AND NONFLAMMABLE AND NONCOMBUSTIBLE LIQUIDS ^{d,e,f}

CONDITION	MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA

§ 80. Subsection 415.7.2.1 of section BC 415 of chapter 4 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

415.7.2.1 Mixed occupancies. Where the storage tank area is located in a building of two or more occupancies, and the quantity of liquid exceeds the maximum allowable quantity for one control area, the use shall be completely separated from adjacent fire areas in accordance with the requirements of Section [302.3.2] *508.3.3.*

§ 81. Subsection 419.5.1 of section BC 419 of chapter 4 of of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

419.5.1 Accessory use non-production laboratories. Accessory non-production laboratories occupying an area not more than 10 percent of the area of the story in which [it is] *such laboratories are* located and not exceeding the tabular values in Table 503 for the allowable height or area for such use shall be classified according to the main occupancy. Such accessory non-production laboratories shall comply with the provisions of Section 419.

§ 82. The title of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

GENERAL BUILDING HEIGHTS AND AREAS; SEPARATION OF OCCUPANCIES

§ 83. Subsection 501.1 of section BC 501 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

501.1 Scope. The provisions of this chapter control the height and area of structures hereafter erected and additions to existing structures, *including separation of occupancies*.

§ 84. Item 2 of subsection 501.3.2.2 of section BC 501 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

 Any building classified [occupied by] *in occupancy* group R-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.

§ 85. Table 503 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

	IADLE 505
	ALLOWABLE HEIGHT AND BUILDING AREAS ^a
	Height limitations shown as stories and feet above grade plane.
Area l	imitations as determined by the definition of "Area, building," per floor.
	TYPE OF CONSTRUCTION

TADLE 501

					TYPE	OF CONSTR	UCTION			
		TY	PE I	TYI	PE II	TYP	EIII	TYPE IV	ТҮР	EV
		Α	B	Α	В	Α	В	HT	Α	В
	Hgt(feet)									
GROUP	Hgt(S)	UL	160 <u>e</u>	65	55	65	55	65	50	40
A-1	S	UL	UL	6	3	6	3	6	3	2
	Α	UL	UL	17,500	10,500	14,700	5,600	15,000	8,400	5,500
A-2	S	UL	UL	6	3	6	3	6	3	2
	Α	UL	UL	17,500	9,500	14,000	5,600	15,000	8,400	5,500
A-3	S	UL	UL	6	3	6	3	6	3	2
	Α	UL	UL	17,500	9,500	14,000	5,600	15,000	8,400	5,500
A-4	S	UL	UL	6	3	6	3	6	3	2
	Α	UL	UL	17,500	9,500	14,000	5,600	15,000	8,400	5,500
A-5	S	UL	UL	UL	UL	UL	UL	6	UL	UL
	Α	UL	UL	UL	UL	UL	UL	UL	UL	UL
В	S	UL	UL	6	3	6	3	6	3	2
	Α	UL	UL	37,500	10,500	28,[0]500	5,600	36,000	8,400	5,500

Е	S	UL	UL	4	3	4	3	6	3	2
_	Ā	UL	UL	26,000	10,500	23,[0]500	5,600	25,500	8,400	5,500
F-1	S	UL	[UL]6	5	3	5	2	5	3	2
	А	UL	ŬL .	12,500	7,500	7,500	3,000	10,000	3,000	1,000
F-2	S	UL	UL	6	3	6	3	6	3	2
	А	UL	UL	37,500	10,500	28,[0]500	5,600	30,000	8,400	5,500
H-1	S	1	1	1	1	1	1	1	1	NP
	Α	21,000	16,500	11,000	7,500	9,500	7,000	10,500	7,500	NP
$H-2^d$	S	UL	3	2	1	2	1	2	1	1
	Α	21,000	16,500	11,000	7,500	9,500	7,000	10,500	7,500	3,000
$H-3^d$	S	UL	6	4	2	4	2	4	2	1
	А	UL	60,000	26,500	14,000	17,500	13,000	25,000	10,000	5,000
H-4	S	UL	7	5	3	5	3	5	3	2
	Α	UL	UL	37,500	17,500	28,[0]500	17,500	36,000	18,000	6,500
H-5	S	3	3	3	3	3	3	3	3	2
	Α	UL	UL	37,500	23,000	28,[0]500	19,000	36,000	18,000	9,000
I-1	S	UL	UL	6	NP	4	3	4	NP	NP
	Α	UL	UL	19,000	NP	16,500	5,600	18,000	NP	NP
I-2	S	UL	6	4	4	5	3	5	3	NP
	Α	UL	UL	7,000	3,500	5,000	1,200	6,500	2,000	NP
I-3	S	UL	4	4	3	4	2	4	3	NP
	A	UL	UL	7,000	3,500	5,000	1,200	6,500	2,000	NP
I-4	S	UL	UL	3	3	3	3	3	2	2
	А	UL	UL	26,500	9,500	23,[0]500	5,600	25,500	8,400	5,500
М	S	UL	UL	6	3	6	3	6	3	2
	Α	UL	UL	21,500	7,500	18,500	5,600	14,000	8,400	5,500
R-1	S	UL	UL	6	NP	6	NP	6	NP	NP
	Α	UL	UL	UL	NP	24,000	NP	20,500	NP	NP
R-2	S	UL	UL	6	NP	6	3	6	NP	NP
	Α	UL	UL	UL	NP	24,000	5,600	20,500	NP	NP
R-3	S	UL	UL	6	3	6	3	6	3	3
	A	UL	UL	17,500	10,500	14,700	5,600	30,000	8,400	5,500
S-1	S	UL	6	5	3	4	3	4	3	2
	Α	UL	48,000	12,000	7,500	7,500	7,500	7,500	5,000	1,000
S-2 ^{6,e}	S	UL	UL	6	3	6	4	6	3	2
	Α	UL	UL	15,000	10,000	10,000	8,500	10,000	8,400	5,500
U ^c	S	UL	5	4	2	3	2	4	2	1
	А	UL	35,000	19,000	8,500	14,000	8,500	18,000	9,000	5,500

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 . UL = Unlimited, NP = Not permitted. Not permitted in Fire District

Not permitted in Fire District without sprinklers

<u>a</u>. See the following sections for general exceptions to Table 503:

1. Section 504.2, Allowable height increase due to automatic sprinkler system installation.

2. Section 506.2, Allowable area increase due to frontage.

3. Section 506.3, Allowable area increase due to automatic sprinkler system installation.

4. Section 507, Unlimited area building.

b. For open parking structures, see Section 406.3.

c. For private garages, see Section 406.1.

d. See Section 415.5 for limitations.

e. Except for occupancy groups F-1, H-1 through H-5, I-2, I-3, S-1 and U, buildings equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1 shall be unlimited in height.

§ 86. Subsections 506.1, 506.2, 506.2.1 and 506.3 of section BC 506 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

506.1 General. The areas limited by Table 503 shall be permitted to be increased due to frontage (I_f) and automatic sprinkler system protection (I_s) in accordance with the following:

[

$$A_a = A_t + \left[\frac{A_t I_f}{100}\right] + \left[\frac{A_t I_s}{100}\right]$$
(Equation 5-1)

where:

A_a = Allowable area per floor (square feet).

- A_t = Tabular area per floor in accordance with Table 503 (square feet).
- If = Area increase due to frontage (percent) as calculated in accordance with Section 506.2.
- *I_s* = Area increase due to sprinkler protection (percent) as calculated in accordance with Section 506.3.

 $A_a = \{A_t + (A_t \times I_f) + (A_t \times I_s)\}$ (Equation 5-1)

where:

 $A_a =$ Allowable area per story (square feet).

 $A_t =$ Tabular area per story in accordance with Table 503 (square feet).

 $I_f =$ Area increase factor due to frontage as calculated in accordance with Section 506.2.

 $I_s =$ Area increase factor due to sprinkler protection as calculated in accordance with Section 506.3.

506.2 Frontage increase. Where a building has more than 25 percent of its perimeter adjoining a public way or open space having a minimum width of 20 feet (6096 mm), the frontage increase shall be determined in accordance with the following:

1

[

$$I_f = 100 \left[\frac{F}{P} - 0.25 \right] \frac{W}{30}$$
 (Equation 5-2)

where:

- If = Area increase due to frontage.
- F = Building perimeter which fronts on a public way or open space having 20 feet (6096 mm) open minimum width (feet).
- P = Perimeter of entire building (feet).
- W = Width of public way or open space (feet) in accordance with Section 506.2.1.

506.2.1 Width limits. W must be at least 20 feet (6096 mm) and the quantity W divided by 30 shall not exceed 1.0. Where the value of W varies along the perimeter of the

 $I_f = (F/P - 0.25) W/30$ (Equation 5-2)

where:

- $I_f = Area$ increase factor due to frontage.
- F = Building perimeter that fronts on a public way or open space having 20 feet (6096 mm) open minimum width (feet).

1

P = Perimeter of entire building (feet).

W = Width of public way or open space (feet) in accordance with Section 506.2.1.

506.2.1 Width limits. "W" must be at least 20 feet (6096 mm) [and the quantity W divided by 30 shall not exceed 1.0]. Where the value of W varies along the perimeter of the building, the calculation performed in accordance with Equation 5-2 shall be based on the weighted average of each portion of exterior wall and open space where the value of W is [between 20 and 30 feet (6096 and 9144 mm)] greater than or equal to 20 feet (6096 mm). Where W exceeds 30 feet (9144 mm), a value of 30 feet (9144 mm) shall be used in calculating the weighted average, regardless of the actual width of the open space.

Exception: The quantity *W* divided by 30 shall be permitted to [not exceed 2.0 when all of the following conditions exist:] be a maximum of 2 when the building meets all requirements of Section 507 except for compliance with the 60-foot (18 288 mm) public way or yard requirement, as applicable.

- [1. The building is permitted to be unlimited in area by Section 507; and
- 2. The only provision preventing unlimited area is compliance with the 60-foot (18 288 mm) public way or yard requirement, as applicable.]

506.3 Automatic sprinkler system increase. Where a building is [protected] *equipped* throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the area limitation in Table 503 is permitted to be increased by an additional 200 percent ($I_s = 2[00 \text{ percent}]$) for [multistory] buildings *with more than one story above_grade plane* and an additional 300 percent ($I_s = 3[00 \text{ percent}]$) for [single-story] *buildings_with no more than one story above grade plane*. These increases are permitted in addition to the height and story increases in accordance with Section 504.2.

Exceptions:

- 1. Buildings with an occupancy in Group H-1, H-2 or H-3.
- 2. Fire-resistance rating substitution in accordance with Table 601, Note d.

§ 87. Subsection 506.4 of section BC 506 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended and a new section 506.4.1 is added to read as follows:

506.4 Area determination. The maximum area of a building with more than one story *above grade plane* shall be determined by multiplying the allowable area per [floor] *story* (A_a), as determined in Section 506.1, by the number of stories *above grade plane* as listed below.

- 1. For [two-story] buildings with two stories above grade plane, multiply by 2;
- 2. For [three-story or higher] buildings *with three or more stories above grade plane*, multiply by 3; and
- 3. No story shall exceed the allowable area per [floor] *story* (A_a), as determined in Section 506.1 for the occupancies on that [floor] *story*.

Exceptions:

- 1. Unlimited area buildings in accordance with Section 507.
- 2. In group R occupancies 6 stories or less in height, the maximum area of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2 shall be

determined by multiplying the allowable area per [floor] *story* (A_a), as determined in Section 506.1, by the number of stories *above grade plane*.

506.4.1 Mixed Occupancies. In buildings with mixed occupancies, the allowable area per story (A_a) shall be based on the most restrictive provisions for each occupancy when the mixed occupancies are treated according to Section 508.3.2 as nonseparated occupancies. When the occupancies are treated according to Section_508.3.3 as separated occupancies, the maximum total building area shall be such that the sum of the ratios for each such area on all floors as calculated according to Section 508.3.3.2 shall not exceed 2 for buildings with two stories above grade plane and 3 for buildings with three or more stories above grade plane.

§ 88. Subsections 507.2, 507.6, 507.8, 507.10, 507.11, 507.12, 507.13 and 507.14 of section BC 507 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

507.2 Sprinklered, one story. The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building of other than Type V construction shall not be limited when the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1, and is surrounded and adjoined on all sides by public ways or yards not less than 60 feet (18 288 mm) in width. However, in Group F-2 and S-2 occupancies, one-story rack storage facilities of Type [I and] II construction that are not accessible to the public shall not be limited in height provided that such buildings conform to the requirements of this section and NFPA 231C.

Exception: The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities, in occupancies in Group A-4, provided that:

- 1. Exit doors directly to the outside are provided for occupants of the participant sports areas; and
- 2. The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.

507.6 High-hazard occupancy groups. Group H-2, H-3 and H-4 fire areas shall be permitted in unlimited area buildings having occupancies in Groups F and S, in accordance with the limitations of this section. Fire areas located at the perimeter of the unlimited area building shall not exceed 10 percent of the area of the building, nor the area limitations specified in Table 503 as modified by Section 506.2, based upon the percentage of the perimeter of the fire area that fronts on a street or other unoccupied space. Other fire areas shall not exceed 25 percent of the area limitations specified in Table 503. Fire-resistance-rating requirements of fire barrier assemblies shall be in accordance with Table [302.3.2] *508.3.3*.

507.8 Group E buildings. The area of a Group E building of Type IIA, IIIA or IV construction shall not be limited where the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The area of a one-story Group E building of Type II*B*[, IIIA or IV] construction shall not be limited when the following criteria are met:

- 1. Each classroom shall have not less than two means of egress, with one of the means of egress being a direct exit to the outside of the building complying with Section 1017.
- 2. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. The building is surrounded and adjoined on all sides by public ways or yards not less than 60 feet (18 288 mm) in width.

507.10 Group B buildings. [The] *Notwithstanding the provisions of Sections 507.2 and 507.3, the* area of a Group B building of Type IIA, IIIA or IV construction shall not be limited where the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

507.11 Group F-2 buildings. [The] *Notwithstanding the provisions of Sections 507.2_and 507.3, the* area of a Group F-2 building of Type IIA, IIIA or IV construction shall not be limited where the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

507.12 Group M buildings. [The] *Notwithstanding the provisions of Sections 507.2 and 507.3, the* area of a Group M building of Type IIA, IIIA or IV construction shall not be limited where the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

507.13 Group R buildings. The area of a Group R-1 and R-2 building of Type IIA, IIIA or IV construction shall not be limited where the building is protected throughout with an approved automatic sprinkler system in accordance with Sections 903.3.1.1 or 903.3.1.2, as applicable.

507.14 Group S-2 buildings. [The] *Notwithstanding the provisions of Sections 507.2 and 507.3, the* area of a Group S-2 building of Type IB, IIA, IIIA or IV construction shall not be limited where the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

§ 89. Section BC 508 of chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

SECTION BC 50[8]9 SPECIAL PROVISIONS

50[8]9.1 General. The provisions in this section shall permit the use of special conditions that are exempt from, or modify, the specific requirements of this chapter regarding the allowable heights and areas of buildings based on the occupancy classification and type of construction, provided the special condition complies with the provisions specified in this section for such condition and other applicable requirements of this code.

50[8]9.2 Group S-2 enclosed parking garage with Group A, B, M or R above. A basement and/or the first story above grade plane of a building shall be considered as a separate and distinct building for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction, when all of the following conditions are met:

- 1. The basement and/or the first story above grade plane is of Type IA construction and is separated from the building above with a horizontal floor assembly having a minimum 3-hour fire-resistance rating.
- 2. Shaft, stairway, ramp or escalator enclosures through the horizontal floor assembly shall have a minimum of 2-hour fire-resistance rating with opening protectives in accordance with Table 715.3.

Exception: Where the enclosure walls below the horizontal floor assembly have a minimum of 3-hour fire-resistance rating with opening protectives in accordance with Table 715.3, the enclosure walls extending above the horizontal floor assembly shall be permitted to have a 1-hour fire-resistance rating provided:

- 1. The building above the horizontal floor assembly is not required to be of Type I construction;
- 2. The enclosure connects less than four stories, and

- 3. The enclosure opening protectives above the horizontal floor assembly have a minimum 1-hour fire protection rating.
- 3. The building above the horizontal floor assembly contains only Group A having an assembly room with an occupant load of less than 300, or Group B, M or R; and
- 4. The building below the horizontal floor assembly is a Group S-2 enclosed parking garage, used for the parking and storage of private motor vehicles.

Exceptions:

- 1. Entry lobbies, mechanical rooms, accessory storage and similar uses incidental to the operation of the building shall be permitted.
- 2. Group A having an assembly room with an occupant load of less than 300, or Group B or M shall be permitted in addition to those uses incidental to the operation of the building, provided that the entire structure below the horizontal floor assembly is protected throughout by an approved automatic sprinkler system.
- 5. The maximum building height in feet/meters as measured from the grade plane shall not exceed the limits set forth in Table 503 for the least restrictive type of construction involved.

50[8]9.3 Group S-2 enclosed parking garage with Group S-2 open parking garage above. A Group S-2 enclosed parking garage located in the basement or first story below a Group S-2 open parking garage shall be classified as a separate and distinct building for the purpose of determining the type of construction when the following conditions are met:

- 1. The allowable area of the structure shall be such that the sum of the ratios of the actual area divided by the allowable area for each separate occupancy shall not exceed 1.0.
- 2. The Group S-2 enclosed parking garage is of Type I or II construction and is at least equal to the fire-resistance requirements of the Group S-2 open parking garage.
- 3. The height and the number of the floors above the basement shall be limited as specified in Table 406.3.5.
- 4. The floor assembly separating the Group S-2 enclosed parking garage and Group S-2 open parking garage shall be protected as required for the floor assembly of the Group S-2 enclosed parking garage. Openings between the Group S-2 enclosed parking garage and Group S-2 open parking garage, except exit openings, shall not be required to be protected.
- 5. The Group S-2 enclosed parking garage is used exclusively for the parking or storage of private motor vehicles, but shall be permitted to contain an accessory office, waiting room and toilet room having a total area of not more than 1,000 square feet (93 m²), and mechanical equipment rooms incidental to the operation of the building.

50[8]9.4 Parking beneath Group R. Where a maximum one-story above grade plane Group S-2 parking garage, enclosed or open, or combination thereof, of Type I construction or open of Type IV construction, with grade entrance, is provided under a building of Group R, the number of stories to be used in determining the minimum type of construction shall be measured from the floor above such a parking area. The horizontal floor assembly between the parking garage and the Group R above shall comply with the type of construction required for the parking garage and shall also provide a fire-resistance rating not less than the mixed occupancy separation required in Section [302.3.2] *508.3.3*.

50[8]9.5 Reserved.

50[8]9.6 Group R-2 buildings of Type IIA construction. The height limitation for buildings of Type IIA construction in Group R-2 shall be increased to nine stories and 100 feet (30 480 mm) where the building is separated by not less than 50 feet (15 240 mm) from any other building on the lot and from property lines, the exits are segregated in an area enclosed by a 2-hour fire-resistance-rated fire wall and the first-floor construction has a fire-resistance rating of not less than $1\frac{1}{2}$ hours.

50[8]9.7 Open parking garage beneath Groups A, I, B, M and R. Open parking garages constructed under Groups A, I, B, M and R shall not exceed the height and area limitations permitted under Section 406.3. The height and area of the portion of the building above the open parking garage shall not exceed the limitations in Section 503 for the upper occupancy. The height, in both feet and stories, of the portion of the building above the open parking garage and the portion of the building above the parking garage and the portion of the building above the parking garage.

50[8]9.7.1 Fire separation. Fire separation assemblies between the parking occupancy and the upper occupancy shall correspond to the required fire-resistance rating prescribed in Table [302.3.2] *508.3.3* for the occupancies involved. The type of construction shall apply to each occupancy individually, except that structural members, including main bracing within the open parking structure, which is necessary to support the upper occupancy, shall be protected with the more restrictive fire-resistance-rated assemblies of the groups involved as shown in Table 601. Means of egress for the upper occupancy shall conform to Chapter 10 and shall be separated from the parking occupancy by fire barriers having at least a 2-hour fire-resistance rating as required by Section 706, with self-closing doors complying with Section 715. Means of egress from the open parking garage shall comply with Section 406.3.

50[8]9.8 Industrial uses in buildings containing Group R. No space classified as Factory Industrial Group F shall be located above the second story of any building of Type III, IV, or V construction containing a space classified as Residential Group R-1 or R-2.

509.9 Separation of different tenancies. Spaces or dwelling units occupied by different tenants shall be separated by fire barriers having at least 1-hour fire resistance ratings.

Exceptions:

- 1. Non-residential spaces occupied by different tenants located in buildings that are sprinklered throughout.
- 2. Tenant spaces in covered mall buildings complying with section 402.

§ 90. Chapter 5 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new section BC 508 to read as follows:

SECTION BC 508 INCIDENTAL USE AREAS AND MIXED OCCUPANCIES

508.1 General. Where a building or portion thereof contains two or more occupancies or uses, the building or portion thereof shall comply with the applicable provisions of this section. For additional requirements for mixed occupancies, see Section 506.4.1.

508.2 Incidental use areas. Incidental use areas shall comply with the provisions of this section.

Exception: Incidental use areas within and serving a dwelling unit are not required to comply with this section.

508.2.1 Occupancy classification. A space that is listed in Table 508.2 and is incidental to a main occupancy shall be considered an incidental use area. An incidental use area shall be classified in accordance with the main occupancy to which the use is incidental; or such area shall be classified in accordance with its actual occupancy and shall comply with Section 508.3 for mixed occupancies.

508.2.1.1 Fire protection requirements. Any additional fire protection requirements in Chapter 9 for an incidental use area shall be based upon the occupancy classification of the area's main occupancy.

508.2.1.2 Allowable area and height. The actual floor area of an incidental use area shall be treated as being in the same occupancy group as its main occupancy for the purposes of calculating allowable height and area in accordance with Section 503.1.

508.2.2 Separation. Incidental use areas shall be separated or protected, or both, from all other occupancies in accordance with Table 508.2.

508.2.2.1 Construction. Where Table 508.2 requires a fire-resistance-rated separation, the incidental use area shall be separated from the remainder of the building by a fire barrier constructed in accordance with Section 706 or a horizontal assembly constructed in accordance with Section 711, or both. Where Table 508.2 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The partitions shall extend from the floor to the underside of the fire-resistance-rated floor/ceiling assembly or fire-resistance-rated roof/ceiling assembly above or to the underside of the floor or roof sheathing, or sub deck above. Doors shall be self- or automatic closing upon detection of smoke in accordance with Section 715.4.7.3. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80.

508.2.3 Protection. Where an automatic fire-extinguishing system or an automatic sprinkler system is provided in accordance with Table 508.2, only the incidental use areas need be equipped with such a system.

ROOM OR AREA	SEPARATION ^a
Furnace room where any piece of equipment is over 400,000 Btu	2 hour; or 1 hour and provide automatic fire-extinguishing
per hour input	system
Furnace room where any piece of equipment is 400,000 Btu per	<i>1 hour or provide automatic sprinkler system^b</i>
hour input or less, except in R-3 occupancy	
Rooms with any boiler over 15 psi and 10 horsepower	2 hour; or 1 hour and provide automatic fire-extinguishing
	system
Rooms with any boiler 15 psi or less and 10 horsepower or less,	1 hour or provide automatic sprinkler system
except in R-3 occupancy	
Mechanical and/or electrical equipment room, except in R-3	1 hour or provide automatic sprinkler system
occupancy	
Refrigerant machinery rooms	1 hour or provide automatic sprinkler system
Parking garage (Section 406.2)	2 hours; or 1 hour and provide automatic fire-extinguishing
	system
Hydrogen cut-off rooms	2-hour fire barriers and floor/ceiling assemblies in all occupancy
	groups.
Incinerator rooms	2 hours and automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies	2 hours; or 1 hour and provide automatic fire-extinguishing
other than Group F	system
Laboratories and vocational shops, not classified as Group H,	2 hour; or 1 hour and provide automatic fire-extinguishing
located in Group E or I-2 occupancies	system
Laundry rooms over 100 square feet, except within dwelling units	1 hour or provide automatic fire-extinguishing system
Storage rooms over 100 square feet, except in R-3 occupancy	1 hour or provide automatic fire-extinguishing system
Group I-3 cells equipped with padded surfaces	1 hour
Group I-2 waste and linen collection rooms	1 hour

TABLE 508.2INCIDENTAL USE AREAS

Waste and linen collection rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system
Stationary lead-acid battery systems having a liquid capacity of	2-hour fire barriers and floor/ceiling assemblies in all occupancy
more than 100 gallons used for facility emergency power or	groups
uninterrupted power supplies	
Rooms utilizing the electrical installation standards for	
"information technology rooms" as per Section 645.1 of the New	As may be required by the New York City Electrical Code
York City Electrical Code	is may be required by the tien form only Electrical could

For SI: 1 square foot = 0.0929 m^2 , 1 pound per square inch = 6.9 kPa, 1 British thermal unit = 0.293 watts, 1 horsepower = 746 watts,

- a. Where an automatic fire-extinguishing system is provided, it need only be provided in the incidental use room or area.
- b. Multiple dwellings shall also comply with Section 65 of the New York State Multiple Dwelling Law.

508.3 Mixed occupancies. Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy_group, the building or portion thereof shall comply with Sections 508.3.1, 508.3.2, 508.3.3 or a combination of these sections.

Exceptions:

- 1. Occupancies separated in accordance with Section 509.
- 2. Where required by Table 415.3.2, areas of Group H-1, H-2 or H-3 occupancies shall be located in a separate and detached building or structure.
- 3. Incidental use areas in accordance with Section 508.2.

508.3.1 Accessory occupancies. Accessory occupancies are those occupancies subsidiary to the main occupancy of the building or portion thereof. In addition, the aggregate of all accessory occupancies located on a single story shall not occupy more than 10 percent of the floor area of the story in which they are located and shall not exceed the tabular values in Table 503 for each such accessory occupancy, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies.

Exceptions:

- 1. The following accessory occupancies are permitted to occupy more than 10 percent of the floor area of the story in which they are located:
 - 1.1. Accessory assembly areas having a floor area less than 750 square feet (69.7 m^2).
 - 1.2. Assembly areas that are accessory to Group E occupancies.
 - 1.3. Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100.
- 2. Rooms or spaces within Group H-2, H-3, H-4 or H-5 occupancy shall not be considered accessory occupancies and shall be treated as separated occupancies in accordance with Section 508.3.3.

508.3.1.1 Occupancy classification. Each accessory occupancy shall be individually classified in accordance with Section 302.1. All code requirements shall apply to each accessory occupancy based upon its individual occupancy classification, except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the entire building or portion thereof.

Exception. Code requirements for allowable height and area and for separation shall be governed by Sections 508.3.1.2 and 508.3.1.3.

 $^{1 \} gallon = 3.785 \ L.$

508.3.1.2 Allowable height and area. The allowable height and area of the building shall be based on the allowable height and area for the main occupancy in accordance with Section 503.1. The height and area of any accessory occupancy shall not exceed the tabular values in Table 503, without height and area increases in accordance with Sections 504 and 506 for such accessory occupancies.

508.3.1.3 Separation. No separation is required between an accessory occupancy and its main occupancy.

508.3.2 Nonseparated occupancies. Buildings or portions of buildings that comply with the provisions of this section shall qualify as nonseparated occupancies.

Exception: Rooms or spaces within Group H-2, H-3, H-4 or H-5 occupancy shall be considered a separated occupancy and shall comply with Section 508.3.3.

508.3.2.1 Occupancy classification. Nonseparated occupancies shall be individually classified in accordance with Section 302.1. All code requirements shall apply to each portion of the building based on the occupancy classification of that space, except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the entire building or portion thereof.

Exception. Code requirements for allowable height and area and for separation shall be governed by Sections 508.3.2.2 and 508.3.2.3.

508.3.2.2 Allowable height and area. The allowable height and area of the building or portion thereof shall be based on the most restrictive allowances for the occupancy groups under consideration for the type of construction of the building in accordance with Section 503.1.

508.3.2.3 Separation. No separation is required between occupancies.

508.3.3 Separated occupancies. Buildings or portions of buildings that comply with the provisions of this section shall qualify as separated occupancies.

508.3.3.1 Occupancy classification. Separated occupancies shall be individually classified in accordance with Section 302.1. Each fire area shall comply with this code based on the occupancy classification of that portion of the building.

508.3.3.2 Allowable area. In each story, the building area shall be such that the sum of the ratios of the actual floor area of each occupancy divided by the allowable area of each occupancy shall not exceed one.

508.3.3.3 Allowable height. Each occupancy shall comply with the height limitations based on the type of construction of the building in accordance with Section 503.1. The height, in both feet and stories, of each fire area shall be_measured from grade plane. This measurement shall include the height, in both feet and stories, of intervening fire areas.

Exception: Special provisions permitted by Section 509.

508.3.3.4 Separation. Individual occupancies shall be separated from adjacent occupancies in accordance with Table 508.3.3. Where the building is equipped throughout with an automatic sprinkler system, installed in accordance with Section 903.3.1.1, the fire-resistance ratings in Table 508.3.3 are permitted to be reduced by 1 hour, but in no case shall be less than that required for floor construction according to the type of construction, or less than 1 hour, whichever is higher.

Exception: Fire separations of Group H and I-2 occupancies shall not be permitted any reductions in fire-resistance ratings.

508.3.3.4.1 Construction. Required separations shall be fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both, so as to completely separate adjacent occupancies.

 TABLE 508.3.3

 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)^a

USE	A-1	A-2	A-3	A-4	A-5	B^b	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5	1-1	I-2	I-3	I-4	M^b	R-1	R-2	R-3	S-1	S-2	U
A-1	_	2	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-2 ^e	=	=	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-3	_	_	_	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-4	=	=	=	=	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-5	=	=	=	=	=	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
B^b	=	=	=	=	=	=	2	3	2	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
Ε	=	=	=	=		_	_	3	2	NP	4	3	2	3	2	2	2	2	2	2	2	2	3	2	1
F-1	=	=	=	=		_	_	=	3	NP	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3
F-2	=	=	=	=	=	=	=	=	=	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
H-1	_	_	_	_	_			_	_		NP	NP	NP	NP	NP	NP	NP								
H-2	_	_	=	=	=	_	_	=	=	_	_	1	2	2	4	4	4	4	2	4	4	4	2	2	1
H-3	_	_	_	=	_	_	_	=	_	_	_	_	1	1	4	3	3	3	1	3	3	3	1	1	1
H-4	=	=	=	=	=	=	=	=	=	=	=	=	=	1	4	4	4	4	1	4	4	4	1	1	1
H-5	_	_	_	=	_	_	_	=	_	_	_	_	_	_	4	4	4	3	1	4	4	4	1	1	3
I-1	_	_	_	=	_	_	_	=	_	_	_	_	_	_	_	2	2	2	2	2	2	2	4	3	2
I-2	_	=	=	=	=	=	=	=	=	=	_	_	=	_	_	=	2	2	2	2	2	2	3	2	1
I-3	_	=	=	=	=	=	=	=	=	=	_	_	=	_	_	=	_	2	2	2	2	2	3	2	1
I-4	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	_	=	2	2	2	2	3	2	1
M^b	_	_	_	_	_			_	_		_	_	_	_	_		_	_		2	2	2	3	2	1
R-1	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	2	2	3	2	1
R-2	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	2	3	2	1
R-3	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	3	2^d	I^d
S-1	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=	3	3
S-2	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	1
U	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_

For SI: 1 square foot = 0.0929 m^2 .

NP = Not Permitted.

a. See Section 508.3.3.4 for reductions permitted.

b. Occupancy separation need not be provided for storage areas serving Groups B or M if any of the following conditions apply:

- 1. The storage area is less than 10 percent of the floor area of the story and less than 3000 square feet (278.7 m²).
- 2. The storage area is provided with an automatic fire-extinguishing system and is less than 3,000 square feet (278.7 m²); or

3. The storage area is less than 1,000 square feet (92.9 m²).

- c. Reserved.
- d. For private garages and carports, see Section 406.1.4.
- e. Commercial kitchens need not be separated from the restaurant seating areas that they serve, provided:
 - 1. The cooking equipment is vented directly to the outdoors; and
 - 2. A draft curtain of noncombustible materials, at least 24 inches (610 mm) down from the ceiling, is provided to separate the cooking facilities from the restaurant seating areas; and
 - 3. Sprinkler heads constructed in accordance with the provisions of this code are provided in the kitchen side of the curtain, within 24 inches (610 mm) of the curtain opening, and any other openings including doors between the kitchen and the seating areas, and spaced not more than 48 inches (1210 mm) on center for each opening that is more than 60 inches (1524 mm) wide.

§ 91. Note i of table 601 of chapter 6 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

i. Type v construction is not permitted inside fire districts *except as provided for in_section D105.1 of Appendix D.*

§ 92. Item 4 of the exceptions in subsection 705.6 of section BC 705 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

4. Buildings located above a parking garage designed in accordance with Section [508.2] *509.2* shall be permitted to have the fire walls for the buildings located above the parking garage extend from the horizontal separation between the parking garage and the buildings.

§ 93. Subsections 706.3.5, 706.3.6, 706.4 and 706.8.1 of section BC 706 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

706.3.5 Incidental use areas. The fire barrier separating incidental use areas shall have a fire-resistance rating of not less than that indicated in Table [302.1.1] *508.2*.

706.3.6 Separation of mixed occupancies. Where the provisions of Section [302.3.2] *508.3.3* are applicable, the fire barrier separating mixed occupancies shall have a fire-resistance rating of not less than that indicated in Section [302.3.2] *508.3.3* based on the occupancies being separated.

706.4 Continuity of fire barrier walls. Fire barrier walls shall extend from the top of the floor/ceiling assembly below to the underside of the floor or roof slab or deck above and shall be securely attached thereto. These walls shall be continuous through concealed spaces such as the space above a suspended ceiling. The supporting construction for fire barrier walls shall be protected to afford the required fire-resistance rating of the fire barrier supported except for 1-hour fire-resistance-rated incidental use area separations as required by Table [302.1.1] *508.2* in buildings of Type IIB, IIIB and VB construction. Hollow vertical spaces within the fire barrier wall shall be fire-stopped at every floor level.

706.8.1 Prohibited penetrations. Penetrations into an exit enclosure shall only be allowed when permitted by Sections 1019.1.2 and 1020.5.

§ 94. Item 2.2 of the exceptions in subsection 707.2 of section BC 707 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2.2. Where the opening is protected by approved power-operated automatic shutters at every floor penetrated. The shutters shall be of noncombustible construction and have a fire-resistance rating of not less than 1.5 hours. The shutter shall be so constructed as to close immediately upon the actuation of a smoke detector installed in accordance with Section [907.11] 907.10 and shall completely shut off the well opening. Escalators shall cease operation when the shutter begins to close. The shutter shall operate at a speed of not more than 30 feet per minute (152.4 mm/s) and shall be equipped with a sensitive leading edge to arrest its progress where in contact with any obstacle, and to continue its progress on release therefrom.

§ 95. Subsections 707.13.4 and 707.13.5 of section BC 707 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

707.13.4 Termination room. Refuse and laundry chutes shall discharge into an enclosed room completely

separated from the remainder of the building by construction that has a fire-resistance rating of not less than 3 hours. Openings into the termination room shall be protected by opening protectives having a fire protection rating of not less than [3] $1\frac{1}{2}$ hours and shall be self-closing.

707.13.5 Incinerator room. Incinerator rooms shall comply with Table [302.1.1] 508.2.

§ 96. Subsection 711.3 of section BC 711 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

711.3 Fire-resistance rating. The fire-resistance rating of floor and roof assemblies shall not be less than that required by the building type of construction. Where the floor assembly separates mixed occupancies, the assembly shall have a fire-resistance rating of not less than that required by Section [302.3.2] *508.3.3* based on the occupancies being separated. Where the floor assembly separates a single occupancy into different fire areas, the assembly shall have a fire-resistance rating of not less than that required by Section 706.3.7. Floor assemblies separating dwelling units in Group I-1 or R Occupancies shall be a minimum of 1-hour fire-resistance-rated construction.

§ 97. Item 3 of subsection 715.3.7.3 of section BC 715 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

3. Doors that protect openings in walls required to be fire-resistance rated by Table [302.1.1] 508.2.

§ 98. Subsection 715.4 of section BC 715 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

715.4 Fire-protection rated glazing. Glazing in fire window assemblies shall be fire protection rated in accordance with this section and Table 715.4. Glazing in fire doors shall comply with Section 715.3.6. Fire-protection-rated glazing installed as an opening protective in fire partitions, smoke barriers and fire barriers shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257 for a fire protection-rated glazing required in accordance with Section 704.12 for exterior wall opening protection shall be tested in accordance with acceptance criteria of NFPA 257 for a fire protection-rated glazing required in accordance with Section 704.12 for exterior wall opening protection shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257 for a fire protection rating as required in Section [715.4.7] *715.4.8*.

Exception: Wired glass in accordance with Section 715.4.3.

§ 99. Subsection 716.5.3 of section BC 716 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

716.5.3 Shaft enclosures. Ducts and air transfer openings shall not penetrate a shaft serving as an exit enclosure except as permitted by Section [1020.5] *1019.1.2*.

§ 100. Subsection 719.3 of section BC 719 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

719.3 Exposed installation. Insulation materials, where exposed as installed in buildings of any type construction, shall have a flame spread index of not more [that] *than* 25 and a smoke-development index of not more than 50.

Exception: Cellulose loose-fill insulation that is not spray applied complying with the requirements of Section 719.6 shall only be required to meet the smoke-development index of not more than 50.

§ 101. Tables 720.1(2) and 720.1(3) of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are REPEALED and new tables 720.1(2) and 720.1(3) are added to read as follows:

	ITEM		тніскі	NIMUM NESS F/ (inc	FINISHI ACE-TO- hes)	ED -FACE ^b
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
	1-1.1	Solid brick of clay or shale ^c	6	4.9	3.8	2.7
	1-1.2	Hollow brick, not filled.	5.0	4.3	3.4	2.3
1. Brick of clay or	1-1.3	Hollow brick unit wall, grout or filled with perlite vermiculite or expanded shale aggregate.	6.6	5.5	4.4	3.0
shale	1-2.1	4" nominal thick units at least 75 percent solid backed with a hat-shaped metal furring channel ${}^{3}I_{4}''$ thick formed from 0.021" sheet metal attached to the brick wall on 24" centers with approved fasteners, and ${}^{1}I_{2}''$ Type X gypsum wallboard attached to the metal furring strips with 1"-long Type S screws spaced 8" on center.	_	_	5 ^d	_
2. Combination of	2-1.1	4" solid brick and 4" tile (at least 40 percent solid).		8	_	
clay brick and load-bearing hollow clay tile	2-1.2	4" solid brick and 8" tile (at least 40 percent solid).	12	_	_	_
	3-1.1 ^{f, g}	Expanded slag or pumice.	4.7	4.0	3.2	2.1
3. Concrete	3-1.2 ^{f, g}	Expanded clay, shale or slate.	5.1	4.4	3.6	2.6
masonry units	3-1.3 ^f	Limestone, cinders or air-cooled slag.	5.9	5.0	4.0	2.7
	3-1.4 ^{f, g}	Calcareous or siliceous gravel.	6.2	5.3	4.2	2.8
		Siliceous aggregate concrete.	7.0	6.2	5.0	3.5
		Carbonate aggregate concrete.	6.6	5.7	4.6	3.2
4. Solid concrete ^{b,1}	4-1.1	Sand-lightweight concrete.	5.4	4.6	3.8	2.7
		Lightweight concrete.	5.1	4.4	3.6	2.5
	5-1.1	One 2" unit cored 15 percent maximum and one 4" unit cored 25 percent maximum with $3/4$ " mortar-filled collar joint. Unit positions reversed in alternate courses.	_	6 ³ /8	_	_
	5-1.2	One 2" unit cored 15 percent maximum and one 4" unit cored 40 percent maximum with ${}^{3}\!/_{4}$ " mortar-filled collar joint. Unit positions side with ${}^{3}\!/_{4}$ " gypsum plaster. Two wythes tied together every fourth course with No. 22 gage corrugated metal ties.	_	6 ³ /4	_	_
5. Glazed or	5-1.3	One unit with three cells in wall thickness, cored 29 percent maximum.	_		6	_
unglazed facing tile, nonload-bearing	5-1.4	One 2" unit cored 22 percent maximum and one 4" unit cored 41 percent maximum with $\frac{1}{4}$ "mortar-filled collar joint. Two wythes tied together every third course with 0.030" (No. 22 galvanized sheet steel gage) corrugated metal ties.	_	_	6	_
	5-1.5	One 4" unit cored 25 percent maximum with $\frac{3}{4}$ " gypsum plaster on one side.			4 ³ /4	_
	5-1.6	One 4" unit with two cells in wall thickness, cored 22 percent maximum.			_	4
	5-1.7	One 4" unit cored 30 percent maximum with $3/4''$ vermiculite gypsum plaster on one side.	_	_	4 ¹ / ₂	_
	5-1.8	One 4" unit cored 39 percent maximum with $3/4''$ gypsum plaster on one side.	_		_	4 ¹ / ₂

TABLE 720.1(2) RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ^{8,0,p}

	ITEM		М	NIMUM THICK FACE-T((inc	FINISHI NESS D-FACE hes)	ED 5
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
	6-1.1	${}^{3/4}''$ by 0.055" (No. 16 carbon sheet steel gage) vertical cold-rolled channels, 16" on center with 2.6-pound flat metal lath applied to one face and tied with 0.049" (No. 18 B.W. Gage) wire at 6" spacing. Gypsum plaster each side mixed 1:2 by weight, gypsum to sand aggregate.	_	_	_	2 ^d
	6-1.2	${}^{3}\!/_{4}''$ by 0.055" (No. 16 carbon sheet steel gage) cold-rolled channels 16" on center with metal lath applied to one face and tied with 0.049" (No. 18 B.W. gage) wire at 6" spacing. Perlite or vermiculite gypsum plaster each side. For three-coat work, the plaster mix for the second coat shall not exceed 100 pounds of gypsum to $2^{1}\!/_{2}$ cubic feet of aggregate for the 1-hour system.	_	_	2 ¹ /2 ^d	2 ^d
6. Solid gypsum plaster	6-1.3	${}^{3/4}''$ by 0.055" (No. 16 carbon sheet steel gage) vertical cold-rolled channels, 16" on center with ${}^{3/8}''$ gypsum lath applied to one face and attached with sheet metal clips. Gypsum plaster each side mixed 1:2 by weight, gypsum to sand aggregate.	_	_	_	2 ^d
	6-2.1	Studless with ¹ / ₂ " full-length plain gypsum lath and gypsum plaster each side. Plaster mixed 1:1 for scratch coat and 1:2 for brown coat, by weight, gypsum to sand aggregate.	_	_	_	2 ^d
	6-2.2	Studless with $1/2''$ full-length plain gypsum lath and perlite or vermiculite gypsum plaster each side.	_	_	$2^{1}/_{2}^{d}$	2 ^d
	6-2.3	Studless partition with ³ / ₈ " rib metal lath installed vertically adjacent edges tied 6" on center with No. 18 gage wire ties, gypsum plaster each side mixed 1:2 by weight, gypsum to sand aggregate.	_	_	_	2 ^d
 Solid perlite and portland cement 	7-1.1	Perlite mixed in the ratio of 3 cubic feet to 100 pounds of portland cement and machine applied to stud side of $1^{1}/_{2}$ " mesh by 0.058-inch (No. 17 B.W. gage) paper-backed woven wire fabric lath wire-tied to 4"-deep steel trussed wire ³ studs 16" on center. Wire ties of 0.049" (No. 18 B.W. gage) galvanized steel wire 6" on center vertically.	_	_	3 ¹ /8 ^d	_
 Solid neat wood fibered gypsum plaster 	8-1.1	³ / ₄ " by 0.055-inch (No. 16 carbon sheet steel gage) cold-rolled channels, 12" on center with 2.5-pound flat metal lath applied to one face and tied with 0.049" (No. 18 B.W. gage) wire at 6" spacing. Neat gypsum plaster applied each side.	_	_	2 ^d	_
9. Solid wallboard partition	9-1.1	One full-length layer ¹ / ₂ " Type X gypsum wallboard ^e laminated to each side of 1" full-length V-edge gypsum coreboard with approved laminating compound. Vertical joints of face layer and coreboard staggered at least 3".	_	_	2 ^d	_
10. Hollow (studless)	10-1.1	One full-length layer of ${}^{5}\!\!/_{8}$ " Type X gypsum wallboard ^e attached to both sides of wood or metal top and bottom runners laminated to each side of 1" × 6" full-length gypsum coreboard ribs spaced 24" on center with approved laminating compound. Ribs centered at vertical joints of face plies and joints staggered 24" in opposing faces. Ribs may be recessed 6" from the top and bottom.	_	_	_	2 ¹ /4 ^d
gypsum wallboard partition	10-1.2	$1''$ regular gypsum V-edge full-length backing board attached to both sides of wood or metal top and bottom runners with nails or $1^{5}l_{8}''$ drywall screws at 24'' on center. Minimum width of rumors $1^{5}l_{8}''$. Face layer of $1'l_{2}''$ regular full-length gypsum wallboard laminated to outer faces of backing board with approved laminating compound.	_	_	4 ⁵ /8 ^d	_

TABLE 720.1(2)—continued RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ^{a,o,p}

			м тніск	INIMUM NESS F/ (inc	FINISHI ACE-TO- hes)	ED -FACE ^b
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
	11-1.1	$3^{1}\!/_{4}^{\prime\prime}$ × 0.044″ (No. 18 carbon sheet steel gage) steel studs spaced 24″ on center. $^{5}\!/_{8}^{\prime\prime}$ gypsum plaster on metal lath each side mixed 1:2 by weight, gypsum to sand aggregate.	_	_	_	4 ³ /4 ^d
11. Noncombustible	11-1.2	$3^{3}\prime_{g}'' \times 0.055'''$ (No. 16 carbon sheet steel gage) approved nailable ^k studs spaced 24" on center. ${}^{5}\prime_{g}''$ neat gypsum wood-fibered plaster each side over ${}^{3}\prime_{g}''$ rib metal lath nailed to studs with 6d common nails, 8" on center. Nails driven $1{}^{1}\prime_{g}''$ and bent over.	_	_	5 ⁵ /8	_
studs—interior partition with plaster each side	11-1.3	$4^{\prime\prime} \times 0.044^{\prime\prime}$ (No. 18 carbon sheet steel gage) channel-shaped steel studs at 16^{\prime\prime} on center. On each side approved resilient clips pressed onto stud flange at 16^{\prime\prime} vertical spacing, ${}^{1}\!/_{4}^{\prime\prime}$ pencil rods snapped into or wire tied onto outer loop of clips, metal lath wire-tied to pencil rods at 6^{\prime\prime} intervals, 1^{\prime\prime} perlite gypsum plaster, each side.	_	7 ⁵ /8 ^d	_	_
	11-1.4	$2^{1}\prime_{2}^{\prime\prime} \times 0.044^{\prime\prime}$ (No. 18 carbon sheet steel gage) steel studs spaced 16" on center. Wood fibered gypsum plaster mixed 1:1 by weight gypsum to sand aggregate applied on $^{3}\prime_{4}$ -pound metal lath wire tied to studs, each side. $^{3}\prime_{4}^{\prime\prime}$ plaster applied over each face, including finish coat.	_	_	4 ¹ /4 ^d	_
	12-1.1 ^{l, m}	$2'' \times 4''$ wood studs 16'' on center with ${}^{5}/{_8}''$ gypsum plaster on metal lath. Lath attached by 4d common nails bent over or No. 14 gage by $1{}^{1}/{_4}''$ by ${}^{3}/{_4}''$ crown width staples spaced 6'' on center. Plaster mixed 1:1 ${}^{1}/{_2}$ for scratch coat and 1:3 for brown coat, by weight, gypsum to sand aggregate.	_	_	_	5 ¹ /8
12. Wood studs	12-1.2 ¹	$2'' \times 4''$ wood studs 16'' on center with metal lath and ${}^{7}\!/_{8}''$ neat wood-fibered gypsum plaster each side. Lath attached by 6d common nails, 7'' on center. Nails driven $1{}^{1}\!/_{4}''$ and bent over.	_	_	5 ¹ /2 ^d	_
with plaster each	12-1.31	$2'' \times 4''$ wood studs 16'' on center with ${}^{3}/{_{8}}''$ perforated or plain gypsum lath and ${}^{1}/{_{2}}''$ gypsum plaster each side. Lath nailed with ${}^{1}/{_{8}}''$ by No. 13 gage by ${}^{19}/{_{64}}''$ head plasterboard blued nails, 4'' on center. Plaster mixed 1:2 by weight, gypsum to sand aggregate.	_	_	_	5 ¹ /4
	12-1.4 ¹	$2'' \times 4''$ wood studs 16'' on center with ${}^{3}/{_{8}}''$ Type X gypsum lath and ${}^{1}/{_{2}}''$ gypsum plaster each side. Lath nailed with 1 ${}^{1}/{_{8}}''$ by No. 13 gage by ${}^{19}/_{64}''$ head plasterboard blued nails, 5'' on center. Plaster mixed 1:2 by weight, gypsum to sand aggregate.	_	_	_	5 ¹ /4
13.Noncumbustible	13-1.1	0.018''' (No. 25 carbon sheet steel gage) channel-shaped studs 24'' on center with one full-length layer of ${}^{5}/{}_{8}'''$ Type X gypsum wallboard ^e applied vertically attached with 1'' long No. 6 drywall screws to each stud. Screws are 8'' on center around the perimeter and 12'' on center on the intermediate stud. The wallboard may be applied horizontally when attached to $3{}^{5}/{}_{8}'''$ studs and the horizontal joints are staggered with those on the opposite side. Screws for the horizontal application shall be 8'' on center at vertical edges and 12'' on center at intermediate studs.	_	_	_	27/8 ^d
studs—interior partition with gypsum wallboard each side	13-1.2	0.018" (No. 25 carbon sheet steel gage) channel-shaped studs 25" on center with two full-length layers of $^{1}/_{2}$ " Type X gypsum wallboard ^e applied vertically each side. First layer attached with 1"-long, No. 6 drywall screws, 8" on center around the perimeter and 12" on center on the intermediate stud. Second layer applied with vertical joints offset one stud space from first layer using $1^{5}/_{8}$ " long, No. 6 drywall screws spaced 9" on center along vertical joints, 12" on center at intermediate studs and 24" on center along top and bottom runners.	_	_	3 ⁵ /8 ^d	_
	13-1.3	0.055" (No. 16 carbon sheet steel gage) approved nailable metal studs ^e 24" on center with full-length ${}^{5}\!/_{8}$ " Type X gypsum wallboard ^e applied vertically and nailed 7" on center with 6d cement-coated common nails. Approved metal fastener grips used with nails at vertical butt joints along studs.	_	_	_	4 ⁷ /8

TABLE 720.1(2)—continued RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ^{a,o,p}

			тніск	INIMUM NESS F (inc	ACE-TO hes)	ED -FACE ^b
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
	14-1.1 ^{h, m}	$2'' \times 4''$ wood studs 16'' on center with two layers of ${}^{3}/{}^{''}_{8}$ regular gypsum wallboard ^e each side, 4d cooler ^a or wallboard ^a nails at 8'' on center first layer, 5d cooler ^a or wallboard ^a nails at 8'' on center second layer with laminating compound between layers, joints staggered. First layer applied full length vertically, second layer applied horizontally or vertically	_	_	_	5
	14-1.2 ^{l, m}	$2'' \times 4''$ wood studs 16'' on center with two layers $^{1/2''}$ regular gypsum wallboard ^e applied vertically or horizontally each side ^k , joints staggered. Nail base layer with 5d cooler ⁿ or wallboard ⁿ nails at 8'' on center face layer with 8d cooler ⁿ or wallboard ⁿ nails at 8'' on center.	_	_	_	5 ¹ / ₂
14.Wood studs—interior	14-1.3 ^{l, m}	2" × 4" wood studs 24" on center with ⁵ / ₈ " Type X gypsum wallboard ^e applied vertically or horizontally nailed with 6d cooler ⁿ or wallboard ⁿ nails at 7" on center with end joints on nailing members. Stagger joints each side.	_	_	_	4 ³ /4
partition with gypsum wallboard each side	14-1.4 ¹	$2'' \times 4''$ fire-retardant-treated wood studs spaced $24''$ on center with one layer of $5'_8''$ Type X gypsum wallboard ^e applied with face paper grain (long dimension) parallel to studs. Wallboard attached with 6d cooler ⁿ or wallboard ⁿ nails at 7'' on center.	_	_	_	4 ³ /4 ^d
	14-1.5 ^{i, m}	$2'' \times 4''$ wood studs 16'' on center with two layers ${}^{5}l_{8}''$ Type X gypsum wallboard ^e each side. Base layers applied vertically and nailed with 6d cooler ^a or wallboard ^a nails at 9'' on center. Face layer applied vertically or horizontally and nailed with 8d cooler ^a or wallboard ^a nails at 7'' on center. For nail-adhesive application, base layers are nailed 6'' on center. Face layers applied with coating of approved wallboard adhesive and nailed 12'' on center.	_	_	6	_
	14-1.6 ¹	$2'' \times 3''$ fire-retardant-treated wood studs spaced $24''$ on center with one layer of $5'_8$ " Type X gypsum wallboard ^e applied with face paper grain (long dimension) at right angles to studs. Wallboard attached with 6d cement-coated box nails spaced 7" on center.	_	_	_	3 ⁵ /8 ^d
	15-1.1 ^{l, m}	Exterior surface with ${}^{3}\!/_{4}''$ drop siding over ${}^{1}\!/_{2}''$ gypsum sheathing on $2'' \times 4''$ wood studs at 16'' on center, interior surface treatment as required for 1-hour-rated exterior or interior $2'' \times 4''$ wood stud partitions. Gypsum sheathing nailed with ${}^{3}\!/_{4}''$ by No. 11 gage by ${}^{7}\!/_{16}''$ head galvanized nails at 8'' on center. Siding nailed with 7d galvanized smooth box nails.	_	_	_	Varies
15. Exterior or	15-1.2 ^{l, m}	$2'' \times 4''$ wood studs 16'' on center with metal lath and ${}^{3}\!/_{4}''$ cement plaster on each side. Lath attached with 6d common nails 7'' on center driven to 1'' minimum penetration and bent over. Plaster mix 1:4 for scratch coat and 1:5 for brown coat, by volume, cement to sand.	_	_	_	5³/8
interior walls	15-1.3 ^{l, m}	$2'' \times 4''$ wood studs 16'' on center with $\frac{7}{8}''$ cement plaster (measured from the face of studs) on the exterior surface with interior surface treatment as required for interior wood stud partitions in this table. Plaster mix 1:4 for scratch coat and 1:5 for brown coat, by volume, cement to sand.	_	_	_	Varies
	15-1.4	$3^{5}/8''$ No. 16 gage noncombustible studs 16'' on center with $7/8''$ cement plaster (measured from the face of the studs) on the exterior surface with interior surface treatment as required for interior, nonbearing, noncombustible stud partitions in this table. Plaster mix 1:4 for scratch coat and 1:5 for brown coat, by volume, cement to sand.	_	—	_	Varies d

TABLE 720.1(2)—continued RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ^{a,o,p}

			м тніск	INIMUM NESS F/ (inc	FINISHI ACE-TO hes)	ED -FACE ^b
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
	15-1.5 ^m	$2^{1}/_{4}'' \times 3^{3}/_{4}'''$ clay face brick with cored holes over $^{1}/_{2}'''$ gypsum sheathing on exterior surface of $2'' \times 4'''$ wood studs at 16'' on center and two layers $^{5}/_{8}''$ Type X gypsum wallboard ^e on interior surface. Sheathing placed horizontally or vertically with vertical joints over studs nailed 6'' on center with $1^{3}/_{4}'' \times No.$ 11 gage by $^{7}/_{16}''$ head galvanized nails. Inner layer of wallboard placed horizontally or vertically and nailed 8'' on center with 6d cooler ^a or wallboard ^a nails. Outer layer of wallboard placed horizontally or vertically and nailed 8'' on center with 8d cooler ^a or wallboard ^a nails. All joints staggered with vertical joints over studs. Outer layer joints taped and finished with compound. Nail heads covered with joint compound. 0.035 inch (No. 20 galvanized sheet gage) corrugated galvanized steel wall ties $^{3}/_{4}'''$ by $6^{5}/_{8}''$ attached to each stud with two 8d cooler ^a or wallboard ^a	_	_	10	_
	15-1.6 ^{1, m}	$2'' \times 6''$ fire-retardant-treated wood studs 16'' on center. Interior face has two layers of $5'_8$ '' Type X gypsum with the base layer placed vertically and attached with 6d box nails 12'' on center. The face layer is placed horizontally and attached with 8d box nails 8'' on center at joints and 12'' on center elsewhere. The exterior face has a base layer of $5'_8$ '' Type X gypsum sheathing placed vertically with 6d box nails 8'' on center at joints and 12'' on center elsewhere. An approved building paper is next applied, followed by self-furred exterior lath attached with $2^{1}/_{2''}$, No. 12 gage galvanized roofing nails with a $3'_8$ '' diameter head and spaced 6'' on center along each stud. Cement plaster consisting of a $1'_{2''}$ brown coat is then applied. The scratch coat is mixed in the proportion of 1:3 by weight, cement to sand with 10 pounds of hydrated lime and 3 pounds of approved additives or admixtures per sack of cement. The brown coat is mixed in the proportion of 1:4 by weight, cement to sand with the same amounts of hydrated lime and approved additives or admixtures used in the scratch coat.			8 ¹ /4	
15. Exterior or interior walls (continued)	15-1.7 ^{1, m}	$2'' \times 6''$ wood studs 16'' on center. The exterior face has a layer of ${}^{5}/{}^{''}_{8}$ Type X gypsum sheathing placed vertically with 6d box nails 8'' on center at joints and 12'' on center elsewhere. An approved building paper is next applied, followed by 1'' by No. 18 gage self-furred exterior lath attached with 8d by $2^{1}/{}^{''}_{2}$ long galvanized roofing nails spaced 6'' on center along each stud. Cement plaster consisting of a $1/{}^{''}_{2}$ scratch coat, a bonding agent and a $1/{}^{''}_{2}$ brown coat and a finish coat is then applied. The scratch coat is mixed in the proportion of 1:3 by weight, cement to sand with 10 pounds of hydrated lime and 3 pounds of approved additives or admixtures per sack of cement. The brown coat is mixed in the proportion of 1:4 by weight, cement to sand with the same amounts of hydrated lime and approved additives or admixtures used in the scratch coat. The interior is covered with ${}^{3}/{}^{''}_{8}$ gypsum lath with 1'' hexagonal mesh of 0.035 inch (No. 20 B.W. gage) woven wire lath furred out ${}^{5}/{}^{''}_{1}$ and 1'' perlite or vermiculite gypsum plaster. Lath nailed with $1{}^{1}_{8}$ by No. 13 gage by ${}^{19}/{}_{64}$ " head plasterboard glued nails spaced 5'' on center. Mesh attached by $1{}^{3}/{}_{4}$ " by No. 12 gage by ${}^{3}/{}_{8}$ " head nails with ${}^{3}/{}_{8}$ furrings, spaced 8'' on center. The plaster mix shall not exceed 100 pounds of gypsum to $2{}^{1}/{}_{5}$ cubic feet of aggregate.			8 ³ /8	
	15-1.8 ^{1, m}	$2'' \times 6''$ wood studs 16'' on center. The exterior face has a layer of ${}^{5}l_{8}''$ Type X gypsum sheathing placed vertically with 6d box nails 8'' on center at joints and 12'' on center elsewhere. An approved building paper is next applied, followed by $1^{1}l_{2}''$ by No. 17 gage self-furred exterior lath attached with 8d by $2^{1}l_{2}''$ long galvanized roofing nails spaced 6'' on center along each stud. Cement plaster consisting of a l_{2}'' scratch coat, and a $1'_{2}''$ brown coat is then applied. The plaster may be placed by machine. The scratch coat is mixed in the proportion of 1:4 by weight, plastic cement to sand. The interior is covered with ${}^{3}l_{8}'''$ gypsun lath with 1'' hexagonal mesh of No. 20 gage woven wire lath furred out ${}^{5}l_{16}'''$ and 1'' perlite or vermiculite gypsum plaster. Lath nailed with $1^{1}l_{8}''$ by No. 13 gage by ${}^{1}l_{6}''$ head nails spaced 5'' on center. Mesh attached by $1{}^{3}l_{4}'''$ by No. 12 gage by ${}^{3}l_{8}''$ head nails with ${}^{3}l_{8}'''$ for center. The plaster mix shall not exceed 100 pounds of gypsum to $2{}^{1}l_{2}$ cubic feet of aggregate.			8 ³ /8	

TABLE 720.1(2)—continued RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ^{a,o,p}

	R/	ATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ****	P			
	тем		М ТНІСКІ	NIMUM NESS FA (incl	FINISHE ACE-TO- hes)	ED -FACE ^b
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
15. Exterior or interior walls (continued)	15-1.9	4" No. 18 gage, nonload-bearing metal studs, 16" on center, with 1" portland cement lime plaster [measured from the back side of the ${}^{3}/_{4}$ -pound expanded metal lath] on the exterior surface. Interior surface to be covered with 1" of gypsum plaster on ${}^{3}/_{4}$ -pound expanded metal lath proportioned by weight—1:2 for scratch coat, 1:3 for brown, gypsum to sand. Lath on one side of the partition fastened to ${}^{1}/_{4}$ " diameter pencil rods supported by No. 20 gage metal clips, located 16" on center vertically, on each stud. 3" thick mineral fiber insulating batts friction fitted between the studs.			6 ¹ /2 ^d	_
	15-1.10	Steel studs 0.060" thick, 4" deep or 6" at 16" or 24" centers, with $1/2$ " Glass Fiber Reinforced Concrete (GFRC) on the exterior surface. GFRC is attached with flex anchors at 24" on center, with 5" leg welded to studs with two $1/2$ "-long flare-bevel welds, and 4" foot attached to the GFRC skin with $5/8$ " thick GFRC bonding pads that extend $21/2$ " beyond the flex anchor foot on both sides. Interior surface to have two layers of $1/2$ " Type X gypsum wallboard. The first layer of wallboard to be attached with 1"-long Type S buglehead screws spaced 24" on center and the second layer is attached with $15/8$ "-long Type S screws spaced at 12" on center. Cavity is to be filled with 5" of 4 pcf (nominal) mineral fiber batts. GFRC has $11/2$ " returns packed with mineral fiber and caulked on the exterior.	_	_	6 ¹ / ₂	_
	15-1.11	Steel studs 0.060" thick, 4" deep or 6" at 16" or 24" centers, respectively, with 1_{2} " Glass Fiber Reinforced Concrete (GFRC) on the exterior surface. GFRC is attached with flex anchors at 24" on center, with 5" leg welded to studs with two 1_{2} "-long flare-bevel welds, and 4" foot attached to the GFRC skin with 5_{8} "-thick GFRC bonding pads that extend 21_{2} " beyond the flex anchor foot on both sides. Interior surface to have one layer of 5_{8} " Type X gypsum wallboard ⁶ , attached with 1_{4} "-long Type S buglehead screws spaced 12" on center. Cavity is to be filled with 5" of 4 pcf (nominal) mineral fiber batts. GFRC has 11_{2} " returns packed with mineral fiber and caulked on the exterior.			_	6 ¹ /8
	15-1.129	$2'' \times 6''$ wood studs at $16''$ with double top plates, single bottom plate; interior and exterior sides covered with ${}^{5}\prime_{8}''$ Type X gypsum wallboard, 4' wide, applied horizontally or vertically with vertical joints over studs, and fastened with ${}^{2}\iota_{4}'''$ Type S drywall screws, spaced 12'' on center.	_	_	_	6 ³ /4
	15-1.139	$2'' \times 6''$ wood studs at 16'' with double top plates, single bottom plate; interior and exterior sides covered with ${}^{5}\prime_{8}''$ Type X gypsum wallboard, 4' wide, applied horizontally or vertically with vertical joints over studs, and fastened with ${}^{2}\prime_{4}'''$ Type S drywall screws, spaced 7'' on center. Cavity to be filled with ${}^{5}\prime_{2}'''$ mineral wool insulation minimum 2.58 pcf (nominal).	_	_	_	6 ³ /4
	15-1.149	$2'' \times 4''$ wood studs at 16'' with double top plates, single bottom plate; interior and exterior sides covered with ${}^{5}/{}_{8}''$ Type X gypsum wallboard and sheathing, respectively, 4' wide, applied horizontally or vertically with vertical joints over studs, and fastened with ${}^{2}/{}_{4}''$ Type S drywall screws, spaced 12'' on center. Cavity to be filled with ${}^{3}/{}_{2}''$ mineral wool insulation.	_	_	_	4 ³ / ₄
	15-1.159	$2'' \times 6''$ wood studs at 24'' centers with double top plates, single bottom plate; interior and exterior side covered with two layers of ${}^{5/}{}_{8}''$ Type X gypsum wallboard, 4' wide, applied horizontally with vertical joints over studs. Base layer fastened with $2{}^{1/}{}_{4}''$ Type S drywall screws, spaced 24'' on center, and face layer fastened with Type S drywall screws, spaced 8'' on center, wallboard joints covered with paper tape and joint compound, fastened heads covered with joint compound. Cavity to be filled with $5{}^{1/}{}_{2}''$ mineral wool insulation.	_	_	7 ³ /4	_

TABLE 720.1(2)—continued RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS ^{a,o,p}

TABLE 720.1(2)—continued RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS a,o,p

	ITEM		М ТНІСКІ	NIMUM NESS F/ (inc	FINISHI ACE-TO- hes)	ED •FACE ^b
MATERIAL	NUMBER	CONSTRUCTION	4 hour	3 hour	2 hour	1 hour
 Exterior walls rated for fire resistance from the 	16-1.1ª	$2'' \times 4''$ wood studs at $16''$ centers with double top plates, single bottom plate; interior side covered with ${}^{5}\!f_{8}''$ Type X gypsum wallboard, 4' wide, applied horizontally unblocked, and fastened with ${}^{21}\!f_{4}''$ Type S drywall screws, spaced 12'' on center, wallboard joints covered with paper tape and joint compound, fastener heads covered with joint compound. Exterior covered with ${}^{3}\!f_{8}''$ wood structural panels (oriented strand board), applied vertically, horizontal joints blocked and fastened with 6d common nails (bright) — $12''$ on center in the field, and 6'' on center panel edges. Cavity to be filled with ${}^{31}\!f_{2}'''$ mineral wool insulation. Rating established for exposure from interior side only.				4 ¹ /2
inside only in accordance with Section 704.5.	16-1.2ª	$2" \times 6"$ (51 mm x 152 mm) wood studs at 16 " centers with double top plates, single bottom plate; interior side covered with ${}^{5}/{}_{8}$ " Type X gypsum wallboard, 4' wide, applied horizontally or vertically with vertical joints over studs and fastened with ${}^{2}/{}_{4}$ " Type S drywall screws, spaced 12" on center, wallboard joints covered with paper tape and joint compound, fastener heads covered with joint compound, exterior side covered with ${}^{7}/{}_{16}$ " wood structural panels (oriented strand board) fastened with 6d common nails (bright) spaced 12" on center in the field and 6" on center along the panel edges. Cavity to be filled with ${}^{5}/{}_{2}$ " mineral wool insulation. Rating established from the gypsum-covered side only.	_		_	6% ₁₆

For SI: 1 inch = 25.4 mm, 1 square inch = 645.2 mm², 1 cubic foot = 0.0283 m³.

a. Staples with equivalent holding power and penetration shall be permitted to be used as alternate fasteners to nails for attachment to wood framing.

- b. Thickness shown for brick and clay tile are nominal thicknesses unless plastered, in which case thicknesses are net. Thickness shown for concrete masonry and clay masonry is equivalent thickness defined in Section 721.3.1 for concrete masonry and Section 721.4.1.1 for clay masonry. Where all cells are solid grouted or filled with silicone-treated perite loose-fill insulation; verniculite loose-fill insulation; or expanded clay, shale or slate lightweight aggregate, the equivalent thickness of the block or brick using specified dimensions as defined in Chapter 21. Equivalent thickness may also include the thickness of applied plaster and lath or gypsum wallboard, where specified.
- c. For units in which the net cross-sectional area of cored brick in any plane parallel to the surface containing the cores is at least 75 percent of the gross cross-sectional area measured in the same plane.
- d. Shall be used for nonbearing purposes only.

e. For all of the construction with gypsum wallboard described in this table, gypsum base for veneer plaster of the same size, thickness and core type shall be permitted to be substituted for gypsum wallboard, provided attachment is identical to that specified for the wallboard, and the joints on the face layer are reinforced and the entire surface is covered with a minimum of ¹/_{1,e}-inch gypsum veneer plaster.

f. The fire-resistance time period for concrete masonry units meeting the equivalent thicknesses required for a 2-hour fire-resistance rating in Item 3, and having a thickness of not less than 7⁵/₈ inches is 4 hours when cores which are not grouted are filled with silicone-treated period period losse-fill insulation; verniculite losse-fill insulation; or expanded clay, shale or slate lightweight aggregate, sand or slag having a maximum particle size of ³/₈ inch.

g. The fire-resistance rating of concrete masonry units composed of a combination of aggregate types or where plaster is applied directly to the concrete masonry

shall be determined in accordance with ACI 216.1/TMS 216. Lightweight aggregates shall have a maximum combined density of 65 pounds per cubic foot. h. See also Note b. The equivalent thickness shall be permitted to include the thickness of cement plaster or 1.5 times the thickness of gypsum plaster applied in accordance with the requirements of Chapter 25.

- i. Concrete walls shall be reinforced with horizontal and vertical temperature reinforcement as required by Chapter 19.
- . Studs are welded truss wire studs with 0.18 inch (No. 7 B.W. gage) flange wire and 0.18 inch (No. 7 B.W. gage) truss wires.
- k. Nailable metal studs consist of two channel studs spot welded back to back with a crimped web forming a nailing groove.
- Wood structural panels shall be permitted to be installed between the fire protection and the wood studs on either the interior or exterior side of the wood frame assemblies in this table, provided the length of the fasteners used to attach the fire protection are increased by an amount at least equal to the thickness of the wood structural panel.

m. The design stress of studs shall be reduced to 78 percent of allowable F'_e with the maximum not greater than 78 percent of the calculated stress with studs having a slenderness ratio l/d of 33.

n. For properties of cooler or wallboard nails, see ASTM C 514, ASTM C 547 or ASTM F 1667.

o. Generic fire-resistance ratings (those not designated as PROPRIETARY* in the listing) in the GA 600 shall be accepted as if herein listed.

p. NCMA TEK 5-8, shall be permitted for the design of fire walls.

q. The design stress of studs shall be equal to a maximum of 100 percent of the allowable F'c calculated in accordance with Section 2306.

			THICKNESS OF FLOOR OR ROOF SLAB (inches)			MINIMUM THICKNESS OF CEILING (inches)				
FLOOR OR ROOF CONSTRUCTION	ITEM NUMBER	CEILING CONSTRUCTION	4 hour	3 hour	2 hour	1 hour	4 hour	3 hour	2 hour	1 hour
1. Siliceous aggregate concrete	1-1.1	Slab (no ceiling required). Minimum cover over nonprestressed reinforcement shall not be less than	7.0	6.2	5.0	3.5	_	_	_	–
2. Carbonate	2-1.1		6.6	5.7	4.6	3.2	_	_	_	_
3. Sand-lightweight concrete	3-1.1	³ / ₄ inch. ^b	5.4	4.6	3.8	2.7	_	_	_	_
4. Lightweight concrete	4-1.1		5.1	4.4	3.6	2.5	_	_	_	_
5. Reinforced concrete	5-1.1	Slab with suspended ceiling of vermiculite gypsum plaster over metal lath attached to ${}^{3}/_{4}$ " cold-rolled channels spaced 12" on center. Ceiling located 6" minimum below joists.	3	2	_	_	1	³ /4	_	_
	5-2.1	${}^{3}\prime_{8}''$ Type X gypsum wallboard ^e attached to 0.018 inch (No. 25 carbon sheet steel gage) by ${}^{7}\prime_{8}''$ deep by ${}^{25}\prime_{8}''$ hat-shaped galvanized steel channels with 1''-long No. 6 screws. The channels are spaced 24'' on center, span 35'' and are supported along their length at 35'' intervals by 0.033-inch (No. 21 galvanized sheet gage) galvanized steel flat strap hangers having formed edges that engage the lips of the channel. The strap hangers are attached to the side of the concrete joists with ${}^{5}\prime_{32}''$ by ${}^{1}\prime_{4}''$ long power-driven fasteners. The wallboard is installed with the long dimension perpendicular to the channels. All end joints occur on channels and supplementary channels are installed parallel to the main channels, 12'' each side, at end joint occurrences. The finished ceiling is located approximately 12'' below the soffit of the floor slab.			21/2				5/ ₈	
 Steel joists constructed with a poured reinforced concrete slab on metal lath forms or steel form units^{d, e} 	6-1.1	Gypsum plaster on metal lath attached to the bottom cord with single No. 16 gage or doubled No. 18 gage wire ties spaced 6" on center. Plaster mixed 1:2 for scratch coat, 1:3 for brown coat, by weight, gypsum-to-sand aggregate for 2-hour system. For 3-hour system plaster is neat.	_	_	21/2	2 ¹ / ₄	_	_	³ /4	⁵ /8
	6-2.1	Vermiculite gypsum plaster on metal lath attached to the bottom chord with single No.16 gage or doubled 0.049-inch (No. 18 B.W. gage) wire ties 6" on center.	_	2	_	_	_	⁵ / ₈	_	_
	6-3.1	Cement plaster over metal lath attached to the bottom chord of joists with single No. 16 gage or doubled 0.049-inch (No. 18 B.W. gage) wire ties spaced 6" on center. Plaster mixed 1:2 for scratch coat, 1:3 for brown coat for 1-hour system and 1:1 for scratch coat, 1:1 $\frac{1}{2}$ for brown coat for 2-hour system, by weight, cement to sand.	_	_	_	2	_	_	_	5/8t
	6-4.1	Ceiling of $\frac{5}{8}''$ Type X wallboard ^c attached to $\frac{7}{8}''$ deep by $\frac{25}{8}''$ by 0.021 inch (No. 25 carbon sheet steel gage) hat-shaped furring channels 12'' on center with 1'' long No. 6 wallboard screws at 8'' on center. Channels wire tied to bottom chord of joists with doubled 0.049 inch (No. 18 B.W. gage) wire or suspended below joists on wire hangers. ⁸	_	_	2 ¹ / ₂	_	_	_	⁵ /8	_
	6-5.1	Wood-fibered gypsum plaster mixed 1:1 by weight gypsum to sand aggregate applied over metal lath. Lath tied 6" on center to ${}^{3}/_{4}$ " channels spaced $13''_{2}$ " on center. Channels secured to joists at each intersection with two strands of 0.049 inch (No. 18 B.W. gage) galvanized wire.		_	2 ¹ / ₂	_	_	_	³ /4	_

TABLE 720.1(3) MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{8,q}

			THICKNESS OF FLOOR OR ROOF SLAB (inches)				MINIMUM THICKNESS OF CEILING (inches)				
FLOOR OR ROOF CONSTRUCTION	ITEM NUMBER	CEILING CONSTRUCTION	4 hour	3 hour	2 hour	1 hour	4 hour	3 hour	2 hour	1 hour	
 Reinforced concrete slabs and joists with hollow clay tile fillers laid end to end in rows 2¹/₂" or more apart; reinforcement placed between rows and concrete cast around and over tile. 	7-1.1	5/8" gypsum plaster on bottom of floor or roof construction.	_	_	8 ^h	_	_	_	5/ ₈		
	7-1.2	None	_	_	_	5 ¹ /2 ⁱ	_	_	_	_	
 Steel joists constructed with a reinforced concrete slab on top poured on a ¹/₂" deep steel deck.^e 	8-1.1	Vermiculite gypsum plaster on metal lath attached to ${}^{3/4}$ " cold-rolled channels with 0.049" (No. 18 B.W. gage) wire ties spaced 6" on center.	2 ¹ /2 ^j	_	_	_	3/4	_	_	_	
 3" deep cellular steel deck with concrete slab on top. Slab thickness measured to top. 	9-1.1	Suspended ceiling of vermiculite gypsum plaster base coat and vermiculite acoustical plaster on metal lath attached at 6" intervals to ${}^{3}/{_{4}}$ " cold-rolled channels spaced 12" on center and secured to ${}^{11}/{_{2}}$ " cold-rolled channels spaced 36" on center with 0.065" (No. 16 B.W. gage) wire. ${}^{11}/{_{2}}$ " channels supported by No. 8 gage wire hangers at 36" on center. Beams within envelope and with a ${}^{21}/{_{2}}$ " airspace between beam soffit and lath have a 4-hour rating.	21/2	_			1 ¹ /8 ^k			_	
10. 1 ¹ / ₂ "-deep steel roof deck on steel framing. Insulation board, 30 pcf density, composed of wood fibers with cement binders of thickness shown bonded to deck with unified asphalt adhesive. Covered with a Class A or B roof covering.	10-1.1	Ceiling of gypsum plaster on metal lath. Lath attached to ${}^{3}/_{4}$ " furring channels with 0.049" (No. 18 B.W. gage) wire ties spaced 6" on center. ${}^{3}/_{4}$ " channel saddle tied to 2" channels with doubled 0.065" (No. 16 B.W. gage) wire ties. 2" channels spaced 36" on center suspended 2" below steel framing and saddle-tied with 0.165" (No. 8 B.W. gage) wire. Plaster mixed 1:2 by weight, gypsum-to-sand aggregate.			17/8	1			³ /4 ¹	³ /4 ¹	
11. 1 ¹ / ₂ "-deep steel roof deck on steel-framing wood fiber insulation board, 17.5 pcf density on top applied over a 15-lb asphalt- saturated felt. Class A or B roof covering.	11-1.1	Ceiling of gypsum plaster on metal lath. Lath attached to $\frac{3}{4}''$ furring channels with 0.049" (No. 18 B.W. gage) wire ties spaced 6" on center. $\frac{3}{4}''$ channels saddle tied to 2" channels with doubled 0.065" (No. 16 B.W. gage) wire ties. 2" channels spaced 36" on center suspended 2" below steel framing and saddle tied with 0.165" (No. 8 B.W. gage) wire. Plaster mixed 1:2 for scratch coat and 1:3 for brown coat, by weight, gypsum-to-sand aggregate for 1-hour system. For 2-hour system, plaster mix is 1:2 by weight, gypsum-to-sand aggregate.			11/2	1			7/g ^g	³ / ₄ ¹	

TABLE 720.1(3)—continued MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a,q}

			THICKNESS OF FLOOR OR ROOF SLAB (inches)			MINIMUM THICKNESS OF CEILING (inches)				
FLOOR OR ROOF CONSTRUCTION	ITEM NUMBER	CEILING CONSTRUCTION	4 hour	3 hour	2 hour	1 hour	4 hour	3 hour	2 hour	1 hour
12. 1 ¹ / ₂ " deep steel roof deck on steel-framing insulation of rigid board consisting of expanded perlite and fibers impregnated with integral asphalt waterproofing; density 9 to 12 pcf secured to metal roof deck by ¹ / ₂ " wide ribbons of waterproof, cold-process liquid adhesive spaced 6" apart. Steel joist or light steel construction with metal roof deck, insulation, and Class A or B built-up roof covering. ^e	12-1.1	Gypsum-vermiculite plaster on metal lath wire tied at 6" intervals to ${}^{3}_{4}$ " furring channels spaced 12" on center and wire tied to 2" runner channels spaced 32" on center. Runners wire tied to bottom chord of steel joists.			1				7/ ₈	
 Double wood floor over wood joists spaced 16" on center.^{m,n} 	13-1.1	Gypsum plaster over ${}^{3}/{_{8}}''$ Type X gypsum lath. Lath initially applied with not less than four ${}^{1}/{_{8}}''$ by No. 13 gage by ${}^{19}/{_{64}}''$ head plasterboard blued nails per bearing. Continuous stripping over lath along all joist lines. Stripping consists of 3" wide strips of metal lath attached by ${}^{11}/{_{2}}''$ by No. 11 gage by ${}^{11}/{_{2}}''$ head roofing nails spaced 6" on center. Alternate stripping weighing 1 pound per square yard and attached by No.16 gage by ${}^{11}/{_{2}}''$ by ${}^{3}/{_{4}}''$ crown width staples, spaced 4" on center. Where alternate stripping is used, the lath nailing may consist of two nails at each end and one nail at each intermediate bearing. Plaster mixed 1:2 by weight, gypsum-to-sand aggregate.		_		_				7/8
	13-1.2	Cement or gypsum plaster on metal lath. Lath fastened with $1^{1}/_{2}^{"}$ by No. 11 gage by $7^{1}/_{16}^{"}$ head barbed shank roofing nails spaced 5" on center. Plaster mixed 1:2 for scratch coat and 1:3 for brown coat, by weight, cement to sand aggregate.	_	_	_	_	_	_		⁵ /8
	13-1.3	Perlite or vermiculite gypsum plaster on metal lath secured to joists with $1^{1}/_{2}^{"}$ by No. 11 gage by $7/_{16}^{"}$ head barbed shank roofing nails spaced 5" on center.	_	_	_	_	_	_	_	⁵ /8
	13-1.4	¹ / ₂ " Type X gypsum wallboard ^e nailed to joists with 5d cooler ^o or wallboard ^o nails at 6" on center. End joints of wallboard centered on joists.	_	_	_	_	_	_	_	1/2
 14. Plywood stressed skin panels consisting of ³/₆"-thick interior C-D (exterior glue) top stressed skin on 2" × 6"nominal (minimum) stringers. Adjacent panel edges joined with 8d common wire nails spaced 6" on center. Stringers spaced 12" maximum on center. 	14-1.1	1/2''-thick wood fiberboard weighing 15 to 18 pounds per cubic foot installed with long dimension parallel to stringers or $3/8''$ C-D (exterior glue) plywood glued and/or nailed to stringers. Nailing to be with 5d cooler ^o or wallboard ^o nails at 12'' on center. Second layer of $1/2''$ Type X gypsum wallboard ^c applied with long dimension perpendicular to joists and attached with 8d cooler ^o or wallboard ^o nails at 6'' on center at end joints and 8'' on center elsewhere. Wallboard joints staggered with respect to fiberboard joints.			_		_			1

TABLE 720.1(3)—continued MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a,q}
			THIC	KNESS R ROC (inc	SOFF SDFSL/ hes)	LOOR	MINI	MUM T OF CE (inc	HICKI ILING hes)	NESS
FLOOR OR ROOF CONSTRUCTION	ITEM NUMBER	CEILING CONSTRUCTION	4 hour	3 hour	2 hour	1 hour	4 hour	3 hour	2 hour	1 hour
15. Vermiculite concrete slab proportioned 1:4 (portland cement to vermiculite aggregate) on a 1 ¹ / ₂ "-deep steel deck supported on individually protected steel framing. Maximum span of deck 6'-10" where deck is less than 0.019 inch (No. 26 carbon steel sheet gage) or greater. Slab reinforced with 4" × 8" 0.109/0.083" (No. ¹² / ₁₄ B.W. gage) welded wire mesh.	15-1.1	None				31				
16. Perlite concrete slab proportioned 1:6 (portland cement to perlite aggregate) on a 1 ¹ / ₄ "-deep steel deck supported on individually protected steel framing. Slab reinforced with 4" × 8" 0.109/0.083" (No. ¹² / ₁₄ B.W. gage) welded wire mesh.	16-1.1	None	_	_	_	3 ¹ /2 ⁱ	_	_	_	_
 Perlite concrete slab proportioned 1:6 (portland cement to perlite aggregate) on a ⁹/16["]-deep steel deck supported by steel joists 4' on center. Class A or B roof covering on top. 	17-1.1	Perlite gypsum plaster on metal lath wire tied to ${}^{3}/{}_{4}''$ furring channels attached with 0.065-inch (No. 16 B.W. gage) wire ties to lower chord of joists.	_	2P	2 ^p		_	7/8	³ /4	
 Perlite concrete slab proportioned 1:6 (portland cement to perlite aggregate) on 1¹/₄"-deep steel deck supported on individually protected steel framing. Maximum span of deck 6'-10" where deck is less than 0.019" (No. 26 carbon sheet steel gage) and 8'-0" where deck is 0.019" (No. 26 carbon sheet steel gage) or greater. Slab reinforced with 0.042" (No. 19 B.W. gage) hexagonal wire mesh. Class A or B roof covering on top. 	18-1.1	None		2 ¹ /4 ^p	2 ¹ / ₄ ^p			_		

TABLE 720.1(3)—continued MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a,q}

(continued)

			тніс	KNESS (ROOF (inc	OF FLOO SLAB	ROR	MIN	IIMUM 1 OF CE (inc	HICKNE EILING hes)	ESS
CONSTRUCTION	NUMBER	CEILING CONSTRUCTION	4 hour	3 hour	2 hour	1 hour	4 hour	3 hour	2 hour	1 hour
 Floor and beam construction consisting of 3"-deep cellular steel floor unit mounted on steel members with 1:4 (proportion of portland cement to perlite aggregate) perlite-concrete floor slab on top. 	19-1.1	Suspended envelope ceiling of perlite gypsum plaster on metal lath attached to ³ / ₄ " cold-rolled channels, secured to 1 ¹ / ₂ " cold-rolled channels spaced 42" on center supported by 0.203 inch (No. 6 B.W. gage) wire 36" on center. Beams in envelope with 3" minimum airspace between beam soffit and lath have a 4-hour rating.	2P	_	_	_	11	_	_	_
 20. Perlite concrete proportioned 1:6 (portland cement to perlite aggregate) poured to ¹/₈-inch thickness above top of corrugations of 1⁵/₁₆"-deep galvanized steel deck maximum span 8'-0" for 0.024-inch (No. 24 galvanized sheet gage) or 6' 0" for 0.019-inch (No. 26 galvanized sheet gage) with deck supported by individually protected steel framing. Approved polystyrene foam plastic insulation board having a flame spread not exceeding 75 (1" to 4" thickness) with vent holes that approximate 3 percent of the board surface area placed on top of perlite slurry. A 2' by 4' insulation board contains six 2³/₄" diameter holes. Board covered with 2¹/₄" minimum perlite concrete slab. 	20-1.1	None			Varies					

TABLE 720.1(3)—continued MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a,q}

(continued)

		THICKNESS OF FLOOR O ROOF SLAB (inches)					MINI	NUM T OF CE (inc	HICKI ILING hes)	NESS
FLOOR OR ROOF CONSTRUCTION	ITEM NUMBER	CEILING CONSTRUCTION	4 hour	3 hour	2 hour	1 hour	4 hour	3 hour	2 hour	1 hour
(continued) 20. Slab reinforced with mesh consisting of 0.042 inch (No. 19 B.W. gage) galvanized steel wire twisted together to form 2" hexagons with straight 0.065 inch (No. 16 B.W. gage) galvanized steel wire woven into mesh and spaced 3". Alternate slab reinforcement shall be permitted to consist of 4" × 8", 0.109/0.238-inch (No. 12/4 B.W. gage), or 2" × 2", 0.083/0.083-inch (No. 14/14 B.W. gage) welded wire fabric. Class A or B roof covering on top.	20-1.1	None	_	_	Varies		_	_		_
21. Wood joists, floor trusses and flat or pitched roof trusses spaced a maximum 24" o.c. with ¹ / ₂ " wood structural panels with exterior glue applied at right angles to top of joist or top chord of trusses with 8d nails. The wood structural panel thickness shall not be less than nominal ¹ / ₂ " less than required by Chapter 23.	21-1.1	Base layer ${}^{5}\!/_{8}$ " Type X gypsum wallboard applied at right angles to joist or truss 24" o.c. with $1{}^{1}\!/_{4}$ " Type S or Type W drywall screws 24" o.c. Face layer ${}^{5}\!/_{8}$ " Type X gypsum wallboard or veneer base applied at right angles to joist or truss through base layer with $1{}^{7}\!/_{8}$ " Type S or Type W drywall screws 12" o.c. at joints and intermediate joist or truss. Face layer Type G drywall screws placed 2" back on either side of face layer end joints, 12" o.c.			_	Varies	_			1 ¹ /4
22. Steel joists, floor trusses and flat or pitched roof trusses spaced a maximum 24" o.c. with ¹ / ₂ " wood structural panels with exterior glue applied at right angles to top of joist or top chord of trusses with No. 8 screws. The wood structural panel thickness shall not be less than nominal ¹ / ₂ " nor less than required by Chapter 23.	22-1.1	Base layer ${}^{5}/{_{8}}''$ Type X gypsum board applied at right angles to steel framing 24" on center with 1" Type S drywall screws spaced 24" on center. Face layer ${}^{5}/{_{8}}''$ Type X gypsum board applied at right angles to steel framing attached through base layer with ${}^{15}/{_{8}}''$ Type S drywall screws 12" on center at end joints and intermediate joints and ${}^{11}/{_{2}}''$ Type G drywall screws 12 inches on center placed 2" back on either side of face layer end joints. Joints of the face layer are offset 24" from the joints of the base layer.	_	_	_	Varies	_			1 ¹ /4
23. Wood I-joist (minimum joist depth $9^{1}I_{4}^{\prime\prime\prime}$ with a minimum flange depth of $1^{5}I_{16}^{\prime\prime\prime}$ and a minimum flange cross-sectional area of 2.3 square inches) at 24" o.c. spacing with 1 × 4 (nominal) wood furring strip spacer applied parallel to and covering the bottom of the bottom flange of each member, tacked in place. 2" mineral fiber insulation, 3.5 pcf (nominal) installed adjacent to the bottom flange of the I-joist and supported by the 1 × 4 furring strip spacer.	23-1.1	1/2'' deep single leg resilient channel 16" on center (channels doubled at wallboard end joints), placed perpendicular to the furring strip and joist and attached to each joist by $1^{7}/_{8}$ " Type S drywall screws. $5/_{8}$ " Type C gypsum wallboard applied perpendicular to the channel with end joints staggered at least 4' and fastened with $1^{1}/_{8}$ " Type S drywall screws spaced 7" on center. Wallboard joints to be taped and covered with joint compound.		_		Varies				

TABLE 720.1(3)—continued MINIMUM PROTECTION FOR FLOOR AND ROOF SYSTEMS^{a,q}

(continued)

Table 720.1(3) Notes.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 0.454 kg, 1 cubic foot = 0.0283 m³,

- 1 pound per square inch = 6.895 kPa = 1 pound per lineal foot = 1.4882 kg/m.
- a. Staples with equivalent holding power and penetration shall be permitted to be used as alternate fasteners to nails for attachment to wood framing.
- b. When the slabis in an unrestrained condition, minimum reinforcement cover shall not be less than 1⁵/₈ inches for 4-hour (siliceous aggregate only); 1¹/₄ inches for 4- and 3-hour; 1 inch for 2-hour (siliceous aggregate only); and 3¹/₄ inch for all other restrained and unrestrained conditions.
- c. For all of the construction with gypsum wallboard described in this table, gypsum base for veneer plaster of the same size, thickness and core type shall be permitted to be substituted for gypsum wallboard, provided attachment is identical to that specified for the wallboard, and the joints on the face layer are reinforced and the entire surface is covered with a minimum of ¹/₁₆-inch gypsum veneer plaster.
- d. Slab thickness over steel joists measured at the joists for metal lath form and at the top of the form for steel form units.
- e. (a) The maximum allowable stress level for H-Series joists shall not exceed 22,000 psi.
- (b) The allowable stress for K-Series joists shall not exceed 26,000 psi, the nominal depth of such joist shall not be less than 10 inches and the nominal joist weight shall not be less than 5 pounds per lineal foot.
- f. Cement plaster with 15 pounds of hydrated lime and 3 pounds of approved additives or admixtures per bag of cement.
- g. Gypsum wallboard ceilings attached to steel framing shall be permitted to be suspended with 1¹/₂ inch cold-formed carrying channels spaced 48 inches on center, which are suspended with No. 8 SWG galvanized wire hangers spaced 48 inches on center. Cross-furring channels are tied to the carrying channels with No. 18 SWG galvanized wire hangers spaced 48 inches on center. Cross-furring channels are tied to the carrying channels with No. 18 SWG galvanized wire (double strand) and spaced as required for direct attachment to the framing. This alternative is also applicable to those steel framing assemblies recognized under Note q.
- h. Six-inch hollow clay tile with 2-inch concrete slab above.
- i. Four-inch hollow clay tile with 11/2-inch concrete slab above.
- j. Thickness measured to bottom of steel form units.
- k. Five-eighths inch of vermiculite gypsum plaster plus 1/, inch of approved vermiculite acoustical plastic.
- 1. Furring channels spaced 12 inches on center.
- m. Double wood floor shall be permitted to be either of the following:
- (a) Subfloor of 1-inch nominal boarding, a layer of asbestos paper weighing not less than 14 pounds per 100 square feet and a layer of 1-inch nominal tongue-and-groove finished flooring; or
- (b) Subfloor of 1-inch nominal tongue-and-groove boarding or ¹⁵/₃₂ inch wood structural panels with exterior glue and a layer of 1-inch nominal tongue-and-groove finished flooring or ¹⁹/₃₂ inch wood structural panel finish flooring or a layer of Type I Grade M-1 particleboard notless than ⁵/₈ inch thick.
- n. The ceiling shall be permitted to be omitted over unusable space, and flooring shall be permitted to be omitted where unusable space occurs above.
- o. For properties of cooler or wallboard nails, see ASTM C 514, ASTM C 547 or ASTM F 1667.

§ 102. Table 721.2.3(2) of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 721.2.3(2) is added to read as follows:

		FIRE-RESISTANCE RATING (hours)										
		Restrained Unrestrained										
CONCRETE AGGREGATE TYPE	1	11/2	2	3	4	1	11/2	2	3	4		
Siliceous	3/4	3/4	³ /4	3/4	3/4	1 ¹ /8	1 ¹ / ₂	1 ³ /4	2 ³ /8	2 ³ /4		
Carbonate	3/4	3/4	³ / ₄	3/4	³ /4	1	1 ³ /8	1 ⁵ /8	2 ¹ /8	2 ¹ /4		
Sand-lightweight or lightweight	3/4	3/4	³ /4	3/4	3/4	1	1 ³ /8	11/2	2	2 ¹ /4		
or SI: 1 inch = 25.4 mm.												

TABLE 721.2.3(2) COVER THICKNESS FOR PRESTRESSED CONCRETE FLOOR OR ROOF SLABS (inches)

§ 103. Section BC 721 of chapter 7 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new subsection 721.3.5 to read as follows:

721.3.5 Concrete masonry columns. The fire-resistance rating of concrete masonry columns shall be determined based upon the least plan dimension of the column in accordance with Table 721.3.5 or by approved alternate methods.

§ 104. Subsection 803.7 of section BC 803 of chapter 8 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

803.7 Expanded vinyl wall coverings. Expanded vinyl wall coverings shall comply with the requirements for textile wall and ceiling materials and their use shall comply with Section [803.5] *803.6*.

Exception: Expanded vinyl wall or ceiling coverings complying with Section 803.2 shall not be required to comply with Section 803.1 or [803.5] *803.6*.

§ 105. Subsection 903.2.1.5 of section BC 903 of chapter 9 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

903.2.1.5 Group A-5. An automatic sprinkler system shall be provided in all enclosed areas of the structure, including but not limited to the concession concourse, concession stands, retail areas, press boxes and other accessory [use areas] *occupancies*, in excess of 1,000 square feet (93 m²).

§ 106. Subsections 904.11.4 and 904.11.4.1 of section BC 904 of chapter 9 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are REPEALED.

§ 107. Subsection 905.3.1 of section BC 905 of chapter 9 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

905.3.1 Applicability. Class III standpipe systems shall be installed throughout the following buildings:

1. In buildings 2 stories or more in height with floor area of 10,000 square feet (929 m²) or greater on any story;

- 2. In buildings 3 stories or more in height with floor area of 7,500 square feet (697 m²) or greater on any story;
- 3. In buildings of any area with a floor level having an occupant load of 30 or more that is located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access.
- 4. In buildings of any area, constructed in accordance with Section 403, with occupied floors located 75 feet (22 860 mm) or more above the lowest level of fire department vehicle access.

Exceptions[:]. The following exceptions are allowed as an alternative to the requirement of a Class III standpipe system:

- 1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 provided that the following additional requirements are met:
 - 1.1. A locked storage cabinet shall be provided on the main entrance floor in a location approved by the Fire Commissioner near the standpipe riser enclosure. Such cabinet shall contain at least three open nozzles, two 1.5 inch (38 mm) spanner wrenches, two 2.5 inch (64 mm) spanner wrenches, two 2.5 inch (64 mm) by 1.5 inch (38 mm) non-swivel reducing couplings, and 375 feet (114 m) of 1.5 inch (38 mm) hose. However, the hose may be omitted when serving Group R-2 occupancies.
 - 1.1.1. A key for unlocking the storage cabinet 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 such key.
 - 1.1.2. An additional labeled key shall be kept in a locked receptacle near the storage cabinet openable by a Fire Department standard key. Such receptacle shall be labeled, "FOR FIRE DEPARTMENT USE ONLY."
 - 1.1.3. A metal sign shall be placed in each stair enclosure on the main entrance floor stating clearly where the storage cabinet is located.
 - 1.2. Hose valves are capped with a hose valve cap fastened to the valve with a chain.
- 2. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45 720 mm) above the lowest level of fire department vehicle access.
- 3. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
- 4. Class I standpipes are allowed in below-grade stories equipped throughout with an automatic sprinkler system.
- 5. 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 that portable fire extinguishers are installed, subject to the approval of the Fire Commissioner.

§ 108. Subsections 907.2.1, 907.2.13 and 907.9.1.3 of section BC 907 of chapter 9 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended and a new subsection 907.2.10.5 is added to read as follows:

907.2.1 Group A. A manual and automatic fire alarm system shall be installed in accordance with NFPA 72 in Group A occupancies having an occupant load of 300 or more. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exceptions:

- 1. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system and the notification appliances will activate upon sprinkler water flow. *This exception shall not apply to Group A-2 occupancies used as a cabaret.*
- 2. [A manual fire alarm system shall be installed in spaces meeting the definition for cabaret having] *A Group A-2 occupancy used as a cabaret with* an occupant load of 75 or more, including associated stages, dressing rooms, and property rooms, *shall be equipped with a manual fire alarm system*. Such a Group A-2 occupancy with an occupant load of 300 or more shall also be equipped with an automatic fire alarm system.

907.2.10.5 Group R-2 Occupancy. Smoke alarms shall be provided with the capability to support visible alarm notification appliances in accordance with ICC/ANSI A117.1.

907.2.13 Atriums connecting more than two stories. A fire alarm system shall be installed in occupancies with an atrium that connects more than two stories. The system shall be activated in accordance with Section [907.7] *907.6*. Such occupancies in Group A, E or M shall be provided with an emergency voice/alarm communication system complying with the requirements of Section 907.2.12.2.

907.9.1.3 Groups [I-1 and] R-1. Group [I-1 and] R-1 dwelling units in accordance with Table 907.9.1.3 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke [alarm] *detector* and the building fire alarm system.

§ 109. Subsection 909.5.1 of section BC 909 of chapter 9 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by deleting the following:

909.5.1 Leakage area. The total leakage area of the barrier is the product of the smoke barrier gross area [monitored] *multiplied* by the allowable leakage area ratio, plus the area of other openings such as gaps and operable windows. Compliance shall be determined by achieving the minimum air pressure difference across the barrier with the system in the smoke control mode for mechanical smoke control systems. Passive smoke control systems tested using other approved means such as door fan testing shall be approved by the department and the Fire Commissioner.

§ 110. Subsection 1014.3 of section BC 1014 of chapter 10 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1014.3 Boiler, *furnace and* incinerator [and furnace] rooms. Two exit access doorways are required in boiler, *furnace and* incinerator [and furnace] rooms where the area is over 500 square feet (46 m^2) and any fuel-fired equipment exceeds 400,000 British thermal units (Btu) (422 000 KJ) input capacity. Where two exit access doorways are required, one is permitted to be a fixed ladder or an alternating tread device. Exit access doorways shall be separated by a horizontal distance equal to one-half the maximum horizontal dimension of the room.

§ 111. Subsection 1021.3 of section BC 1021 of chapter 10 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1021.3 Opening protectives. Fire doors in horizontal exits shall be self-closing or automatic-closing when

activated by a smoke detector installed in accordance with Section [907.11] 907.10. Opening protectives in horizontal exits shall be consistent with the fire-resistance rating of the wall. Such doors where located in a cross-corridor condition shall be automatic-closing by activation of a smoke detector installed in accordance with Section [907.11] 907.10.

§ 112. Subsection 1107.2.2 of section BC 1107 of chapter 11 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1107.2.2 Type B unit toilet and bathing facilities in R-2 occupancy. Where toilet and bathing facilities are provided in the dwelling unit or sleeping unit, all such toilet and bathing facilities shall comply with Appendix P.

Exception for Type A toilet and bathing facility: Where at least one toilet and bathing facility in the dwelling or sleeping unit is constructed in accordance with the Type A toilet and bathing facilities requirements of Section 1003.11 (Toilet and Bathing Facilities), *including Section 1003.3.2 (Turning Space)*, of ICC A117.1 and is in compliance with the following:

- 1. At least one lavatory, one water closet and either a bathtub or shower within such toilet or bathing facility shall comply with Section 1003.11 of ICC A117.1. Such toilet and bathing fixtures shall be in a single toilet or bathing area, such that travel between fixtures does not require travel beyond the area in which the fixtures of such toilet or bathing facility are located.
- 2. Toilet paper dispensers within such facilities shall comply with Section 604.10.7 (Dispensers) of ICC A117.1.
- 3. Medicine cabinets, if provided, must include a storage shelf no higher than 44 inches (1118 mm) above the floor.

Where at least one toilet and bathing facility complying with Sections 1003.11 and 1003.3.2 of ICC A117.1 is provided within the dwelling or sleeping unit *in accordance with this exception*, other toilet and bathing facilities shall be required to comply only with Sections 1004.3 (Accessible route), 1004.4 (Walking Surfaces), 1004.5.2 (User Passage Doorways), 1004.9 (Operable Parts) and 1004.11.2 (Reinforcement) of ICC A117.1. Doors and doorways to such toilet and bathing facilities shall provide clear opening width of 32 inches (813 mm) minimum.

§ 113. Subsection 1203.4.1.2 of section BC 1203 of chapter 12 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1203.4.1.2 Habitable spaces. All habitable spaces shall be provided with natural ventilation in accordance with Section 1203.4.1.2. Openings providing required natural ventilation to habitable spaces shall be windows and/or glazed doors.

Exception: R-3 occupancies. Openable skylights[,] opening directly to the outer air, transparent or translucent panels, or other natural light-transmitting media may be substituted for window openings in R-3 occupancies provided that they meet the minimum dimensional requirements of Section 1203.4.1.2.1.

§ 114. Subsection 1207.2 of section BC 1207 of chapter 12 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1207.2 Air-borne sound. Walls, partitions and floor/ceiling assemblies separating dwelling units from each other, from public or service areas, from stairs or from mechanical equipment spaces, including boiler

rooms, or elevator or other shafts shall [having] *have* a sound transmission class (STC) for air-borne noise of not less than 50 based upon laboratory measurements made in accordance with ASTM E 90, or not less than 45 if field tested in accordance with ASTM E 336. Dwelling unit entrance doors shall be installed of assemblies having an STC of not less than 35 based upon laboratory measurements made in accordance with ASTM E 1408. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings.

§ 115. Subsection 1213.2 of section BC 1213 of chapter 12 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1213.2 Compactor. A refuse compacting system shall be provided in multiple dwellings in Groups I-1 or R-2 occupancy that are four or more stories in height and contain 12 or more dwelling units, and in buildings of any size occupied as a Group R-1 multiple dwelling. Such system shall be located within a refuse storage room constructed in accordance with Section 1213.1 or in a [in] refuse chute termination room constructed in accordance with Section 707.13.4. *The floor within such room shall be constructed of concrete and shall be sloped to a floor drain connected to the building sewer. A hose connection shall be provided within such room.*

§ 116. The definition of "EXTERIOR WALL COVERING" in subsection 1402.1 of section BC 1402 of chapter 14 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

EXTERIOR WALL COVERING. A material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather-resisting barrier, insulation or for aesthetics, including but not limited to, veneers, siding, exterior insulation and finish systems, architectural trim and embellishments such as cornices, soffits, facias, gutters and leaders.

§ 117. Subsection 1405.18.3.5 of section BC 1405 of chapter 14 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1405.18.3.5 Flame spread. The EIFS insulation [board] shall comply with the requirements of Chapter 26. [and the] *The* assembly of fiberglass reinforcing mesh, base coat [on the face of the insulation board] and textured protective finish coat shall be tested in accordance with ASTM E 84, and shall have a flame spread rating of 25 or less and a smoke-developed rating of 50 or less. Materials shall be tested in the thickness intended to be used.

§ 118. Table 1507.2 of chapter 15 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 1507.2 is added to read as follows:

COMPONENT	INSTALLATION REQUIREMENT
1. Roof slope	Asphalt shingles shall only be used on roof slopes of two units vertical in 12 units horizontal (2:12) or greater. For roof slopes from two units vertical in 12 units horizontal (2:12) up to four units vertical in 12 units horizontal (4:12), double underlayment application is required in accordance with Section 1507.2.8.
2. Deck requirement	Asphalt shingles shall be fastened to solidly sheathed roofs.
3. Underlayment	Underlayment shall conform with ASTM D 226, Type 1, or ASTM D 4869, Type 1.
For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in 12 units horizontal (4:12)	Underlayment shall be two layers applied in the following manner. Apply a minimum 19-inch strip or underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 35-inch-wide sheets of underlayment overlapping successive sheets 19 inches and fastened sufficiently to hold in place.
For roof slopes from four units vertical in 12 units horizontal (4:12) or greater	Underlayment shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches, fastened only as necessary to hold in place.
In areas where the average daily temperature in January is 25°F or less or where there is a possibility of ice forming along the eaves causing a backup of water	A membrane that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall be used in lieu of normal underlayment and extend from the eave's edge to a point at least 24 inches inside the exterior wall line of the building.
4. Application	_
Attachment	Asphalt shingles shall have the minimum number of fasteners required by the manufacturer and Section 1504.1. Asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 20 units vertical in 12 units horizontal (20:12), special methods of fastening are required.
Fasteners	Galvanized, stainless steel, aluminum or copper roofing nails, minimum 12-gage (0.105 inch) shank with a minimum $3/g$ -inch diameter head. Fasteners shall be long enough to penetrate into the sheathing $3/4$ inch or through the thickness of the sheathing.
Flashings	In accordance with Section 1507.2.9.

TABLE 1507.2 ASPHALT SHINGLE APPLICATION

§ 119. Subsection 1507.16.3 of section BC 1507 of chapter 15 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1507.16.3 Material Standards. Green roof systems shall comply with required standards for the roof covering and good practice standards for the landscape material components. Either an affidavit from the roof covering manufacturer, stating review and acceptance of the final work, shall be provided prior to sign-off of construction or a [controlled] *special* inspection by the professional architect or engineer shall be performed.

§ 120. Item 2 of subsection 1603.1.4 of section BC 1603 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2. Wind importance factor, *I_W*, and [building c] *Structural Occupancy Category*.

§ 121. Subsection 1604.5 and Table 1604.5 of section BC 1604 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended and a new subsection, 1604.5.1 is added to read as follows:

1604.5 [Importance factors] Structural Occupancy Category and Importance Factors. All buildings and

other structures shall be assigned a Structural Occupancy Category, as determined by Table 1604.5. The value for snow load, wind load and seismic load importance factors shall be determined in accordance with Table 1604.5.

TABLE 1604.5 [CLASSIFICATION OF BUILDINGS AND OTHER STRUCTURES FOR IMPORTANCE FACTORS] STRUCTURAL OCCUPANCY CATEGORY AND IMPORTANCE FACTORS

STRUCTURAL OCCUPANCY CATEGORY ^a	NATURE OF OCCUPANCY	SEISMIC FACTOR I _e	SNOW FACTOR I _s	WIND FACTOR I _w
Ι	 Buildings and other structures that represent a low hazard to human life in the event of failure including, but not limited to: Agricultural facilities Certain temporary facilities Minor storage facilities 	1.00	0.8	0.87
Π	Buildings and other structures except those listed in <i>Structural_Occupancy</i> Categories I, III and IV	1.00	1.0	1.00
III	 Buildings and other structures that represent a substantial hazard to human life in the event of failure including, but not limited to: Buildings and other structures where more than 300 people congregate in one area Buildings and other structures with elementary school, secondary school or day care facilities with an occupant load greater than 250 Buildings and other structures with an occupant load greater than 250 Buildings and other structures with an occupant load greater than 500 for colleges or adult education facilities Health care facilities with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities Jails and detention facilities Power-generating stations, water treatment for potable water, waste water treatment facilities and other public utility facilities not included in <i>Structural Occupancy</i> Category IV Buildings and other structures not included in <i>Structural_Occupancy</i> Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released 	1.25	1.1	1.15
IV	 Buildings and other structures designed as essential facilities including, but not limited to: Hospitals and other health care facilities having surgery or emergency treatment facilities Fire, rescue and police stations and emergency vehicle garages Designated earthquake, hurricane or other emergency shelters Designated emergency preparedness, 	1.50	1.2	1.15

communication, and operation other facilities required for e	on centers and mergency response
Power-generating stations an	d other public utility
facilities required as emerger	ncy
backup facilities for Structur	al Occupancy Category
IV structures	
• Structures containing highly	toxic materials as
defined by Section 307 when	e the
quantity of the material exce	eds the maximum
allowable quantities of Table	2 307.7(2)
• Aviation control towers, air t	raffic control centers
and emergency aircraft hange	ars
Buildings and other structure	s having critical
national defense functions	-
Water treatment facilities rec	uired to maintain water
pressure for fire suppression	

a. For the purpose of Section 1616.2, *Structural Occupancy* Categories I and II are considered Seismic Use Group I, *Structural Occupancy* Category III is considered Seismic Use Group II and *Structural Occupancy* Category IV is equivalent to Seismic Use Group III.

1604.5.1 Multiple occupancies. Where a structure is used for two or more occupancies not included in the same category of Table 1604.5, the structure shall be assigned the classification of the highest structural occupancy category corresponding to the various occupancies, except as provided for in ASCE 7 section 1.5.1.

§ 122. Subsection 1605.6 of section BC 1605 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1605.6 Structural integrity load combinations – **alternate load path method.** Where specifically required by Sections 1624 through 1629, elements and components shall be designed to resist the forces calculated using the following combination of factored loads:

$$D + f_1 L + f_2 W$$
 (Equation 16-65)

Where:

- $f_1 = 0.25$ for buildings in *Structural Occupancy* Category II.
- $f_1 = 0.5$ for buildings in *Structural Occupancy* Category III or IV.
- $f_2 = 0$ for buildings in *Structural Occupancy* Category II.
- $f_2 = 0.33$ for buildings in *Structural Occupancy* Category III or IV.

The live load component f_1L need not be greater than the reduced live load.

§ 123. Subsection 1608.3.3 of section BC 1608 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1608.3.3 Snow load importance factor. The value for the snow load importance factor, I_s , used in the calculation of ρ_f shall be determined in accordance with Table 1604.5. Greenhouses that are occupied for growing plants on production or research basis, without public access, shall be included in [Importance] *Structural Occupancy* Category I.

§ 124. Figure 1609.6.2.2 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new figure 1609.6.2.2 is added to read as follows:



COMPONENT AND CLADDING PRESSURE

For SI: 1 foot = 304.8 mm, 1 degree = 0.0174 rad. Notes:

- 1. Pressures are applied normal to the surface for Exposure B, at h = 30 feet, for I_w = 1.0. Adjust to other exposures and heights with adjustment factor λ.
- 2. Plus and minus signs signify pressures acting toward and away from the surfaces, respectively.
- 3. For hip roofs with $\theta \le 25^\circ$, Zone 3 shall be treated as Zone 2.
- For effective areas between those given, the value is permitted to be interpolated, otherwise use the value associated with the lower effective area.
 Notation:
 - a: 10 percent of least horizontal dimension or 0.4h, whichever is smaller, but not less than either 4 percent of least horizontal dimension or 3 feet.
 - h: Mean roof height, in feet (meters), except that eave height shall be used for roof angles <10°.
 - θ: Angle of plane of roof from horizontal, in degrees.

§ 125. Table 1617.6.2 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

TABLE 1617.6.2 DESIGN COEFFICIENT AND FACTORS FOR BASIC SEISMIC-FORCE-RESISTING SYSTEMS

Ba	sic Seismic Force-Resisting System	Detailing Reference Section	Response Modification Coefficient, R ^a	$\begin{array}{c} \text{System} \\ \text{Over-} \\ \text{strength} \\ \text{Factor} \\ \\ \Omega_0^{\text{f}} \end{array}$	Deflection Amplification Factor, C _d ^b	Strue L Build L Sei	Structural Syste Limitations And Building Height Limitations ^c Seismic Design	
						P		y D ^d
•	Dearing Wall Systems					D	C	D
1.	Ordinary steel [concentrically] braced frames <i>in light-frame</i>	2211	4	2	3 1/2	NL	NL	35 ⁱ
2.	construction Special reinforced concrete shear walls	1910.2.4	5	2 1/2	5	NL	NL	NL
3.	Ordinary reinforced concrete shear walls	1910.2.3	4	2 1/2	4	NL	NL	NP
4.	Detailed plain concrete shear walls	1910.2.2	2 1/2	2 1/2	2	NL	NP	NP
5.	Ordinary plain concrete shear walls	1910.2.1	1 1/2	2 1/2	1 1/2	NL	NP	NP
6.	Special reinforced masonry shear walls	1.13.2.2.5	5	2 1/2	3 1/2	NL	NL	NL
7.	Intermediate reinforced masonry shear walls	1.13.2.2.4 ⁱ	3 1/2	2 1/2	2 1/4	NL	NL	NP
8.	Ordinary reinforced masonry shear walls	1.13.2.2.3 ⁱ	2 1/2	2 1/2	1 3⁄4	NL	NL	NP
9.	Detailed plain masonry shear walls	1.13.2.2.2 ^j	2	2 1/2	1 3⁄4	NL	NP	NP
10.	Ordinary plain masonry shear walls	1.13.2.2.1 ^j	1 1/2	2 1/2	1 1/4	NL	NP	NP
11.	Light-framed walls sheathed with wood structural panels rated for shear resistance or steel sheets	2306.4.1/2211	6 ½	3	4	NL	NL	65
12.	Light-framed walls with shear panels of all other materials	2306.4.5/2211	2	2 1/2	2	NL	NL	35
13.	Light-framed wall systems using flat strap bracing	2306/2211	4	2	3 1/2	NL	NL	65
14.	Ordinary plain prestressed masonry shear walls	2106.1.1.1	1 1/2	2 1/2	1 1/4	NL	NP	NP
15.	Intermediate prestressed masonry shear walls	2106.1.1.2, 1.13.2.2.4 ^j	2 1/2	2 1/2	2 1/2	NL	35	NP
16.	Special prestressed masonry shear walls	$2106.1.1.3, \\ 1.13.2.2.5^{i}$	4 1/2	2 1/2	3 1/2	NL	35	35
B.	Building Frame System	-	•	•	-		-	

Ba	sic Seismic Force-Resisting System	Detailing Reference Section	Response Modification Coefficient, R ^a	$\begin{array}{c} System\\ Over-\\ strength\\ Factor,\\ \Omega_0^{\ f} \end{array}$	Deflection Amplification Factor, C _d ^b	Stru L Build L Sei	Structural Syst Limitations And Building Height Limitations ^c Seismic Desig Category	
						В	C	D ^d
1.	Steel eccentrically braced frames, moment resisting connections at columns away from links	(15) ^k	8	2	4	NL	NL	NL
2.	Steel eccentrically braced frames, non-moment resisting connections at columns away from links	$(15)^k$	7	2	4	NL	NL	NL
3.	Special steel concentrically braced frames	$(13)^{k}$	6	2	5	NL	NL	NL
4.	Ordinary steel concentrically braced frames	$(14)^{k}$	5	2	4 1/2	NL	NL	35 ⁱ
5.	Special reinforced concrete shear walls	1910.2.4	6	2 1/2	5	NL	NL	NL
6.	Ordinary reinforced concrete shear walls	1910.2.3	5	2 1/2	4 1/2	NL	NL	NP
7.	Detailed plain concrete shear walls	1910.2.2	3	2 1/2	2 1/2	NL	NP	NP
8.	Ordinary plain concrete shear walls	1910.2.1	2	2 1/2	2	NL	NP	NP
9.	Composite eccentrically braced frames	$(14)^{l}$	8	2	4	NL	NL	NL
10.	Composite concentrically braced frames	$(13)^{l}$	5	2	4 1/2	NL	NL	NL
11.	Ordinary composite braced frames	$(12)^{l}$	3	2	3	NL	NL	NP
12.	Composite steel plate shear walls	$(17)^{l}$	6 1/2	2 1/2	5 1/2	NL	NL	NL
13.	Special composite reinforced concrete shear walls with steel elements	$(16)^{l}$	6	2 1/2	5	NL	NL	NL
14.	Ordinary composite reinforced concrete shear walls with steel elements	$(15)^{l}$	5	2 1/2	4 1/4	NL	NL	NP
15.	Special reinforced masonry shear walls	1.13.2.2.5 ⁱ	5 1/2	2 1/2	4	NL	NL	NL
16.	Intermediate reinforced masonry shear walls	1.13.2.2.4 ⁱ	4	2 1/2	4	NL	NL	NP
17.	Ordinary reinforced masonry shear walls	1.13.2.2.3 ^j	3	2 1/2	2 1/4	NL	NL	NP
18.	Detailed plain masonry shear walls	$1.13.2.2.2^{j}$	2 1/2	2 1/2	2 1/4	NL	160	NP
19.	Ordinary plain masonry shear walls	1.13.2.2.1 ^j	1 1/2	2 1/2	1 1/4	NL	NP	NP

Ba	sic Seismic Force-Resisting System	Detailing Reference Section	Response Modification Coefficient, R ^a	System Over- strength Factor , Ω_0^{f}	Deflection Amplification Factor, C _d ^b	Stru L Build L	Structural Syster Limitations And Building Height (Limitations ^c Seismic Design	
						Ser	Categor	V
						В	C	D ^d
20.	Light-framed walls sheathed with wood structural panels rated for shear resistance or steel sheets	2306.4.1/2211	7	2 1/2	4 1/4	NL	NL	65
21.	Light-framed walls with shear panels of all other materials	2306.4.5/2211	2 1/2	2 1/2	2 1/2	NL	NL	35
22.	Ordinary plain prestressed masonry shear walls	2106.1.1.1	1 1/2	2 1/2	1 1⁄4	NL	NP	NP
23.	Intermediate prestressed masonry shear walls	2106.1.1.2, 1.13.2.2.4 ^j	3	2 1/2	2 1/2	NL	35	NP
24.	Special prestressed masonry shear walls	2106.1.1.3, 1.13.2.2.5 ^j	4 1/2	2 1/2	4	NL	35	35
C.	Moment Resisting Frame Systems							
1.	Special steel moment frames	(9) ^k	8	3	5 1/2	NL	NL	NL
2.	Special steel truss moment frames	(12) ^k	7	3	5 1/2	NL	NL	NL
3.	Intermediate steel moment frames	$(10)^{k}$	4 1/2	3	4	NL	NL	35 ^g
4.	Ordinary steel moment frames	$(11)^{k}$	3 1/2	3	3	NL	NL	NP ^{g,h}
5.	Special reinforced concrete moment frames	$(21.1)^m$	8	3	5 1/2	NL	NL	NL
6.	Intermediate reinforced concrete moment frames	$(21.1)^m$	5	3	4 1/2	NL	NL	NP
7.	Ordinary reinforced concrete moment frames	$(21.1)^m$	3	3	2 1/2	NL	NP	NP
8.	Special composite moment frames	$(9)^l$	8	3	5 1/2	NL	NL	NL
9.	Intermediate composite moment frames	$(10)^{l}$	5	3	4 1/2	NL	NL	NP
10.	Composite partially restrained moment frames	$(8)^l$	6	3	5 1/2	NL	NL	100
11.	Ordinary composite moment frames	$(11)^{l}$	3	3	2 1/2	NL	NP	NP
12.	Special masonry moment frames	2108	5 1/2	3	5	NL	NL	NL
D.	Dual Systems with Special Moment Frames Capable of Resisting at Least 25% of Prescribed Seismic Forces	<u> </u>	·		·			

Ba	sic Seismic Force-Resisting System	Detailing Reference Section	Response Modification Coefficient, R ^a	$\begin{array}{c} System\\ Over-\\ strength\\ Factor,\\ \Omega_0^{f} \end{array}$	Deflection Amplification Factor, C _d ^b	Strue L Build L Sei	Structural Syste Limitations And Building Height Limitations ^c Seismic Desig	
							Category	y
		L				B	С	Da
1.	Steel eccentrically braced frames, moment resisting connections at columns away from links	(15)*	8	2 1/2	4	NL	NL	NL
2.	Steel eccentrically braced frames, non-moment resisting connections at columns away from links	(15)*	7	2 1/2	4	NL	NL	NL
3.	Special steel concentrically braced frames	$(13)^{k}$	8	2 1/2	6 1/2	NL	NL	NL
4.	Special reinforced concrete shear walls	1910.2.4	8	2 1/2	6 1/2	NL	NL	NL
5.	Ordinary reinforced concrete shear walls	1910.2.3	7	2 1/2	6	NL	NL	NP
6.	Composite eccentrically braced frames	$(14)^{l}$	8	2 1/2	4	NL	NL	NL
7.	Composite concentrically braced frames	$(13)^{l}$	6	2 1/2	5	NL	NL	NL
8.	Composite steel plate shear walls	$(17)^{l}$	8	2 1/2	6 1/2	NL	NL	NL
9.	Special composite reinforced concrete shear walls with steel elements	$(16)^{l}$	8	2 1/2	6 1/2	NL	NL	NL
10.	Ordinary composite reinforced concrete shear walls with steel elements	$(15)^{l}$	7	2 1/2	6	NL	NL	NP
11.	Special reinforced masonry shear walls	1.13.2.2.5 ⁱ	7	3	6 ¹ / ₂	NL	NL	NL
12.	Intermediate reinforced masonry shear walls	1.13.2.2.4 ⁱ	6	2 1/2	5	NL	NL	NL
13.	Ordinary steel concentrically braced frames	$(14)^{k}$	6	2 1/2	5	NL	NL	NL
E.	Dual Systems with Intermediate Moment Frames Capable of Resisting at Least 25% of Prescribed Seismic Forces							
1.	Special steel concentrically braced frames ^e	$(13)^{k}$	4 1/2	2 1/2	4 1/2	NL	NL	35
2.	Special reinforced concrete shear walls	1910.2.4	6	2 1/2	5	NL	NL	NL
3.	Ordinary reinforced masonry shear walls	1.13.2.2.3 ^j	3	3	2 1/2	NL	NL	NP
4.	Intermediate reinforced masonry shear walls	1.13.2.2.4 ^j	5	3	4 1/2	NL	NL	NP

Ba	sic Seismic Force-Resisting System	Detailing Reference Section	Response Modification Coefficient, R ^a	System Over- strength Factor, Ω_0^{f}	Deflection Amplification Factor , C _d ^b	Structural Syste Limitations And Building Height Limitations ^c Seismic Design Category		vstem ns ht (ft) 15 ^c sign
-	0	(12)		2.1/	4.17	B	C	D ^d
5.	braced frames	(13)	5	2 1/2	4 1/2	NL	NL	NL
6.	Ordinary composite braced frames	$(12)^{l}$	4	2 1/2	3	NL	NL	NP
7.	Ordinary composite reinforced concrete shear walls with steel elements	$(15)^{l}$	5	3	4 1/2	NL	NL	NP
8.	Ordinary steel concentrically braced frames	$(14)^{k}$	5	2 1/2	4 1/2	NL	NL	NL
9.	Ordinary reinforced concrete shear walls	1910.2.3	5 1/2	2 1/2	4 1/2	NL	NL	NP
F.	Shear Wall-frame Interactive System with Ordinary Moment Frames and Ordinary Reinforced Concrete Shear Walls	(21.1) ^m 1910.2.3	5 1/2	2 1/2	5	NL	NP	NP
G.	Inverted Pendulum Systems and Cantilevered Column Systems							
1.	Cantilevered Column System	1602.1	2 1/2	2	2 1/2	NL	NL	35
2.	Special steel moment frames	$(9)^k$	2 1/2	2	2 1/2	NL	NL	NL
3.	Ordinary steel moment frames	$(11)^{k}$	1 1/4	2	2 1/2	NL	NL	NP
4.	Special reinforced concrete moment frames	$(21.1)^m$	2 1/2	2	1 1/4	NL	NL	NL
H.	Structural Steel Systems Not Specifically Detailed for Seismic Resistance	AISC-335 AISC-LRFD AISC-HSS AISI	3	3	3	NL	NL	NP

For SI: 1 foot = $\overline{304.8 \text{ mm}}$, 1 pound per square foot = 0.0479 KN/m^2 .

Notes:

- **a.** Response modification coefficient, R, for use throughout the standard. Note R reduces forces to a strength level not an allowable stress level.
- **b.** Deflection amplification factor, C_{d.}[, for use in Sections 9.5.3.7.1 and 9.5.3.7.2]
- **c.** NL = Not Limited and NP = Not Permitted. For metric units use 30 m for 100 ft and use 50 m for 160 ft. Heights are measured for the base of the structure as defined in *ASCE* 7 section 9.2.1.
- **d.** See *ASCE* 7 section 9.5.2.2.4.1 for a description of building systems limited to buildings with a height of 240 ft (75 m) or less.
- e. Ordinary moment frame is permitted to be used in lieu of intermediate moment frame in Seismic Design Categories B and C.
- **f.** The tabulated value of the overstrength factor, Ω_0 , may be reduced by subtracting $\frac{1}{2}$ for structures with flexible diaphragms but shall not be taken as less than 2.0 for any structure.

- **g.** Steel ordinary moment frames and intermediate moment frames are permitted in single-story buildings up to a height of 60 ft, when the moment joints of field connections are constructed of bolted end plates and the dead load of the roof does not exceed 15 psf.
- **h.** Steel ordinary moment frames are permitted in buildings up to a height of 35 ft when the dead load of the walls, floors, and roofs does not exceed 15 psf.
- i. Steel ordinary concentrically braced frames are permitted in single-story buildings up to a height of 60 ft when the dead load of the roof does not exceed 15 psf and in penthouse structures.
- *j.* ACI 530/ASCE 5/ TMS 402 section number.
- k. AISC 341 Part I or Part III section number.
- *I.* AISC 341 Part II section number.
- *m.* ACI 318 section number.

§ 126. Subsection 1620.3.1 of section BC 1620 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1620.3.1 Anchorage of concrete or masonry walls. Concrete or masonry walls shall be anchored to floors and roofs and members that provide out-of-plane lateral support for the wall or that are supported by the [all] *wall*. The anchorage shall provide a positive direct connection between the wall and floor or roof capable of resisting the horizontal forces specified in Equation 16-62 for structures with flexible diaphragms or in Section 9.6.1.3 of ASCE 7 (using a_p of 1.0 and R_p of 2.5) for structures with diaphragms that are not flexible.

§ 127. Subsection 1625.1 of section BC 1625 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1625.1 Scope. The intent of these provisions is to enhance structural performance under extreme event scenarios by providing additional overall system redundancy and local robustness. All structures shall be designed to satisfy the prescriptive requirements of this Section.

Exception: Structures in *Structural Occupancy* Category I of Table 1604.5 and structures in occupancy group R-3 are exempt from the requirements of Sections 1624 through 1626.

§ 128. Item 1 of subsection 1626.1 of section BC 1626 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1. Buildings [with Importance Factor] *included in Structural Occupancy* Category [of] IV as defined in this chapter and more than 50,000 square feet (4645 m²) of framed area.

§ 129. Subsection 1626.3 of section BC 1626 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York is REPEALED and a new subsection 1626.3 is added to read as follows:

1626.3 Reserved.

§ 130. Item 1 of subsection 1627.2 and subsection 1627.7.2 of section BC 1627 of chapter 16 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

1. Buildings [with Importance Factor] *included in Structural Occupancy* Category [of] IV as defined in this chapter and more than 50,000 square feet (4645 m²) of framed area.

1627.7.2 Contents. The report shall demonstrate at a minimum compliance with items 1 through 10 of section [1630.6.1] *1627.6.1*. In addition, the report shall also include the following:

- 1. The codes and standards used in the structural design of the project.
- 2. The structural design criteria, including loads and performance requirements.
- 3. The basis for design criteria that are not specified directly in applicable codes and standards. This should include reports by specialty consultants such as wind tunnel study reports and geotechnical reports. Generally, the report should confirm that existing conditions at the site have been investigated as appropriate and that the design of the proposed structure is in general conformance with these conditions.

§ 131. The definition of "APPROVED FABRICATOR" in subsection 1702.1 of section BC 1702 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

APPROVED FABRICATOR. An established and qualified person, firm or corporation approved by the commissioner *to custom manufacture or build products or assemblies regulated by this code*.

§ 132. Subsection 1704.1.1.1 of section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is renumbered to be section 1704.1.1.2 and a new section 1704.1.1.1 is added to read as follows:

1704.1.1.1 Required notification to special inspectors. The permit holder shall notify the relevant special inspectors in writing at least 72 hours before the commencement of any work requiring special inspection.

§ 133. Section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new subsection 1704.3.4 to read as follows:

1704.3.4 Cold-Formed steel construction. Cold-formed steel used structurally shall be subject to the special inspection requirements of Section 1704.3, and Table 1704.3. In addition, the following requirements shall be inspected for compliance by the special inspector:

1. The special inspector shall check for compliance with the requirements of Section 2209.1.3.

2. Temporary bracing, shoring, jacks, etc. shall not be removed until the special inspector determines that they are no longer needed.

§ 134. Table 1704.4 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Verification and Inspection	Continous	Periodic	Referenced Standard	BC Reference
1. Inspection of reinforcing steel, including prestressing tendons, and placement.		Х	ACI 318:3.5, 7.1 – 7.7	1903.5, 1907.1, 1907.7, 1914.4
2. Inspection of reinforcing steel welding in accordance with table 1704.3, Item 5B.			AWS D1.4 ACI 318:3.5.2	1903.5.2
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased.	Х			1912.5
4. Verifying use of required design mix.		Х	ACI 318: Ch. 4, 5.2-5.4	1904, 1905.2- 1905.4, 1914.2,1914.3
5. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Х		ASTM C 172 ASTM C 31 ACI 318: 5.6,5.8 (Note a,b[,c])	1905.6, 1914.10
6. Inspection of concrete and shotcrete placement for proper application techniques.	Х		ACI 318: 5.9, 5.10	1905.9, 1905.10, 1914.6, 1914.7, 1914.8
7. Inspection for maintenance of specified curing temperature and techniques.		Х	ACI 318: 5.11- 5.13	1905.11, 1905.13, 1914.9
 8. Inspection of prestressed concrete: A. Application of prestressing forces B. Grouting of bonded prestressing tendons in the seismic-force-resisting system. 	X X		ACI 318: 18.20 ACI 318:18.18.4	
9. Erection of precast concrete members.		Х	ACI 318: Ch. 16	
10. Verification of in-situ concrete strength, prior to stressing of tendons in posttensioned concrete and prior to removal of shores and forms from beams and structural slabs.		X	ACI 318: 6.2	1906.2

TABLE 1704.4 REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

[a)] *a*. Standard sampling rate shall be in accordance with Section 1905.6.2.

[b)] b. 4"x8" cylinders may be accepted in lieu of 6"x12" cylinders at the option of the engineer of record.

§ 135. Subsection 1704.5 of section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1704.5 Masonry construction. Masonry construction shall be inspected and evaluated in accordance with the requirements of this section, depending on the [classification] *Structural Occupancy Category* of the building or structure or nature of occupancy, as defined by this code (see Table 1604.5 and Section 1616.2).

Exception: Special inspections shall not be required for:

- 1. Empirically designed masonry, glass unit masonry or masonry veneer designed by Section 2109, 2110 or ACI 530/ASCE 5/TMS 402, Chapters 5, 6 or 7, when they are part of nonessential buildings (see Table 1604.5 and Section 1616.2).
- 2. Masonry foundation walls constructed in accordance with Table 1805.5(1), 1805.5(2), 1805.5(3) or 1805.5(4).

§ 136. Section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York is amended by adding new subsections 1704.6.3, 1704.6.3.1, 1704.6.4 and 1704.6.4.1 to read as follows:

1704.6.3 Metal-plate-connected wood trusses. In addition to the requirements of Section 1704.1, metalplate-connected wood trusses shall be subject to special inspection in accordance with Section 1704.6.3.1.

1704.6.3.1 Erection. The use of all metal-plate-connected wood trusses shall be subject to special inspection for compliance with the approved construction documents, the requirements of Sections 1704.1, and the following:

- 1. All installed materials shall be clean, straight, and otherwise undamaged. Members and parts shall not be stretched, bent, or otherwise distorted unless such forming is in the integral part of the design. The special inspector shall ensure that damaged members are not used for construction.
- 2. Profiles of members used structurally shall conform to the dimensions in specified in the approved construction documents. The installation shall be inspected for compliance with the approved construction documents regarding locations, positions, beam separators, bearing surfaces, fasteners, screws, bolts, and bracing as applicable.
- 3. Temporary bracing, shoring, jacks, etc. shall not be removed until the special inspector determines that they are no longer needed.
- 4. Where prefabricated metal-plate-connected wood trusses are utilized, such prefabricated wood structural elements and assemblies shall also comply with Section 1704.2. Where any metal-plate connectors are utilized in site-built assemblies, such connections and assemblies shall be subject to special inspection for compliance with the requirements of the approved construction documents and manufacturers' instructions.

1704.6.4 Prefabricated wood I-joists. The fabrication of prefabricated wood I-joists shall be subject to special inspections in accordance with Section 1704.2 and the requirements of Section 2303.1.2.

1704.6.4.1 Erection. The erection of prefabricated wood I-joists shall be subject to special inspection for compliance with the approved construction documents, the requirements of Sections 1704.1, and the following:

1. All installed materials shall be clean, straight, and otherwise undamaged. Members and parts shall not be stretched, bent, or otherwise distorted unless such forming is in the integral part of the design. The special inspector shall ensure that damaged members are not used for construction.

- 2. Profiles of members used structurally shall conform to the dimensions in specified in the approved construction documents. The installation shall be inspected for compliance with the approved construction documents regarding locations, positions, beam separators, bearing surfaces, fasteners, screws, bolts, and bracing as applicable.
- 3. The size, location, and number of penetrations shall be inspected for compliance with the approved construction documents and manufacturers' instructions.
- 4. Temporary bracing, shoring, jacks, etc. shall not be removed until the special inspector determines that they are no longer needed.

§ 137. Subsection 1704.9.1 of section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1704.9.1 Underpinning operations. Special inspection is required for underpinning operations in accordance with [Section] Sections [3301.3. See Section 1704.21] 1704.19 and 1814.

§ 138. Subsection 1711.1 of section BC 1711of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1711.1 General. In the absence of rules or other approved standards, and upon special application by a registered design professional the commissioner shall make, or cause to be made, the necessary tests and investigations; or the commissioner shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in [Section 113] *Article 113 of Chapter 1_of Title 28 of the Administrative Code.* The cost of all tests and other investigations required under the provisions of this code shall be borne by the permit applicant.

§ 139. The exception in subsection 1704.15.2 of section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Exception: Systems and equipment exempt from service equipment certificate of compliance in accordance with Section [109.3.8.2.1] 28-116.4.1 of the *Administrative Code*.

§ 140. Item 2 of the exceptions in subsection 1704.16 of section BC 1704 of chapter 17 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2. Systems and equipment exempt from service equipment certificate of compliance in accordance with Section [109.3.8.2.3] 28-116.4.1 of the Administrative Code.

§ 141. Subsection 1803.3 of section BC 1803 of chapter 18 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1803.3 Site grading. The ground immediately adjacent to the foundation shall be sloped away from the building as needed, or an approved alternate method of diverting water away from the foundation shall be used, where surface water would detrimentally affect the foundation bearing soils. *Site grading shall also comply with Section 1101.11 of the New York City Plumbing Code.*

§ 142. Subsection 1805.2.1 of section BC 1805 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1805.2.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extending a minimum of 4 feet (1219 mm) below grade;
- 2. Constructing in accordance with ASCE-32; or
- 3. Erecting on solid rock.

Exception: Free-standing buildings meeting all of the following conditions are shall not required to be protected:

- 1. Classified in [Importance] Structural Occupancy Category I (See Table 1604.5);
- 2. Area of 400 square feet (37 m^2) or less; and
- 3. Eave height of 10 feet (3048 mm) or less.

Footings shall not bear on frozen soil unless such frozen condition is of a permanent character.

§ 143. Subsection 1805.4.2.1 of section BC 1805 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1805.4.2.1 Concrete strength. Concrete in footings shall have a specified compressive strength [(f'c)] (f'_c) of not less than 2,500 pounds per square inch (psi) (17 237 kPa) at 28 days.

§ 144. Subsection 1810.3.1 of section BC 1810 of chapter 18 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1810.3.1 Allowable stresses. The allowable design stress in the concrete of drilled uncased piles shall not exceed 33 percent of the 28-day specified compressive strength [(f'c)](f'c). The allowable design stress in the concrete of augered cast-in-place piles shall not exceed 25 percent of the 28-day specified compressive strength (f'c). The allowable compressive stress of reinforcement shall not exceed 34 percent of the yield strength of the steel or 25,500 psi (175.8 Mpa).

§ 145. Item 2 of subsection 1813.1 of section BC 1813 of chapter 18 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2. The potential for liquefaction on level ground shall be determined on the basis of the *Structural* Occupancy Categories associated with the uncorrected Standard Penetration Resistance (N) at the site, as defined in Figure 1813.1, or a site specific analysis performed by an engineer with specific expertise in the evaluation of liquefaction.

§ 146. Items 1 and 2 of subsection 1813.3 of section BC 1813 of chapter 18 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1. The calculated cyclic shear demand is equal to or less than 75 percent of the calculated cyclic shear strength for *Structural Occupancy* Category I, II, and III structures.

2. The calculated cyclic shear demand is equal to or less than 85 percent of the calculated cyclic shear strength for *Structural Occupancy* Category IV structures.

§ 147. Table 1907.5.2.1 of chapter 19 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

DEPTH (d) (inches)	TOLERANCE ON d (inch)	TOLERANCE ON MINIMUM CONCRETE <i>COVER</i>
$[d < 8] \ d \leq 8$	$\pm \frac{3}{8}$	- 3/8
<i>d</i> > 8	$\pm \frac{1}{2}$	- 1/2

TABLE 1907.5.2.1TOLERANCES

§ 148. Subsection 2106.5.1 of section BC 2106 of chapter 21 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2106.5.1 Loads for shear walls designed by the working stress design method. When calculating inplane shear or diagonal tension stresses by the working stress design method, shear walls that resist seismic forces shall be designed to resist 1.5 times the *seismic* forces required by Chapter 16. The 1.5 multiplier need not be applied to the overturning moment.

§ 149. The exception in subsection 2110.1.1 of section BC 2110 of chapter 21 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Exception: Glass-block assemblies having a fire protection rating of not less than $\frac{3}{4}$ hour shall be permitted as opening protectives in accordance with Section 715 in <u>fire</u> barriers and fire partitions that have a required fire-resistance rating of 1 hour and do not enclose exit stairways or exit passageways.

§ 150. Subsection 2206.3 of section BC 2206 of chapter 22 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2206.3 Limitations of use. Open web steel joists [are] *shall be* prohibited in high rise buildings [in all occupancy groups except R-2 and R-3] *until the commissioner promulgates rules establishing minimum acceptable fireproofing methods*.

§ 151. Section BC 2209 of chapter 22 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new subsection 2209.1.4 to read as follows:

2209.1.4 Special inspection. The use of cold-formed steel for structural purposes shall be subject to the requirements of special inspection in accordance with Chapter 17.

§ 152. Note b of table 2211.3 of chapter 22 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

b. See Section 2211.3.2, Item [b]1.

§ 153. Item 2 of the exceptions in subsection 2213.1 of section BC 2213 of chapter 22 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2. Structures in [occupancy category] Group R-3 occupancy not more than three stories in height.

§ 154. Item 2 of subsection 2213.3 of section BC 2213 of chapter 22 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2. Connections at the discontinuous edges of permanent metal decking to supporting members shall have a minimum [a] connection strength in the direction parallel to the rib of the deck equal to the shear strength of a ³/₄-inch (19.1 mm) puddle weld every 12 inches (305 mm) on center.

§ 155. Subsections 2303.1.2 and 2303.4 of section BC 2303 of chapter 23 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

2303.1.2 Prefabricated wood I-joists. Structural capacities and design provisions for prefabricated wood I-joists shall be established and monitored in accordance with ASTM D 5055. *The use of prefabricated wood I-joists structurally shall be subject to the special inspection requirements of Chapter 17.*

2303.4 Trusses. Metal-plate-connected wood trusses shall be manufactured as required by TPI 1. Each manufacturer of trusses using metal plate connectors shall retain an approved agency to make unscheduled inspections of truss manufacturing and delivery operations. The inspection shall cover all phases of truss operations, including lumber storage, handling, cutting fixtures, presses or rollers, manufacturing, bundling and banding. *Metal-plate connected wood trusses shall also be subject to the special inspection requirements of Chapter 17*.

§ 156. Table 2305.3.3 of chapter 23 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 2305.3.3 is added to read as follows:

ТҮРЕ	MAXIMUM HEIGHT- WIDTH RATIO
Wood structural panels or particleboard, nailed edges	For other than seismic: 3 ¹ / ₂ :1 For seismic: 2:1 ^a
Diagonal sheathing, single	2:1
Fiberboard	11/2:1
Gypsum board, gypsum lath, cement plaster	1 ¹ / ₂ :1 ^b

TABLE 2305.3.3 MAXIMUM SHEAR WALL ASPECT RATIOS

a. For design to resist seismic forces, shear wall height-width ratios greater than 2:1, but not exceeding 3¹/₂:1, are permitted provided the allowable shear values in Table 2306.4.1 are multiplied by 2w/h.

b. Ratio shown is for unblocked construction. Aspect ratio is permitted to be 2:1 where the wall is installed as blocked construction in accordance with Section 2306.4.5.1.2. § 157. Table 2306.3.2 of chapter 23 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 2306.3.2 is added to read as follows:

		LARCH OF	R SOUTHERN PI	NE [®] FOR WIND	OR SEISMIC	; LOADI	NG				
						BLOCKED DIAPHRAGMS					
								Cases	1 and 2 ^d		
						Fa	stener S	pacing Pe (inc	er Line at hes)	Boundar	ries
		MINIMUM	MINIMUM	NOMINAL		4	1	2	1/ ₂	:	2
PANEL	FASTENER	FASTENER PENETRATION	NOMINAL PANEL THICKNESS	WIDTH OF FRAMING MEMBER ^e		Faster	ner Spaci	ing Per L (inc	ine at Oth hes)	er Panel	Edges
GRADE	AND SIZE	(inches)	(inch)	(inches)	FASTENERS	6	4	4	3	3	2
10d common nails grades 14 gage staples		15/ ₃₂	3 4 4	2 2 3	605 700 875	815 915 1,220	875 1,005 1,285	1,150 1,290 1,395		_ _ _	
	10d common nails	10d common 1 ¹ / ₂ nails	¹⁹ / ₃₂	3 4 4	2 2 3	670 780 965	880 990 1,320	965 1,110 1,405	1,255 1,440 1,790	—	
			²³ / ₃₂	3 4 4	2 2 3	730 855 1,050	955 1,070 1,430	1,050 1,210 1,525	1,365 1,565 1,800		
	14 gage		15/ ₃₂	3 4	2 3	600 860	600 900	860 1,160	960 1,295	1,060 1,295	1,200 1,400
	staples	aples 2	¹⁹ / ₃₂	3 4	2 3	600 875	600 900	875 1,175	960 1,440	1,075 1,475	1,200 1,795
			¹⁵ / ₃₂	3 4 4	2 2 3	525 605 765	725 815 1,085	765 875 1,130	1,010 1,105 1,195	-	
Sheathing single floor and other grades covered in DOC PS 1 and PS 2	10d common 1 ¹ / ₂ nails	1 ¹ / ₂	¹⁹ / ₃₂	3 4 4	2 2 3	650 755 935	860 965 1,290	935 1,080 1,365	1,225 1,370 1,485	-	
			²³ / ₃₂	3 4 4	2 2 3	710 825 1,020	935 1,050 1,400	1,020 1,175 1,480	1,335 1,445 1,565		
			¹⁵ / ₃₂	3 4	2 3	540 735	540 810	735 1,005	865 1,105	915 1,105	1,080 1,195
	14 gage staples	2	¹⁹ / ₃₂	3 4	2 3	600 865	600 900	865 1,130	960 1,430	1,065 1,370	1,200 1,485
		23/22	4	3	865	900	1.130	1.490	1.430	1.545	

TABLE 2306.3.2
ALLOWABLE SHEAR IN POUNDS PER FOOT FOR HORIZONTAL BLOCKED DIAPHRAGMS
UTILIZING MULTIPLE ROWS OF FASTENERS (HIGH LOAD DIAPHRAGMS) WITH FRAMING OF DOUGLAS FIR
LARCH OR SOUTHERN PINE [®] FOR WIND OR SEISMIC LOADING ^b

For SI: 1 inch = 25.4 mm, 1 pound per foot = 14.5939 N/m.

a. For framing of the other species: (1) Find specific gravity for species of framing lumber in AFPA National Design Specification, (2) Find shear value from table above for nail size of actual grade, and (3) Multiply value by the following adjustment factor = [1 - (0.5 - SG)], where SG = Specific gravity of the framing lumber. This adjustment factor shall not be greater than 1.

b. Fastening along intermediate framing members: Space nails 12 inches on center, except 6 inches on center for spans greater than 32 inches.

c. Panels conforming to PS 1 or PS 2.

d. This table gives shear values for Cases 1 and 2 as shown in Table 2306.3.1. The values shown are applicable to Cases 3, 4, 5 and 6 as shown in Table 2306.3.1, providing fasteners at all continuous panel edges are spaced in accordance with the boundary fastener spacing.

e. The minimum depth of framing members shall be 3 inches.

§ 158. Note a in table 2306.4.5 of chapter 23 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

a. These shear walls shall not be used to resist loads imposed by masonry or concrete construction (see Section 2305.1.5). Values shown are for short-term loading due to wind or seismic [loading] load [in

Seismic Design Categories A, B and C]. Walls resisting seismic loads shall be subject to the limitations in Section 1617.6. Values shown shall be reduced 25 percent for normal loading.

§ 159. Table 2308.12.4 of chapter 23 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 2308.12.4 is added to read as follows:

TADLE 2300.12.4				
WALL BRACING IN SEIS	MIC DESIGN CATE	GORIES D	AND E	
(Minimum Length of Wall Bracing per each 25 Linear Feet of Braced Wall Line ^a)				
		0 == 1 0		1 0 0

TABLE 2200 12 /

STORY LOCATION	SHEATHING TYPE ^b	$0.05 \le S_{DS} < 0.75$	$0.75 \le S_{DS} \le 1.00$	$1.00 < S_{\rm DS}$		
	G-P ^d	14 feet 8 inches ^e	18 feet 8 inches ^e	25 feet 0 inchese		
Top or only story	S-W	8 feet 0 inches ^c	9 feet 4 inchese	12 feet 0 inchese		
	G-P ^d	NP	NP	NP		
Story below top story	S-W	13 feet 4 inches ^c	17 feet 4 inches ^c	21 feet 4 inchese		
	G-P ^d	Conventional construction not permitted: conformance				
Bottom story of three stories	S-W	with Section 2301.2.1 or 2301.2.2 is required.				

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Minimum length of panel bracing of one face of wall for S-W sheathing or both faces of wall for G-P sheathing; h/w ratio shall not exceed 2:1. For S-W panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half the tabulated value but the h/w ratio shall not exceed 2:1 and design for uplift is required.

b. G-P = gypsum board, fiberboard, particleboard, lath and plaster, or gypsum sheathing boards; S-W = wood structural panels and diagonal wood sheathing. NP = not permitted.

c. Applies to one- and two-family detached dwellings only.

d. Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates, and, where occurring, at blocking:

For 1/2-inch gypsum board, 5d (0.113 inch diameter) cooler nails at 7 inches on center;

For ⁵/₈-inch gypsum board, No. 11 gage (0.120 inch diameter) at 7 inches on center;

For gypsum sheathing board, 1^{3}_{4} inches long by $7'_{16}$ inch head, diamond point galvanized nails at 4 inches on center; For gypsum lath, No. 13 gage (0.092 inch) by 1^{1}_{g} inches long, $^{19}_{16^{-1}}$ inch head, plasterboard at 5 inches on center; For gypsum lath, No. 13 gage (0.092 inch) by 1^{1}_{g} inches long, $^{19}_{16^{-1}}$ inch head, plasterboard at 5 inches on center; For portland cement plaster, No. 11 gage (0.120 inch) by 1^{1}_{2} inches long, $^{7}_{16^{-1}}$ inch head at 6 inches on center; For fiberboard and particleboard, No. 11 gage (0.120 inch) by 1^{1}_{2} inches long, $^{7}_{16^{-1}}$ inch head, galvanized nails at 3 inches on center.

§ 160. Figure 2308.12.6(1) of chapter 23 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new figure 2308.12.6(1) is added to read as follows:



§ 161. Subsection 2406.2 of section BC 2406 of chapter 24 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2406.2 Identification of safety glazing. Except as indicated in Section [2406.1.2] 2406.2.1, each pane of safety glazing installed in hazardous locations shall be identified by a label specifying the labeler, whether the manufacturer or installer, and the safety glazing standard with which it complies, as well as the

information specified in Section 2403.1. The label shall be acid etched, sand blasted, ceramic fired or an embossed mark, or shall be of a type that once applied cannot be removed without being destroyed.

§ 162. Section BC 2902 (including Table 403.1 and subsections 2902.1 and 2902.1.1 thereof) of chapter 29 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED.

§ 163. Subsection 3001.9 of section BC 3001 of chapter 30 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

3001.9 Approved equipment. Buffers, [PA] interlocks, elevator entrances, wedge shackles, and elevator governors shall be approved by the commissioner.

§ 164. Item 12 of subsection 3001.10 of section BC 3001 of chapter 30 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

12. The total static and dynamic loads from the governor, [ruper] buffer and tension system.

§ 165. Item 1 of subsection 3301.9.4 of section BC 3301 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

The telephone numbers of the department special units in charge of complaints on major buildings [as identified pursuant to department rules]; and

§ 166. Subsections 3303.5.2 3303.5.2.1, 3303.5.2.2, 3303.5.2.3, 3303.5.2.4, 3303.11.1, 3303.11.1.1 and 3303.12 of section BC 3303 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

3303.5.[2]<u>5</u> Chutes. Chutes used in association with the removal of materials shall comply with Sections 3303.5.[2]5.1, 3305.[2]5.2, 3305.[2]5.3, and 3305.[2]5.4.

3303.5.[2]5.1 Enclosures. Chute enclosures shall comply with the following requirements:

- 1. 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 48 inches (1219 mm) 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.
- 2. Chutes at an angle of less than forty-five degrees with the horizontal may be open on the upper side.

3303.5.[2]5.2 Chute construction. Chute construction shall comply with the following requirements:

- 1. Every chute used to convey waste material from a building shall be rigidly supported and braced throughout its height. Chutes less than 24 inches (610 mm) in maximum dimension shall be constructed of not less than 1-inch (25.4 mm) (nominal) wood or ¹/₈ inch (3.18 mm) thick steel. Chutes more than 24 inches (610 mm) in maximum dimensions shall be constructed of not less than 2-inch (51 mm) (nominal) wood or ³/₁₆ inch (4.76 mm) thick steel.
- 2. Chutes shall be provided with a metal impact plate where material is forced to change direction while falling.

- 3. 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.
- 4. A bumper or curb at least 4 inches by 4 inches (102 by 102 mm) 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.

3303.5.[2]5.3 Fire retardant construction. When used in the following applications, all chutes constructed of combustible material shall be covered on the exterior with corrugated steel sheeting having a minimum thickness of 24 gauge through their entire height. Alternatively, chutes shall be constructed of non-combustible material:

- 1. Chutes exceeding 75 feet (22 860 mm) in height.
- 2. Alteration, repair or partial demolition of buildings where the main use or dominant occupancy is in Group I.

3303.5.[2]5.4 Supports. All structural supports of material chutes shall be of noncombustible material.

3303.11.1 [Stairways required] *Temporary stairways in unoccupied buildings.* Where a building [has been] *being* constructed [to] *reaches* a height greater than 50 feet (15 240 mm) or four stories, or where an existing *unoccupied* building exceeding 50 feet (15 240 mm) in height is altered [or demolished], at least one temporary lighted stairway shall be provided, unless one or more of the permanent stairways are erected or maintained as the construction [or demolition] progresses. *Demolition work shall comply with item 6 of 3306.9.9.*

3303.11.1.1 Maximum distance. The maximum distance between the working deck of *such* a building under construction or [demolition] *alteration* and the highest floor accessible to a temporary or permanent stair shall be no more than 40 feet or 4 floors. In concrete construction, the working deck is the floor being formed. In steel construction the working deck is the floor where the metal decking and steel components are being placed before concrete is poured.

3303.12 Temporary elevator or hoist. Whenever construction or demolition work reaches a height greater than 75 feet (22 860 mm), at least one elevator meeting the requirements of Chapter 30, or a hoist meeting the requirements of Section 3318 shall be kept in readiness at all times for Fire Department use. The maximum distance between the highest accessible floor from a temporary elevator or hoist and the working deck of the building under construction or demolition shall be no more than 75 feet ([13 716] 22_860 mm) or 7 floors. In concrete construction, the working deck is the floor being formed. In steel construction the working deck is the floor where the metal decking and steel components are being placed before concrete is poured.

§ 167. Subsection 3306.5 of section BC 3306 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

3306.5 Submittal documents for demolition. Where mechanical demolition equipment, other than handheld devices, are to be used in the full or partial demolition of a building from within the building, or are to be used within the building to remove debris or move material, documents prepared by or under the supervision of an engineer must be submitted and approved by the department before demolition work begins. The documents shall be [professionally certified] *signed and sealed* by the engineer. The approved set of documents shall be kept at the site at all times and be accessible for inspection. At a minimum, the demolition documents shall include the following:

- 1. Plans, sections, and details of the building or portion thereof to be demolished clearly showing the extent, sequence, and means and methods of demolition.
- 2. Listing and description of all proposed demolition equipment, other than hand held devices, to be used in demolition, including the scope of equipment work and positioning of equipment on the existing structure. Description of equipment shall include calculations showing adequacy of the existing structure to support loads imposed by such equipment. If more than one piece of demolition equipment is proposed to be used at the same time, the effect of the simultaneous loads imposed on the existing structure shall be described and investigated.
- 3. Bracing and shoring necessary to support all demolition operations and equipment through all sequences of full or partial demolition.
- 4. Description of compliance with the provisions of Section 3306.9.

§ 168. Subsection 3310.5 of section BC 3310 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

3310.5 Requirement for a site safety manager or coordinator. A site safety manager certified by the department in accordance with the requirements of Chapter 4 of Title 28 of the Administrative Code is required for the construction or demolition of a major building, or the alteration of the façade of a major building when a sidewalk shed is required.

Exceptions:

- 1. A site safety coordinator certified by the department in accordance with the requirements of Chapter 4 of Title 28 of the Administrative Code may be used instead of a site safety manager for <u>a</u>_major building[s] *that is:* [between 10 and 14 stories or 125 to 200 feet (38 100 to 60 960 mm) in height.]
 - 1.1. Less than 15 stories in height;
 - 1.2. Less than 200 feet (60 960 mm) in height; and
 - 1.3. Less than 100,000 square feet $(30 \ 480 \ m^2)$ of lot coverage.
- 2. A site safety manager or coordinator is not required for the alteration of the façade of a major building *that is:*[between 10 and 14 stories in height.]
 - 2.1. Less than 15 stories in height; and
 - 2.2. Less than 200 feet (60 960 mm) in height; and
 - 2.3. Less than 100,000 square feet $(30 \ 480 \ m^2)$ of lot coverage.
- 3. A site safety manager or coordinator is not required for partial demolition operations in major buildings where the partial demolition operation is limited to the interior components of the building and where mechanical demolition equipment, other than handheld devices, are not used.

§ 169. Subsection 3314.1.1 of section BC 3314 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is renumbered to be subsection 3314.1.2 and a new subsection 3314.1.1 is added to read as follows:

3314.1.1 Notification prior to commencement of work. The permit holder or person directly in charge of any suspended scaffold supported by c-hooks or outrigger beams shall notify the department in a form and manner specified by the department at least 24 hours, but not more than 48 hours, prior to the installation or use of such scaffolding equipment.

§ 170. Item 1 of the exceptions in subsection 3314.2 of section BC 3314 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1. Any two-point suspended scaffold supported by a parapet using C-hooks that meet the requirements of Section 3314.10.2[. In lieu of a permit, no person shall use or install such a two-point suspended scaffold supported by a parapet using C-hooks without notifying the department in a form and manner specified by the department at least 24 hours, but no more than 48 hours prior to the commencement of such use or installation.] *provided that prior notification is provided to the department in accordance with Section 3314.1.1.*

§ 171. Subsections 3314.4.5 and 3314.4.6 section BC 3314 of chapter 33 of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

3314.4.5 Requirements for workers who erect, repair, maintain, modify or remove supported scaffolds. Only workers with experience in erecting, repairing, maintaining, modifying, or removing supported scaffolds shall be employed to perform this work. They shall be supervised by a designated superintendent or foreman who shall enforce such measures as necessary for the protection of the public and property.

Workers who erect, repair, maintain, modify and remove supported scaffolds 40 feet (12 192 mm) or more in height must, at a minimum, have completed a training program or course that is at least 32 hours long, and must complete an 8 hour refresher program or course every 4 years thereafter. The training program or course shall be based on the United States Department of Labor Occupational Safety and Health Department ("OSHA") scaffold safety and training guidelines and the scaffold requirements of this chapter. The training program or course shall be conducted by a registered New York State Department of Labor apprenticeship training program or by an educational institution or school chartered, licensed or registered by the New York State Department of Education and presented by an instructor(s) authorized under the applicable provisions established by OSHA for construction safety.

Successful completion of the training program or course shall be evidenced by a dated scaffold certificate of completion issued by the provider of the training program or course. The certificate or a copy thereof, shall be readily available to the commissioner upon request, and shall be deemed valid for four years from its date of issuance.

Workers who erect, repair, maintain, modify, or remove a sidewalk shed that provides a base for a scaffold 40 feet (12 192 mm) or more in height are subject to the above requirements.

The requirement that a refresher program or course be completed every four years shall apply retroactively to individuals who satisfied such requirements prior to the effective date of this code.

3314.4.6 Requirements for workers who use a supported scaffold. Every worker who uses a supported scaffold to perform his or her job tasks shall complete a 4-hour training program or course, and a 4-hour refresher program or course every four years thereafter, that includes instruction on the nature of electrical hazards, fall and falling object hazards, material handling on scaffolds, and the maximum intended load and load-handling capacities of scaffolds. The training program or course shall be conducted by a registered New York State Department of Labor apprenticeship training program or by an educational institution or school chartered, licensed or registered by the New York State Department of Education, and presented by an instructor(s) authorized under the applicable provisions established by OSHA for construction safety.

Successful completion of the training program or course shall be evidenced by a dated scaffold user certificate issued by the provider of the training program or course. The certificate, or a copy thereof, shall be readily available to the commissioner upon request, and shall be deemed valid for four years from its date of issuance.

The requirement that a refresher program or course be completed every four years shall apply retroactively to individuals who satisfied such requirements prior to the effective date of this code.

§ 172. Subsection D102.2.4 of section BC D 102 of Appendix D of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

D102.2.4 Structural fire rating. The fire-resistance rating of <u>bearing</u> walls, floors, roofs and their supporting structural members shall comply with Table 601 of Chapter 6, but in no event shall such rating be less than 1-hour.

Exceptions. The following buildings or building elements may be constructed with fire-resistance rating in accordance with Table 601:

- 1. Buildings of Type IV construction.
- 2. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 3. Automobile parking structures.
- 4. Buildings surrounded on all sides by a permanently open space of not less than 30 feet (9144 mm).
- 5. Partitions complying with Section 603.1 (8).

§ 173. The definition of "DESIGN FLOOD ELEVATION" in subsection G201.2 of section BC G201 of appendix G of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

DESIGN FLOOD ELEVATION. The applicable elevation specified in ASCE 24, Tables 2-1, 4-1, 5-1, 6-1, or 7-1, depending on the [structure] *structural occupancy* category designated in ASCE 24, Table 1-1

§ 174. Section G402 of chapter G 4 of appendix G of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

SECTION BC G402 STANDARDS

ASCE 7-02	Minimum Design Loads for Buildings and Other Structures	G104.5.2, G201.2, G304.2
ASCE 24-05*	Flood Resistant Design and Construction	G103.1, G104.3, G104.5.1, G104.5.2, G105.2, G105.3.1, G201.2, G301.1, G303.2, G303.3, G303.4, G303.7, G304.1.1, G304.1.2, G304.2, G305.1, G307.1, G307.2, G307.3,

FEMA F1 360497	S Flood Insurance Study, Community Number 360497, Revised [May 21, 2001] <i>September_5, 2007</i> ; Federal Emergency Management Agency	G102.2
FEMA FIRM 360497	s [1)] Flood Insurance Rate Map, Community Number 360497, Panel Numbers 1 through [153] 0457, Revised [May 21, 2001] September 5, 2007; Federal Emergency Management Agency	G102.2, G102.3, G102.3.1, G102.3.2, G103.3, G201.2
	[2) Letter of Map Revision, revising FIRM Panel 149, FEMA Case #01-02-045P, effective July 3, 2002.]	
FEMA FORM 8 31	- Elevation Certificate; Federal Emergency Management Agency	G105.3
FEMA FORM 8 65	 Floodproofing Certification; Federal Emergency Management Agency 	G105.3
HUD 24 CFR Pa 3280-94	t Manufactured Home Construction and Safety Standards, 1994	G201.2

*As modified in Chapter G5.

§ 175. The modifications to sections 1.2, 1.4.3, 2.3, 4.4, 5.1, 6.2 and 7.1 of ASCE 24-05 as set forth in subsection G501.1 of section BC G 501 of Appendix G of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

Section 1.2. Section 1.2 (Definitions) is amended by modifying only the following definitions:

Coastal A Zone—Reserved.

Design Flood Elevation—The applicable elevation specified in Table 2-1, 4-1, 5-1, 6-1, or 7-1, depending on the [structure] *structural occupancy* category designated in Table 1-1.

High Risk Flood Hazard Area—An area designated as a *coastal high hazard area*, being those areas identified on the FIRM as a *V-Zone*.

Nonresidential—As defined in Section G201 of the New York City Building Code, Appendix G.

Residential—As defined in Section G201 of the New York City Building Code, Appendix G.

Section 1.4.3. Table 1-1 of Section 1.4.3 (Classification of Structures) is amended to read as follows:

Table 1-1. Classification of Structures for Flood-Resistant Design and Construction (Classification same as *New York City Building Code* Table 1604.5)

	Structural
Nature of Occupancy	Occupancy
	Category

Buildings and other structures that represent a low hazard to human life in the event of I failure including, but not limited to:

• Agricultural facilities

• Certain temporary facilities

• Minor storage facilities

Buildings and other structures except those listed in *Structural Occupancy* Categories I, III II and IV

Buildings and other structures that represent a substantial hazard to human life in the event III of failure including, but not limited to:

- Buildings and other structures where more than 300 people congregate in one area
- Buildings and other structures with elementary school, secondary school or day care facilities with an occupant load greater than 250
- Buildings and other structures with an occupant load greater than 500 for colleges or adult education facilities
- Health care facilities with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities
- Jails and detention facilities
- Power-generating stations, water treatment for potable water, waste water treatment facilities and other public utility facilities not included in *Structural Occupancy* Category IV
- Buildings and other structures not included in *Structural Occupancy* Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released

IV

• Hospitals and other health care facilities having surgery or emergency treatment facilities

Buildings and other structures designed as essential facilities including, but not limited to:

- Fire, rescue and police stations and emergency vehicle garages
- Designated earthquake, hurricane or other emergency shelters
- Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response
- Power-generating stations and other public utility facilities required as emergency backup facilities for *Structural Occupancy* Category IV structures
- Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.7(2) of the *New York City Building Code*
- Aviation control towers, air traffic control centers and emergency aircraft hangars
- Buildings and other structures having critical national defense functions
- Water treatment facilities required to maintain water pressure for fire suppression

Section 2.3. Table 2-1 of Section 2.3 (Elevation Requirements) is amended to read as follows:

 Table 2-1. Minimum Elevation of the Top of Lowest Floor Relative to Design Flood

 Elevation (DFE)—A-Zones^a

 Floor to a log on the top of Lowest Floor Relative to Design Flood

[Structure] Structure 1 Occupancy Cotocory ^b	Minimum Elevation of		
[Structure] Structural Occupancy Category	Lowest Floor		
Ι	DFE = BFE		
II ^c	DFE = BFE		
III ^c	DFE = BFE + 1 ft		
IV ^c	DFE = BFE + 2 ft		

^aMinimum elevations shown in Table 2-1 do not apply to V Zones (see Table 4-1). Minimum elevations shown in Table 2-1 apply to A-Zones unless specific elevation requirements are given in Section 3 of this Standard.

^bSee Table 1-1, or Table 1604.5 of the *New York City Building Code*, for *structural_occupancy* category descriptions.

^cFor nonresidential buildings and nonresidential portions of mixed-use buildings, the lowest floor shall be allowed below the minimum elevation if the structure meets the floodproofing requirements of Section 6.

Section 4.4. Table 4-1 of Section 4.4 (Elevation Requirements) is amended to read as follows:
Table 4-1.	Minimum	Elevation	of Bottom	of Lowest	Supporting	Horizontal	Structural
Member of	Lowest Flo	or Relative	e to Design	Flood Elev	vation (DFE)	-V Zones	

[Structure] Structural	Member Orientation Relative Approach	to the Direction of Wave
Occupancy Calegory	Parallel ^b	Perpendicular ^b
Ι	DFE = BFE	DFE = BFE
II	DFE = BFE	DFE = BFE
III	DFE = BFE + 1 ft	DFE = BFE + 2 ft
IV	DFE = BFE + 1 ft	DFE = BFE + 2 ft

^aSee Table 1-1, or Table 1604.5 of the *New York City Building Code*, for *structural_occupancy* category descriptions.

^bOrientation of lowest horizontal structural member relative to the general direction of wave approach; parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

Section 5.1. Table 5-1 of Section 5.1 (Materials, General) is amended to read as follows:

Table 5-1. Minimum Elevation, Relative to Design Flood Elevation (DFE), Below which Flood-Damage-Resistant Materials Shall Be Used

Structur[e]al		V-Zones	
Occupancy	A-Zone	Orientation Parallel ^b	Orientation
Category ^a			Perpendicular ^b
Ι	DFE = BFE	DFE = BFE	DFE = BFE
II	DFE = BFE	DFE = BFE	DFE = BFE
III	DFE = BFE + 1 ft	DFE = BFE + 2 ft	DFE = BFE + 3 ft
IV	DFE = BFE + 2 ft	DFE = BFE + 2 ft	DFE = BFE + 3 ft

^aSee Table 1-1, or Table 1604.5 of the *New York City Building Code*, for *structural_occupancy* category descriptions.

^bOrientation of lowest horizontal structural member relative to the general direction of wave approach; parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

Section 6.2. Table 6-1 of Section 6.2 (Dry Floodproofing) is amended to read as follows:

Table 6-1. Minimum Elevation of Floodproofing, Relative to Design Flood Elevation (DFE)—A-Zones

[Structure] Structural Occupancy Category ^a	Minimum Elevation of Floodproofing ^b
Ι	DFE = BFE
II ^c	DFE = BFE
III	DFE = BFE + 1 ft
IV	DFE = BFE + 2 ft

^aSee Table 1-1, or Table 1604.5 of the *New York City Building Code*, for *structural occupancy* category descriptions.

^bWet or dry floodproofing shall extend to the same level.

^cDry floodproofing of residential buildings and residential portions of mixed use buildings shall not be permitted.

Section 7.1. Table 7-1 of Section 7.1 (General) is amended to read as follows:

Table 7-1. Minimum Elevation of Utilities and Attendant Equipment Relative to Design Flood Elevation (DFE)

Locate Utilities and Attendant Equipment Above^b

[Structure]		V-Zones	
Structural	A-Zones	Orientation Parallel ^c	Orientation
Occupancy			Perpendicular ^c
Category ^a			
Ι	DFE = BFE	DFE = BFE	DFE = BFE
II	DFE = BFE	DFE = BFE	DFE = BFE
III	DFE = BFE + 1 ft	DFE = BFE + 2 ft	DFE = BFE + 3 ft
IV	DFE = BFE + 2 ft	DFE = BFE + 2 ft	DFE = BFE + 3 ft

^aSee Table 1-1, or Table 1604.5 of the *New York City Building Code*, for *structural_occupancy* category descriptions.

^bLocate utilities and attendant equipment above elevations shown unless otherwise provided in the text.

^cOrientation of lowest horizontal structural member relative to the general direction of wave approach; parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

§ 176. The amendment to 811.1.3 of section 8.11 of part 8 of ASME A 17.1-00 as set forth in subsection K101.1 of section BC K 101 of appendix K of the New York city building code of chapter 7 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

8.11.1.3 Periodic Inspection and Test Frequency. See Chapter 3 of Title 28 of the Administrative Code.

(NOTE [(8.11.1.3)]: Required intervals for periodic inspections and tests can be found in [Table 8.11.1.3] *Table N1 as modified below in this appendix.*)

[Revise table N1 of Appendix N by deleting rows 6, 7 & 8 and the note. Renumber as Table 8.11.1.3.

(Table 8.11.1.3 is attached on page 42 of this document)]

TABLE [8.11.1.3] N 1REQUIRED INSPECTION AND TEST INTERVALS IN "MONTHS"[Periodic Tests]

				Periodic				Tests		
		Periodic Ins	pections	Category One Category Three Category Five			Five			
Reference Section	Equipment Type	Requirement	Interval	Requirement	Interval	Requirement	Interval	Requirement	Interval	
8.11.2	Electric Elevators	8.11.2.1	6-12	8.11.2.2	12	N/A	N/A	8.11.2.3	60	
8.11.3	Hydraulic Elevators	8.11.3.1	6-12	8.11.3.2	12	8.11.3.3	36	8.11.3.4	60	
8.11.4	Escalators & Moving Walks.	8.11.4.1	6-12	8.11.4.2	12	N/A	N/A	N/A	N/ A	
8.11.5.1	Sidewalk Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11. <u>] 36</u>	8.11.2.3, 8.11.3.4	60	
8.11.5.2	Private Residence Elevators	8.11.2.1, 8.11.3.1	—	8.11.2.2, 8.11.3.2	12	8.11.3.3	36	8.11.2.3, 8.11.3.4	60	
8.11.5.4	Dumbwaiters	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	36	8.11.2.3, 8.11.3.4	60	
8.11.5.5	Material Lifts	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	36	8.11.2.3, 8.11.3.4	60	
8.11.5.5	Vertical Reciprocating Conveyors (VRC)	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	36	8.11.2.3, 8.11.3.4	60	
8.11.5.6	Special Purpose Personnel Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11. <u>]</u> 36	8.11.2.3, 8.11.3.4	60	
8.11.5.7	Inclined Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11. <u>]</u> 36	8.11.2.3, 8.11.3.4	60	
8.11.5.8	Shipboard Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11. <u>]</u> 36	8.11.2.3, 8.11.3.4	60	
8.11.5.9	Screw-column Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11. <u>]</u> 36	8.11.2.3, 8.11.3.4	60	
8.11.5.10	Rooftop Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11. <u>]</u> 36	8.11.2.3, 8.11.3.4	60	
8.11.5.12	Limited-use/Limited-application Elevators	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11.]_ <i>36</i> .	8.11.2.3, 8.11.3.4.	60	
8.11.5.13	Elevators Used for Construction	8.11.2.1, 8.11.3.1	6-12	8.11.2.2, 8.11.3.2	12	8.11.3.3	[8.11.]_36	8.11.2.3, 8.11.3.4	60	

§ 177. Items 2 and 4 of subsection 106.4 of section MC 106 of chapter 1 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

- The occupancy group of the main use or dominant occupancy of the building [in accordance with Section 302.1 of the New York City Building Code];
- 4. The [structure] *structural occupancy* category in accordance with Table 1604.5 of the *New York City Building Code*;

§ 178. The definition of "STEAM-HEATING BOILER" in section MC 202 of chapter 2 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

STEAM-HEATING BOILER. A boiler operated at pressures not exceeding 15 psig (103 kPa gauge) for steam.

§ 179. The lists titled "correctional facilities" and "specialty shops" under the column labeled "occupancy classification" in Table 403.3 of chapter 4 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

OCCUPANCY CLASSIFICATION Correctional facilities Cells without plumbing fixtures with plumbing fixtures ^{b,g} Dining halls Guard stations
OCCUPANCY
CLASSIFICATION
Specialty shops
Automotive [service] motor-fuel-
dispensing stations
Barber
Beauty
Clothiers, furniture
Florists
Hardware, drugs, fabrics
Nail salon
Pet shops
Reducing salons
Supermarkets

§ 180. Item 1.2 of the exceptions in subsection 502.7.3.2 of section MC 502 of chapter 5 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1.2. The vapor concentration is less than 25 percent of the lower [flammability] flammable limit (LFL).

§ 181. Subsection 509.1 of section MC 509 of chapter 5 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

509.1 Where required. Commercial [food heat-processing] *cooking* appliances required by Section 507.2.1 to have a Type I hood shall be provided with an approved automatic fire suppression system complying with the *New York City Building Code* and the *New York City Fire Code*.

§ 182. Table 510.8.2 of chapter 5 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 510.8.2 is added to read as follows:

CLEARANCE TO COMBUSTIBLES				
TYPE OF EXHAUST OR TEMPERATURE OF EXHAUST (°F)	CLEARANCE TO COMBUSTIBLES (inches)			
Less than 100	1			
100-600	12			
Flammable vapors	б			

For SI: 1 inch = 25.4 mm, $^{\circ}C = \{(^{\circ}F - 32)\}/1.8$

§ 183. Subsection 513.5.1 of section MC 513 of chapter 5 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

513.5.1 Leakage area. Total leakage area of the barrier is the product of the smoke barrier gross area times the allowable leakage area ratio, *plus the area of other openings_such as gaps and operable windows*. Compliance shall be determined by achieving the minimum air pressure difference across the barrier with the system in the smoke control mode for mechanical smoke control systems. Passive smoke control systems tested using other approved means such as door fan testing shall be as approved by the commissioner.

§ 184. Item 3.1 of the exceptions in subsection 609.1 of section MC 609 of chapter 6 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

3.1. The occupancy has no process producing combustible material such as dust, lint, or greasy vapors. Such occupancies include banks, office buildings, [churches] *houses of worship*, hotels, and health care facilities (but not kitchens, laundries, and manufacturing portions of such facilities).

§ 185. Subsection 801.1.1.1 of section MC 801 of chapter 8 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

801.1.1.1 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 or vents within 100 feet (30 480 mm), the owner of such new or altered building shall have the responsibility of altering such chimneys or vents to make them conform with the requirements of this chapter. A chimney or vent that is no longer connected with a fireplace or combustion or other equipment for which a chimney or vent 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 or vents to the height required in this chapter.
- 2. Offset such chimneys or vents to a distance beyond that required in Chapter 5 of this code from the new or altered building provided that the new location of the outlet of the offset chimney or vent shall otherwise comply with the requirements of this chapter.

[3.] Such requirements shall not dispense with or modify any additional requirements that may be applicable pursuant to rules of the New York City Department of Environmental Protection.

§ 186. Subsections 804.1 and 804.3.4 of section MC 804 of chapter 8 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

804.1 Direct-vent terminations. Vent terminals for direct-vent appliances shall be installed in accordance with the manufacturer's installation instructions. Horizontal venting shall be allowed *only if approved by the commissioner and* only if in a non-hazardous location and if the appliance has a sealed combustion chamber.

804.3.4 Horizontal terminations. Horizontal terminations shall only be allowed *if_approved by the commissioner*, if they are in a nonhazardous location and if the appliance has a sealed combustion chamber (direct vent) in accordance with the appliance listing and manufacturers instructions. In addition, horizontal terminations shall comply with the following requirements:

- 1. Where located adjacent to walkways, the termination of mechanical draft systems shall be not less than 7 feet (2134 mm) above the level of the walkway.
- 2. Vents shall terminate at least 3 feet (914 mm) above any forced air inlet located within 10 feet (3048 mm).
- 3. The vent system shall terminate at least 4 feet (1219 mm) below, 4 feet (1219 mm) horizontally from or 1 foot (305 mm) above any door, window or gravity air inlet into the building.
- 4. The vent termination point shall not be located closer than 3 feet (914 mm) to an interior corner formed by two walls perpendicular to each other.
- 5. The vent termination shall not be mounted directly above or within 3 feet (914 mm) horizontally from any gas or electric metering, regulating, venting relief equipment or other building opening.
- 6. The bottom of the vent termination shall be located at least 24 inches (610 mm) above finished grade.

§ 187. Subsection 1011.1 of section MC 1011 of chapter 10 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1011.1 Tests. Upon completion of the assembly and installation of boilers and pressure vessels, acceptance tests shall be conducted in accordance with the requirements of the ASME *Boiler and Pressure Vessel Code*. Boilers shall not be placed in operation upon completion of construction until they have been inspected and tested and a certificate of compliance has been issued by the commissioner. All final inspections and tests for boilers shall be made by a qualified boiler inspector in the employ of the department or a duly authorized insurance company as provided in Section 204 of the Labor Law of the State of New York. Equipment having a Btu input of not more than 350,000 Btu/h (103 kW) shall be exempt from this requirement. Where field assembly of pressure vessels or boilers is required, a copy of the completed *H-2, P-2 or* U-1 Manufacturer's Data Report required by the ASME *Boiler and Pressure Vessel Code* shall be submitted to the department.

§ 188. Item 7 of subsection 1210.2.2 of section MC 1210 of chapter 12 of the New York city mechanical code of chapter 8 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

7. Radiographic examination, when required, shall be performed on butt-welds in accordance with ASME B31.1 based on the piping pressure and shall be as follows:

Piping Pressure	Percentage		
90 psig (621 kPa) or below	Not Required		
91 psig (627 kPa) to 150 psig (1034 kPa)	10 at Random		
Over 150 psig (1034 kPa)	100		

However, if, in the opinion of the engineer responsible for [controlled] *special* inspection, radiographic examination is not required for piping at pressure between 90 psig (621 kPa) and 150 psig (1034 kPa), the engineer shall so specify in writing, and the final report on the installation may omit the foregoing, and be predicated on all of the other requirements noted in this section, and a hydrostatic test.

§ 189. Subsection 102.2.1 of section FGC 102 of chapter 1 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

102.2.1 Existing buildings. Additions, alterations, renovations or repairs related to building or structural issues shall be goverened by Chapter 1 of Title 28 of the *Administrative [code] Code, the New York City Building Code and the 1968 building code, as applicable.*

§ 190. Section FGC 105 of chapter 1 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new subsection 105.5 to read as follows:

105.5 Other permits. In addition to any permits required by the provisions of this code, permits for sidewalk and street openings shall be obtained from the Department of Transportation.

§ 191. Items 2 and 4 of subsection 106.4 of section FGC 106 of chapter 1 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

- 2. The occupancy group of the main use or dominant occupancy of the building [in accordance with Section 302.1 of the *New York City Building Code*];
- 4. The [structure] *structural occupancy* category in accordance with Table 1604.5 of the *New York City Building Code*;

§ 192. Subsections 106.6 and 106.7 of section FGC 106 of chapter 1 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

106.6 Heating systems. Construction documents for heating systems shall include the temperature to be maintained in every room and the output capacity in BTU per hour ([0.2931] W) of the central heating source.

106.7 Boilers. Construction documents for boiler installations shall indicate the output capacity in BTU per hour (W), the operating weight of each boiler, the pressure setting of the relief valves, and such other data and information as required this code.

§ 193. Section FGC 107 of chapter 1 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended by adding a new subsection 107.1.3 to read as follows:

107.1.3 *Exposure of work.* It shall be the duty of the permit holder to cause the work to remain accessible and exposed for inspection purposes. Neither the commissioner nor the city shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

§ 194. The definitions of "BTU" and "DEMAND" in section FGC 202 of chapter 2 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

BTU. Abbreviation for British Thermal Unit, which is the quantity of heat required to raise the temperature of 1 pound (454 g) of water 1° F ([1.8] 0.56°C) (1 Btu = 1055 J).

DEMAND. The maximum amount of gas input required per unit of time, usually expressed in cubic feet per hour $(1 ft^3 = 0.0283 m^3)$, or Btu/h (1 Btu/h = 0.2931 W).

§ 195. Subsection 304.10 of section FGC 304 of chapter 3 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

304.10 Louvers and grilles. The required size of openings for combustion, ventilation and dilution air shall be based on the net free area of each opening. Where the free area through a design of louver, [or] grille *or screen* is known, it shall be used in calculating the size opening required to provide the free area specified. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 10-percent free area and metal louvers and grilles will have 60-percent free area. Screens shall have a mesh size not smaller than ¹/₄ inch (6.4 mm). Nonmotorized louvers and grilles shall be fixed in the open position. Motorized louvers shall be interlocked with the equipment so that they are proven to be in the full open position prior to main burner ignition and during main burner operation. Means shall be provided to prevent the main burner from igniting if the louvers fail to open during burner start-up and to shut down the main burner if the louvers close during operation.

§ 196. Table 402.2 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is REPEALED and a new table 402.2 is added to read as follows:

APPLIANCE	INPUT BTU/H (Approx.)
Space Heating Units	
Hydronic boiler	
Single family	100,000
Multifamily, per unit	60,000
Warm-air furnace	
Single family	100,000
Multifamily, per unit	60,000
Space and Water Heating Units	
Hydronic boiler	
Single family	120,000
Multifamily, per unit	75,000
Water Heating Appliances	
Water heater, automatic instantaneous	
Capacity at 2 gal./minute	142,800
Capacity at 4 gal./minute	285,000
Capacity at 6 gal./minute	428,400
Water heater, automatic storage, 30- to 40-gal. tank	35,000
Water heater, automatic storage, 50-gal. tank	50,000
Water heater, domestic, circulating or side-arm	35,000
Cooking Appliances	
Built-in oven or broiler unit, domestic	25,000
Built-in top unit, domestic	40,000
Range, free-standing, domestic	65,000
Other Appliances	
Barbecue	40,000
Clothes dryer, Type 1 (domestic)	35,000
Gas fireplace, direct-vent	40,000
Gas light	2,500
Gas log	80,000
Refrigerator	3,000

TABLE 402.2 APPROXIMATE GAS INPUT FOR TYPICAL APPLIANCES

For SI: 1 British thermal unit per hour = 0.293 W, 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m.

§ 197. Items 4 and 6 of subsection 403.1.1 of section FGC 403 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

- 4. All welding of gas distribution piping shall be subject to [controlled] <u>special</u> inspection as set forth in Section 406.
- 6. Threaded piping may be used up to 4 inches (102 mm) at pressure no greater than ½ psig (3.5 kPa gauge).

§ 198. Item 2.4 of subsection 406.4.1 of section FGC 406 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

2.4. The units of measurement ["psig" shall appear on the face of the gauge; and

§ 199. Item 5 of subsection 406.4.3 of section FGC 406 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

5. The $\frac{1}{5}$ interval on the gauge shall not be smaller than $\frac{1}{10}$ of an inch (2.5 mm) of arc;

§ 200. Item 1 of subsection 406.4.4 of section FGC 406 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1. The gauge shall have a minimum reading of $^{1}/100$ of a psig (69 Pa), and

§ 201. Subsection 406.4.5 of section FGC 406 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

406.4.5 Witnessing tests of gas piping systems. Tests of gas piping systems in accordance with this code shall be witnessed by department plumbing inspectors, or approved agencies. The department shall prescribe qualifications for individuals who are authorized to witness such tests on behalf of approved agencies, including but not limited to the requirement that such individuals shall be licensed master plumbers or registered design professionals with not less than five years experience in the inspection and testing of gas piping systems. Such tests may be conducted without any verifying inspection of tests by the department, provided that verified statements and supporting inspectorial and test reports are filed with the department within one working day of such tests.

§ 202. The exception in subsection 410.3 of section FGC 410 of chapter 4 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Exception: A vent to the outside of the building is not required for regulators less than $1\frac{1}{4}$ inches (31.7 *mm*) NPS equipped with and labeled for utilization with approved vent-limiting devices installed in accordance with the manufacturer's instructions.

§ 203. Subsection 501.1.1.1 of section FGC 501 of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

501.1.1.1 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 or vents within 100 feet (30 480 mm), the owner of such new

or altered building shall have the responsibility of altering such chimneys or vents to make them conform with the requirements of this chapter. A chimney or vent that is no longer connected with a fireplace or combustion or other equipment for which a chimney or vent 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 or vents to the height required in this chapter.
- 2. Offset such chimneys or vents to a distance beyond that required in Chapter 5 of this code from the new or altered building provided that the new location of the outlet of the offset chimney or vent shall otherwise comply with the requirements of this chapter.

[3.] Such requirements shall not dispense with or modify any additional requirements that may be applicable pursuant to rules of the New York City Department of Environmental Protection.

§ 204. Item 3 of subsection 503.5.6.5.1 of section FGC 503 of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

3. 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 one-half inch (12.7 mm) 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.

§ 205. Item 1 of subsection 503.6.10.2 of section FGC 503 of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

1. The available total height (H) for each segment of a multistory venting system is the vertical distance between the level of the highest draft hood outlet or flue collar on that floor and the centerline of the next highest interconnection tee (see Figure [B-13] 503.6.10.2(1)).

§ 206. Subsection 503.7.5 of section FGC 503 of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

503.7.5 Roof penetrations. A pipe passing through a roof shall extend without interruption through the roof flashing, roof [jacket] *jack*, or roof thimble. Where a single-wall metal pipe passes through a roof constructed of combustible material, a noncombustible, non-ventilating thimble shall be used at the point of passage. The thimble shall extend at least 18 inches (457 mm) above and 6 inches (152 mm) below the roof with the annular space open at the bottom and closed only at the top. The thimble shall be sized in accordance with Section 503.10.16.

§ 207. The line beginning "TYPE B DOUBLE-WALL CONNECTOR" in Table 504.2(4) (and in the continuation of such table) of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

TABLE 504.2(4) MASONRY CHIMNEY

[TYPE B-DOUBLE-WALL CONNECTOR] *SINGLE-WALL METAL CONNECTOR* DIAMETER—(D) inches to be used with chimney areas within the size limits at bottom

§ 208. The line labeled "Appliance Type" in Table 504.2(5) of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

Appliance Type	[Category I] Draft hood equipped	
		504 3 2

TABLE 504.2(5)SINGLE-WALL METAL PIPE OR TYPE B ASBESTOS CEMENT VENT

§ 209. Subsections

504.3.5, 504.3.14 and 504.3.15 of section FGC 504 of chapter 5 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, are amended to read as follows:

504.3.4.

504.3.2 Connector length limit. The vent connector shall be routed to the vent utilizing the shortest possible route. Except as provided in Section 504.3.3, the maximum vent connector horizontal length shall be $1\frac{1}{2}$ feet for each inch ([457] *18* mm per mm) of connector diameter as shown in Table 504.3.2.

504.3.4 Vent connector manifold. Where the vent connectors are combined prior to entering the vertical portion of the common vent to form a common vent manifold, the size of the common vent manifold and the common vent shall be determined by applying a 10-percent reduction (0.90 maximum common vent capacity) to the common vent capacity part of the common vent tables. The length of the common vent connector manifold (L_M) shall not exceed 1¹/₂ feet for each inch (457 mm [per] *for each 25.4* mm) of common vent connector manifold diameter (D) (see Figure B-11).

504.3.5 Common vertical vent offset. Where the common vertical vent is offset, the maximum capacity of the common vent shall be reduced in accordance with Section 504.3.6. The horizontal length of the common vent offset (Lo) shall not exceed $1\frac{1}{2}$ feet for each inch (457 mm [per] *for each 25.4* mm) of common vent diameter.

504.3.14 Multistory common vents [offsets]. Where used in multistory systems, vertical common vents shall be Type B double wall and shall be installed with a listed vent cap.

504.3.15 Multistory common vent offsets. Offsets in multistory common vent systems shall be limited to a single offset in each system, and systems with an offset shall comply with all of the following:

- 1. The offset angle shall not exceed 45 degrees (0.79 rad) from vertical.
- 2. The horizontal length of the offset shall not exceed 1½ feet for each inch (457 mm [per] *for each 25.4* mm) of common vent diameter of the segment in which the offset is located.
- 3. For the segment of the common vertical vent containing the offset, the common vent capacity listed in the common venting tables shall be reduced by 20 percent ($0.80 \times$ maximum common vent capacity).
- 4. A multi-story common vent shall not be reduced in size above the offset.

§ 210. Subsection 609.8 of section FGC 609 of chapter 6 of the New York city fuel gas code of chapter 9 of title 28 of the administrative code of the city of New York, as added by local law number 33 for the year 2007, is amended to read as follows:

609.8 Duct temperature. The outlet duct temperature of warm air heating furnaces shall not be greater than [two hundred fifty degrees Fahrenheit] $250^{\circ}F$ ($121^{\circ}C$).

§ 211. Notwithstanding any other law or rule new tables, figures or equations in PDF format to be added to the New York city construction codes pursuant to this local law need not be underlined to denote new matter being added. The absence of underlining to denote new matter being added shall not affect the validity of new tables, figures or equations in PDF format to be added to the New York city construction codes pursuant to this local law, local law number 99 for the year 2005 or local law number 33 for the year 2007.

§ 212. This local law shall take effect on July 1, 2008. Prior to July 1, 2008 the commissioner of buildings shall take administrative actions necessary for the timely implementation of this local law, including but not limited to the promulgation of rules.

The City of New York, Office of the City Clerk, s.s.:

I hereby certify that the foregoing is a true copy of a local law of The City of New York, passed by the Council on February 27, 2008 and approved by the Mayor of March 13, 2008.

Hector L. Diaz, Clerk of the Council.

CERTIFICATION PURSUANT TO MUNICIPAL HOME RULE LAW § 27

Pursuant to the provisions of Municipal Home Rule Law § 27, I hereby certify that the enclosed Local Law (Local Law 008 of 2008, Council Int. No. 659-A) contains the correct text:

Received the following vote at the meeting of the New York City Council on February 27, 2008: 46 For, 0 Against, 0 Not Voting Was signed by the Mayor on March 13, 2008

Was returned to the City Clerk on March 13, 2008.

Jeffrey D. Friedlander, Acting Corporation Counsel.