

## TITLE 27 CONSTRUCTION AND MAINTENANCE

### CHAPTER 1 BUILDING CODE

#### SUBCHAPTER 1 ADMINISTRATION AND ENFORCEMENT

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*\*\*“C26” omitted from section numbers in this column.  
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**ARTICLE 1 GENERAL PROVISIONS**

**§[C26-100.1] 27-101 Title.-** This code shall be known and may be cited as the "building code of the city of New York", and is hereinafter referred to as "this code" or "the code".

**§[C26-100.2] 27-102 Purpose.-** The purpose of this code is to provide reasonable minimum requirements and standards, based upon current scientific and engineering knowledge, experience and techniques, and the utilization of modern machinery, equipment, materials, and forms and methods of construction, for the regulation of building construction in the city of New York in the interest of public safety, health and welfare, and with due regard for building construction and maintenance costs.

**§[C26-100.3] 27-103 Scope. -** This code shall apply to the construction, alteration, repair, demolition, removal, maintenance, occupancy and use of new and existing buildings in the city of New York, including the installation, alteration, repair, maintenance and use of service equipment therein, except as provided in section six hundred forty-three of the charter.

**§[C26-100.4] 27-104 Interpretation.-** This code shall be liberally interpreted to secure the beneficial purposes thereof. Any conflict or inconsistency between the requirements of this code and applicable state and federal laws and regulations shall be resolved in favor of the more restrictive requirement.

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§[C26-100.5] **27-105 Effective date.**- Any work for which an application for a permit was submitted to the department prior to the effective date of this code, (December sixth nineteen hundred sixty-eight), or for which an application for a permit is submitted to the department within a period of twelve months after such date may, however, at the option of the owner, be performed in its entirety in accordance with the requirements of this code, or in accordance with the requirements of the building laws and regulations previously in force in the city of New York, provided that such work is commenced within twelve months after the date of issuance of a permit therefor and is diligently carried on to completion. This section shall not apply to the requirements of article ten of subchapter nineteen of this chapter which shall become effective on December sixth, nineteen hundred sixty-eight.

§[C26-100.6] **27-106 Enforcement.**- This code shall be enforced by the commissioner of buildings, pursuant to the provisions of section six hundred forty-three of the New York city charter, as amended, except that the fire commissioner shall also enforce the provisions of this code relating to the approved number of persons in places of assembly (overcrowding), obstruction of aisles, corridors, and exits, and to the maintenance of fire alarm equipment and devices, exit and directional signs, emergency lighting, and fire-preventive and fire-extinguishing equipment and devices, and except that the commissioner of ports and terminals shall enforce all the provisions of this code with respect to buildings under the jurisdiction of the department of ports and terminals. Where the installation of exit and directional signs, emergency lighting and sprinkler and fire alarm protection is required by the fire prevention code, the fire commissioner shall require such installations to be in accordance with the provisions of this code.

§[C26-100.7] **27-107 Variations.**- The requirements and standards prescribed in this code shall be subject to variation in specific cases by the commissioner, or by the board of standards and appeals, under and pursuant to the provisions of paragraph two of subdivision (b) of section six hundred forty-five and section six hundred sixty-six of the charter, as amended.

§[C26-100.9] **27-108 Application of references.**- Unless otherwise specifically provided in this code, all references to articles and section numbers, or to provisions not specifically identified by number, shall be construed to refer to articles, sections, or provisions of this code.

### ARTICLE 2 MATTERS COVERED

§[C26-101.1] **27-109 Building matters covered.**- The provisions of this code shall cover all matters affecting or relating to buildings, as set forth in section 27-103 of article one of this subchapter, and shall extend to excavation operations, and to all types of buildings and structures and

their appurtenant constructions, including vaults, signs, projections, and accessory additions, together with all surface and sub-surface construction within the curb line, including curb cuts and driveways, the coverings thereof and entrances thereto, and the issuance of permits in reference thereto.

§[C26-101.2] **27-110 Matters not provided for.**- Any matter or requirement essential for the fire or structural safety of a new or existing building or essential for the safety or health of the occupants or users thereof or the public, and which is not covered by the provisions of this code or other applicable laws and regulations, shall be subject to determination and requirements by the commissioner in specific cases.

### ARTICLE 3 CONTINUATION AND CHANGE IN USE

§[C26-102.1] **27-111 Continuation of lawful existing use.**- The lawful occupancy and use of any building, including the use of any service equipment therein, existing on the effective date of this code or thereafter constructed or installed in accordance with prior code requirements, as provided in section 27-105 of article one of this subchapter, may be continued unless a retroactive change is specifically required by the provisions of this code.

§[C26-102.2] **27-112 Change in occupancy or use.**-Changes in the occupancy or use of any building may be made after the effective date of this code, subject to the provisions of section 27-217 of article twenty-two of this subchapter. After a change in occupancy or use has been made in a building, the re-establishment of a prior occupancy or use that would not be lawful in a new building of the same construction class shall be prohibited unless and until all the applicable provisions of this code and other applicable laws and regulations for such re-established occupancy or use shall have been complied with. A change from a use prohibited by the provisions of this code, but which was permitted prior to the effective date of this code, to another use prohibited by the provisions of this code shall be deemed a violation of this code.

§[C26-102.3] **27-113 Continuation of unlawful existing use.**-

The continuation of the unlawful occupancy or use of a building after the effective date of this code, contrary to the provisions of this code, shall be deemed a violation of this code.

**ARTICLE 4 ALTERATION OF EXISTING BUILDINGS**

**§[C26-103.0] 27-114 Alteration of existing buildings.-** Subject to the provisions of section 27-105 of article one of this subchapter, and except as otherwise specifically provided by the provisions of this code, the following provisions shall apply to the alteration of existing buildings, whether made voluntarily or as a result of damage, deterioration or other cause, provided, however, that the following alterations shall conform with the requirements of this code regardless of magnitude or cost:

(a) Alterations or additions to existing standpipes, sprinklers or interior fire alarm and signal systems or a change in use or an enlargement to spaces requiring such protection, as provided in subchapter seventeen of this code.

(b) Alterations, replacements or new installations of equipment for heating or storing water, as provided in reference standard RS-16.

(c) Projections beyond the street line, as provided in subchapter four of this code.

(d) Sprinkler, alarm protection, and emergency lighting requirements for places of assembly, as provided in subchapter eight of this code.

[(e) Plumbing fixtures required to be installed in conjunction with any change of use, enlargement or addition to any space classified in occupancy group F-4, a place of assembly, dormitory, public building, public bath, school or workers temporary facility, as provided in table RS 16-5 of section P104.1 of reference standard RS-16.]\*

(e)\*\* Interior finish work, as provided in section 27-348.

(f)\*\*\* Finish flooring and floor covering, as provided in section 27-351.

(g)† The installation or replacement of elevators, as provided in subchapter eighteen of this code.

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

*\*\* As enacted but "(f)" probably intended.*

*\*\*\* As enacted but "(g)" probably intended.*

*† As enacted but "(h)" probably intended.*

**§[C26-103.1] 27-115 Alterations exceeding sixty percent of building value.-** If the cost of making alterations in any twelve-month period shall exceed sixty percent of the value of the building, the entire building shall be made to comply with the requirements of this code, except as provided in section 27-120 of this article.

**§[C26-103.2] 27-116 Alterations between thirty percent and sixty percent of building value.-** If the cost of making alterations in any twelve-month period shall be between thirty percent and sixty percent of the value of the building, only those portions of the building altered shall be made to comply with the requirements of this code, except as provided in sections 27-120 and 27-121 of this article.

**§[C26-103.3] 27-117 Alterations under thirty percent of building value.-** Except as otherwise provided for in sections 27-120 and 27-121 of this article, if the cost of making alterations in any twelve month period shall be

under thirty percent of the value of the building, those portions of the building altered may, at the option of the owner, be altered in accordance with the requirements of this code, or altered in compliance with the applicable laws in existence prior to December sixth, nineteen hundred sixty-eight, provided the general safety and public welfare are not thereby endangered.

**§[C26-103.4] 27-118 Alterations involving change in occupancy or use.-**

(a) Except as otherwise provided for in this section, if the alteration of a building or space therein results in a change in the occupancy group classification of the building under the provisions of subchapter three, then the entire building shall be made to comply with the requirements of this code.

(b) Except as otherwise provided for in this section, if the alteration of a space in a building involves a change in the occupancy or use thereof, the alteration work involved in the change shall, except as provided for in this section, be made to comply with the requirements of this code and the remaining portion of the building shall be altered to such an extent as may be necessary to protect the safety and welfare of the occupants.

(c) When, however, the cost of alterations involved in the change of occupancy of an existing building erected prior to December sixth, nineteen hundred sixty-eight or space therein authorizes the alterations to be made in compliance with the applicable laws in existence on such sixth day of December, nineteen hundred sixty-eight, such change in occupancy may similarly be made in compliance with such prior laws, provided the general safety and public welfare are not thereby endangered, and further provided that the alteration work shall effect compliance with all requirements of this code relating to interior finish work, finish flooring and floor covering, sprinklers, interior fire alarms, fire command and communication systems, elevators, smoke detectors, directional signs, emergency lighting and emergency power.

**††27-118.1 Illegal alterations involving change in occupancy.-** No person, except in accordance with all requirements of this code, shall convert, knowingly take part or assist in the conversion, or permit the maintenance of the conversion, of a residence which is legally approved for occupancy as a dwelling for one or more families, to a residence for occupancy as a dwelling for more than the legally approved number of families. Any person who shall violate or fail to comply with the provisions of this section shall be liable for a civil penalty which may be recovered in a proceeding before the environmental control board pursuant to the provisions of section 26-126.1 of this code.

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Upon the finding of such violation and the imposition of the civil penalty, the Environmental Control Board shall forward to the Internal Revenue Service, the New York State Department of Taxation and Finance and the New York City Department of Finance the name and address of the respondent, the address of the building or structure with respect to which the violation occurred, and the time period during which the violation was found to have existed.

†† *Local Law 65-1997.*

**§[C26-103.5] 27-119 Alteration cost: building value.-** For the purpose of applying the foregoing provisions of this article, the cost of making alterations shall be determined by adding the estimated cost of making the proposed alterations computed as of the time of submitting the permit application, to the actual cost of any and all alterations made in the preceding 12-month period; and the value of the building shall be determined at the option of the applicant on the basis of one and one-quarter times the current assessed valuation of the building, as adjusted by the current State equalization rate, or on the basis of the current replacement cost of the building, provided that satisfactory evidence of current replacement cost is submitted to the commissioner.

**§[C26-103.6] 27-120 Alterations to multiple dwelling[s]\* and conversions to multiple dwellings.-** At the option of the owner, regardless of the cost of the alteration or conversion, an alteration may be made to a multiple dwelling or a building may be converted to a multiple dwelling in accordance with all requirements of this code or in accordance with all applicable laws in existence prior to December sixth, nineteen hundred sixty-eight, provided the general safety and public welfare are not thereby endangered.

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

**§[C26-103.7] 27-121 Alterations to residence buildings.-** Alterations to one- or two-family residence buildings erected under the provisions of the building code in effect prior to December sixth, nineteen hundred sixty-eight, and damaged by fire or other catastrophe to the extent of less than fifty percent of the value of the building (except as otherwise provided in section 27-297 of article four of subchapter four of this chapter) may be reconstructed in accordance with the provisions of the building code in effect prior to December sixth, nineteen hundred sixty-eight.

**§[C26-103.8] 27-122 Alterations involving conversions from seasonal to year round use.-**

(a) Buildings converted from seasonal use to year round use shall comply with the minimum building insulation standards as provided in reference standard RS 12-10, energy conservation in new building design, with the exception that the provisions as set forth in opinion 76-16, state of New York, public service commission, dated August thirteenth, nineteen hundred seventy-six, relating to noise control and fire rating shall not apply. The standards set forth in this code relating to noise control and fire rating and other applicable standards shall apply.

(b) All alterations performed in accordance with the requirements of this section shall also be in full compliance with the provisions of subchapter fourteen (inspections) of chapter one of title twenty-six of the administrative code to insure a method of controlled inspection of all converted buildings.

**§[C26-103.9] 27-123 Alterations involving high hazard occupancies.-** Any building erected prior to the effective date of this code (December sixth, nineteen hundred sixty-eight) and complying with section 27-117 of this article may be utilized for new high hazard occupancies without compliance with article two of subchapter six of this chapter on condition that the building or building section for such high hazard occupancy be provided with an approved one source automatic sprinkler system complying with the provisions of subchapter seventeen for B-1 occupancies regardless of the area thereof. Existing high hazard occupancies in structures erected prior to the effective date of this code and complying with section 27-117 of this article may continue to operate, subject to such fire protection requirements as the fire commissioner shall direct.

**\*\*27-123.1 Alterations, additions, repairs and changes in occupancy or use requiring facilities for people having physical disabilities.-** The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to alterations, additions and repairs made to buildings, as well as to changes in occupancy or use, as set forth below. The provisions of sections 27-115, 27-116, 27-117, 27-118 and 27-120 of this code shall not govern the application of the provisions of such subarticle.

(a) The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to an entire existing building, as if hereafter erected, when the costs of any alterations, additions or repairs, other than ordinary repairs, made within any twelve-month period immediately following the filing of the application exceed fifty percent of the cost of replacement of the building with one of similar floor space, as estimated by the department at the beginning of that twelve-month period. When such estimated costs of alterations, additions or repairs, other than ordinary repairs, do not exceed fifty percent of such replacement cost, then the provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven shall apply to such alterations, additions or repairs, although nothing herein is meant to discourage compliance with the standards set forth in subarticle two of article two of subchapter four of chapter one of title twenty-seven in other portions of buildings described in this sentence.

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(b) The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to an entire existing building, as if hereafter erected, when there is a change in occupancy classification of the building. The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code shall apply to a space in a building when there is a change in the occupancy type thereof or in how such space is used.

(c) When any work not otherwise required to comply with the provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven is done on an interior accessible route in existing residential buildings, other than in occupancy group J-3, which work involves plumbing fixtures, that work shall be required to comply with section 27-292.8 of this code for the extent of the work being performed, provided such work will not require any structural changes or additional partitions; ordinary repairs and replacement of existing piping shall be exempt from the provisions of this sentence.

(d) Where additions or alterations subject parts of existing systems to loads exceeding those permitted herein, such parts shall be made to comply with this code.

(e) The provisions of subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code and of subdivisions b and c of this section shall not apply to the alteration of existing residential buildings, other than adult residential care facilities, which are classified in occupancy group J-2 and contain no more than three dwelling units or which are classified in occupancy group J-3 and are being altered to contain three dwelling units, and which satisfy the requirements of subdivision (d) of section 27-357 of this code, when the cost of any alterations, additions or repairs, other than ordinary repairs, made within any twelve-month period immediately following the filing of the application do not exceed fifty percent of the cost of replacement of the building with one of similar floor space, as estimated by the department at the beginning of that twelve-month period.

*\*\*Local Law 58-1987.*

**\* § 27-123.2 Provision of sprinklers in existing buildings.-** Notwithstanding any provision of law to the contrary, the provisions of section 27-954 of this code shall apply to alterations made to buildings, as well as to changes in occupancy or use, as set forth below:

(a) The provisions of section 27-954 of this code shall apply to an entire existing building that is being altered, when such building is classified in occupancy group J-2 and will have four or more dwelling units upon the completion of the alterations, or is classified in occupancy group J-1, and when the costs of making any alterations to any such J-1 or J-2 building within any twelve-month period exceeds fifty percent of the building value.

(b) The provisions of section 27-954 of this code shall apply to an entire existing building when the occupancy

classification of the building will change to a residential occupancy group other than occupancy group J-2 with not more than three dwelling units or occupancy group J-3.

(c) The provisions of section 27-954 of this code shall apply to any space:

(1) when alterations thereto involve a change in the occupancy or use thereof to a residential occupancy group other than occupancy group J-2 with not more than three dwelling units or occupancy group J-3, or

(2) when the costs of making alterations thereto within any twelve-month period exceeds fifty percent of the value of the space.

(d) For the purposes of this section, the cost of making alterations and the value of any such building or space shall be determined as set forth in section 27-119 of this chapter; provided, however, that for purposes of this section:

(1) the cost of making alterations to a residential building shall be determined based on the aggregate cost of alterations to the residential Portions of such building, and the value of such a building shall be determined based on the aggregate value of the residential portions of the building, exclusive of the value of any non-residential portions of the building; and

(2) the cost of making alterations to residential spaces in a non-residential building shall be determined based on the collective cost of alterations to such spaces, and the value of such residential spaces shall be determined based on the aggregate value of all such spaces in the building, exclusive of the value of any non-residential portions of the building.

(e) When a system of automatic sprinklers is installed in any existing building or space pursuant to this section, such system shall comply with the requirements of this code and any other laws and rules applicable to the occupancy group in which such building or space is classified or in which such building or space would be classified if such building or space were classified under this chapter.

*\*Local Law 10-1999.*

### ARTICLE 5 MINOR ALTERATIONS: ORDINARY REPAIRS

**§[C26-104.1] 27-124 Minor alterations.-** For the purposes of this code, the term "minor alterations" shall mean minor changes or modifications in a building or any part thereof, excluding additions thereto, that do not in any way affect health or the fire or structural safety of the building. Minor alterations shall not include any of the work described or referred to in section 27-126 of this article, or any other work for which a permit is required under the provisions of articles ten through seventeen of this subchapter.

**§[C26-104.2] 27-125 Ordinary repairs.-**

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For the purposes of this code, the term "ordinary repairs" shall mean replacements or renewals of existing work in a building, or of parts of the service equipment therein, with the same or equivalent materials or equipment parts, that are made in the ordinary course of maintenance and that do not in any way affect health or the fire or structural safety of the building or the safe use and operation of the service equipment therein. Ordinary repairs shall not include any of the work described or referred to in section 27-126 of this article or any other work for which a permit is required under the provisions of articles ten through seventeen of this subchapter.

### **\*\*§[C26-104.3] 27-126 Work not constituting minor alterations or ordinary repairs. -**

(a) For the purposes of this code, minor alterations or ordinary repairs shall not include the cutting away of any wall, floor, or roof construction, or any portion thereof; or the removal, cutting, or modification of any beams or structural supports; or the removal, change, or closing of any required means of egress; or the rearrangement or relocation of any parts of the building affecting loading or exit requirements, or light, heat, ventilation, or elevator requirements; nor shall minor alterations or ordinary repairs include additions to, alterations of, or rearrangement, relocation, replacement, repair or removal of any portion of a standpipe or sprinkler system, water distribution system, house sewer, private sewer, or drainage system, including leaders, or any soil, waste or vent pipe, or any gas distribution system, or any other work affecting health or the fire or structural safety of the building.

(b) Minor alterations or ordinary repairs shall include the repair or replacement of any fixture, piping or faucets from the inlet side of a trap to any exposed stop valve.

*\*\*Local Law 51-2001.*

## ARTICLE 6 MAINTENANCE

**§[C26-105.1] 27-127 Maintenance requirements.-** All buildings and all parts thereof shall be maintained in a safe condition. All service equipment, means of egress, devices, and safeguards that are required in a building by the provisions of this code or other applicable laws or regulations, or that were required by law when the building was erected, altered, or repaired, shall be maintained in good working order.

**§[C26-105.2] 27-128 Owner responsibility.-** The owner shall be responsible at all times for the safe maintenance of the building and its facilities.

### **\*§[C26-105.3] 27-129 Exterior walls and appurtenances thereof.-**

In order to maintain a building's exterior walls and appurtenances thereof in a safe condition, the following additional requirements shall apply to all existing buildings or buildings hereafter erected which are greater than six stories in height:

**(a) Inspection requirements.-** A critical examination of an applicable building's exterior walls and appurtenances thereof shall be conducted at periodic intervals as set forth by rule of the commissioner, but such examination shall be conducted at least once every five years.

(1) The initial examination for any building in existence on February twenty-first, nineteen hundred eighty shall be conducted prior to February twenty-first, nineteen hundred eighty-two and the initial examination for any building thereafter constructed shall be conducted in the fifth year following the erection or installation of any exterior wall and/or enclosures.

(2) Such examination shall be conducted and witnessed by or under the direct supervision of a licensed architect or licensed professional engineer by or on behalf of the owner of the building.

(3) Such examination shall include, in addition to an inspection, a complete review of the most recently prepared report.

(4) Such examination shall also be conducted in accordance with applicable rules promulgated by the commissioner.

**(b) Notification requirements.-** Whenever an architect or engineer learns through a critical examination of a building's exterior walls and appurtenances thereof of an unsafe condition prior to the filing of a report with the department of buildings pursuant to subdivision (c) of this section, he or she shall notify the owner and the department of buildings immediately in writing of such condition.

**(c) Report of examination.-**Such architect or engineer shall submit a written report certifying the results of such examination to the commissioner, clearly documenting the condition of the exterior walls and appurtenances thereof, as either safe, unsafe or safe with a repair and maintenance program. The report shall include a record of all significant deterioration, unsafe conditions and movement observed as well as a statement concerning the watertightness of the exterior surfaces. Such report must be signed by and bear the professional seal of such architect or engineer.

### **(d) Necessary repairs.-**

(1) Unsafe condition.

a. Upon the filing of the architect's or engineer's report of an unsafe condition with the commissioner, the owner, his or her agent or the person in charge shall immediately commence such repairs or reinforcements and shall undertake such measures as may be required to secure public safety and to make the building's exterior walls or appurtenances thereof conform to the provisions of this code.

b. All unsafe conditions shall be corrected within thirty days of the filing of the critical examination report.

c. The architect or engineer shall inspect the premises and file an amended report setting forth the condition of the building within two weeks after



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repairs to correct the unsafe condition have been completed.

d. The commissioner may grant an extension of time of up to ninety days to complete the repairs required to correct an unsafe condition upon receipt and review of an initial extension application submitted by the architect or engineer together with such additional documentation as may be prescribed by rule.

e. The commissioner may grant a further extension of time to complete the repairs required to remove an unsafe condition upon receipt and review of an application for a further extension submitted by the architect or engineer together with such further documentation as may be prescribed by rule.

(2) Safe condition with a repair and maintenance program. An architect or engineer shall not file a report of a safe condition with a repair and maintenance program for the same building for two consecutive filing periods unless the second such report is accompanied by his or her certification attesting to the correction of all conditions identified in the earlier report as requiring repair.

(e) **Exceptions.**- The additional requirements imposed by this section shall not be applied to any part of an exterior wall which is less than twelve inches from the exterior wall of an adjacent building.

(f) **Violations.**- Any person who shall violate, or refuse, or neglect to comply with any provisions of this section shall, upon conviction thereof, be punished by a fine of not more than one thousand dollars, or by imprisonment not exceeding six months, or both; and any such person shall, also, for each offense, be subject to the payment of a penalty in the sum of two hundred fifty dollars for each month there is non-compliance, to be recovered in a civil action brought in the name of the commissioner.

(g) With respect to buildings in existence on March first, nineteen hundred ninety eight, the initial critical examination of an exterior wall which was not subject to such examination under the provisions of paragraph one of subdivision d of this section in effect prior to the effective date of this local law shall be conducted prior to March first, two thousand.

*\*Local Law 11-1998.*

### ARTICLE 7 MATERIALS, ASSEMBLIES, FORMS AND METHODS OF CONSTRUCTION

**§[C26-106.1] 27-130 General requirements.**- All materials, assemblies, forms, and methods of construction (hereinafter collectively referred to as "material" or "materials") which, in their use, are regulated by the provisions of this code, shall be subject to the requirements for acceptance, as provided in section 27-131 of this article and to the requirements for inspection, as provided in section 27-132 of this article, except as otherwise specifically provided by the provisions of this code. Materials which in their use do not require regulation and control in the interests of public safety, health, and welfare, are not subject to any requirement of

acceptance, inspection, test, or approval under the provisions of this code.

**\*§[C26-106.2] 27-131 Acceptance requirements.**- The following requirements shall apply to the initial acceptance of all materials which, in their use, are regulated by the provisions of this code:

(a) **Methods of acceptance.**-No material of any manufacturer or producer shall be acceptable for the use intended unless and until the material shall have been tested for compliance with code requirements under a test method prescribed by the code, or shall have been tested and approved by the commissioner or shall have been previously approved by the board of standards and appeals, unless such approval is amended or repealed by the commissioner.

(1) Code test method.- Whenever the code prescribes a method for testing any material, the material shall be tested in accordance with such test method (a) under the direction of an architect or engineer, or (b) by a testing service or laboratory acceptable to the commissioner. The commissioner may require the witnessing of tests by his or her representative. The test report showing compliance with code requirements and bearing the signature of the architect or engineer, or the signature of an officer of the testing service or laboratory, as the case may be, shall be filed with the department. The commissioner may require a certificate of the manufacturer or producer, certifying that the material tested was and is equivalent to material of the same kind and quality regularly being manufactured by such manufacturer or producer. Upon the filing of the test report, as provided above, the material shall be acceptable for the use intended, subject to the provisions of subdivisions (d) and (e) of this section.

(2) Commissioner approval.- Materials which in their use are regulated by the provisions of this code but cannot satisfy the requirements of paragraph one of this subdivision shall not be acceptable for the use intended unless and until the material shall have been tested and approved for such use by the commissioner. For the purposes of this requirement, all materials legally acceptable prior to July 1, 1991 shall be permitted subject to the provisions of subdivision d of this section.

(b) **List of acceptable laboratories and materials.**- A current list of all testing services and laboratories acceptable to the commissioner for the purpose of testing materials, as provided in subparagraph (b) of paragraph one of subdivision (a) of this section and a current list of all acceptable materials, shall be maintained by the department and made available for public inspection.

(c) **Certification of accepted materials.**- All shipments and deliveries of such materials shall be accompanied by a certificate or label certifying that the

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material shipped or delivered is equivalent to the materials tested and acceptable for use, as provided in this section. Such certificate or label is to be provided (1) by the manufacturer or producer of the material, or (2) by a testing service or laboratory acceptable to the commissioner and regularly engaged by the manufacturer or producer to make periodic inspections and/or tests of the material in the course of manufacture or production. In the case of materials previously approved by the board of standards and appeals, the shipment or delivery of the material shall also be accompanied by a tag or label stating that the material has been approved for use by the board, and containing the calendar number under which the material received board approval.

**(d) Retesting of materials.-** All materials tested and acceptable for use, shall be subject to periodic retesting as determined by the commissioner; and any material which, upon retesting is found not to comply with code requirements or the requirements set forth in the approval of the commissioner shall cease to be acceptable for the use intended. During the period for such retesting, the commissioner may require the use of such material to be restricted or discontinued if necessary to secure safety.

**(e) Conflicting test results.-** Whenever there is evidence of conflicting results in the test of any material, the commissioner shall determine the acceptability of the material and/or the acceptable rating for such material.

*\*Local Law 49-1991.*

**\*§27-131.1 Reference Standards.-** The appendix to this chapter of the administrative code, known as the "building code reference standard", is adopted and promulgated and shall be known as the "building code rules" of said chapter; except for reference standards RS4-3, RS7-2, and such portions of RS16 not included in the "List of Referenced National Standards". The commissioner shall be empowered to issue or amend the building code reference standards acting in consultation with the fire commissioner on all issues relating to fire safety.

*\*Local Law 49-1991.*

**§[C26-106.3] 27-132 Inspection requirements.-** The following requirements shall apply to the inspection of all materials which, in their use, are regulated by the provisions of this code:

**(a) Controlled inspection.-** All such materials which are designated for "controlled inspection" under the provisions of this code shall be inspected and/or tested to verify compliance with code requirements. Unless otherwise specifically provided by code provisions, all required inspections and tests of materials designated for "controlled inspection" shall be made and witnessed by or under the direct supervision of an architect or engineer retained by or on behalf of the owner or lessee, who shall be, or shall be acceptable to, the architect or engineer who prepared or supervised the preparation of the plans; and the architect or engineer by whom, or under whose direct supervision, the required inspections and tests are made

and witnessed shall file with the department signed copies of all required inspection and test reports, together with his or her signed statement that the material and its use or incorporation into the work comply with code requirements, unless the filing of such reports and statements is specifically waived by code provisions. The provisions of section 27-195 of article nineteen of this subchapter relating to notice of commencement of work shall be complied with prior to the commencement of any work requiring controlled inspection.

**(b) Semicontrolled inspection.-** All such materials that are not designated for controlled inspection under the provisions of this code shall be subject to semicontrolled inspection and, as such, shall be inspected and/or tested to verify compliance with code requirements by the person superintending the use of the material or its incorporation into the work, except that all required inspections and tests may, at the option of the owner or lessee, be made and witnessed by or under the direct supervision of an architect or engineer retained by or on behalf of the owner or lessee, who shall be, or shall be acceptable to, the architect or engineer who prepared or supervised the preparation of the plans. The person superintending the use of the material or its incorporation into the work, or the architect or engineer by or under whose direct supervision the required inspections and tests are made and witnessed, as the case may be, shall file with the department signed copies of all required inspection and test reports, together with his or her signed statement that the material and its use or incorporation into the work comply with code requirements, unless the filing of such reports and statement is specifically waived by code provisions.

**(c) Off-site inspection.-** In all cases where code provisions require that the inspection and/or test of materials be made off-site, or prior to actual use or incorporation into the work, the inspector shall mark or cause to be marked for identification all units (or packages of units) of the material inspected; and the reported results of such inspection shall state that the material was so marked for identification.

**§[C26-106.4] 27-133 Alternate or equivalent materials.-** Whenever the code prescribes the use of a particular material, the commissioner may permit the use of any material shown to be equivalent for the use intended, in terms of health, fire, and/or structural safety. Nothing contained in this code shall be construed to require the use of any particular material for the purpose of meeting performance requirements of this code.

## ARTICLE 8 SERVICE EQUIPMENT

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§[C26-107.1] **27-134 General requirements.-** All service equipment and machinery and devices used in connection therewith (hereinafter collectively referred to as "equipment") which, in their use, are regulated by the provisions of this code, shall be subject to the requirements for acceptance, as provided in section 27-135, and to the requirements for inspection, as provided in section 27-136 of this article, except as otherwise specifically provided by the provisions of this code. Equipment which in its use does not require regulation and control in the interests of public safety, health, and welfare, is not subject to any requirement of acceptance, inspection, test, or approval under the provisions of this code. Elements or appurtenances of equipment or machinery which are in conformity with specifications relating thereto in this code, or which may be designed in their entirety in accordance with accepted engineering design principles based on provisions of this code are not subject to the requirements for acceptance.

§[C26-107.2] **27-135 Acceptance requirements.-** The requirements for acceptance of materials, as provided in section 27-131 of article seven of this subchapter, shall apply to the initial acceptance of all equipment which, in its use, is regulated by the provisions of this code; and for this purpose, the word "equipment" shall be substituted for the words "or materials" wherever those words occur in section 27-131 of article seven of this subchapter.

§[C26-107.3] **27-136 Inspection requirements.-** The requirements for inspection of materials, as provided in section 27-132 of article seven of this subchapter, shall apply to the inspection of all equipment which, in its use, is regulated by the provisions of this code; and for this purpose, the word "equipment" shall be substituted for the words "material" and "materials" wherever those words occur in section 27-132 of article seven of this subchapter.

§[C26-107.4] **27-137 Alternate or equivalent equipment.-** Whenever the code prescribes the use of particular equipment, the commissioner may permit the use of any equipment shown to be equivalent for the use intended, in terms of health, fire and/or structural safety. Nothing contained in this code shall be construed to require the use of any particular equipment for the purpose of meeting performance requirements of this code.

### ARTICLE 9 APPROVAL OF PLANS

§[C26-108.1] **27-138 Separate approval of plans required.-** Whenever plans are required to be submitted in connection with applications for work permits, as provided in articles ten through seventeen of this subchapter, separate application shall be made for the approval of the plans

therefor. The application may be made at or prior to the time of submitting the work permit application.

§[C26-108.2] **27-139 Application for approval of plans.-** Applications for approval of plans shall be made on forms furnished by the department, and shall be accompanied by the required fee. The application shall contain a general description of the proposed work, its location, and such other pertinent information as the commissioner may require. All applications for approval of plans for any new construction, in which plumbing fixtures are to be installed, shall be accompanied by the following:

1. Information as to the availability of a public sewer system.

\*\*2. In the event that a private sewage treatment plant is proposed, evidence of submission of plans for approval of such plant to the department of environmental protection and the department of health as required by law shall be submitted. In the case of plans for the construction of new buildings or the alteration of existing buildings, separate application may be made for the approval of:

(a) the lot diagram showing compliance with the zoning resolution, as provided in paragraph one of subdivision (a) of section 27-157 of article eleven of this subchapter;

(b) the foundation plans, as provided in paragraphs one and seven of subdivision (b) of section 27-157 of article eleven of this subchapter;

(c) the floor and roof plans showing compliance with exit requirements, as provided in paragraph three of subdivision (a) of section 27-157 of article eleven of this subchapter;

(d) the detailed architectural, structural and mechanical drawings, as provided in subdivisions (a) through (c) of section 27-157 of article eleven of this subchapter.

**\*\*Local Law 65-1996.**

\*§[C26-108.3] **27-140 Applicant.-** Applications for approval of plans shall be made in behalf of the owner or lessee or condominium unit owner or cooperative shareholder by the person who prepared or supervised the preparation of the plans, and shall be accompanied by a signed statement of the owner, condominium board of managers or cooperative board of directors stating that the applicant is authorized to make the application. In the case of applications for approval of plans for the construction or alteration of buildings, for the installation or alteration of plumbing or plumbing systems, or for the installation or alteration of service equipment which involves changes in the structure of the building or requirements for fire protection, light, heat, ventilation, or means of egress, the application shall be made by protection, light, heat, ventilation, or means of egress, the application shall be made by an architect or

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engineer. The full names and addresses of the owner, including the condominium unit owner or cooperative shareholder, lessee, and applicant, and of the principal officers thereof, if a corporation, shall be set forth in the application.

*\*Local Law 72-1991.*

### \*\* §27-140.1 Registration requirements.-

(a) No person, other than those described in subdivision (c) of this section, may present, submit, furnish or seek approval of applications for approval of plans or remove any documents from the possession of the department, without first having registered with the department his or her name, address and company affiliation on a form to be furnished by the department. Consistent with article twenty-three-A of the correction law, registration may be denied to any person who has been convicted of a criminal offense relating to bribing or receipt of a bribe, giving or receiving unlawful gratuities, official misconduct, or other corruption-related acts. The commissioner, after due notice and a hearing before the office of administrative trials and hearings, pursuant to section one thousand forty-eight of the charter and rules established thereunder, shall have the power to revoke, suspend or limit the registration of any person upon a finding that such person has willfully or negligently violated the rules of the department or has engaged in any misconduct arising out of his or her business dealings with the department. Misconduct shall be defined by the rules of the commissioner promulgated pursuant to subdivision (d) of this section.

(b) No person shall use the term "registered with the department of buildings", "registered" or any similar representation in such a manner as to convey the impression that such person is registered with the department of buildings unless such person is registered in accordance with the provisions of this section.

(c) The following persons are exempt from the provisions of this section:

(i) the owners of the premises for which the building applications are filed including, in the case of partnerships or corporations, the general partners or the principal officers of the corporation. Principal officers of a corporation shall include the president, vice presidents, secretary and treasurer;

(ii) the lessees of such premises authorized by the owner to file building applications;

(iii) condominium unit owners authorized by the condominium board of managers to file building applications;

(iv) cooperative shareholders authorized by the cooperative board of directors to file building applications;

(v) registered architects licensed by the New York state department of education;

(vi) professional engineers licensed by the New York state department of education;

(vii) attorneys admitted to practice in New York state;

(viii) master plumbers licensed pursuant to article two of subchapter two of chapter one of title twenty-six of this code;

(ix) master fire suppression piping contractors licensed pursuant to article two of subchapter two of chapter one of title twenty-six of this code; and

(x) master electricians licensed pursuant to subchapter one of chapter three of title twenty-seven of this code.

(a) the commissioner shall promulgate rules for the proper and efficient administration and enforcement of this section.

*\*Local Law 72-1991.*

**§[C26-108.4] 27-141 Plans.-** With each application for approval of plans, there shall be submitted such number of copies of the plans as the commissioner may require. All plans shall comply in form and content with requirements of this code and other applicable laws and regulations.

### **§[C26-108.5] 27-142 Applicant's statement.-**

(a) A signed statement of the applicant shall also be submitted with the application, stating that he or she is authorized by the owner to make the application and that, to the best of his or her knowledge and belief, the plans and the work shown thereon comply with the provisions of this code and other applicable laws and regulations. If there are practical difficulties in the way of carrying out the strict letter of the law, the applicant shall set forth the nature of such difficulties in such signed statement.

(b) In addition to all other requirements of this article, an application for approval of plans for the alteration of an existing building or the construction of a new building shall be accompanied by a signed statement of the applicant certifying either (1) that the building to be altered, or the site of the new building, as the case may be, contains no occupied housing accommodations subject to control under chapter three of title twenty-six of the administrative code, or (2) that the owner has notified the city rent agency of his or her intention to file such plans and has complied with all requirements imposed by the regulations of such agency as preconditions for such filing.

### **§[C26-108.6] 27-143 Examination of application and plans.-**

All applications for approval of plans and all plans submitted in connection therewith, and any amendments thereto, shall be numbered, docketed and examined promptly after their submission. The examination shall be made under the direction of the commissioner for compliance with the provisions of this code and other applicable laws and regulations. The commissioner may at his or her discretion, when the application is submitted by an architect or an engineer,

designate portions of the examination for limited supervisory check. The personnel employed for examination of plans shall be qualified engineers or architects experienced in building construction and design.

**\*§[C26-108.7] 27-144 Approval of application and plans.-**

Except as otherwise provided in section 27-198 and section 27-198.1 of article nineteen of this subchapter, applications and plans complying with the provisions of this code and other applicable laws and regulations shall be approved by the commissioner and written notice of approval shall be given the applicant promptly and no later than forty calendar days after the submission thereof, and applications and plans failing to comply with the provisions of this code and other applicable laws and regulations shall be rejected and written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than forty calendar days after the submission thereof, except that on or before the fortieth day, the commissioner may on good cause shown, and upon notification to the applicant, extend such times for an additional twenty days. Whenever an application and accompanying plans have been rejected and are thereafter revised and resubmitted to meet stated grounds of rejection, the revised application and plans shall be approved if they meet the stated grounds of rejection, or shall be rejected if they fail to meet the stated grounds of rejection; and written notice of approval or written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than twenty calendar days after the resubmission thereof.

*\*Local Law 76-1985, language juxtaposed per Ch. 907-1985.*

**§[C26-108.8] 27-145 Conditional approval of plans.-**

All approvals of plans given prior to the submission of the work permit application shall be conditioned upon and subject to compliance with the requirements of this code and other applicable laws and regulations in effect at the time of submission of the permit application, and shall also be conditioned upon the submission of the work permit application not later than twelve months after the date of notice of plan approval.

**§[C26-108.9] 27-146 Endorsement of approved plans.-**

All plans and amendments thereto, when approved by the commissioner, shall be stamped or endorsed approved under the official seal of the department, followed by a notation of the date of plan approval. One set of such approved plans shall be retained in the department office of the borough in which the building premises or equipment is located; and after the issuance of a work permit, a second set of such approved plans shall be retained at the place where the building premises or equipment is located, and shall be open at all times to inspection by the commissioner and his or her authorized representatives until final inspection of the work is completed.

**ARTICLE 10 PERMITS**

**§[C26-109.1] 27-147 When permits required.-**

No building construction or alteration work, foundation or earthwork, demolition or removal work, or plumbing work shall be commenced, and no signs or service equipment of the types listed in articles sixteen and seventeen of this subchapter shall be erected, installed, altered, repaired, or used, nor shall any service equipment of the types listed in article eighteen of this subchapter be used or operated, unless and until a written permit therefor shall have been issued by the commissioner. The provisions of this section shall not apply, however, to minor alterations and ordinary repairs, as defined and delineated in article five of this subchapter or to work or equipment exempted from permit requirements under the provisions of sections 27-176, 27-179, 27-184, and 27-189 of this subchapter.

**§[C26-109.2] 27-148 Classification of permits.-**

For the purposes of this code, permits shall be classified as follows:

(a) **New building permits:** for the construction of new buildings, as provided in article eleven of this subchapter.

(b) **Alteration permits:** for the alteration of existing buildings, as provided in article twelve of this subchapter.

(c) **Foundation and earthwork permits:** for the construction or alteration of foundations, including earthwork excavation and fill, as provided in article thirteen of this subchapter.

(d) **Demolition and removal permits:** for the demolition or removal of existing buildings, as provided in article fourteen of this subchapter.

(e) **Plumbing permits:** for the installation or alteration of plumbing and plumbing systems including gas piping, as provided in article fifteen of this subchapter.

(f) **Sign permits:** for the erection or alteration of signs and sign installations, as provided in article sixteen of this subchapter.

(g) **Equipment work permits:** for the installation or alteration of service equipment, as provided in article seventeen of this subchapter.

(h) **Equipment use permits:** for the use and operation of service equipment, as provided in article eighteen of this subchapter.

**\*\* §[C26-109.3] 27-149 Separate permits required.-**

Separate permits shall be required, as provided above, except that separate permits for foundations and earthwork, or for the installation or alteration of service equipment, other than fire suppression piping systems,

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shall not be required whenever plans for such work are included in and form a part of the plans for the construction of new buildings or the alteration of existing buildings.

**\*\* Local Law 107-1993.**

### **\*§[C26-109.4] 27-150 Application for permit.-**

All applications for permits shall be submitted on forms furnished by the department, and shall be accompanied by the required fee. The application shall contain a general description of the proposed work or equipment, its location, and such other pertinent information as required pursuant to section 27-198.1 or as the commissioner may require.

**\* Local Law 76-1985, language juxtaposed per Ch. 907-1985.**

**§[C26-109.5] 27-151 Applicant.-** Applications for permits shall be made by or in behalf of the owner or lessee of the buildings; and if made by a person other than the owner, the application shall be accompanied by a signed statement of the applicant declaring that he or she is authorized by the owner to make the application. The full names of the owner, lessee, and applicant, and of the principal officers thereof, if a corporation, shall be set forth in the application.

### **§[C26-109.6] 27-152 Other application requirements.-**

In addition to the foregoing general requirements, applications for permits shall be subject to the further requirements of articles eleven through eighteen of this subchapter, as the same may be applicable.

### **\*\* §[C26-109.7] 27-153 Place of filing applications.-**

Except as otherwise provided by rule, applications for permits and accompanying papers and plans shall be filed in the department office in the borough in which the work or equipment is located. Applications shall be numbered and docketed promptly as received; and for purposes of identification and reference, all such papers shall be marked with the block and lot number of the property to which they apply, and with street and house number where possible.

**\*\* Local Law 107-1993.**

### **§[C26-109.8] 27-154 Amendments to applications.-**

Subject to the limitations of section 27-155 of this article, amendments to permit applications and any accompanying plans and papers may be submitted at any time before final inspection of the work or equipment is completed; and such amendments shall be deemed part of the original permit application and shall be filed therewith.

### **§[C26-109.9] 27-155 Time limitation of application.-**

An application for a permit shall be deemed to have been abandoned twelve months after date of submission, unless such application has been diligently prosecuted after rejection in whole or in part, or a permit shall have been

issued under article nineteen of this subchapter except that the commissioner may, for reasonable cause, grant extensions of time for additional twelve month periods.

## **ARTICLE 11 APPLICATIONS FOR NEW BUILDING PERMITS**

**§[C26-110.1] 27-156 General requirements.-** All applications for new building permits shall be subject to the requirements of articles nine and ten of this subchapter. In addition, each such application shall set forth the name and business address of the person who is to perform the proposed work, and shall be accompanied by satisfactory evidence of compliance with the provisions of the workers compensation law.

### **§[C26-110.2] 27-157 Plans required.-**

All such applications shall be accompanied by architectural, structural, and mechanical plans, which shall be complete and of sufficient clarity to indicate the entire nature and extent of the proposed construction work and its compliance with the provisions of this code and other applicable laws and regulations. Composite plans showing architectural, structural, and mechanical parts of a building may be submitted provided that a clear understanding of each part is not impaired. The plans may be submitted with the application for the permit or prior thereto, as provided in section 27-138 of article nine of this subchapter; and the same set of plans may be used for several buildings of the same construction, if such buildings are located on adjoining lots under the same ownership, and if permit applications therefore [sic] are filed simultaneously. All such plans shall be drawn to suitable scale and shall be reproduced upon substantial paper, plastic, or cloth, as the commissioner may require; and each plan or drawing shall contain the registration number, seal, signature, and address of the architect or engineer who prepared or supervised the preparation of the plans. Whenever equipment, materials, assemblies, forms, or methods of construction are subject to "controlled inspection", as provided in sections 27-131 and 27-135 of this subchapter, all such equipment, materials, assemblies, forms, or methods of construction shall be listed on the title sheet of the plans, or the sheet immediately following as subject to "controlled inspection" in accordance with code requirements. In no case shall the code be cited or the term "legal" or its equivalent used as a substitute for specific reference to particular code section or standard in order to show compliance with code requirements or other applicable laws or regulations.

**(a) Architectural plans** shall contain at least the following data and information:

(1) Lot diagram showing compliance with the zoning resolution, and indicating the size, height and

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location of the proposed construction and all existing structures on the site and their distances from lot and street lines, the established grade and existing curb elevations, and final grade elevations of the site shown by contours or spot grades at reasonable intervals. The lot diagram shall be drawn in accordance with an accurate boundary survey, made by a licensed surveyor, which shall be attached to and form part of the lot diagram.

(2) A statement or notation as to the occupancy group or groups that apply to the building and all parts thereof, the construction class of the building, and whether the building is inside or outside of the fire districts.

(3) Floor and roof plans showing compliance with exit requirements, and with sufficient elevations and cross-sections to indicate all means of egress, and including the number of stories in all parts of the building.

(4) Detailed drawings necessary to show adequately all architectural elements of the building, including those doors, windows, and interior finish schedules, and other details necessary to substantiate all required fire-protection characteristics.

**(b) Structural plans** shall contain at least the following data and information except as provided for in section 27-590 of article one of subchapter ten of this chapter:

(1) Foundation plans, floor plans, levels, and sections, showing all structural requirements.

(2) Detailed drawings showing sizes, sections, and locations of members, and such other information as may be required to indicate clearly all structural elements and special structural engineering features.

(3) A tabulation of the vertical live loads, both uniform and concentrated (including allowances of partition loads), used in the design of the several areas and levels of the building. The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted.

(4) Column schedules showing the design load contributed by the framing at any level and the total accumulated design load at each level.

(5) Where trusses are employed, a diagram or table indicating the loads or moments in the various members under the design loading conditions. The requirement for a diagram or table will be waived when the trusses consist of elements selected from load tables or similar data, subject to the requirements for verification in section 27-590 of article one of subchapter ten of this chapter.

(6) Where prestressed members are employed, a schedule or table showing the total prestressing forces and the method and sequence of application.

(7) Foundation plans shall comply with the requirements of subchapter eleven of this chapter and shall show the plan locations, design elevations of the bottoms, and details as to sizes, reinforcements, and construction of all footings, piers, foundation walls, pile groups, and pile caps. The levels of footings of adjacent structures shall be indicated or, if the adjacent structures

are pile supported, this shall be so stated. In addition, there shall be a statement indicating the character and minimum class of the soil strata required for the support of the foundation; the allowable soil pressure used for the design of footings; and the character, class, and presumptive bearing capacity of the bearing stratum to which piling is required to penetrate. The types and design capacities of piling and the records of required borings or test pits shall also be shown.

**(c) Mechanical plans** shall contain at least the following data and information:

(1) The plumbing, heating, ventilating, refrigeration, and other mechanical work to be performed, so drawn as to conform to the architectural and structural aspects of the building. If desired, plans may be composite plans showing one or more types of systems on each plan, provided that a clear understanding of each system shown is not thereby impaired.

(2) Details for each type of work to be performed, and for each type of equipment to be installed, shall be shown, as provided in sections 27-173 and 27-182 of this subchapter.

(3) Information as to the availability of a public sewer system.

\*\* (4) In the event a public sewer system is not available, alternate provisions for disposal of storm water and sanitary sewage. If private sewers are to be constructed pursuant to subdivision b of section fourteen hundred three of the New York city charter, a copy of the sewer plan. If a private sewage treatment plant is to be constructed, a copy of plans of the plant approved by the department of health and the department of environmental protection. If an individual on site private sewage disposal system is to be installed, a site and subsoil evaluation indicating that the site and subsoil conditions comply with the applicable law and rules.

*\*\*Local Law 65-1996.*

**\*§[C26-110.3] 27-158 Datum.** - All elevations on plans shall be referred to the United States coast and geodetic survey mean sea level datum of nineteen hundred twenty-nine (national geodetic vertical datum, NGVD), as provided in section 26-208 of chapter one of title twenty-six of the administrative code, as amended. The following table shall be used to convert NGVD to borough datum elevations:

Location:	Add to NGVD to obtain borough datum
Bronx.....	+2.608
Brooklyn.....	+2.547
Manhattan.....	+2.752
Queens.....	+2.725
Staten Island.....	+3.192

*\*Local Law 33-1988.*

**§[C26-110.4] 27-159 Additional information.-** In addition to the data and information specified under subdivisions (a) through (c) of section 27-157 of this article, the commissioner may require the submission of computations, test reports, and such other data and information as may be necessary to determine compliance with code provisions and other applicable laws and regulations.

**\*\*§[C26-110.5] 27-160 Certification of performance bond, license and insurance required.-**

**\*\*\***(a) An applicant for a permit who, pursuant to section 24-526 of the administrative code, is required to construct or repair defects in catch basins or sewers which lie outside of the property shall submit to the department certification from the department of environmental protection that the applicant or owner has provided such department with:

(1) a performance bond or other security satisfactory to such department and approved as to form by the law department of the city for the full cost, as estimated by such department, of constructing the part of the storm water drainage system for such property which shall lie outside of such property and repairing defects in such construction, if and as required by section 24-526 of the administrative code;

(2) any license or other written instrument which such department or the law department of the city may reasonably request which gives such department, its agents and contractors and the surety for a performance bond described in paragraph one of this subdivision the legal right to enter private property to perform work described in paragraph one of this subdivision, pursuant to the terms of the performance bond or in accordance with the conditions of acceptance of other security described in paragraph one of this subdivision, and the legal right to connect to, to extend or to discharge storm water into any private sewer authorized as a point of disposal pursuant to section 24-526 of the administrative code, in the event that the owner of property fails to do so, if and as required pursuant to section 24-526 of the administrative code; and

(3) insurance of a kind and in an amount which such department and the law department of the city deem satisfactory to insure the city fully for all risks of loss, damage to property or injury to or death of persons to whomsoever occurring, arising out of or in connection with the performance of all work described in this section.

(b) The provisions of this section shall not be construed to abrogate or contravene any contractual obligation of the city to construct storm water drainage systems or parts thereof. The requirements of subdivision (a) of this section shall be inapplicable to an applicant for a new building permit insofar as they relate to any construction work required to be performed by the city pursuant to such a contractual obligation.

**\*\*Note for Excerpts from Local Law 7-1974, see end of Subchapter 1.**

**\*\*\*Local Law 65-1996; Local Law 103-1989.**

**ARTICLE 12 APPLICATIONS FOR BUILDING ALTERATION PERMITS**

**§[C26-111.1] 27-161 General requirements.-**

All applications for permits to alter existing buildings shall be subject to the requirements of articles nine and ten of this subchapter and section 27-156 of article eleven of this subchapter.

**\*\*\*§[C26-111.2] 27-162 Plans required.-**

All such applications shall be accompanied by such architectural, structural, and mechanical plans as may be necessary to indicate the nature and extent of the proposed alteration work and its compliance with the provisions of this code and other applicable laws and regulations. To the extent necessary, all such applications and plans shall be subject to and shall comply with the requirements of sections 27-157, 27-158, and 27-159 of article eleven of this subchapter. Whenever the proposed alteration work consists of the construction of a substantial horizontal enlargement as defined in subdivision (a) of section P110.2 of reference standard RS-16, the applicant shall submit information as to the availability of a public sewer system pursuant to paragraph three of subdivision (c) of section 27-157 of this code as well as an evaluation of the adequacy of any existing system for the disposal of storm water by any means other than storm or combined sewers, prepared pursuant to paragraph four of subdivision (c) of section 27-157 of this code. The plans may be submitted with the application for the permit or prior thereto, as provided in section 27-138 of article nine of this subchapter.

**\*\*\* Local Law 103-1989.**

**ARTICLE 13 APPLICATIONS FOR FOUNDATION AND EARTHWORK PERMITS**

**§[C26-112.1] 27-163 General requirements.-**

All applications for foundation and earthwork permits shall be subject to the requirements of articles nine and ten and section 27-156 of article eleven of this subchapter. When the permit sought is solely for earthwork excavation operations, the applicant shall also submit satisfactory evidence that the property is free from any lien for unpaid city taxes, assessments, water rates, bail bonds, or judgments obtained by the city, together with the consent in writing of the mortgagee, if there is any mortgage upon the property, and the consent in writing of the surrogate's court or the supreme court, if the owner of the property is a minor or incompetent.

**§[C26-112.2] 27-164 Plans required.-**

All such applications shall be accompanied by a lot diagram, as provided in paragraph one of subdivision (a) of section 27-157 of article eleven of this subchapter, and foundation plans, as provided in subdivision (b)



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of section 27-157 of article eleven of this subchapter, except that when the permit sought is solely for earthwork excavation or fill operations, the applicant shall submit, in lieu of foundation plans, plans showing the exact location, extent, and depth or height of the proposed excavation or fill operation.

**§[C26-112.3] 27-165 Notice to adjoining owners.-** No foundation or earthwork permit shall be issued unless and until at least five days prior written notice of the permit application shall have been given by the applicant to the owners of all adjoining lots, buildings and service facilities which may be affected by the proposed foundation work or earthwork operations.

**§[C26-112.4] 27-166 Protection of adjoining properties.-** All foundation and earthwork operations shall be performed in accordance with the requirements of subchapters eleven and nineteen of this code; and all lots, buildings and service facilities adjoining the foundation and earthwork areas shall be protected and supported in accordance with the requirements of subchapters eleven and nineteen of this code and subchapter seventeen of chapter one of title twenty-six of the administrative code.

### **ARTICLE 14 APPLICATIONS FOR DEMOLITION AND REMOVAL PERMITS**

**§[C26-113.1] 27-167 General requirements.-** All applications for demolition or removal permits shall be subject to the requirements of article ten, section 27-156 of article eleven, section 27-198 and section 27-198.1 of article nineteen of this subchapter.

**§[C26-113.2] 27-168 Requirement of certifications.-**

(a) Prior to the issuance of the permit, all gas, electric, water, steam, and other service lines to the building shall be disconnected and certifications to that effect by the respective utility companies or city agencies having jurisdiction shall be filed with the department; and the applicant shall also file with the department a certification by a licensed exterminator that the building has been treated effectively for rat extermination.

(b) In addition to all other requirements of this article, an application for a permit for the demolition or removal of an existing multiple dwelling shall be accompanied by a signed statement of the applicant certifying either (1) that the dwelling contains no occupied housing accommodations subject to control under chapter three of title twenty-six of the administrative code, or (2) that the owner has notified the city rent agency of his or her intention to apply for such permit and has complied with all requirements imposed by the regulations of such agency as preconditions of such application.

**§[C26-113.3] 27-169 Notice to adjoining owners.-** No demolition or removal permit shall be issued unless and until at least five days prior written notice of the permit application shall have been given by the applicant to the owners of all adjoining lots, buildings and service facilities which may be affected by the proposed demolition or removal work.

**§[C26-113.4] 27-170 Protection of lot and adjoining properties.-** All demolition and removal operations shall be performed in accordance with the requirements of subchapter nineteen of this chapter; and after the building has been demolished or removed, the premises shall be maintained free from all unsafe or hazardous conditions by the proper protection of the lot, restoration of grades, and the erection of necessary retaining walls and fences in accordance with the provisions of article three of subchapter eighteen of this chapter.

**§[C26-113.5] 27-171 Requirement of photographs.-**

(a) Except as otherwise provided herein, all applications for permits for the demolition or removal of existing buildings shall be accompanied by two sets of photographs of the building or buildings to be demolished or removed. Both sets of photographs shall be received by the department on behalf of the landmarks preservation commission and the municipal archives division of the department of records and information services.

(b) The commissioner, upon the advice of the commissioner of the department of records and information services and the chairperson of the landmarks preservation commission, shall promulgate such rules and shall prescribe such specifications as may be necessary to carry out the provisions of this section.

(c) Where photographs are otherwise required to be submitted to the landmarks preservation commission, applications for demolition or removal permits submitted on behalf of the department of housing preservation and development, shall be exempt from the requirements of this section.

(d) Permits authorized pursuant to section 26-243 of the administrative code, shall be exempt from the requirements of this section.

### **ARTICLE 15 APPLICATIONS FOR PLUMBING PERMITS**

**§[C26-114.1] 27-172 General requirements.-** All applications for plumbing permits shall be subject to the requirements of articles nine and ten of this subchapter. In addition, each such application shall set forth the name and business address of the licensed master plumber who is to perform or supervise the proposed work, and shall be

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accompanied by satisfactory evidence of compliance with the provisions of the workers' compensation law.

**§[C26-114.2] 27-173 Plans required.**- Except as provided in section 27-174 of this article, all applications for plumbing permits shall be accompanied by plans which shall be complete and of sufficient clarity to indicate the nature and extent of the plumbing work to be performed and its compliance with provisions of this code and other applicable laws and regulations. The plans may be submitted with the application for the permit or prior thereto, as provided in article nine of this subchapter. All plans for plumbing work shall comply with the applicable provisions of section 27-157 of article eleven of this subchapter. In addition, the plans shall contain at least the following data and information:

(a) Single line or diagrammatic plans showing the location, layout, and spacing of all plumbing fixtures, the summation of plumbing loads, the size, location, and material for all building sewers and drains, and the soil, waste, vent, water, and gas distribution piping.

(b) One floor plan for floors with typical layouts; and stack details shown on one drawing, provided that such details are clearly identified as to location and stack number.

(c) A riser diagram showing:

(1) Story heights.

(2) All plumbing fixtures with diagrammatic arrangement of their connections to soil, waste, and vent piping.

(3) All soil, waste, and vent stacks from the point of connection with the building drain to their termination above the roof.

(4) All leader and storm water piping from the point of connection with the building drain to the roof drain.

(5) All water and gas risers.

(d) In the case of plans for new plumbing systems, the relative elevation of the lowest fixture referred to the datum provided in section 27-158 of article eleven of this subchapter and the approximate inside top of the public sewers, and the number, size, and location of all proposed sewer connections and relative location and size of all water mains, leaders, and risers; and the plans shall be accompanied by a statement from the department of environmental protection, giving the minimum water pressure in the main serving the building. When required by the commissioner, such data shall also be included on plans for the alteration of existing plumbing systems.

(e) All appurtenant equipment, including, but not limited to, pumps, ejectors, water tanks, and piping shall be indicated clearly on the plans.

**§[C26-114.3] 27-174 Exemptions from plan requirements.**- The submission of plans shall not be required for any of the following:

(a) Plumbing or gas piping alterations requiring a repair slip as provided in section 27-175 of this article.

(b) Plumbing for temporary installations used for exhibition purposes when not designed for sanitary use and not directly connected to a sewerage, water supply, or water distribution system.

(c) Plumbing for temporary installations used in connection with construction operations, other than plumbing for temporary gas installations for which the submission of plans shall be required.

**\*§[C26-114.4] 27-175 Alteration and repair slip.** -

(a) An application for a plumbing permit may be treated as an application for an alteration and repair slip where the total cost of the proposed work in the building, as certified by the permit applicant, does not exceed eighteen thousand dollars in any twelve-month period and the proposed work consists of any of the following:

(1) The installation of new plumbing or gas piping, or the rerouting of existing plumbing or gas piping.

(2) The addition of not more than two plumbing fixtures or fixture connections.

(3) The mounting of new plumbing fixtures on existing roughings, other than the mere replacement of existing fixtures constituting a minor alteration or ordinary repair under article five of this subchapter.

(4) The installation or replacement of backflow prevention devices.

(b) Upon the approval of the application, an alteration and repair slip shall be issued in lieu of a plumbing permit, with same force and effect as if a plumbing permit had been issued.

*\*Local Law 51-2001, Local Law 6-1997.*

**§[C26-114.5] 27-176 Exemptions from permit requirement-**

Plumbing permits shall not be required for the installation or alteration of gas service piping or gas meter piping including meters, valves, regulators, and related equipment, when such work is to be performed and serviced and maintained by utility corporations subject to the jurisdiction of the public service commission; nor shall plumbing permits be required for the emergency repair of gas distribution piping when such work is performed by licensed master plumbers or by utility corporations subject to the jurisdiction of the public service commission, in order to alleviate hazardous conditions, provided that a written report describing the details of such repairs shall be filed with the commissioner upon completion of the work.

## ARTICLE 16 APPLICATIONS FOR SIGN PERMITS

**\*\*§[C26-115.1] 27-177 General requirements.**- All applications for permits to erect or alter signs or sign installations shall be subject to the requirements of

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articles nine and ten of this subchapter. In addition, each such application shall set forth the name and business address of the licensed sign hanger who is to perform or supervise the proposed work and, if the sign or sign location is under the control of an outdoor advertising company, as defined in section 26-259 of this code, the name and, where provided by rule, the registration number of such outdoor advertising company. The application shall be accompanied by satisfactory evidence of compliance with the provisions of the workers' compensation law. Each permit shall have an identification number and shall authorize the erection, alteration or installation of the type of display described in the application. The identification number of the permit and, if the sign is under the control of an outdoor advertising company, the name and, where provided by rule, the registration number of such outdoor advertising company shall be displayed on the sign or on the building or premises on which the sign is located or both in a manner to be provided by rule. If a sign is otherwise in compliance with the administrative code, the zoning resolution and rules adopted pursuant to such provisions, the changing of copy on an existing permitted sign, specifically designed for the use of replaceable copy, and the painting, repainting, cleaning or other normal maintenance and repair of an existing permitted sign, not involving structural changes, shall not require a new permit pursuant to this article and sections 27-147 and 27-148 of the code. The changing of copy on a permitted sign not designed for the use of replaceable copy or any structural change of the sign or sign structure shall require a new permit pursuant to this article and sections 27-147 and 27-148 of the code. No permit for the erection, alteration or installation of a sign or sign structure issued pursuant to this article and sections 27-147 and 27-148 of the code shall be deemed to constitute permission or authorization to maintain a sign which would otherwise be illegal without a maintenance permit for an outdoor sign as required pursuant to section 26-253 of the code or which is otherwise illegal pursuant to any other provision of law nor shall any permit issued hereunder constitute a defense in an action or proceeding with respect to such an unlawful sign.

**\*\*Local Law 14-2001.**

**Footnote:** The following §§ 5,6,7,8 are unconsolidated provisions of Local Law 14 of 2001.

§5. The initial application for registration of an outdoor advertising company pursuant to section 26-260 of the administrative code, as added by section 3 of this local law, shall include a report to the department of buildings identifying:

- (a) all signs and supporting structures therefor and
- (b) all sign locations that are under the control of such outdoor advertising company and located in:
  - (i) zoning districts in which signs for advertising purposes are not permitted;

- (ii) areas within a distance of two hundred linear feet from and within view of an arterial highway, as such term is defined under subdivision c of section 26-253 of the administrative code, as added by section 3 of this local law; and

- (iii) areas within a distance of two hundred linear feet from and within view of a public park with an area of one half acre or more.

Notwithstanding any provision to the contrary of section 26-260 of the administrative code, as added by section 3 of this local law, the commissioner of buildings shall refuse to accept and may return the initial application for registration of an outdoor advertising company:

- (i) where such business fails to submit the report required by this section; or

- (ii) the commissioner has reasonable cause to believe that such report contains an incomplete or inaccurate listing of signs or sign locations which are required to be included therein.

In the event a company whose initial application for registration has been rejected by the commissioner of buildings pursuant to this subdivision fails thereafter to submit a report acceptable to the commissioner within a time frame specified by the department of buildings, and the commissioner, after notice and opportunity to be heard, affirms his or her determination that such company has not satisfied the requirements of this section, then such outdoor advertising company shall be deemed in violation of subdivision a of section 26-260 of the administrative code, as added by section 3 of this local law, and shall be subject to all provisions of section 26-262 of the administrative code, as added by section 3 of this local law, which apply to an outdoor advertising company which has not registered with the department of buildings. The department shall revoke the registration of an outdoor advertising company if it is subsequently determined by the commissioner, after notice and opportunity to be heard, that such company has filed an incomplete or inaccurate listing of signs which are required to be included in the report provided for under this section, and such company knew or should have known that the listing was incomplete or inaccurate. Notwithstanding the provisions of section six hundred sixty six of the charter, such determinations by the commissioner shall not be subject to review by the board of standards and appeals. The commissioner shall make all reports filed pursuant to this section accessible to the public.

§6.

- (a) In addition to the report described in section 5 of this local law, an outdoor advertising company may elect to include in its initial application for registration pursuant to section 26-260 of the administrative code, as added by section 3 of this local law, a compliance plan, prepared in such form

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and according to such standards as shall be specified by rules of the department of buildings with regard to such plans and amendments thereto, which plan shall include a schedule for the permanent removal of all signs and any supporting structures therefor which were installed, erected, attached, affixed, painted on, or in any other manner represented on a building or premises prior to December 22, 2000 which are identified in the report submitted pursuant to section 5 of this local law. Such removal shall take place within three annual periods following the commissioner's acceptance of the compliance plan, based on his or her determination that such plan satisfies all requirements of this section. The removal schedule included with such compliance plan shall provide for the removal of equal numbers of signs and any supporting structures therefor during the course of each of such three annual periods, at regular intervals within such annual periods as specified by rule of the department. Such compliance plan shall not include signs which have legal non-conforming use status pursuant to the zoning resolution, provided the outdoor advertising company provides evidence of such status in a form satisfactory to the commissioner. Notwithstanding any provisions to the contrary of subdivision a of section 26-261 of the administrative code, as added by section 3 of this local law, an outdoor advertising company shall not be required to submit a certification pursuant to such subdivision with respect to signs included in the compliance plan provided that the sign is in compliance with the schedule for its removal pursuant to such plan.

(b) For each sign and any supporting structure therefor included in a compliance plan, the outdoor advertising company shall submit to the department of buildings as part of such compliance plan an instrument, in a form satisfactory to the commissioner of buildings, executed by all persons parties or entities to whom notice is required to be given pursuant to subdivision b of section 26-127.3 of the administrative code, as added by section 2 of this local law, and binding upon all successors and assigns, consenting to:

(i) removal of such sign and any supporting structure therefor in accordance with the schedule for removal set forth in the compliance plan; and

(ii) entry by the commissioner, police officers, and authorized representatives of the department upon the building or premises on which the sign and any supporting structure therefor is located for purposes of removal of such sign and any supporting structure therefor by the city, without further proceedings, in the event that such sign and any supporting structure is not removed in accordance with the schedule included in such compliance plan. Such instrument shall be filed and recorded with the clerk or register of the county in which the sign is located.

(c) As part of a compliance plan, the outdoor advertising company shall also post a bond to the city,

with a surety approved by the department, in an amount to be determined by the department by rule based on the number, size and other features of signs and any supporting structures therefor identified in the compliance plan. The bond shall be conditioned such that the obligor will pay all costs incurred by the city with respect to the removal of such signs and any supporting structures therefor in accordance with the consents set forth in instruments filed with respect to such signs pursuant to paragraph b of this section. Nothing herein shall be construed to affect the obligation of an outdoor advertising company to post a bond pursuant to subdivision c of section 26-260 of the administrative code, as added by section 3 of this local law, with respect to signs not eligible for inclusion in the compliance plan.

(d) The commissioner shall refuse to accept and may return a compliance plan submitted pursuant to this section where he or she determines that it does not satisfy the requirements of this section and rules promulgated pursuant thereto. In the event a company whose initial compliance plan has been rejected by the commissioner of buildings pursuant to this subdivision fails thereafter to submit a compliance plan acceptable to the commissioner within a time frame specified by the department of buildings, and the commissioner, after notice and opportunity to be heard, affirms his or her determination that such company has not satisfied the requirements of this section, then such outdoor advertising company shall be deemed subject to section 7 of this local law. Notwithstanding the provisions of section six hundred sixty-six of the charter, such determination shall not be subject to review by the board of standards and appeals.

(e) Notwithstanding any provisions to the contrary of section 26-262 of the administrative code, as added by section 3 of this local law, where a sign and any sign structure therefor is included in a compliance plan accepted by the commissioner, no civil penalties or criminal fines and/or imprisonment may be imposed with respect to such sign upon an outdoor advertising company or other party for any violations of the zoning resolution, the administrative code or rules adopted pursuant thereto (except for violations which involve the creation or maintenance of a hazardous condition), nor shall the commissioner of buildings seek the removal of such sign pursuant to section 26-127.3 of the administrative code, as added by section 2 of this local law; provided, however, that:

(i) the outdoor advertising company is in compliance with the schedule for removal of such sign and any supporting structure therefor set forth in the compliance plan; and

(ii) the size, height or degree of projection of such sign and any supporting structure therefor has not been increased or enlarged after December 22,

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2000. Upon acceptance of a compliance plan pursuant to this section, the commissioner of buildings shall discontinue any administrative, judicial or other enforcement proceedings pending as of such date with respect to such sign (other than collection activities with respect to previously adjudicated violations), unless the commissioner has reasonable cause to believe that the size, height or degree of projection of such sign and any supporting structure therefor has been increased or enlarged after December 22, 2000. Nothing herein shall be construed to prevent the imposition of civil penalties or criminal fines and/or imprisonment upon an outdoor advertising company or other party for violations of the zoning resolution, the administrative code or rules adopted pursuant thereto, with respect to signs which are not eligible for inclusion in a compliance plan submitted pursuant to this section.

(f) The provisions of section 26-253 of the administrative code, as added by section 3 of this local law, shall not apply to a sign under the control of an outdoor advertising company which is included in a compliance plan accepted by the commissioner, provided that the outdoor advertising company is in compliance with the schedule for removal of such sign and any supporting structure set forth in the compliance plan.

(g) The sale, lease, or other transfer of control of a sign, and any supporting structure therefor identified in a compliance plan shall not affect the schedule for the removal of such sign and any supporting structure in accordance with the schedule included in the compliance plan, and any outdoor advertising company which assumes control of such sign and any sign structure shall be responsible for compliance with the terms of the compliance plan with respect thereto. In the event an outdoor advertising company which has submitted a compliance plan pursuant to this section assumes control of a sign and any supporting structure therefor required to be included in the report provided for under section 5 of this local law but not previously included in a compliance plan, such company shall amend its compliance plan to include such sign and supporting structure in the plan, in accordance with rules of the department.

(h) In the event a sign and any supporting structure therefore [*sic*] is not removed in accordance with the schedule included within a compliance plan, or in the event the registration of the outdoor advertising company which submitted such compliance plan is revoked pursuant to subdivision i of this section, the commissioner shall, in addition to or in lieu of seeking any and all remedies provided for under this local law, be authorized to remove such sign and any supporting structure therefor in accordance with the consents set forth in the instrument filed with respect to such sign pursuant to paragraph (b) of this section.

(i) Notwithstanding any provisions to the contrary of subdivision d of section 26-260 of the administrative

code, as added by section 3 of of this local law, in the event that an outdoor advertising company has failed to remove all signs and any supporting structures therefor in accordance with the compliance plan by the end of any of the three annual periods following the commissioner's acceptance of the compliance plan, registration of such company shall be subject to revocation.

(j) The commissioner shall make all compliance plans filed pursuant to this section accessible to the public.

§7. An outdoor advertising company which does not submit a compliance plan pursuant to section 6 of this local law shall be subject to all criminal, civil and other remedies provided for in this local law for any violation of the zoning resolution or the administrative code or rules adopted pursuant thereto with respect to signs under its control, without limitation. Notwithstanding any provision to the contrary of subdivision d of section 26-260 of the administrative code, as added by this local law, relating to the circumstances under which the commissioner is authorized to revoke the registration of an outdoor advertising company, the commissioner of buildings shall, after notice and opportunity to be heard, revoke the registration of any such outdoor advertising company where such company has been found liable on three or more occasions by the environmental control board or a court of competent jurisdiction for violations of the zoning resolution or the administrative code or rules adopted pursuant thereto with respect to signs under its control identified in the report submitted by such outdoor advertising company pursuant to sections 5 of this local law, on the basis that such signs are advertising signs, as defined in section 12-10 of the zoning resolution, which are located in:

(i) zoning districts in which signs for advertising purposes are not permitted;

(ii) areas within a distance of two hundred linear feet and within view of an arterial highway, as such term is defined under subdivision c of section 26-253 of the administrative code, as added by section 3 of this local law; or

(iii) areas within a distance of two hundred linear feet from and within view of a public park with an area of one half acre or more.

§8. All terms as used in sections 5, 6 and 7 of this local law shall be as defined in subchapter four of chapter one of title twenty-six of the administrative code, as added by this local law. The commissioner of buildings shall promulgate rules as necessary for the administration and implementation of sections 5, 6 and 7 of this local law.

\*\*\*§[C26-115.2] 27-178 Plans required.- All such applications shall be accompanied by plans which

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shall contain at least the following data and information:

(a) A sketch or drawing showing the size and location of the sign or sign installations in relation to the building or premises upon which the sign is or will be erected.

(b) Detail drawings showing the dimensions, materials, and construction of the sign, its supporting members, and the foundation or anchorage thereof.

(c) A tabulation or diagram of all loads and stresses.

(d) Plans for illuminated signs projecting beyond the street line shall be accompanied by a statement from the department of buildings indicating that such department has received an application from a licensed electrician for inspection of such signs.

*\*\*\*Local Law 59-1996.*

### §[C26-115.3] 27-179 Exemptions from permit requirements.-

Sign permits shall not be required where the sign is:

(a) Painted directly on the exterior wall surface of a building or on the surface of a fence.

(b) A wall sign of not more than six square feet in area.

(c) A sign erected by employees of a city or other governmental agency, including traffic and other similar signs.

(d) A ground sign advertising the sale or rental of the premises on which it is erected, provided the sign does not exceed twelve square feet in area.

(e) A temporary sign erected during construction work and related thereto.

(f) A temporary sign for special decorative display use for holidays, public demonstrations, or the promotion of civic, welfare or charitable purposes, except that signs that utilize streets or cross streets shall be subject to the requirements of the department of highways.

## ARTICLE 17 APPLICATIONS FOR EQUIPMENT WORK PERMITS

**\*\*§[C26-116.1] 27-180 When equipment work permits required.-** Except as provided in section 27-184 of this article, equipment work permits shall be required for the installation or alteration of the following types of service equipment:

(a) Air conditioning and ventilating systems.

(b) Elevators, escalators, moving walks, and stairways, dumbwaiters, etc.

(c) Fuel burning and fuel oil storage equipment.

(d) Refrigerating systems.

(e) Heating systems.

(f) Boilers.

(g) Fire suppression piping systems.

*\*\*Local Law 107-1993.*

**§[C26-116.2] 27-181 Application requirements.-** All such applications shall be subject to the applicable requirements of article ten and section 27-156 of this subchapter, and to the applicable requirements of article nine, subdivision (c) of section 27-157 and sections 27-158

and 27-159 of this subchapter whenever plans are required to be submitted in connection with such applications.

**\*§[C26-116.3] 27-182 Plans required.-** Except as provided in section 27-183 and section 27-184.1 applications for equipment work permits shall be accompanied by plans in the following cases and in accordance with the following requirements:

*\* Local Law 6-1997.*

**(a) Air conditioning and ventilating systems.-** Plans for air conditioning and ventilating systems shall contain at least the following data and information:

(1) The location and sizes of all ducts; the location of all fire dampers, motors, fans, and filters; the type, air capacity, and size of all equipment; and where the plans are not accompanied by structural plans, the operating weight and manner of support of all equipment weighing in excess of one thousand pounds.

(2) The locations of smoke detecting devices.

(3) The location and size of the fresh air intake, the design population, and the index for ventilation for each room or space.

(4) The amount of air to be exhausted or supplied from each outlet for each room or space.

In the case of ventilating or exhaust systems for ranges, fryers, ovens, and other similar types of restaurant or bakery equipment, for which a hood is required, the plans shall also show the type of extinguishing system, the location of heat detection devices, nozzles, piping, gas controls, manual and automatic control valves, method of joining ducts, method and location of discharging exhaust from building, the location of break-glass controls, and the quantity in cfm designed for each hood.

**(b) Elevators, etc.-** Plans for elevators, escalators, moving walks and stairways, dumbwaiters, and similar equipment shall contain at least the following data and information.

(1) The location of all machinery, switchboards, junction boxes, and reaction points, with loads indicated.

(2) The details of all hoistway conditions including bracket spacing.

(3) The estimated maximum vertical forces on the guide rails on application of the safety device.

(4) In the case of freight elevators for class B or C loading, the horizontal forces on the guide-rail faces during loading and unloading; and the estimated maximum horizontal forces in a post wise direction on the guide-rail faces on application of the safety device.

(5) The size and weight per foot of any rail reinforcements where provided.

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**(c) Fuel-burning and fuel-oil storage equipment.-** Plans for fuel-burning equipment and fuel-oil storage equipment shall contain at least the following data and information:

- (1) The kind or grade of fuel to be used.
- (2) The location, arrangement, size, load, and maximum capacity of the burning, storage and fuel-pumping equipment.
- (3) The method or means of providing air to the equipment space, showing duct and opening sizes.
- (4) The location, size, and materials for all breechings; the height and size of all chimneys and gas vents; the thickness and type of all insulation materials; and the clearances from combustible walls, partitions, and ceilings.
- (5) Diagrams of all piping, including vent and fill piping for oil systems, and all safety cut-off and relief devices and valves in piping.
- (6) Where the alteration or replacement of parts for a fuel-oil burning installation does not affect the size of the combustion chamber, the atomization of the fuel, the grade of fuel used, or the maximum capacity of the system, a descriptive statement of the proposed work may be submitted in lieu of plans.

**(d) Refrigerating systems.-** Plans for refrigerating systems shall contain at least the following data and information:

- (1) The location of all machinery; the horsepower of compressors; the type and number of pounds of refrigerant to be used; and the air quantities for, and means of, ventilating the machinery space.
- (2) The location of emergency switches for compressors and for ventilation in the machinery rooms.
- (3) The location of pressure relief piping and any city water connections and water-saving devices.
- (4) The tonnage capacity of the machine and the suction and discharge pressures at which the machine is rated.
- (5) The operating weight of the equipment.

**(e) Heating systems.-** Plans for heating systems shall contain at least the following data and information:

- (1) The temperature to be maintained in every room.
- (2) The amount of heat in btu per hour to be provided in every room, and the output capacity in btu per hour of the central heat sources.

**(f) Boilers.-** Plans for boiler installations and boiler alterations shall contain at least the following data and information:

- (1) The btu per hour output capacity and operating weight of each boiler; and the pressure setting of the relief valves.
- (2) Such other data and information as are required to be contained on plans for fuel-burning equipment, as hereinabove provided.

**\*\* (g) Fire suppression piping systems. -** All applications shall include a plot plan to scale indicating the location of the system in relation to the rest of the building.

**(1) Standpipe systems.** Plans for standpipe systems shall contain at least the following data and information:

(a) The location and size of all risers, cross-connections, hose racks, valves, siamese connections, sources of water supply, piping, and other essential features of the system.

(b) A floor plan for floors that have typical riser locations and no special features within the floor level, with the title of this plan indicating clearly the floors to which the arrangement is applicable.

(c) A riser diagram showing the essential features of the system and indicating the risers, cross-connections, valves, siamese connections, tanks, pumps, sources of water supply, pipe sizes, capacities, floor heights, zone pressures, and other essential data and features of the system.

(d) The available water pressure at the top and bottom floors of each zone, and at each floor where the weight pipe fittings change, shall be shown on the riser diagram. For street pressure-fed systems and fire pumps, a statement from the department of environmental protection, giving the minimum water pressure in the main serving the building, shall be supplied.

**\*\* (2) Sprinkler systems.** Plans for sprinkler systems, whether automatic or non-automatic, shall contain at least the following data and information:

(e) The location and size of water supplies and the location, spacing, number, and type of sprinklers to be used, with approximate location and size of all feed mains, risers, valves, siamese connections, and other essential features of the system.

(f) A diagram showing the proposed sprinkler system in relation to principal construction features of the building, such as its size, walls, columns, and partitions; and such other information as may be necessary for the evaluation of the system.

(g) The location, number, and type of any electrical or automatic devices to be used in the system.

(h) The available water pressure at the top and bottom floors of each zone shall be shown on the riser diagram. For street pressure-fed systems and fire pumps, a statement from the department of environmental protection, giving the minimum water pressure in the main serving the building, shall be supplied.

**\*\* (3) Other fire suppression piping systems.** Plans for chemical or gaseous fire suppression piping systems shall contain at least the following data and information:

(a) Type, model number and location of all surface, plenum and duct nozzles; the type, location and surface dimensions of all cooking appliances; the location and type of the automatic fuel shut-off and

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statement as to type (gas or electric); location and distance of the remote control or manual pull station.

(b) A statement that board of standards and appeals or department approved grease filters are to be used in any kitchen hood; the dimensions of all hoods and all related ducts.

(c) The brand name, model and board of standards and appeals or department approval number of the fire suppression piping system; the type of extinguishing agent and number and size of agent containers; size, length, and type of all piping that will be used; number and location of all fusible links or detectors and the temperature setting; type, model number and location of all surface, plenum and duct nozzles.

(d) For halon systems, the plan should also include type and concentration of the halon, the method of providing power supply to smoke or heat detectors; if reserve supply is being provided, fire rating of partitions and if the area involved is sprinklered, location of all audible/visible alarms within and outside the location involved and the details of construction of the room to contain the halon.

*\*\*Local Law 107-1993.*

### §[C26-116.4] 27-183 Exemptions from plan requirements.-

The submission of plans shall not be required in connection with applications for permits to install or alter fuel-burning and fuel-oil storage equipment under any of the following conditions. However, the commissioner may require the filing of sketches showing compliance with the provisions of this code.

(a) The equipment is to be used for heating a one- or two-family dwelling.

(b) The equipment is fed by gas fuel and is not used with an incinerator.

(c) The capacity of the equipment does not exceed three hundred fifty thousand btu per hour and the capacity of each of the oil storage tanks for the equipment does not exceed two hundred seventy-five gallons, unless the tanks are buried, or are in a multiple dwelling, or in a building adjacent to the line of a subway, or are located above the lowest story of a building, or unless the fuel-burning equipment is located above the lowest story of a building.

§[C26-116.5] 27-184 Exemptions from permit requirement.- An equipment work permit shall not be required in any of the following cases:

(a) **Air-conditioning and ventilating systems.-** Where the system is a voluntary system serving only one floor of a building and:

(1) Does not use lot line windows for the intake or exhaust of air or the mounting of equipment.

(2) Is not installed in any public hallway, passageway, or stairway.

(3) Does not in any way reduce the ventilation of any room or space below that required by code provisions.

(4) Does not penetrate any fire division, roof, floor, or wall (except that a packaged air-conditioning unit not exceeding 3 tons rated capacity may be used in windows or in sleeves under windows, provided that health, fire and/or structural safety is not thereby impaired).

(b) **Elevators, etc.-** Where the equipment consists of a portable elevating device used only for handling materials and located and operated entirely within one story.

(c) **Fuel-burning and fuel-oil storage equipment.-** Where the equipment consists of any of the following:

(1) Portable fuel-burning equipment that does not require a chimney or vent connection.

(2) Portable heaters used in construction work.

(3) Oil-fired heaters having a fuel-storage capacity of 6 gallons or less (except that internal combustion engines of any size shall require a permit).

(d) **Refrigerating systems.-** Where the system:

(1) Has a capacity of twenty-five tons or less and uses a Group I refrigerant.

(2) Is to be installed in a vehicle, railroad car, or vessel.

(3) Uses water or air as the refrigerant.

(e) **Hot water boilers and steam boilers** operating at a gauge pressure of not more than fifteen pounds per square inch located in dwellings occupied by less than six families.

### \*§ 27-184.1 Alteration and repair slip. -

(a) An application for an equipment work permit for work on an existing combined standpipe or sprinkler system may be treated as an application for an alteration and repair slip where the total cost of the proposed work within the building, as certified by the permit applicant, does not exceed ten thousand dollars in any twelve month period and the proposed work consists of any of the following:

(1) Replacement of parts required for the operation of a combined standpipe or sprinkler system. In the event of emergency an application for an alteration and repair slip must be filed within twenty-four hours after the commencement of the repairs.

(2) Replacement of sprinkler heads. Provided that orifice sizes, type and deflector position remain the same.

(3) Changes that do not alter the type of sprinkler system.

(4) Relocation of piping that does not effect the operation of the sprinkler system.

(5) Rearrangement of not more than twenty sprinkler heads in areas presently sprinklered in light hazard occupancy which will remain light hazard



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occupancy, provided that the addition of sprinkler heads in existing systems shall be limited to light hazard occupancy in rooms or spaces not exceeding eight hundred square feet requiring only one head with the maximum spacing allowed by the code, and provided that the number of new heads does not exceed a total of five.

(6) Relocation of combined fire standpipe auxiliary hose sources and cabinets within ten feet of their original location, provided that the existing covered area is not affected and provided that such relocation complies with subchapter seventeen and reference standard RS 17-1.

(b) Notwithstanding any inconsistent provision of this section, an application for an equipment work permit for work on an existing combined standpipe or sprinkler system may not be treated as an application for an alteration and repair slip for any alteration of primary or auxiliary water supplies.

(c) Upon the approval of the application an alteration and repair slip shall be issued in lieu of an equipment work permit, with the same force and effect as if an equipment work permit had been issued.

(d) The submission of plans shall not be required for an alteration and repair slip.

*\*Local Law 6-1997.*

### ARTICLE 18 APPLICATIONS FOR EQUIPMENT USE PERMITS

§[C26-117.1] 27-185 **When equipment use permits required.**- Equipment use permits shall be required for the use and operation of the following types of service equipment:

- (a) Air-conditioning and ventilating systems.
- (b) Elevators, escalators, moving walks and stairways, dumbwaiters, etc.
- (c) Fuel-burning and fuel-oil storage equipment.
- (d) Refrigeration systems.
- (e) Heating systems.
- (f) Boilers.

§[C26-117.2] 27-186 **Application requirements.**- All applications for equipment use permits shall be subject to the requirements of article ten of this subchapter.

§[C26-117.3] 27-187 **Inspections and tests.**- No equipment use permit shall be issued unless and until the equipment shall have been inspected and tested to determine proper functioning and compliance with the provisions of this code and other applicable laws and regulations. All inspections and tests shall be conducted in accordance with required inspection and test procedures; and signed copies of all required inspection and test reports shall be filed with the department and form part of the papers accompanying the permit application. In the case of heating systems, a signed statement by an architect or engineer shall be submitted with the permit application, stating that the system has been operated and

functions satisfactorily and that, to the best of his or her knowledge and belief, the system will meet code temperature requirements.

§[C26-117.4] 27-188 **Temporary use permit.**- The commissioner may, upon request, issue a temporary use permit authorizing partial use and operation of the equipment prior to completion of the installation or alteration work, provided that such partial use and operation may be made safely and without endangering public health, safety and welfare, and further provided that such temporary use permit shall not be issued for a period of more than thirty calendar days, subject to renewal for additional thirty-day periods at the discretion of the commissioner. All temporary use permits shall be required to be posted in a conspicuous location in or near the equipment covered by the permit, and shall state the nature and extent of the partial use and operation permitted and indicate clearly that full use and operation of the equipment is not permitted.

§[C26-117.5] 27-189 **Exemptions from equipment use permit requirement.**- No equipment use permit shall be required for equipment exempted from the requirement of an equipment work permit under section 27-184 of article seventeen of this subchapter; nor shall an equipment use permit be required for the use and operation of equipment specifically exempted under the provisions of subchapters thirteen and fourteen of this chapter.

§[C26-117.6] 27-190 **Duration and renewal of permit.**- Equipment use permits shall be of indefinite duration, subject to the provisions of section 27-196 of article nineteen of this subchapter, except that permits for the use and operation of elevators and similar equipment and boilers shall be limited to a term of one year from the date of issuance of the permit, subject to annual renewal upon application and proof of compliance with the requirements for periodic inspections as prescribed in subchapters fourteen and eighteen of this chapter. Applications for renewal of such permits shall be submitted on forms furnished by the department, not later than thirty calendar days prior to the expiration date of the permit, accompanied by the required fee; and late applications for renewal shall be subject to the payment of an additional fee of one (1) dollar.

### ARTICLE 19 ISSUANCE OF PERMITS

§[C26-118.1] 27-191 **Approval of permit application.**-All applications for permits and any accompanying plans and papers, including any amendments thereto, shall be examined promptly after their submission for compliance with the

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provisions of this code and other applicable laws and regulations. Except as otherwise provided in section 27-198 of this article, applications complying with the provisions of this code and other applicable laws and regulations shall be approved by the commissioner and the permit issued promptly and not later than forty calendar days after the submission thereof, and applications failing to comply with the requirements of this code and other applicable laws and regulations shall be rejected and written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than forty calendar days after the submission thereof, except that on or before the fortieth day, the commissioner may on good cause shown, and upon notification to the applicant, extend such time for an additional twenty days. Whenever a permit application has been rejected and is thereafter revised and resubmitted to meet stated grounds of rejection, the revised application shall be approved if it meets the stated grounds of rejection, or shall be rejected if it fails to meet the stated grounds of rejection; and the permit shall be issued or written notice of rejection, stating the grounds of rejection, shall be given the applicant promptly and not later than 20 calendar days after the resubmission thereof.

**§[C26-118.2] 27-192 Approval of application in part.-** The commissioner may approve the application and issue a permit for construction of part of a building, including foundations, before complete plans and specifications for the entire building have been submitted and approved, provided that adequate information and detailed plans or statements have been submitted complying with the provisions of this code and any other applicable laws and regulations, and provided further that the holder of such permit shall proceed with the building operation at his or her own risk and without assurance that a permit for construction of the entire building will thereafter be issued.

**§[C26-118.3] 27-193 Signature to permit.-** Every permit issued by the commissioner shall have his or her signature affixed thereto; but the commissioner may authorize any subordinate to affix such signature.

**§[C26-118.4] 27-194 Posting of permit.-** A permit card bearing the permit number, application number, location of the premises or equipment for which the permit is issued, and such other information as the commissioner may determine, shall be furnished the applicant in connection with the issuance of the permit; and such permit card shall be posted in a conspicuous place at such location open to public inspection during the entire time of the prosecution of the work or the use and operation of the equipment, or until the expiration of the permit. No such permit card shall be posted or displayed at any

location other than the location of the premises or equipment for which the permit was issued.

**§[C26-118.5] 27-195 Notice of commencement of work.-** At least twenty-four hours written notice shall be given to the commissioner before the commencement of any work for which a permit has been issued. Before any work is commenced on an item of construction requiring controlled inspection, all persons responsible for such controlled inspection shall be notified in writing at least seventy-two hours prior to such commencement.

**\*§[C26-118.6] 27-196 Expiration of permit.-** Except as otherwise provided in section 27-190 of article eighteen of this subchapter, all permits issued by the commissioner shall expire by limitation and become invalid if the permitted work or use is not commenced within twelve months from the date of issuance of the permit or, if commenced, is suspended or abandoned for a period of twelve months thereafter. All permits for work in a special flood hazard area as delineated in reference standard RS4-4 shall expire if the actual start of permanent construction has not occurred within one hundred eighty-eight days of the date on which such permit is issued. The commissioner may, however, upon good cause shown, reinstate a work permit at any time within a period of two years from the date of issuance of the original permit, provided that the work shall comply with all the requirements of this code and other applicable laws and regulations in effect at the time application for reinstatement is made, and provided further that the applicant shall pay a renewal fee in accordance with section 26-211 of the code.

*\*Local Law 38-1990; Local Law 33-1988.*

**\*\*§[C26-118.7] 27-197 Revocation of permit.-** The commissioner may, on notice to the applicant, revoke any permit for failure to comply with the provisions of this code or other applicable laws and regulations; or whenever there has been any false statement or any misrepresentation as to a material fact in the application or accompanying plans and papers upon the basis of which the permit was issued; or whenever any permit has been issued in error and conditions are such that a permit should not have been issued. Such notice shall inform the applicant that he or she shall have the right to present to the commissioner or his or her representative within five business days or personal service or ten days of the posting of service by mail information as to why the permit should not be revoked. The commissioner may suspend a permit immediately when the commissioner has determined that an imminent peril to life or property exists and shall at the same time notify the applicant that the permit shall be revoked

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and that the applicant has the right to present to the commissioner or his or her representative within five business days of personal service or ten days of the posting of service by mail information as to why the permit should not be revoked.

*\*\*Local Law 11-1988.*

### §[C26-118.8] 27-198 Approval of plans and permit applications for alteration or demolition of single room occupancy multiple dwellings.-

a. For the purposes of this section "single room occupancy multiple dwelling" means either a class A multiple dwelling used in whole or in part as a rooming house or furnished room house or for single room occupancy pursuant to section two hundred forty-eight of the multiple dwelling law or containing rooming units, as such term is defined in section 27-2004 of the housing maintenance code or a class B multiple dwelling. Notwithstanding the foregoing provision, the term "single room occupancy multiple dwelling" shall not include:

- (1) college or school dormitories;
- (2) clubhouses;
- (3) luxury hotels, as such term is defined by the commissioner of housing preservation and development;
- (4) residences whose occupancy is restricted to an institutional use such as housing intended for use primarily or exclusively by the employees of a single company or institution;
- (5) city-owned multiple dwellings;
- (6) any multiple dwelling containing fewer than nine class B dwelling units used for single room occupancy unless the total number of such units is more than fifty percent of the total number of dwelling units in such multiple dwelling; and
- (7) any class A or class B multiple dwelling which is
  - (a) The subject of a program approved by the commissioner of housing preservation and development and related to the rehabilitation and preservation of single room occupancy multiple dwellings other than a program of tax abatement or tax exemption including, but not limited to, programs of tax abatement or tax exemption authorized by subchapter two of chapter two of title eleven of the administrative code or section four hundred twenty-one-a of the real property tax law, and

(b) exempted from the provisions of this section by such commissioner.

b. (1) The commissioner shall not approve any plans pursuant to article nine of this subchapter, issue an alteration permit pursuant to article twelve of this subchapter or a demolition permit pursuant to article fourteen of this subchapter for a single room occupancy multiple dwelling:

(a) for the alteration of such dwelling to a class A multiple dwelling to be used in whole or in part for other than single room occupancy purposes or for the demolition of such dwelling, or

(b) with respect to the addition or removal of kitchen or bathroom facilities in such multiple dwelling or such other types of alteration work as shall be prescribed by regulation of the commissioner of housing preservation and development, in consultation with the commissioner, unless

(i) the commissioner of housing preservation and development has certified that there has been no harassment of the lawful occupants of such multiple dwelling within the thirty-six month period prior to the date of the submission of an application for a certification of no harassment or has issued a waiver of such certification,

(ii) the applicant has submitted a sworn statement by or on behalf of all the owners, as such term is defined in paragraph forty-five of subdivision a of section 27-2004 of the housing maintenance code, of such multiple dwelling that there will be no harassment of the lawful occupants of such multiple dwelling by or on behalf of such owners during the construction period, and

(iii) the applicant has submitted a plan which provides for the safety and health of the occupants thereof during the construction period.

(2) Notwithstanding the foregoing provisions, if within the thirty-six month period prior to the date of the submission of an application for a certification of no harassment to the commissioner of housing preservation and development, title to a single room occupancy multiple dwelling was vested in the city, the period of time for which the commissioner of housing preservation and development shall certify whether there has been no harassment of the lawful occupants of such multiple dwelling shall commence from the date on which the title to such property was no longer vested in the city.

(3) An applicant for such plan approval, alteration or demolition permit shall forward a copy of such application to the commissioner of housing preservation and development, together with an application for a certification of no harassment pursuant to section 27-2093 of the housing maintenance code.

(4) The time period in which the commissioner is required to approve or reject an application, or resubmission thereof, for such plan approval or alteration permit pursuant to section 27-144 or 27-191 of this subchapter shall commence from the date that the commissioner receives either such certification or a waiver thereof, or notice of the denial of such certification or waiver thereof from the commissioner of housing preservation and development and such sworn statement and plan.

(5) Where the commissioner of housing preservation and development denies the certification required by this section the commissioner shall reject

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the application for such plan approval, alteration permit or demolition permit.

(6) The commissioner shall be empowered to issue a stop-work notice and order with respect to an alteration or demolition permit or rescind such plan approval, alteration or demolition permit at the request of the commissioner of housing preservation and development pursuant to section 27-2093 of the housing maintenance code.

(7) Where the commissioner rejects an application for such plan approval, alteration or demolition permit pursuant to paragraph five of this subdivision or where the commissioner rescinds such plan approval, alteration or demolition permit pursuant to paragraph six of this subdivision, no further application for plan approval, an alteration or demolition permit, for the purposes described in subdivision b of this section, with respect to the alteration or demolition of such multiple dwelling shall be considered by the commissioner for a period of thirty-six months following the date of the denial of the certification of no harassment by the commissioner of housing preservation and development or the date of the rescission of such certification of no harassment by such commissioner.

(8) The provisions of this subdivision shall not apply to repairs, demolition or any other work performed by a city agency or by a contractor pursuant to a contract with a city agency.

\* (9) The commissioner shall not approve any plans or issue any permits based upon a certification of no harassment issued prior to February second, nineteen hundred eighty-seven unless the commissioner of housing preservation and development issues a supplemental certification that there is no reasonable cause to believe that there has been harassment at the multiple dwelling during the period of time from the date of the issuance of the original certification of no harassment to the date of the application for such a supplemental certification. If the commissioner of housing preservation and development finds that there is reasonable cause to believe that harassment has occurred during such period of time he or she shall suspend the original certification of no harassment pursuant to paragraphs two and three of subdivision f of section 27-2093 of the code.

*\*Local Law 9-1987; Local Law 59-1985, language juxtaposed per Ch. 907-1985.*

### **\*\*§[C26-118.9] 27-198.1 Approval of plans and permit applications where an asbestos project is performed.-**

a. The commissioner shall not approve any plans pursuant to article nine of this subchapter except plans for the construction of new buildings unless an asbestos investigator has certified that work to be performed will not constitute an asbestos project or the applicant submits with the application for approval of plans an asbestos inspection report completed in accordance with the provisions of section 24-146.1 of subchapter six of chapter one of title twenty-four of the code.

b. Where the commissioner of environmental protection has by regulation required that, in connection with other work for which a permit but not plans is required under this chapter, that an asbestos investigator certify that the work to be performed will not constitute an asbestos project or that an asbestos inspection report be completed in accordance with the provisions of section 24-146.1 of subchapter six of chapter one of title twenty-four of the code, the commissioner shall not issue such permit unless such certification or such report is submitted in connection with the application for such permit.

c. Where the commissioner of environmental protection has by regulation required that, in connection with work for which an alteration permit or demolition permit is required under this chapter, that an asbestos investigator certify that the work to be performed will not constitute an asbestos project or that the applicant submit with the application for such permit proof that an asbestos removal plan has been approved by the commissioner of environmental protection in accordance with the provisions of section 24-146.1 of subchapter six of chapter one of title twenty-four of the code, the commissioner shall not issue such permit unless such certification or proof of such approval has been submitted in connection therewith.

d. The commissioner shall not issue any permit under this chapter for work which constitutes an asbestos project and for which an asbestos inspection report is required unless the applicant at the time of application for such permit certifies on forms prescribed by the commissioner of environmental protection that he or she is familiar with federal, state and local laws and regulations applicable to asbestos related work.

e. Whenever proof of approval of an asbestos removal plan is required for plan or permit approval, any requirement for the submission of an asbestos inspection report shall be deemed waived.

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

*\*\*Local Law 80-1986. Not applicable to plans submitted prior to April 1, 1987 or amendments or revisions to such plans submitted prior to March 31, 1988; Local Law 76-1985, language juxtaposed per Ch. 907-1985.*

### **\*§[C26-118.10] 27-198.2 Conversion, alteration and demolition of single room occupancy multiple dwellings prohibited.-**

a. Except as otherwise provided in this section and notwithstanding any other provision of law to the contrary, no single room occupancy dwelling unit or

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units or portions thereof (i) shall be altered for or converted to use as apartments, whether such alteration or conversion is effected with or without physical alterations, or (ii) shall be altered for or converted to use other than as single room occupancy dwelling units, whether such alteration or conversion is effected with or without physical alterations, or (iii) shall be altered to add either kitchens or bathrooms if such units lacked either of such facilities as of January ninth, nineteen hundred eighty-five or to remove such facilities. No single room occupancy multiple dwelling shall be altered to reduce the number of single room occupancy dwelling units and no single room occupancy multiple dwelling shall be demolished. No single room occupancy multiple dwelling shall be altered to remove kitchens or bathroom facilities which are used for any single room occupancy dwelling unit.

b. 1. For the purposes of this section the term "single room occupancy multiple dwelling" means a multiple dwelling which is either (i) a class A multiple dwelling which is either used in whole or in part for single room occupancy or as a rooming house or furnished room house pursuant to section two hundred forty-eight of the multiple dwelling law or which contains rooming units or (ii) a class B multiple dwelling including, without limitation, hotels, lodging houses, rooming houses, boarding houses and furnished room houses. Notwithstanding the foregoing provision, the term "single room occupancy multiple dwelling" shall not include:

(a) any multiple dwelling which had a certificate of occupancy as a college or school dormitory on January ninth, nineteen hundred eighty-five or if the dwelling had no certificate of occupancy was lawfully used as a college or school dormitory on such date;

(b) any multiple dwelling which had a certificate of occupancy as a clubhouse on January ninth, nineteen hundred eighty-five or if the dwelling had no certificate of occupancy was lawfully used as a clubhouse on such date;

(c) any multiple dwelling which was a residence whose occupancy was restricted to an institutional use such as housing intended for use primarily or exclusively by the employees of a single company or institution on January ninth, nineteen hundred eighty-five;

(d) multiple dwellings owned by the city, the state, or any political subdivision thereof;

(e) hotels in which the rent on October first, nineteen hundred eighty-four, exclusive of governmentally assisted rental payments, charged for seventy-five percent or more of the total number of occupied individual dwelling units was more than fifty-five dollars per day for each unit rented on a daily basis, or more than two hundred fifty dollars per week for each unit rented on a weekly basis or more than eight hundred fifty dollars per month for each unit rented on a monthly basis;

(f) any class A or class B multiple dwelling in which, on January ninth, nineteen hundred eighty-five, either less

than five dwelling units were rooming units or dwelling units other than apartments or less than ten percent of the total number of dwelling units were rooming units or dwelling units other than apartments;

(g) any class A or class B multiple dwelling which is (a) the subject of a project or program related to the rehabilitation and preservation of single room occupancy multiple dwellings approved by the commissioner of housing preservation and development other than a program of tax abatement or tax exemption including, but not limited to, programs of tax abatement or tax exemption authorized by subchapter two of chapter two of title eleven of the code or section four hundred twenty-one-a of the real property tax law, and (b) exempted from the provisions of this section by such commissioner;

(h) any wood-frame multiple dwelling.

(i) any hotel in which during the twelve month period commencing on January first, nineteen hundred eighty-four ninety percent or more of the dwelling units were occupied for less than thirty consecutive days by any one occupant and in which there are no dwelling units subject to regulation pursuant to the rent stabilization law of nineteen hundred sixty-nine, as amended, provided however that this provision shall not apply unless an application for exemption is filed with the department of housing preservation and development in such form and containing such information as the department shall prescribe on or before April thirtieth, nineteen hundred eighty-seven.

2. The status of a vacant building as a single room occupancy multiple dwelling shall be determined by its last legal use prior to vacancy.

3. For the purposes of this section the term "single room occupancy dwelling unit" means a dwelling unit, other than an apartment, in a single room occupancy multiple dwelling.

4. For the purposes of this section the terms "apartment", "dwelling unit", "owner" and "rooming unit" shall be as defined in the housing maintenance code.

c. 1. The commissioner shall not approve any plans pursuant to article nine of this subchapter, issue an alteration permit pursuant to article twelve of this subchapter or a demolition permit pursuant to article fourteen of this subchapter for a single room occupancy multiple dwelling:

(a) for the alteration of such dwelling to a class A multiple dwelling to be used in whole or in part for other than single room occupancy purposes or for the demolition of such dwelling, or

(b) with respect to the addition or removal of kitchen or bathroom facilities in such multiple

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dwelling prohibited pursuant to subdivision a of this section, or

(c) with respect to any other alterations or other work prohibited pursuant to subdivision a of this section.

2. Except as provided in paragraph three of this subdivision, the department shall revoke any such permit or approval granted on or after January ninth, nineteen hundred eighty-five.

3. If demolition of a single room occupancy multiple dwelling has been completed pursuant to a permit issued on or after January ninth, nineteen hundred eighty-five and prior to August fifth, nineteen hundred eighty-five, the department shall not issue a permit for new construction on the site of such demolished dwelling and shall revoke any such permit for new construction issued on or after January ninth, nineteen hundred eighty-five unless the owner makes the payment or provides for replacement units pursuant to subparagraph (a) of paragraph (4) of subdivision d of this section for each single room occupancy dwelling unit which was demolished.

4. The provisions of this section shall not apply to work done pursuant to any permit issued by the department prior to January ninth, nineteen hundred eighty-five.

a. The provisions of subdivisions a and c shall not apply to a single room occupancy multiple dwelling if:

1. (a) such multiple dwelling had twenty-four or fewer dwelling units on January ninth, nineteen hundred eighty-five and

(i) on January first, nineteen hundred eighty-three and on January ninth, nineteen hundred eighty-five had seven or fewer occupied single room occupancy dwelling units, excluding any owner occupied single room occupancy dwelling units; or

(ii) an individual owner with at least a fifty percent fee interest in the multiple dwelling establishes to the satisfaction of the commissioner of the department of housing preservation and development prior to the issuance of any permit by the department of buildings for work which would otherwise be prohibited pursuant to subdivisions a and c of this section that he or she intends to occupy such premises as his or her primary residence for a period of not less than three years after completion of such work; and

(iii) an application to establish an exemption pursuant to this subparagraph is submitted to the department of housing preservation and development and such application is approved by the department; or

(b) such multiple dwelling had twenty-five or more dwelling units on January ninth, nineteen hundred eighty-five and the residential portion of such dwelling has been continuously vacant since January first, nineteen hundred eighty-three, an application to establish an exemption pursuant to this subparagraph is submitted to the department of housing preservation and development on or before May twenty-ninth, nineteen hundred eighty-

seven and such application is approved by such department; or

2. such multiple dwelling is within an area for which the department of city planning has issued a special permit prior to January ninth, nineteen hundred eighty-five which was conditioned upon a commitment by the developer to provide dwelling units as set forth in such special permit to replace the single room occupancy dwelling units which are lost; or

3. such multiple dwelling is determined by the department or by the fire department to be an unsafe building and the department determines there is no alternative to demolition; or

4. (a) (i) Prior to the issuance of a permit for work which would otherwise be prohibited pursuant to subdivisions a and c of this section, the owner of such single room occupancy multiple dwelling complies with the provisions of §27-198.3 of this code and further provides for the replacement of the single room occupancy dwelling units which would be altered, converted or demolished by paying, to the single room occupancy housing development fund company established pursuant to subdivision i of this section for each dwelling unit which would be altered, converted or demolished as a result of the work, forty-five thousand dollars or such other amount which the commissioner of housing preservation and development determines by regulation would equal the cost of creating a dwelling unit, other than an apartment, to replace such single room occupancy dwelling unit. No such regulation shall be promulgated before January first, nineteen hundred eighty-eight provided, however, that on and after such date such regulation shall be promulgated where the commissioner determines that the cost of creating such a dwelling unit, exceeds forty-five thousand dollars. Each regulation shall indicate the manner in which the cost of creating such a dwelling unit was determined. Notwithstanding the foregoing, where fifty percent or more of the dwelling units of such multiple dwelling are occupied as of January twentieth, nineteen hundred eighty-seven, the owner of such multiple dwelling shall be required to provide for replacement units pursuant to clause (ii) of this subparagraph for such units occupied as of such date; or

(ii) Prior to the issuance of a permit for work which would otherwise be prohibited pursuant to subdivisions a and c of this section, the owner replaces the single room occupancy dwelling units which would be altered, converted or demolished as a result of such work elsewhere within the city by providing dwelling units affordable to persons of low and moderate income, under a plan approved by such commissioner which complies with the provisions of §27-198.3 of this code. "Replacement" shall include but not be limited to the acquisition of an existing

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multiple dwelling or the creation of such dwelling units either by the construction of a new multiple dwelling or the substantial rehabilitation of an existing multiple dwelling. "Multiple dwelling" shall include but not be limited to a "single room occupancy multiple dwelling". In the event that an existing multiple dwelling is acquired for the purpose of providing replacement units, such multiple dwelling shall be located in the same or adjacent community board in which the single room occupancy multiple dwelling which is to be altered, converted or demolished is located. Where a replacement Plan is submitted to such commissioner, the commissioner shall give notice to the council member and community board for the community district in which the dwelling units to be provided pursuant to such plan are to be located. Such plan shall provide either for the sale or net lease of the multiple dwelling containing such dwelling units to a not-for-profit organization or for such other form of transfer of ownership, management or possession of such multiple dwelling approved by such commissioner.

(iii) Notwithstanding the provisions of item (i) or (ii) of this subparagraph, upon the submission of an application for a permit for such work an owner shall make an application for a certification of no harassment or supplemental certification of no harassment pursuant to the provisions of section 27-2093 of this code and if such application is denied by the commissioner of housing preservation and development or a certification is granted and thereafter revoked and the basis for such denial or revocation is predicated in whole or in part on a determination by such commissioner that harassment occurred at such multiple dwelling after January ninth, nineteen hundred eighty-five, no permit shall be issued on the basis of any payment made pursuant to item (i) or the provision of dwelling units pursuant to item (ii) and such owner shall be subject to the provisions of section 27-2151 of this code and subdivisions a and c of this section. In addition, the sanctions provided by section 27-198 shall apply and no permit shall be issued for a period of two years following the expiration of the sanction period set forth in section 27-198 unless the owner, prior to the issuance of such permit, makes a payment of twice the amount required by item (i) or provides for twice the number of replacement units required by item (ii) for each single room occupancy dwelling unit which would be demolished, altered or converted as a result of the issuance of such permit. Any payment made or replacement units provided prior to such denial or revocation shall be credited against such required amount or units.

(b) The amount of the payment required to be made or the number of dwelling units required to be provided pursuant to subparagraph (a) of this paragraph may be reduced in whole or in part by the commissioner of housing preservation and development if such commissioner determines that the owner has established:

(i) that there is no reasonable possibility that such owner can make a reasonable rate of return unless the property is

altered or converted in a manner prohibited by subdivisions a and c of this section or demolished; and (ii) that neither the owner nor any prior owner intentionally managed the property to impair the ability to earn such return, and (iii) that the requirement that all single room occupancy dwelling units be replaced would substantially impair the feasibility of redeveloping the property for any other use. Such application shall be made to the commissioner of housing preservation and development in a form and manner and containing such information as the commissioner of housing preservation and development shall prescribe. The term "reasonable rate of return" is defined to mean a net annual return of eight and one-half percent of the assessed value of the subject property without recourse to the alteration, conversion or demolition prohibited by subdivisions a and c of this section. If the department of housing preservation and development determines that the assessed value of the subject property has increased as the result of the sale of such property, such department shall disregard the increase in the assessed value resulting from such sale to the extent that such department determines that the amount paid for the property at such sale was in excess of the fair market value of the property on the date of the sale if the property continued to be used for single room occupancy rental housing of the same type and quality after the sale. For the purpose of such determination the property shall be valued subject to the continuation of tenancies existing at the subject property immediately prior to the date of the sale. Notwithstanding the foregoing provision the commissioner shall revoke a determination reducing the payment or the number of replacement dwelling units if the denial or revocation of a certification of no harassment or supplemental certification of no harassment is predicated in whole or in part on a determination by such commissioner that harassment occurred at such multiple dwelling after January ninth, nineteen hundred eighty-five.

e. The department shall not issue a building permit to allow new construction on the site after demolition pursuant to paragraph three of subdivision d of this section unless the owner makes the payment or provides replacement units pursuant to subparagraph (a) of paragraph four of subdivision d of this section for each single room occupancy dwelling unit which is demolished, provided however that if the department of housing preservation and development determines that the conditions which necessitated or significantly contributed to the need for the demolition were not the result of violations of the housing maintenance code which resulted from intentional acts or substantial negligence of an owner or former owner or his or her agent or was the owner of record prior to January ninth, nineteen hundred eighty-five and such acts did not occur during the period of his or her ownership, the owner may

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apply for a reduction of the required replacement units pursuant to subparagraph (b) of paragraph four of subdivision d of this section.

f. Notwithstanding the provisions of section 27-2077 of the code for purposes of this section, rooming units for persons of low and moderate income provided pursuant to paragraph two or four of subdivision d of this section may be created through alterations of apartment units in a class A multiple dwelling.

g.\* Any person who violates the provisions of this section shall be subject to all of the remedies and penalties provided for in this title except that no civil or criminal penalties shall apply with respect to acts in violation of this section committed prior to August fifth, nineteen hundred eighty-five.

*\*As enacted but "1" probably intended.*

2. In addition to any other penalties set forth in this subdivision or in any other provisions of law, any person who violates the provisions of this section following August fifth, nineteen hundred eighty-five shall also be liable for a civil penalty in the amount of one hundred fifty thousand dollars for each single room occupancy dwelling unit unlawfully altered, converted or demolished.

3. An owner who falsely represents an intention to occupy a dwelling in order to obtain a permit pursuant to clause (ii) of subparagraph (a) of paragraph one of subdivision d of this section to do work which would otherwise be prohibited pursuant to subdivisions a and c of this section shall be liable for a civil penalty of fifty thousand dollars for each single room occupancy dwelling unit demolished or converted to use as apartments under such permit.

4. Such civil penalties shall be recovered by the corporation counsel in an action in any court of competent jurisdiction. A judgement recovered in such an action shall constitute a lien against the premises with respect to which the violation occurred from the time of the filing of a notice of pendency in the office of the clerk of the county in which such premises is situated. A notice of pendency may be filed at the time of the commencement of this action or at any time before final judgement or order.

5. In addition to any other penalties set forth in this subdivision or in any other provisions of law, the commissioner shall either (i) refuse to issue or shall seek to have revoked the certificate of occupancy of a dwelling which has been altered, converted or demolished after August fifth, nineteen hundred eighty-five to reduce the number of single room occupancy dwelling units in violation of this section unless the owner makes the payment or provides replacement units pursuant to subparagraph (a) of paragraph four of subdivision d of this section for each single room occupancy dwelling unit which was unlawfully altered, converted or demolished, provided, however, that such owner shall not be eligible for a reduction in such payment pursuant to subparagraph (b) of paragraph four of subdivision d of this section; or (ii) order any single

room occupancy multiple dwelling to be restored so that the number of single room occupancy dwelling units is increased up to the number of such units prior to such alteration or conversion.

h. All applications submitted pursuant to this section shall be accompanied by an affidavit of the owner attesting to the accuracy and truthfulness of the information contained therein and an application fee. The department of housing preservation and development is authorized to establish such reasonable fees as may be appropriate.

i. The commissioner of housing preservation and development shall establish a single room occupancy housing development fund company pursuant to the provisions of article eleven of the private housing finance law or such other provision of law as may be deemed appropriate by the corporation counsel. Monies paid to the company shall be used for the preservation, acquisition and development of dwelling units for persons of low and moderate income pursuant to applicable provisions of law and a preference in the occupancy of such dwelling units shall be given to individuals who are of low income, are single adults and whose last residence was in a single room occupancy multiple dwelling unit which was altered, demolished or converted. On or before June thirtieth, nineteen hundred eighty-eight and annually thereafter the company shall submit a report to the city council and to the mayor describing its activities during the preceding calendar year.

j. All civil penalties recovered pursuant to any provision of this section shall be single room occupancy housing fund development company established pursuant to subdivision i of this section.

k. The provisions of this section shall not be construed to alter, affect or amend any of the provisions of the emergency housing rent control act, the emergency tenant protection act of nineteen seventy-four or any local laws enacted pursuant thereto, the emergency housing rent control law, the rent stabilization law of nineteen hundred sixty-nine and the local hotel stabilization law of nineteen hundred sixty-nine.

l. For the purpose of this section and §27-198.3, "commissioner of housing preservation and development" may also mean such other agency or office of the city, as the mayor may direct.

*\*Local Law 9-1987.*

### **\*§ 27-198.3 Relocation of tenants in occupancy in certain single room occupancy multiple dwellings.-**

a. An owner who, pursuant to either clause (i) or (ii) of subparagraph (a) of paragraph four of subdivision d of section 27-198.2, seeks an exemption from the provisions of subdivisions a and c of such section, shall be required to offer tenants in



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occupancy as of January twentieth, nineteen hundred eighty-seven, or thereafter, an opportunity for relocation to a comparable unit at a comparable rent and such comparable unit shall be located in the same borough in which the single room occupancy unit which is to be exempted is located. Any owner subjected to the provisions of subdivisions a and c of such section shall, on or before April first, nineteen hundred eighty-seven, submit to the commissioner of housing preservation and development a sworn statement containing a list of tenants in occupancy as of January twentieth, nineteen hundred eighty-seven. A "tenant in occupancy" shall be defined as an occupant of a dwelling unit within a single room occupancy multiple dwelling who has lawfully occupied such dwelling unit for thirty consecutive days or longer or who has entered into a lease with respect to such dwelling unit.

b. On or before April first, nineteen hundred eighty-seven, an owner of a single room occupancy multiple dwelling subject to the provisions of subdivisions a and c of section 27-198.2 of this code shall both post in a conspicuous, common area in such multiple dwelling and mail to each occupant on an annual basis thereafter and to each new occupant within ten days of occupancy, a notice, in a form approved by the commissioner of housing preservation and development, setting forth the rights of tenants in occupancy pursuant to this section and other applicable provisions of law. Such owner shall be subject to a civil penalty of one hundred dollars per day for each and every day that such owner fails to mail, or to post such notice after April first, nineteen hundred eighty-seven.

c. The commissioner of housing preservation and development shall not authorize the exemption of any single room occupancy dwelling unit from the prohibitions contained in subdivisions a and c of section 27-198.2 of this code unless the owner of such single room occupancy multiple dwelling shall submit a sworn statement to such commissioner accounting for all vacancies occurring at such multiple dwelling after January twentieth, nineteen hundred eighty-seven by submitting to such commissioner a sworn statement by each and every tenant in occupancy at such multiple dwelling, on January twentieth, nineteen hundred eighty-seven, or thereafter, who has vacated such multiple dwelling, that such tenant was advised by the owner, prior to vacating such dwelling, of his or her right to remain at such dwelling and his or her right to be offered relocation by such owner pursuant to this section. Where a vacancy has occurred at such multiple dwelling after January twentieth, nineteen hundred eighty-seven and the owner does not submit the affidavit of such tenant, the owner shall submit an affidavit to such commissioner stating either that such tenant wrongfully refused to sign such affidavit or, if the owner lacks knowledge of the cause for such vacancy, setting forth the period of such tenant's occupancy at such multiple dwelling, the date of such tenant's vacating of such multiple dwelling and the circumstances thereof. The commissioner shall have the discretion not to accept an affidavit which such

commissioner has reason to believe is substantially or materially inaccurate.

d. Where an owner, pursuant to either clause (i) or (ii) of subparagraph four of subdivision d of section 27-198.2, seeks an exemption from the provisions of subdivisions a and c of such section for single room occupancy dwelling units which had tenants in occupancy as of the date of the application for such exemption, such owner shall submit to the commissioner of housing preservation and development a relocation plan for such tenants. If such plan is approved by such commissioner, the owner shall notify such tenants, in a form approved by such commissioner, of their right to elect to accept the offer of relocation pursuant to such plan within the period of ninety days from the date of such notification. A tenant in occupancy who fails to accept such an offer within such ninety day period or rejects such offer shall be deemed to have waived his or her right to relocation pursuant to this section. Upon approval of a relocation plan by such commissioner, the commissioner, shall notify those parties who have registered with the commissioner as being interested in providing tenants in occupancy with alternative offers of relocation.

*\*Local Law 9-1987.*

### ARTICLE 20 CONDITIONS OF PERMIT

**§[C26-119.1] 27-199 Payment of fees.-** No permit shall be issued unless and until the required fee or fees therefor, as prescribed in subchapter three of chapter one of title twenty-six of the administrative code shall have been paid.

**§[C26-119.2] 27-200 Compliance with code, etc.-** Permits shall be deemed to incorporate the provisions [*sic*] that the applicant, his or her agent, employees, and contractors shall carry out the permitted work or use in accordance with the provisions of this code and other applicable laws and regulations, whether specified or not, except insofar as variations therefrom have been legally permitted or authorized.

**§C26-119.3] 27-201 Compliance with application, plans, etc.-**

All work shall conform to the approved application and accompanying plans and papers, and any approved amendments thereto.

**§[C26-119.4] 27-202 Adherence to lot diagram.-** All work shall be located strictly in accordance with the approved lot diagram; and no lot or plot shall be changed, increased or diminished in area from that shown on the approved lot diagram, unless and until a revised diagram showing such changes, accompanied by the necessary statement of the owner or applicant,

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shall have been submitted to and approved by the commissioner.

**§[C26-119.5] 27-203 Compliance with safety requirements.-** All building operations shall be conducted in accordance with and subject to the safety requirements of this code and other applicable laws and regulations, including any order or requirement by the commissioner that the building under construction or alteration be vacated, in whole or in part during the progress of the work and until the issuance of a certificate of occupancy.

**\*§[C26-119.6] 27-204 Builder's pavement.-**

a. Every permit issued for the construction or alteration of any building shall contain a statement that no certificate of occupancy or letter of completion shall be issued with respect to such building unless the sidewalk in front of or abutting such building, including but not limited to the intersection quadrant for corner property, shall have been installed and paved or repaired by the owner at his or her own cost, in the manner, of the materials, and in accordance with the standard specifications prescribed by the department of transportation pursuant to sections 19-113 and 19-115 of the code except where the commissioner has determined that such sidewalk is not required, unless the owner of such premises furnishes to the department prior to the issuance of a certificate of occupancy or letter of completion security satisfactory to the department that the sidewalk will be installed and paved or repaired within the time specified by the department. Nothing contained in this subdivision shall impair or diminish the power of the commissioner to waive the requirements of this subdivision if he or she shall determine that conditions do not require the construction [*sic*] of such sidewalks, nor affect the obligations of an owner of property specified under subdivision (a) of section 19-152 of the code, or relieve such owner of any such obligations, or impair or diminish the rights of the city or its agencies to enforce such obligations.

b. No permit shall be granted for the construction or alteration of any building, unless the owner of such premises has furnished to the department a policy of liability insurance, marked paid, in such amounts as may be fixed by the department. Such policy shall insure, indemnify and save the city harmless from all claims, suits, demands, causes of action and judgments by reason of personal injuries, including death, sustained by any person and from any claims, suits, demands, causes of action and judgments for damages to property, occurring on any sidewalk on, abutting or in front of such premises, including but not limited to the intersection quadrant for corner property, up to the date of issuance of such certificate of occupancy or letter of completion or up to the date on the completion of the installation and pavement of such sidewalk in accordance with the standard specifications and regulations prescribed by the commissioner of the department of transportation pursuant to sections 19-113 and 19-115 of the code,

whichever is later. In the event that the owner of the premises is covered by a policy of liability insurance, the department may accept a certificate of endorsement extending such policy to include the city within the policy's coverage.

*\*Local Law 65-1996.*

## ARTICLE 21 DEPARTMENT INSPECTIONS

**§[C26-120.1] 27-205 Right of entry and inspection.-**

The commissioner or his or her authorized representatives, in the discharge of their duties, shall have authority to enter upon and examine and inspect at all reasonable times any building, enclosure, or premises, or any part thereof, or any signs or service equipment attached thereto or contained therein, for the purpose of determining compliance with the provisions of this code and other applicable laws and regulations.

**§[C26-120.2] 27-206 Identification of inspectors.-**

Officers and employees of the department, in the discharge of their duties, shall identify themselves by exhibiting the official badge of the department; and other authorized representatives of the commissioner shall identify themselves by producing and exhibiting their authority in writing signed by the commissioner.

**§[C26-120.3] 27-207 General provisions.-**

All examinations and inspections, including all tests in connection therewith, as required by the provisions of this code and other applicable laws and regulations, shall be made and conducted under the direction of the commissioner and in accordance with such inspection and test procedures as may be prescribed by the provisions of this code or other applicable laws and regulations, with the expense of all tests to be borne by the owner or lessee, or the contractor performing the work. The commissioner may accept inspection and test reports from officers and employees of the department and other government agencies. The commissioner may accept signed statements and supporting inspection and test reports filed by architects, engineers or persons superintending construction work and the installation of equipment, under and pursuant to the requirements of sections 27-131, 27-132, 27-135 and 27-136 of this subchapter.

**§[C26-120.4] 27-208 Preliminary inspection.-**

Before the issuance of a work permit, the commissioner may cause an examination and inspection to be made at the site of the proposed work.

**§[C26-120.5] 27-209 Inspections during progress of work.-**

After the issuance of a work permit, inspections shall be made during the progress of the work at such times or at such stages of the work and in such manner as the commissioner shall direct; and such inspections shall include inspection of machinery

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and equipment used for hoisting purposes, cableways and rigging purposes. The commissioner may accept signed statements by architects or engineers and supporting inspection and test reports which have been filed with the department covering materials and equipment subject to controlled inspection and semi-controlled inspection, as provided under sections 27-132, 27-133, 27-136 and 27-137 of this subchapter, and the work may, unless otherwise specifically provided by code provisions or directed by the commissioner, proceed without any verifying inspections or test by the department, provided that the names and business addresses of such architects or engineers shall have been set forth in the work permit application or filed in writing with the department not later than ten calendar days prior to the commencement of work thereunder.

**§[C26-120.6] 27-210 Final inspection.-** Upon completion of the work, and before the issuance of any certificate of occupancy or equipment use permit, a final inspection of the work shall be made by the department, at which the architect, engineer, or other person who supervised or superintended the construction, installation or alteration work shall be present; and any and all failures to comply with the provisions of this code or other applicable laws and regulations shall be noted and the owner or lessee promptly notified thereof in writing.

**§[C26-120.7] 27-211 Inspection of completed buildings.-** The commissioner shall cause inspections to be made periodically of completed buildings, and of signs and service equipment installations when so required by the provisions of subchapter four of chapter one of title twenty-six, or other applicable laws and regulations.

**§[C26-120.8] 27-212 Inspection reports.-** All inspection reports shall be in writing and signed by the inspector, or the responsible individual, or an officer of the inspection service, making the examination of inspection; and a record of all inspections shall be kept by the department.

### ARTICLE 22 CERTIFICATES OF OCCUPANCY

**\*§[C26-121.1] 27-213 General provisions.-**All certificates of occupancy shall be issued by the commissioner and the issuance thereof shall be subject to the provisions of this section, and to the provisions of subdivision (b) of section six hundred forty-five of the New York city charter and article five of subchapter three of chapter one of title twenty-six.

*\*Local Law 91-1989.*

**§[C26-121.2] 27-214 New buildings; sidewalk requirements.-**

a. Except as permitted under the provisions of section 27-218 of this article, no building hereafter constructed shall be occupied or used, in whole or in part, unless and until a certificate of occupancy shall have been issued

certifying that such building conforms substantially to the approved plans and the provisions of this code and other applicable laws and regulations.

**\*\*\*b. (1)** No certificate of occupancy or letter of completion shall be issued for any building, completed on or after April twenty-third, nineteen hundred sixty-three unless the sidewalk in front of or abutting such building, including but not limited to the intersection quadrant for corner property shall have been installed and paved or repaired by the owner at his or her own cost, in the manner, of the materials, and in accordance with the specifications prescribed by the department of transportation pursuant to sections 19-113 and 19-115 of the code, or unless the owner of such premises has furnished to the department security satisfactory to it that such sidewalk will be installed and paved or repaired within the time specified by the department or unless the commissioner waives such requirement where conditions do not require the installation of a sidewalk.

(2) The commissioner of buildings shall insure that streets are suitably improved in accordance with the standards and specifications of the department of transportation as required by subdivision two of section thirty-six of the general city law and shall otherwise carry out the provisions of such subdivision.

c. No certificate of occupancy or temporary certificate of occupancy (excluding amendments to previously issued certificates of occupancy) shall be issued on or after April first, nineteen hundred eighty-seven for any existing building which has not fully complied with all requirements of this code applicable to such existing building.

*\*\*\*Local Law 65-1996.*

**§[C26-121.3] 27-215 Altered buildings.-** Except as permitted under the provisions of section 27-218 of this article, no building hereafter altered so as to change from one occupancy group to another, either in whole or in part, or so as to affect any existing means of egress, or so as to increase the number of habitable rooms in the building, and no building hereafter altered for which a certificate of occupancy has not theretofore been issued, shall be occupied or used unless and until a certificate of occupancy shall have been issued certifying that the alteration work for which the permit was issued has been completed substantially in accordance with the approved plans and the provisions of this code and other applicable laws and regulations. If the building was not required to be vacated, either in whole or in part, during the course of the alteration work, the occupancy or use of the building shall not continue more than thirty calendar days after completion of the alteration work, unless a certificate of occupancy has been issued, as above provided.

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**\*\*§[C26-121.4] 27-216 Existing buildings.-** Upon application by the owner of an existing building, and subject to the provisions of section 27-111 of article three of this subchapter, the commissioner shall issue a certificate of occupancy for such building, provided that at the time of issuing such certificate, no notices of violation or other notices or orders affecting the building as they relate to the provisions of this code are pending before the department of buildings, and provided further that it is established to the satisfaction of the commissioner, after inspection and investigation, that the alleged use of the building has heretofore legally existed. The issuance of a certificate of occupancy for any existing building on waterfront property not used in conjunction with and in furtherance of waterfront commerce and/or navigation shall be conditioned upon compliance with the provisions of this code regulating means of egress, and upon the issuance of a certificate of completion by the commissioner of ports and trade, and shall be limited to the uses and purposes certified to therein.

*\*\*Local Law 14-1989; Local Law 5-1986, language juxtaposed per Ch. 907-1985.*

### **§[C26-121.5] 27-217 Change of occupancy or use.-**

(a) No change shall be made in the occupancy or use of an existing building which is inconsistent with the last issued certificate of occupancy for such building, or which would bring it under some special provision of this code or other applicable law or regulation, unless a new certificate of occupancy is issued by the commissioner certifying that such building or part thereof conform to all of the applicable provisions of this code and all other applicable laws and regulations for the proposed new occupancy or use.

(b) Except as provided by law, a new certificate of occupancy shall not be required where the change of use is within the same use group as listed in the amended zoning resolution. Where a building exceeds three stories in height and the change does not exceed twenty per cent of the total floor area, an amendment to the existing certificate of occupancy for such new use shall be issued by the commissioner certifying that the proposed new occupancy and use conforms to the provisions of the laws governing building construction and that the proposed use will not be in conflict with any provisions of the labor law, multiple dwelling law or the zoning resolution.

**†§[C26-121.6] 27-218 Temporary occupancy.-** The commissioner may, upon request, issue a temporary certificate of occupancy for a part or parts of a building before the entire work covered by the permit shall have been completed, provided that such part or parts may be occupied safely prior to completion of the building and will not endanger public safety, health or welfare, and further provided that the temporary certificate of occupancy shall be issued initially for a period between

ninety and one hundred eighty days, in the case of all buildings classified in occupancy group J-3 or three-family homes, and ninety days for all other buildings subject to renewal for additional ninety-day periods at the discretion of the commissioner. When an applicant applies for an initial temporary certificate of occupancy for longer than ninety days, he or she must state the reason necessary for the longer time period.

*†Local Law 12-1993.*

**\*§[C26-121.7] 27-219 Applications for certificates of occupancy.-** All applications for certificates of occupancy shall be submitted on forms furnished by the department. Each application shall be accompanied by an accurate and complete lot survey made by a licensed surveyor showing the location of any new building and/or any extension to an existing building, the elevation of the first tier of beams or the first floor, the finished grades of all open spaces on the lot, the location and controlling grades of watercourses, paved swales and similar above-grade methods of storm water disposal when permitted by this code, the locations of all catch basins on the property, the established curb level, and the location of all other structures and impervious surfaces, as defined in subdivision (a) of section P110.2 of reference standard RS-16, on the lot. Such lot survey shall also show the location and boundaries of the lot or plot upon which such buildings and structures are located. The commissioner may waive the requirement of such survey in the case of small sheds, stands, signs, and similar small structures. In addition, prior to the issuance of a certificate of occupancy the department shall confirm by inspection that all work relating to the installation of the part of the storm water drainage system which shall lie outside of such property, if and as required by section 24-526 of this code, has been satisfactorily completed.

*\*Local Law 65-1996; Note: For Excerpts from Local Law 7-1974, see end of Subchapter 1; Local Law 103-1989.*

**§[C26-121.8] 27-220 Applicant.-** The application for a certificate of occupancy shall be made by or in behalf of the owner of the building premises; and if made by a person other than the owner, the application shall be accompanied by a signed statement of the applicant stating that he or she is authorized by the owner to make the application. The full names and addresses of the owner, lessee, and applicant, and of the principal officers thereof, if a corporation shall be stated in the application.

**§[C26-121.9] 27-221 Statement of compliance.-** When a certificate of occupancy for a new or altered building is applied for, the application shall be accompanied by a signed statement of the architect, engineer or other person who supervised or superintended

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the construction or alteration work, stating that he or she has examined the approved plans and specifications of the building for which the certificate of occupancy is sought, and that, to the best of his or her knowledge and belief, the building has been erected or altered in accordance with the approved plans and specifications and, as erected or altered, complies with the provisions of this code and all other applicable laws and regulations, except insofar as variations or variances therefrom have been legally permitted or authorized, specifying such variations or variances in such required statement.

### §[C26-121.10] 27-222 Issuance of certificates of occupancy.-

(a) All applications for certificates of occupancy and accompanying papers shall be examined promptly after their submission. If the building is entitled to the certificate of occupancy applied for, the application shall be approved and the certificate of occupancy issued by the commissioner within ten calendar days after submission of the application. Otherwise, the application shall be rejected and written notice of rejection stating the grounds of rejection, shall be given to the applicant within ten calendar days of the submission of the application. Wherever an application has been rejected and proof is thereafter submitted establishing that the grounds of rejection have been met and that the building is entitled to the certificate of occupancy applied for, the application shall be approved and the certificate of occupancy issued within ten calendar days after submission of such proof.

(b) No certificate of occupancy or temporary certificate of occupancy shall be issued until a fire protection plan, if required under the provisions of article twenty-five, has been filed and accepted.

**\*\***(c) No certificate of occupancy shall be issued until compliance with such provisions of chapter three of title twenty-seven of this code as may be required in regulations promulgated by the commissioner is certified by the bureau of electrical control.

This subdivision shall not apply to temporary certificates of occupancy issued by the commissioner pursuant to section 27-218 of this code.

**\*\*Local Law 73-1988.**

§[C26-121.11] 27-223 Contents of certificates.- In addition to the required certification by the commissioner, each certificate of occupancy shall state the purposes for which the building may be used in its several parts, and shall specify:

(a) The occupancy group or groups which apply to all parts of the building.

(b) The maximum permissible live loads on the several floors of the building.

(c) The occupancy loads in the building and all parts thereof.

(d) Any special stipulations and conditions of the building permit.

§[C26-121.12] 27-224 Record of certificates.- A record of all certificates of occupancy shall be kept by the department; and copies thereof shall be furnished by the department upon request, and on the payment of the fee prescribed in section 26-214 of the administrative code. The certificate of occupancy or a copy thereof shall be available for inspection at the building at all reasonable times.

## ARTICLE 23 POSTING BUILDINGS

### §[C26-122.1] 27-225 Posted occupancy and use.-

All buildings other than buildings classified in occupancy group J shall be posted by the owner with a sign or placard in a form prescribed by the commissioner, which shall be permanently affixed to the structure in a conspicuous location in a public hall or corridor of the building, and which shall state the live loads and the occupant loads in the building and all parts thereof, as provided in subchapters six, eight and nine of this chapter.

### §[C26-122.2] 27-226 Replacement of posted signs.-

All posted signs shall be furnished by the owner and shall be of permanent design, shall not be removed or defaced, and if lost, removed or defaced, shall be immediately replaced. The commissioner may inspect or cause to be inspected periodically all existing buildings for compliance with the provisions of this code in regard to posting; and the inspection reports shall specify any violation thereof.

## ARTICLE 24 STOP-WORK ORDER

### §[C26-123.1] 27-227 Stop-Work notice and order.-

Upon notice from the commissioner, or his or her authorized representatives, that any work at any building or building site is being executed in violation of the provisions of this code or other applicable laws or regulations, or in a dangerous or unsafe manner, such work shall immediately be stopped. The notice shall be given to the owner or lessee of the property involved, or to the agent of either of them, or to the person or persons doing the work, and may be continued in a stop-work order issued by the commissioner stating the reasons for the issuance of the order and the conditions under which the work may be resumed.

[Conditions warranting issuance of a stop work order include but are not limited to, failure to have a construction site safety coordinator present in the course of on-going construction at those sites where department rules and regulations requires that a construction site safety coordinator be designated and present; the failure to erect a sidewalk shed (or

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portions thereof), as required by Section C26-1901.5 of the administrative code, or the removal of a sidewalk shed or portions thereof, when such sidewalk shed is still required pursuant to Section C26-1901.5 of the administrative code.

In addition to the penalties provided for in this title, failure to comply with a stop work order shall be subject to the payment of a penalty in the sum of \$500 for each day there is non-compliance, to be recovered in a civil action brought in the name of the commissioner; provided, however, this shall not apply to any work performed to remedy an unsafe or hazardous condition.]\*

*\*Copy in brackets not enacted but probably intended.  
(§C26-1901.5 referred to is renumbered §27-1021.)*

**§[C26-123.2] 27-228 Unlawful continuance.-** No person shall, with knowledge or notice of a stop-work order, continue or cause to be continued any work covered by such order, except such work as is directed to be performed to remove the violation or the dangerous or unsafe condition.

### ARTICLE 25 FIRE PROTECTION PLAN

**§[C26-124.1] 27-228.1 Applicability.-** This article shall apply to the following buildings and building sections:

(a) High rise buildings or building sections exceeding seventy-five feet in height.

(b) Buildings or building sections classified in occupancy group A, B, C, D, E or G which are two or more stories in height with over twenty thousand gross square feet per floor or are two or more stories in height with a total building floor area exceeding fifty thousand gross square feet.

(c) Any building containing an assembly use having an occupant load of three hundred or more persons.

(d) Buildings or building sections classified in occupancy group H or J-1 which are two or more stories in height and contain sleeping accommodations for thirty or more persons.

(e) Buildings or building sections classified in occupancy group J-2 which contain thirty or more dwelling units and over ten thousand gross square feet of floor area used for mercantile, assembly, educational or institutional purposes.

(f) Alterations to a building or building section listed in subdivisions (a) through (e) of this section, if the cost of the alterations, computed in accordance with section 27-119, exceeds one million dollars or involves a change of use.

**§[C26-124.2] 27-228.2 Scope.-**

(a) The plan shall include the following information, where applicable:

(1) Building description: address; block and lot numbers; number of stories; height in feet; occupancy

group; construction classification; occupancy load and department of buildings application number.

(2) Key plans showing all floors, exits, corridors, partitions serving as fire separations or fire divisions, locations and ratings or required enclosures, stairs with pressurization, roof access, exit discharges, locations of frontage space.

(3) Descriptions in narrative form of safety systems and features, including:

- a. Communications systems
- b. Alarm systems
- c. Smoke detection equipment
- d. Location of fire command station
- e. Elevator recall
- f. Emergency lighting and power
- g. Standpipes
- h. Sprinklers
- i. Compartmentation
- j. Mechanical ventilation and air conditioning
- k. Smoke control systems and equipment
- l. Furnishings types and materials
- m. Places of assembly
- n. Fire department access
- o. Other systems, required and voluntary, to be installed

(4) Proof that the fire safety plan, if required, has been filed with the fire department and accepted by that department.

**§[C26-124.3] 27-228.3 General Requirements.-** A fire protection plan, as defined in subchapter two shall be filed with the department by a registered architect or licensed professional engineer whose seal and signature shall be on the plan.

**§[C26-124.4] 27-228.4 Retroactivity.-** The requirements of this article shall apply to all alterations to, and construction of, buildings listed in section 27-228.1 in progress and not yet completed on March twenty-seventh, nineteen hundred eighty-four.

### ARTICLE 26 SPECIAL FILING REQUIREMENTS

**§[C26-125.1] 27-228.5 General Requirements.-** Owners of all existing buildings which are required to comply with the provisions of subdivision (a) of section 27-353.1 (elevator vestibules), section 27-381 and subdivision (b) of section 27-382 (exit lighting), subdivision (b) of section 27-384 (exit signs), section 27-396.3 (signs in sleeping rooms), section 27-777.2 (ventilation in J-1 buildings), subdivision (b) of section 27-929 (sprinklers, fire alarm systems, fire command and communication systems), paragraph two of subdivision (c) of section 27-989 (elevators in

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readiness), section 27-996.1 (locks on hoistway doors) and section 27-996.2 (firemen's service) shall file with the department a report on or before April first, nineteen hundred eighty-seven certifying to the installation of the required fire protection systems in accordance with approved plans and appropriate permits prior to such date. Owners of all existing buildings not already subject to the requirements of article nine of subchapter six of this chapter as of January eighth, nineteen hundred seventy-three shall file with the department a report on or before October first, nineteen hundred eighty-five certifying to the installation of stair and elevator signs meeting the requirements of article nine of subchapter six of this chapter prior to such date. Such reports shall be on such forms and in such manner as prescribed by the commissioner. Failure to file such report by such dates shall be a violation of this section, which shall be punishable pursuant to section 26-125 of title twenty-six of the administrative code.

### **Footnote: The following §§ 1 and 10 are unconsolidated provisions of Local Law 7 of 1974**

Section 1. the council finds that serious flooding and ponding problems exist in areas of the city of New York which are presently without adequate sewers for the disposal of storm water. The council further finds that these flooding and ponding problems endanger human life and cause substantial property damage. As the primary means of reducing these problems, the city of New York currently is engaged in an accelerated sewer construction program, approved by the council, of unprecedented scope. The city is also engaged in an active program of maintaining existing watercourses and other storm water disposal systems, pursuant to orders of the city's Board of Health. It is the expectation of the council that in the next twenty years the city sewer construction program will provide a large network of storm sewers for the areas of the city which presently lack them. In addition, however, the council recognizes that present construction of new buildings and developments without adequate storm water drainage in these unsewered areas is worsening existing flooding and ponding problems, and that the stringent storm drainage requirements for property owners set forth in this local law, which terminate December thirty-first, nineteen hundred ninety-three, are necessary as a temporary measure until the city has substantially advanced its accelerated sewer construction program.

§10. This local law shall take effect thirty days after it shall have become law. Its requirements insofar as they differ from or are additional to those of the administrative code of the city of New York in effect immediately prior to the effective date of this local law shall apply to the construction of all new buildings for which applications for new building permits have been filed on or after such effective date; provided, however, that such new of

different requirements shall not apply to the construction of new buildings on specific sites for which schemes for storm water drainage have been approved by the environmental protection administration on or before such effective date if such construction lawfully commences within five years after such approval. A scheme for storm water drainage for the purpose of this section is an undetailed plan which shows the proposed drains, sewers and/or other means of storm water disposal, which the environmental protection administration normally require property owners to submit to it prior to the submission of a detailed plan for the construction of such facilities.

Effective date, May 16, 1974.

### **\*ARTICLE 27**

#### **ALTERNATIVE PROCEDURE FOR CERTAIN PERMITS**

#### **27-228.6 Contract with not-for-profit corporation.-**

Notwithstanding any other provision of law, the commissioner may enter into a contract with a not-for-profit corporation described in section 27-228.7 to provide for the examination and approval of plans and the issuance of permits by such corporation on behalf of the department for the installation or alteration of plumbing and plumbing systems, including gas piping, as provided in article fifteen of this subchapter, and for the installation or alteration of fire suppression piping systems, as provided in article seventeen of this subchapter. Such contract shall require the not-for-profit corporation to agree to provide such services in conformity with sections 27-228.8, 27-228.9, 27-228.10, 27-228.11, 27-228.12, 27-228.13 and 27-228.14.

**\*\*27-228.7 Not-for-profit corporation.-** No contract shall be entered into pursuant to this article except with a not-for-profit corporation, a majority of the members of the board of directors of which are city officials. Such members shall include one person designated by the speaker of the council and officers or employees of the department and the fire department, serving ex officio, and such other persons as provided in the bylaws of such corporation. No such bylaws shall be adopted by such corporation prior to January 18, 1994. For the purposes of this article the term "corporation" shall mean a not-for-profit corporation as set forth in this section.

**\*\*Local Law 109-1993; Local Law 107-1993.**

#### **27-228.8 Examination and approval of plans.-**

(a) The corporation shall examine and approve plans in accordance with and in the manner prescribed by the provisions of the charter, the code and the rules of the department relating to the

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examination and approval of plans by the department, except as hereinafter provided.

(b) Except where authorized by the commissioner, the corporation shall not have the authority to designate

(c) portions of the examination of plans submitted by architects or engineers for limited supervisory check pursuant to section 27-143 of the code.

(d) All plans approved by the corporation shall be endorsed with the official seal of the corporation.

(e) The corporation shall use forms for applications which shall be prescribed by the commissioner.

### **27-228.9 Issuance of permits.-**

(a) The corporation shall issue permits in accordance with and in the manner prescribed by the provisions of the charter, the code and the rules of the department relating to the issuance of permits by the department, except as hereinafter provided.

(b) Whenever work which requires a plumbing permit or a fire suppression piping system permit is a part of the construction of a new building or the alteration of an existing building, the corporation shall not issue such plumbing permit or fire suppression piping system permit until after the department has issued a new building permit or a building alteration permit to the applicant. The applicant shall submit to the corporation the final plans, approved by the department, for such new building or alteration and a copy of the new building permit or the building alteration permit issued by the department before the plumbing permit and/or the fire suppression piping system permit may be issued.

(c) The corporation shall act in accordance with guidelines which the commissioner shall establish under which the corporation shall defer the approval of plans or the issuance of permits pending appropriate action by other city agencies.

(d) The corporation shall not have the power to revoke any of the permits issued by the corporation but may recommend revocation to the commissioner. The commissioner may revoke permits issued by the corporation pursuant to section 27-197 of the code.

(e) All determinations of the corporation shall be subject to review by the board of standards and appeals to the same extent and in the same manner as if such determination were made by the department.

(f) All permits issued by the corporation shall bear the signature of the chief operating officer of the corporation.

**27-228.10 Fees.-** The corporation shall collect fees on behalf of the department for permits which the corporation issues. The disposition of such fees shall be governed by the contract between the corporation and the city.

### **27-228.11 Employment conditions.-**

(a) The corporation shall require its salaried officers and employees to agree in writing:

(1) to refuse to accept gratuities in the performance of their duties for the corporation;

(2) to be subject to the restrictions set forth in chapter sixty-eight of the New York city charter; and

(3) to be subject to the restrictions upon outside work, employment and financial interests set forth in section 26-114 of the code.

(b) The corporation shall require its per diem employees and consultants to agree in writing to refuse to accept gratuities in the performance of their duties for the corporation.

(c) The corporation shall adopt disciplinary and other procedures to ensure compliance with such agreements.

**27-228.12 Inspection.-** With respect to the permits issued by the corporation, the corporation shall perform the inspections described in sections 27-208, 27-209 and 27-210 of the code. For such purpose, employees of the corporation shall be designated as authorized representatives of the commissioner pursuant to section 27-205 with authority to enter upon and examine and inspect at all reasonable times any building.

**27-228.13 Records.-** The corporation shall keep and maintain records relating to the services performed on behalf of the department in a manner and for such period of time as shall be agreed upon between the department and the corporation.

**27-228.14 Corruption prevention program.-** The corporation shall develop and implement a corruption prevention program to detect and punish corrupt conduct by employees in carrying out their duties on behalf of the corporation which shall not be less restrictive than the corruption prevention program for employees of the department. Such program shall provide for the dismissal of employees who are found to be engaged in corrupt activities, including the solicitation and acceptance of gratuities. The corporation shall not commence services pursuant to the contract until a plan for the implementation of such program has been reviewed and approved by the commissioner.

**27-228.15 Performance review by the commissioner.-** The commissioner shall establish such procedures for the audit, inspection, examination and review of services performed by the corporation on behalf of the department as may be necessary to ensure that the examination and approval of plans, the issuance of permits and conduct of inspections performed by the corporation are carried out in a manner consistent with the provisions of this article.

### **27-228.16 Jurisdiction of the fire department.-**

The provisions of this article shall not be construed to affect, alter or amend the jurisdiction of the fire department over the inspection and testing of plumbing and fire suppression piping systems.

*\*Local Law 107-1993.*



**SUBCHAPTER 2  
DEFINITIONS**

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\*\*\*"27" omitted from section numbers in this column.*

**ARTICLE 1 GENERAL**

**§[C26-200.1] 27-229 Application of terms.-**

The words and terms listed in this subchapter shall have the meanings given herein. Where terms are not defined they shall have their ordinarily accepted meanings or such as the context may imply.

**§[C26-200.2] 27-230 Definitions in reference standards.-**

Definitions that appear in any building code reference standard shall apply to the provisions of that reference standard only.

**§[C26-200.3] 27-231 Tense, gender, and number.-**

Words used in the present tense include the future; words used in the masculine gender include the feminine and neuter; words used in the singular include the plural, and the plural the singular.

**\*\*\* ARTICLE 2 DEFINITIONS**

*\*\*\*Italicized words within definitions are themselves defined elsewhere in this section.*

**§[C26-201.0] 27-232 Definitions.-**Words that are capitalized are defined in this section.

**ACCESSORY BUILDING.** -A *building*, the *use* or *occupancy* of which is incidental to that of the main *building*.

**ACCESSORY USE.**-A *use* or *occupancy* incidental to the principal *use* or *occupancy* of a *building*.

†**ACCESSIBLE.**-A *building* or *portion* thereof and the accessory public areas thereof are accessible when they comply with subarticle two of article two of subchapter four of chapter one of title twenty-seven of this code and can be approached, entered and used by people having physical disabilities.

†**ACCESSIBLE ROUTE.**-A continuous unobstructed path connecting all accessible spaces and rooms in a building that can be negotiated by all categories of people having physical disabilities. Interior accessible routes may include corridors, doorways, floors, ramps, elevators, lifts and clear floor space adjacent to fixtures. Exterior accessible routes may include parking access aisles, curb ramps, walks, ramps and lifts.

**ACCESS STAIR.**-A stair between two floors, which does not serve as a *required exit*. (See EXTERIOR STAIR and INTERIOR STAIR).

†**ADAPTABLE DWELLING UNITS.**-Dwelling units which are constructed on an accessible route and equipped as set forth in reference standard RS 4-6, so that they may be converted to be used, with a minimum of structural change, by all categories of people having physical disabilities.

†*Local Law 58-1987.*

**ADDITION.** An extension or increase in *floor area* or *height* of a *building* that increases its exterior dimensions.

**ADJOINING GRADE ELEVATION.**- The average elevation of the final *grade* adjoining all exterior *walls* of a *building*, calculated from grade elevations taken at intervals of ten feet around the perimeter of the *building*.

**AIR CONDITIONING.**-The process by which the temperature, humidity, movement, cleanliness, and odor of air circulated through a space are controlled simultaneously.

**AIR-SUPPORTED STRUCTURE.**-A *structure* consisting of skin diaphragms made of flexible material, which achieves its shape, support, and stability from internal air pressure.

**ALLOWABLE SOIL PRESSURE.**-The maximum stress permitted in soil of a given type and under given conditions.

**ALLOWABLE STRESS.**-The maximum stress permitted at a given point in a structural member under given conditions.

**ALTERATIONS.**- Any *addition*, or change or modification of a *building*, or the *service equipment* thereof, that affects safety or health and that is not classified as a *minor alteration* or *ordinary repair*. The moving of a *building* from one location or position to another *shall* be deemed an alteration.

**AMUSEMENT ATTRACTION.**- A game of chance or skill or similar activity in which the public participates as a form of amusement.

**AMUSEMENT DEVICE.**- A mechanically operated device or *structure*, open to the public, *used* to convey persons in any direction as a form of amusement.

**APARTMENT HOUSE.**-(See **MULTIPLE DWELLING**.)

††**APPROVED.**-When used in connection with plans, materials and equipment *shall* mean approved by the *commissioner*; when used in connection with materials and equipment, *shall* also mean previously approved by the *board*, unless such approval is amended or repealed by the *commissioner*; otherwise *shall* mean approved by the department or agency indicated by the text.

††*Local Law 49-1991.*

**ARCHITECT.**-A *person* licensed to practice the profession of architecture under the education law of the state of New York.

**AREA OF REFUGE.**-A floor area to which egress is made through a *horizontal exit* or *supplemental vertical exit*.

**AREAWAY.**-A space below *grade*, adjacent to a *building*, open to the outer air and enclosed by walls.

**ASSEMBLY SPACE.**-Any part of a *place of assembly*, exclusive of a stage, that is occupied by numbers of *persons* during the major period of *occupancy*. Every *tier of seating* shall be considered a separate assembly space.

**ATRIUM.**-A vertical opening or series of openings within a building connecting three or more floors, which may be covered at the top, and which is used for purposes other than an enclosed stairway, elevator hoistway or utility shaft.

**ATTIC.**-The space between the ceiling framing of the top most *story* and the underside of the *roof* framing.

**AUTOMATIC.**-As applied to an *opening protective*, shall mean a door, window, damper, or other device, and its assembly, which is normally open and is designed to close automatically when subjected to a predetermined temperature, rate of temperature rise, or abnormal smoke condition.

**AUTOMATIC DRY STANDPIPE SYSTEM.**- A *standpipe system* in which all piping is filled with air, either compressed or at atmospheric pressure. Water enters the system through a control valve actuated either automatically by the reduction of air pressure within the system or by the manual activation of a remote control located at each hose station.

**AUTOMATIC DRY PIPE SPRINKLER SYSTEM.**- A *sprinkler system* in which the piping up to the sprinkler heads is filled with air, either compressed or at atmospheric pressure, with the water supply controlled by a Type A or Type B *dry pipe valve*.

**AUTOMATIC FIRE PUMP.**-A pump that maintains a *required* water pressure in a fire extinguishing system and which is actuated by a starting device adjusted to cause the pump to operate when the pressure in the system drops below a predetermined pressure, and to stop the pump when the pressure is restored.

**AUTOMATIC OPERATION.**- As applied to an *elevator*, shall mean operation whereby the starting of the car is effected in response to the momentary actuation of operating devices at the landing, and/or of operating devices in the car identified with the landings, and/or in response to an automatic starting mechanism, and whereby the car is stopped automatically at the landings.

**AUTOMATIC WET PIPE SPRINKLER SYSTEM.**-A *sprinkler system* in which all piping and sprinkler heads are at all times filled with water under pressure which is immediately discharged when a sprinkler head operates, with the water continuing to flow until the system is shut off.

**AUTOMOTIVE LIFT.**-A vehicle-lifting device, the purpose of which is to raise an entire vehicle to provide accessibility for under-chassis service.

**AUTOMOTIVE REPAIR SHOP.**-A *building* or space in which *motor vehicles* are repaired.

**AUTOMOTIVE SERVICE STATION.**-A *building*, space, or *premises used* for the storage and sale of motor fuels, and which may also have facilities for lubrication, minor repairs, or washing of *motor vehicles*.

**BACKFLOW** (water supply).-The flow of water or other substances into the distribution pipes of a *potable water* supply from any source other than the intended source.

**BALLOON FRAME.**-Light timber *construction* in which the exterior *walls* consist of studs that are either continuous through floors or interrupted only by thickness of plates.

**BASEMENT.**-A *story* partly underground, but having less than one-half its clear height (measured from finished floor to finished ceiling) below the *curb level*; except that where the *curb level* has not been legally established, or where every part of the *building* is set back more than twenty-five feet from a *street line*, the height shall be measured from the *adjoining grade elevation*. (See CELLAR.)

**BEARING.**-As applied to a wall or *partition*, shall mean supporting any vertical load in addition to its own weight.

**BELT-DRIVE MACHINE.**-As applied to an *elevator*, shall mean an indirect-drive machine having a single belt or multiple belts as the connecting means.

**BOARD.**-The board of standards and appeals of the city of New York.

**BOARDER (ROOMER, LODGER).**- An individual living within a household who pays a consideration for such residence and does not *occupy* such space as an incident of employment therein.

**BREEZEWAY.**-A *structure* open to the outdoors consisting of a *roof*, roof supports, and floor, connecting a garage or other *accessory building* with a *dwelling*.

**BUILDING.**-An enclosed *structure* including *service equipment* therein. The term shall be construed as if followed by the phrase "*structure, premises, or part thereof*" unless otherwise indicated by the text.

**BUILDING HOUSE DRAIN.**-That part of the lowest piping of a *drainage system* that receives the discharge from the soil, waste, and other drainage pipes and conveys it to the *building house sewer* by gravity. The building house drain shall be considered to extend five feet outside the exterior wall of the *building*.

**BUILDING HOUSE DRAIN (COMBINED).**-A *building house drain* that conveys storm water in combination with *sewage* or other drainage.

**BUILDING HOUSE DRAIN (SANITARY).**- A *building house drain* that carries *sewage* only.

**BUILDING HOUSE DRAIN (STORM).**-That part of the lowest piping of a storm *drainage system* that receives clear water drainage from *leaders*, surface runoff, ground water, subsurface water, condensate, cooling water, or other similar storm or clear drainage and conveys it to the *building house storm sewer* by

gravity. The building house storm drain *shall* be considered to extend five feet outside the exterior wall of the *building*.

**BUILDING HOUSE SEWER.**-That part of the horizontal piping of a drainage system that extends from the end of the *building house drain* and that receives the discharge of the *building house drain* and conveys it to a *public sewer*, *private sewer*, individual *sewage-disposal system*, or other point of disposal.

**BUILDING HOUSE SEWER (COMBINED).**- A *building house sewer* that conveys *sewage* in combination with storm water and other clear water wastes.

**BUILDING HOUSE SEWER (SANITARY).**- A *building house sewer* that carries *sewage* only.

**BUILDING HOUSE STORM SEWER.**-That part of the horizontal piping of a storm *drainage system* that extends from the *building house storm drain* to the public storm sewer, combined sewer, or other point of disposal.

**BUILDING SECTION.**-A room, floor, group of floors, wing, or any other portion of a *building* contained within *fire divisions*.

**BUILDING SUB-HOUSE DRAIN.**-That portion of a house *drainage system* that cannot drain by gravity into the *building house sewer*.

**BULKHEAD.**-An enclosed *structure* on or above the *roof* of any part of a *building*, enclosing a *shaft*, stairway, tank, or *service equipment*, or other space not designed or *used* for human occupancy. (See PENTHOUSE and ROOF STRUCTURE.)

**CABARET.**-The term cabaret shall mean any room, place or space in which any musical entertainment, singing, dancing or other similar amusement is permitted in connection with an eating and drinking establishment.

**CABLEWAY.**-A power operated system for moving loads in a generally horizontal direction in which the loads are conveyed on an overhead cable, track or carriage.

**CAR DOOR OR GATE.**-As applied to an *elevator*, *shall* mean the sliding portion of the car that closes the opening giving access to the car.

**CAR DOOR OR GATE SWITCH.**-As applied to an *elevator*, *shall* mean an electrical device, the function of which is to prevent operation of the driving machine by the normal operating device unless the car door or gate is in the closed position.

**CAR-SWITCH OPERATION.**- Operation of an *elevator* wherein the movement and direction of travel of the car are directly and solely under the control of the operator by means of a manually operated car switch or of continuous-pressure buttons in the car.

**CASING-OFF.**-The elimination of the frictional forces between a portion of a *pile* and the surrounding soil by use of a sleeve between the *pile* and the soil.

**CATCH PLATFORM.**- A platform or other *construction* projecting from the face of a *building*, supported therefrom, and *used* to intercept the fall of objects and to protect individuals and property from falling debris.

**CELLAR.**-A story partly or wholly underground, but having one-half or more of its clear height (measured from finished floor to finished ceiling) below the curb level; except that where the curb level has not been legally established, or where every part of the building is set back more than twenty-five feet from a street line, the height shall be measured from the adjoining grade elevation. Cellars shall not be counted as stories in measuring the height of buildings. (See BASEMENT.)

**CERTIFICATE OF OCCUPANCY.**- (See article twenty-two of subchapter one of this chapter.)

**CHAIN-DRIVE MACHINE.**-As applied to an *elevator*, *shall* mean an indirect-drive machine having a chain as the connecting means.

**CHARGING CHUTE (INCINERATOR)** . - An enclosed vertical passage through which refuse is fed to an incinerator.

**CHARGING GATE (INCINERATOR)** . - A gate in an incinerator *used* to control the flow of combustion gases into the *charging chute* and the entry of refuse into the combustion chamber.

**CHIMNEY.**-A vertical enclosure containing one or more *flues used* to remove hot gases from burning fuel, refuse, or from industrial processes.

**CHIMNEY CONNECTOR.**-A pipe or metal breeching that connects combustion equipment to a *chimney*.

**CITY.**-The city of New York.

**CLOSED SHAFT.**-A shaft enclosed at the top.

**COATINGS, FIRE-RETARDANT.**- A material applied to the surface of a building material to improve its flame spread rating.

**COLLECTING SAFE AREA.**-A *safe area* that receives occupants from the *assembly space it serves*, as well as from other *safe areas*.

**COMMISSIONER.**-The commissioner of buildings of the city of New York, or his or her duly authorized representative.

**COMPRESSOR (REFRIGERATION).**-A machine used for the purpose of compressing a *refrigerant*.

**CONCENTRATED LOAD.**- A conventional representation of an element of *dead* or *live load* whereby the entire load is assumed to act either at a point or within a limited area.

**CONCURRENT LOADS.**-Two or more elements of *dead* or *live load* that, for purposes of design, are considered to act simultaneously.

**CONSTRUCTION.**-Any or all work or operations necessary or incidental to the erection, demolition, assembling, installing, or equipping of buildings, or any alterations and operations incidental thereto. The term "construction" *shall* include land clearing, grading, excavating, and filling. It *shall* also mean the finished product of any such work or operations.

**CONSTRUCTION CLASS (GROUP).**-The category in which a *building* or space is classified by the provisions of subchapter three of this chapter, based on the *fire-resistance ratings* of its *construction* elements.

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**CONSOLE LIFT.**-A section of the *floor area* of a theater or auditorium that can be raised and lowered.

**CONTRACTOR.**-A *person* undertaking *construction*.

**CONTROLLED INSPECTION.**-(See section 27-132 of subchapter one of this chapter.)

**CORRIDOR.**-An enclosed public passage providing a means of access from rooms or spaces to an *exit*. (See EXIT PASSAGEWAY.)

**COURT.**-An *inner court* or *outer court*.

**CRANE.**-A machine for lifting or lowering a load and moving it horizontally which utilizes wire rope and in which the hoisting mechanism is an integral part of the machine.

**CROSS AISLE.**-An aisle in a *place of assembly* usually parallel to rows of seats, connecting other aisles or an aisle and an exit.

**CROSS-CONNECTION (FIRE EXTINGUISHING SYSTEM).**- Piping between risers and *siamese connections* in a *standpipe* or *sprinkler system*.

**CROSS-CONNECTION (POTABLE WATER SYSTEM).**- A physical connection or arrangement between two otherwise separate piping systems, one of which contains *potable water*, and the other of which contains water of questionable safety, or steam, gases, or chemicals whereby there can be a flow from one system to another.

**CURB LEVEL.**-The legally established level on the curb in *front* of a *building*, measured at the center of such *front*. When a *building* faces on more than one *street*, curb level *shall* mean the average of the legally established levels of the curbs at the center of each *front*.

**CURB LINE.**-The line coincident with the face of the *street* curb adjacent to the roadway.

**DATUM.**-(See section 27-158 of subchapter one of this chapter.)

**DEAD END.**-A portion of a *corridor* in which the travel to an *exit* is in one direction only.

**DEAD LOAD.**-Materials, equipment, *constructions*, or other elements of weight supported in, on, or by the *building* (including its own weight) that are intended to remain permanently in place.

**DECIBEL.**-A unit of measurement of the loudness of sound. A division of a logarithmic scale for expressing the ratio of two amounts of power or energy. The number of decibels denoting such a ratio is ten times the logarithm of the ratio.

**DELUGE SPRINKLER SYSTEM.**-An open head *sprinkler system* without water in the system piping, with the water supply controlled by an automatic valve operated by smoke or heat-responsive devices installed throughout the sprinklered area, and independent of the sprinkler heads.

**DEMOLITION.**-The dismantling or razing of all or part of a *building*, including all operations incidental thereto.

**DEPARTMENT.**-The department of buildings of the city of New York.

**DERRICK.**-An apparatus consisting of a mast or equipment members held at the top by guys or braces,

with or without a boom, for use with a hoisting mechanism and operating ropes, for lifting or lowering a load and moving it horizontally.

**DRAINAGE SYSTEM.**-All the piping within public or private *premises*, which conveys *sewage*, rain water, or other liquid wastes to a legal point of disposal, but shall not include the mains of public sewer system or private or public sewage-treatment or disposal plant.

**DRAFT CURTAIN.**- A *noncombustible* curtain suspended in a vertical position from a ceiling for retarding the lateral movement of heated air, gases, and smoke along the ceiling in the event of fire.

**DRAFT HOOD.**-A device placed in and made part of a *chimney*, *vent connector*, or combustion equipment, to (1) insure the ready escape of the products of combustion in the event of no draft, back-draft, or stoppage beyond the draft hood, (2) prevent a back-draft from entering the equipment, or (3) neutralize the effect of excessive stack action of the *chimney flue* upon the operation of the equipment.

**DRY PIPE VALVE.**-A valve that automatically controls the water supply to a *sprinkler system* so that the system beyond the valve is normally maintained dry.

**DUCT (VENTILATION)** . - A pipe, tube, conduit, or an enclosed space within a wall or *structure*, used for conveying air.

**DUMBWAITER.**-A hoisting and lowering mechanism equipped with a car that moves in guides in a substantially vertical direction, the floor area of which does not exceed nine square feet, whose total inside height whether or not provided with fixed or movable shelves does not exceed four feet, the capacity of which does not exceed five hundred pounds, and that is used exclusively for carrying materials.

**DWELLING.**-Any *building occupied* in whole or in part as the temporary or permanent home or residence of one or more *families*.

**DWELLING UNIT.**-One or more rooms in a *dwelling* or building that are arranged, designed, *used* or intended for *use* by one or more *families*.

**ELECTRICALLY SUPERVISED.**-As applied to a control circuit, *shall* mean that in the event of interruption of the current supply or in the event of a break in the circuit, a specific signal will be given.

**ELEVATOR.**-A hoisting and lowering mechanism equipped with a car or platform that moves in guides in a substantially vertical direction, and that serves two or more floors of a *building*.

**ELEVATOR VESTIBULE.**-A room or space enclosed with noncombustible smoke barrier partitions with smoke stop doors conforming to subdivision (c) of section 27-371. Except for such smoke stop doors, openings to elevators shall be the only other door openings permitted in the enclosing partitions.

**EMERGENCY INTERLOCK RELEASE SWITCH.**-

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As applied to an *elevator*, shall mean a device to make inoperative, in case of emergency, door or gate electric contacts or door interlocks.

**ENGINEER.**-A *person* licensed to practice the profession of engineering under the education law of the state of New York.

**EQUIVALENT UNIFORM LOAD.**-

A conventionalized representation of an element of *dead* or *live load*, used for the purposes of design in lieu of the actual *dead* or *live load*.

**ESCALATOR.**-A power driven, inclined, continuous stairway used for raising or lowering passengers.

**EXISTING BUILDING.**-A building, whether high rise or low rise:

(1) Which on April first, nineteen hundred eighty-four is complete or under construction, or

(2) For which an application for approval of plans has been filed with the department prior to October first, nineteen hundred eighty-four and construction commenced prior to April first, nineteen hundred eighty-six, provided that those requirements of this code applicable to existing buildings classified in the same occupancy group as the proposed building shall be complied with in accordance with the time limitations set forth in this code.

**EXISTING HIGH RISE BUILDING.**-A building, classified as a high rise structure:

(1) Which on April first, nineteen hundred eighty-four is complete or under construction, or

(2) For which an application for approval of plans has been filed with the department prior to October first, nineteen hundred eighty-four and construction commenced prior to April first, nineteen hundred eighty-six, provided that those requirements of this code applicable to existing buildings classified in the same occupancy group as the proposed building shall be complied with in accordance with the time limitations set forth in this code.

(1)\* **EXISTING OFFICE BUILDING, ONE HUNDRED FEET OR MORE IN HEIGHT.**-An office building one hundred feet or more in height or a building classified in occupancy group E, one hundred feet or more in height:

(1) which on January eighteenth, nineteen hundred seventy-three is complete or under construction, or

(2) for which plans have been filed before January eighteenth, nineteen hundred seventy-three and construction commenced on or before January eighteenth, nineteen hundred seventy-four, or

(3) for which plans are filed on or before January eighteenth, nineteen hundred seventy-four and construction commenced on or before January eighteenth, nineteen hundred seventy-five and further provided that all the requirements for such existing office buildings are fully complied with in the course of construction and before completion.

*\*As enacted but "(1)" probably intended to be omitted.*

**EXIT.**-A means of egress from the interior of a *building* to an *open exterior space* which is provided by the use of the following, either singly or in combination: exterior door openings, *vertical exits*, *exit passageways*, *horizontal exits*,

*interior stairs*, *exterior stairs* or fire escapes; but not including *access stairs*, aisles, corridor doors or *corridors*.

**EXIT PASSAGEWAY.**-A horizontal extension of a *vertical exit*, or a passage leading from a *yard* or *court* to an *open exterior space*.

**EXTERIOR SEPARATION.**-The shortest distance across an unobstructed outdoor space measured from the furthest projection of the exterior wall of a *building* to an *interior lot line* or to a line halfway between the wall and that of any other *building* on the same lot, or to the centerline of an adjacent *street* or other *public space*.

**EXTERIOR STAIR.**-A stair open to the outdoor air, that serves as a *required exit*. (See ACCESS STAIR and INTERIOR STAIR.)

**FACING.**-As applied to a *sign*, shall mean the surface of the *sign*, upon, against or through which the message of the *sign* is exhibited.

**\*\*FAMILY.**-A single individual; or two or more individuals related by blood or marriage or who are parties to a domestic partnership, and living together and maintaining a common household, with not more than four *boarders*, *roomers* or *lodgers*; or a group of not more than four individuals, not necessarily related by blood, marriage or because they are parties to a domestic partnership, and maintaining a common household.

**\*\*Local Law 27-1998.**

**FIRE ALARM.**- A system, automatic or manual, arranged to give a signal indicating a fire emergency.

**FIRE AREA.**- A *floor* area enclosed by *fire divisions* and/or exterior walls.

**FIRE CANOPY.**- A solid horizontal projection, extending beyond the exterior face of a *building* wall, located over a wall opening so as to retard the spread of fire through openings from one *story* to another.

**FIRE DISTRICTS.**- The geographical territories established under subchapter four of this chapter for the regulation of *occupancy groups* and *construction classes* within such districts.

**FIRE DIVISION.**- Any construction, vertical, horizontal or otherwise, having the *required fire-resistance rating* and structural stability under fire conditions to provide a fire barrier between adjoining *buildings* or between adjoining or superimposed *fire areas* or *building sections* within the same *building*.

**FIRE DOOR.**-An *opening protective* in the form of a door and its assembly.

**FIRE PROTECTION PLAN.**-A report containing a narrative description of the life and fire safety systems and evacuation system for a structure, in accordance with section 27-228.2.

**FIRE-PROTECTION RATING.**-The time in hours or fractions thereof that an *opening protective* and its assembly will withstand fire exposure as determined by a fire test made in conformity with specified standards of subchapter five of this chapter.

**FIRE-RESISTANCE RATING.**-The time in hours or fractions thereof that materials or their assemblies will withstand fire exposure as determined by a fire test made in conformity with a specified standard of subchapter five of this chapter.

**FIRE RETARDANT TREATED WOOD.**-Wood that has been pressure impregnated with chemicals so as to reduce its combustibility.

**FIRE SAFETY PLAN.**-A description of the fire drill and evacuation procedures for a structure which is required to be submitted to the fire department in accordance with the requirements of section 27-4267 of the administrative code and the regulations of the fire Commissioner.

**FIRE SECTION.**-A sprinklered area within a *building* that is separated from other areas by *noncombustible* construction having a least a two-hour *fire-resistance rating*.

**FIRE SEPARATION.**-Any construction, vertical, horizontal, or otherwise, having the *required fire-resistance rating* to provide a fire barrier between adjoining rooms or spaces within a *building, building section, or fire area*.

**FIRESTOP.**- A solid or compact, tight closure to retard the spread of flames or hot gases within concealed spaces.

**\*FIRE SUPPRESSION PIPING SYSTEM.**- Any system including any and all equipment and materials in connection therewith the purpose of which is to control, to contain, to suppress or to extinguish fire.

*\*Local Law 107-1993.*

**FIRE WALL.**-A *fire division* in the form of a wall.

**FIRE WINDOW.**-An *opening protective* in the form of a window and its assembly.

**FLAME SPREAD RATING.**-The measurement of the comparative rate of propagation of flame over the surface of a material as determined by a fire test made in accordance with a specified standard in subchapter five of this chapter.

**FLAMMABLE.**-Capable of being easily ignited when exposed to flame, and which burns intensely, or has a rapid rate of flamespread.

**FLASH POINT.**-The lowest temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the vessel used.

**FLOOR AREA.**-The projected horizontal area inside of walls, *partitions*, or other enclosing *construction*.

**FLOOR AREA (NET).**-When used to determine the *occupant load* of a space, *shall* mean the horizontal occupiable area within the space, excluding the thickness of walls, and *partitions*, columns, furred-in spaces, fixed cabinets, equipment, and accessory spaces such as closets, machine and equipment rooms, toilets, stairs, halls, *corridors, elevators* and similar unoccupied spaces.

**FLUE.**-An enclosed passageway in a *chimney* to carry products of combustion to the outer air.

**FOLDED PLATE.**-An assembly consisting of one or more units, each unit of which is formed by two or

more individually planar elements, termed plates, intersecting at angles.

**FOOTING.**-A *foundation* element consisting of an enlargement of a *foundation pier* or *foundation wall*, wherein the soil materials along the sides of and underlying the element may be visually inspected prior to and during its construction.

**FOUNDATION (BUILDING).**-A *construction* that transfers *building* loads to the supporting soil.

**FOUNDATION PIER.**-A *foundation* element consisting of a column embedded into the soil below the lowest floor to the top of a *footing* or *pile cap*. Where a pier bears directly on the soil without intermediate *footings* or *pile caps*, the entire length of the column below the lowest floor level *shall* be considered as a foundation pier. Foundation piers *shall* be limited to piers so constructed that the entire surface of the sides of the pier and the *bearing* material under the lower end of the pier can be visually inspected prior to or during *construction*, but which will be concealed in the final work. Piers below the lowest floor or *basement level* that will be exposed and open to inspection in the final work *shall* be considered as columns. Types of *construction* wherein the sides cannot be visually inspected *shall* be considered as piling.

**FOUNDATION WALL.**-A wall extending below *grade*.

**FRAMEWORK.**-As applied to a *sign, shall* mean the supports, uprights and bracing of the *sign*.

**FRESH AIR.**-Outdoor air.

**FRONT.** - As applied to *building* location on a *lot, shall* mean the distance between lines drawn through the most remote points of the *building* perimeter, projected at right angles to a *frontage space*.

**FRONTAGE SPACE.**-A *street*; or an open space outside of a *building*, not less than thirty feet in any dimension, that is accessible from a *street* by a driveway, lane, or alley at least twenty feet in width, and that is permanently maintained free of all obstructions that might interfere with its use by the fire department.

**FRONT YARD.**-A *yard* extending along the full length of a *street line*.

**GAS DISTRIBUTION PIPING.**-All piping from the house side of the *gas meter piping* that distributes gas supplied by a public utility to all fixtures and apparatus used for illumination or fuel in any *building*.

**GAS METER PIPING.**-The piping from the gas service line valve to the outlet of the meter regulator set or the meter if no regulator is required.

**GAS PIPING SYSTEMS.**-The gas service piping, meter piping and distribution piping.

**GAS SERVICE LINE VALVE.**-The valve located at or below grade on the supply side of the meter or service regulator, if a service regulator is required. If a plug type valve is used it shall be constructed so as to prevent the core from being blown out by the pressure of the gas. In addition, it shall be of a type capable of being locked in the off position by the local gas utility.

**GAS SERVICE PIPING.**-The supply piping from the street main up to and including the gas service line valve.

**GRADE.**-The finished surface of the ground, either paved or unpaved.

**GRADE BEAM.**- A beam, at, near, or below *grade*, spanning between footings, *pile caps* or *foundation piers*, and supporting walls or other elements of a *building*.

**GRANDSTAND.**- A *structure used* to support spectators, either standing or seated, usually outdoors.

**GROUND SIGN.**- A *sign* supported by uprights or braces in or upon the surface of the ground.

**GROUP HOME.**- A facility for the care and maintenance of not less than seven nor more than twelve children, operated pursuant to subdivision (c) of section three hundred seventy-four of the social services law, or other provisions of applicable laws, and supervised by the New York state board of social welfare.

**\*\* HABITABLE ROOM.**-A residential room or space, having the minimum dimensions required by section 27-751 of article six of subchapter twelve of this chapter in which the ordinary functions of domestic life are carried on, and which includes bedrooms, living rooms, studies, recreation rooms, kitchens, dining rooms and other similar spaces, but does not include closets, halls, stairs, laundry rooms, or bathrooms.

**\*\*Chapter 559,Laws of 1995.**

**HEIGHT (BUILDINGS).**-The vertical distance from the *curb level* to the highest point of the *roof beams* in the case of flat roofs, or to a point at the average height of the gable in the case of roofs having a pitch of more than one foot in four and one-half feet; except that where the *curb level* has not been legally established, or where every part of the building is set back more than twenty-five feet from a *street line*, the height *shall* be measured from the *adjoining grade elevation*.

**HEREAFTER.**-On or after the effective date of this code.

**HERETOFORE.**-Before the effective date of this code.

**HIGH RISE.**-A structure seventy-five feet or more in height.

**HOISTWAY.**-An enclosed or partly enclosed *shaft* used for the travel of an *elevator*, *dumbwaiter*, platform or bucket.

**HOISTWAY DOOR.**-As applied to an *elevator shall* mean the hinged or sliding portion of a *hoistway* enclosure, which closes the opening giving access to a landing.

**HOISTWAY DOOR INTERLOCK.**-A device used to prevent the operation of the driving machine of an *elevator* by the normal operating device unless the *hoistway door* is locked in the closed position, and also used to prevent the opening of the *hoistway door* from the landing side unless the car is within the landing zone and is either stopped or being stopped.

**\*HOISTING MACHINE.**-A power operated machine used for lifting or lowering a load utilizing a drum and wire rope, excluding elevators. This shall include but not be limited to a crane, derrick and cableway.

**HORIZONTAL EXIT.**-(See Section 27-373 of article five of subchapter six of this chapter.)

**ILLUMINATED SIGN.**-A sign designed or arranged to give forth or reflect light from an attached artificial source.

**IMPACT LOAD.**-A kinetic load of short duration such as that resulting from moving machinery, *elevators*, cranes, vehicles, etc.

*\*As enacted but this definition probably intended to follow definition of "HIGH RISE".*

**INDEPENDENT POLE SCAFFOLD.**-A scaffold supported by multiple rows of uprights, and not depending on the *building* for support.

**INDIRECT WASTE PIPE.**-A drain pipe used to convey liquid wastes which does not connect directly with the *drainage system*, but which discharges into the house *drainage system* through an air break into a *trap*, fixture, receptacle, or interceptor.

**INDUSTRIAL LIFT.**- A hoisting and lowering mechanism of a nonportable power-operated type for raising or lowering material vertically, operating entirely within one *story* of a *building*.

**INDUSTRIAL WASTE.**- Liquid, gaseous or solid substances, or a combination thereof, resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resource.

**INNER COURT.**-Any open area, other than a *yard* or portion thereof, that is unobstructed from its lowest level to the sky and that is bounded by either *building walls*, or *building walls* and one or more *lot lines* other than a *street line* or *building walls*, except for one opening on any open area along an *interior lot line* that has a width of less than thirty feet at any point.

**INTERIOR LOT LINE.**-A *lot line* other than a *street line*.

**INTERIOR STAIR.**-A stair within a *building*, that serves as a *required exit*. (See **ACCESS STAIR** and **EXTERIOR STAIR**.)

**LAGGING (PILE).**-Pieces of timber or other material attached to the sides of *piles* to increase resistance to penetration through soil.

**LAMELLA.**-*Shell construction* in which the *shell* is formed by a lattice of interlacing members.

**LANDING DOOR.**-(See **HOISTWAY DOOR**.)

**LEADER.**-A vertical drainage pipe for conveying storm water from *roof* or gutter drains to a *building house storm drain*, *building house drain (combined)*, or other means of disposal. The leader *shall* include the horizontal pipe to a single *roof drain* or gutter drain.

**LESSEE.**-The *person* in possession of a *building* under a lease from the owner thereof.

**LICENSE.**- A *written* document issued by the *commissioner* authorizing a *person* to perform specific acts in or in connection with the *construction* or *alteration* of *buildings*, or the installation, *alteration*, and use and operation of *service equipment* therein.

**LIVE LOAD.** - All occupants, materials, equipment, *constructions* or other elements of weight supported in,

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on or by a *building* that will or are likely to be moved or relocated during the expected life of the *building*.

**LOAD-BEARING.**-(See BEARING.)

**LOADING RAMP.**-A hinged, mechanically operated lifting device *used* for spanning gaps and/or adjusting heights between loading surfaces, or between loading surfaces and carriers.

**LODGER.**-(See BOARDER.)

**LOT.**-A portion or parcel of land considered as a unit. A zoning lot.

**LOT LINE.**-A line dividing one land unit from another, or from a *street* or other public space. A boundary line of a zoning *lot*.

**LOW RISE.**-A structure less than seventy-five feet in height.

**MALL.**-An enclosed or roofed area used as a pedestrian circulation space and connecting no more than three stories or portions of stories of a building or buildings housing single and/or multiple tenants.

**MANUAL FIRE PUMP.**-A pump that feeds water into a fire extinguishing system that must be started by either the building personnel or members of the fire department.

**MARQUEE SIGN.**-A *sign* placed flat against the front or side fascia of a marquee.

**MECHANICAL VENTILATION.**-The process of introducing outdoor air into, or removing vitiated air from a *building* by mechanical means. A mechanical ventilating system may include air heating, air cooling, or *air conditioning* components.

**MECHANIZED PARKING GARAGE EQUIPMENT.**-Special devices in mechanical parking garages that operate in either stationary or horizontal moving hoistways, that are exclusively for the conveying of automobiles, and in which no *persons* are normally stationed on any level other than the receiving level and in which each automobile during the parking process is moved by means of a power driven transfer device, on and off the elevator directly into parking spaces or cubicles.

**MEZZANINE.**-An intermediate floor between the floor and ceiling of any space. When the total gross *floor area* of all mezzanines occurring in any story exceeds thirty-three and one-third percent of the gross *floor area* of that story such mezzanine shall be considered as a separate story.

**MINOR ALTERATIONS.**-(See Section 27-124 of article five of subchapter one of this chapter.)

**MORTAR (GROUT).**-A mixture of cementitious materials, fine-aggregates and water.

**MOTOR VEHICLE.**-A conveyance propelled by an internal combustion engine and having a fuel storage tank capacity of more than two gallons.

**MOVING WALK.**-A passenger-carrying device on which *persons* stand or walk, and in which the passenger-carrying surface remains parallel to its direction of motion and is uninterrupted.

**MULTIPLE DWELLING.**-A building containing three or more *dwelling units*. Multiple dwelling shall

not be deemed to include a hospital, school, convent, monastery, asylum or other public institution.

**NONAUTOMATIC SPRINKLER SYSTEM.**- A *sprinkler system* in which all pipes and sprinkler heads are maintained dry and which is supplied with water through a fire department *siamese connection*.

**NONAUTOMATIC STANDPIPE SYSTEM.**- A *standpipe system* in which all piping is maintained dry, and which is supplied with water through a fire department *siamese connection*.

**NONBEARING.**-As applied to a wall or *partition*, shall mean one that supports no vertical load other than its own weight.

**\*NONCOMBUSTIBLE.**-A material which, in the form in which it is used in construction, will not ignite and burn when subjected to fire. However, any material which liberates flammable gas when heated to any temperature up to one thousand three hundred eighty degrees Fahrenheit for five minutes shall not be considered noncombustible. No material shall be considered noncombustible which is subject to increase in combustibility beyond the limits established above, through the effects of age, fabrication or erection techniques, moisture, or other interior or exterior atmospheric conditions.

*\*Local Law 13-1987.*

**NONCURRENT LOADS.**-Two or more elements of *dead* or *live* load which, for purposes of design, are considered not to act simultaneously.

**NONLOADBEARING.**-(See NONBEARING.)

**OCCUPANCY.**-The purpose or activity for which a *building* or space is *used* or is designed or intended to be *used*.

**OCCUPANCY GROUP.**-The category in which a building or space is classified by the provisions of subchapter three of this chapter, based on its occupancy or use.

**OCCUPANT LOAD.**-The number of occupants of a space, floor or *building* for whom exit facilities shall be provided.

**OCCUPIABLE ROOM.**-A room or space, other than a *habitable room* designed for human *occupancy* or *use*, in which *persons* may remain for a period of time for rest, amusement, treatment, education, dining, shopping, or other similar purposes, or in which occupants are engaged at work.

**OCTAVE.**-The interval between two sounds having a basic frequency ratio of two. By extension, the octave is the interval [*sic*] between any two frequencies having the ratio 2:1. The standard octave bands are:

	FREQUENCY (CPS)								
Mid-Frequency	63	125	250	500	1000	2000	4000	8000	
Approximate Frequency Limits	Lower	45	90	180	355	710	1400	2800	5600
	Upper	90	180	355	710	1400	2800	5600	11120

**OIL BUFFER.**-As applied to an *elevator*, shall mean a buffer using oil as a medium which absorbs and



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dissipates the kinetic energy of a descending car or counterweight.

**OPEN EXTERIOR SPACE.**-A *street* or other *public space*; or a *yard*, *court*, or *plaza* open on one or more sides and unroofed or open on all sides, which provides egress to a street or public space.

**OPEN PARKING LOT.**-A *lot*, or portion thereof, *used* for the storage or sale of more than four *motor vehicles*, but not *used* for the repair or servicing of such vehicles.

**OPEN PARKING STRUCTURE.**-A structure open to the outdoors fifty percent or more on two or more sides of *each story*, *used* for the parking of *motor vehicles*.

**OPEN SHAFT.**-A *shaft* open to the outdoor air at the top.

**OPENING PROTECTIVE.**-An assembly of materials and accessories, including frames and hardware installed in an opening in a wall, *partition*, floor, ceiling or *roof* to prevent, resist, or retard the passage of flame, smoke or hot gases.

**ORDINARY REPAIRS.**-(See section 27-125 of this chapter.)

**OUTER COURT.**-Any open area, other than a *yard* or portion thereof, that is unobstructed from its lowest level to the sky and that, except for an outer court opening upon a *street line*, a *front yard*, or a *rear yard*, is bounded by either *building walls* or *building walls* and one or more *lot lines* other than a *street line*.

**OUTRIGGER SCAFFOLD.**-A scaffold, the platform of which is built upon supports cantilevering beyond the walls of the *building*.

**OUTSIDE GAS SERVICE LINE VALVE.**-The valve located on the gas service piping which can be either exposed or buried.

**OWNER.**-A *person* having legal title to *premises*; a mortgagee or vendee in possession; a trustee in bankruptcy; a receiver or any other *person* having legal ownership or control of *premises*.

**PARAPET.**-The continuation of an exterior wall, fire wall, or party wall above the roof line.

**PARKING TIER.**-A general level of parking.

**PARTITION.**-A vertical unit or assembly of materials that separates one space from another within any *story* of a *building*.

**PARTY WALL.**-A *fire division* on an interior lot line common to two adjoining buildings.

**PENTHOUSE.**-An enclosed *structure* on or above the roof of any part of a building, which is designed or used for human occupancy. (See BULKHEAD and ROOF STRUCTURE.)

**PERMIT.**-A *written* document issued by the *commissioner* authorizing the *construction*, *alteration*, or *demolition* of a *building*, or the installation, *alteration* or *use* and operation of *service equipment* therein.

**PERSON.**-An individual, partnership, corporation, or other legal entity.

**\*PHYSICAL DISABILITY.**-Any of the following:

(a) impairment requiring use of a wheelchair; or

(b) impairment causing difficulty or insecurity in walking or climbing stairs or requiring the use of braces, crutches or other artificial supports; or impairment caused by amputation, arthritis, spastic condition or pulmonary, cardiac or other ills rendering the individual semi-ambulatory; or

(c) total or partial impairment of hearing or sight causing insecurity or likelihood of exposure to danger in public places; or

*\*Local Law 58-1987.*

(d) impairment due to conditions of aging and incoordination.

The term "physical handicap" shall have the same meaning as the term "physical disability" and the phrase people having "physical disabilities" shall include those having one or more physical disabilities.

**PILE.**-A structural element introduced into the ground to transmit loads to lower strata and of such construction that the material underlying the base of the unit or along the sides cannot be visually inspected.

**PILE CAR.**-A construction encasing the heads of one or more piles which transfers loads to the *pile* or *piles*.

**\*\* PLACE OF ASSEMBLY.**-An enclosed room or space in which seventy-five or more persons gather for religious, recreational, educational, political or social purposes, or for the consumption of food or drink, or for similar group activities or which is designed for use by seventy-five or more persons gathered for any of the above reasons, but excluding such spaces in dwelling units; or an outdoor space in which two hundred or more persons gather for any of the above reasons or which is designed for use by two hundred or more persons gathered for any of the above reasons.

*\*\*Local Law 23-1990.*

**PLASTIC.**-A material that contains as an essential ingredient an organic substance of large molecular weight, is solid in its finished state and, at some stage in its manufacture or its processing into finished articles, can be shaped by flow.

**PLASTIC, SLOW BURNING.**-A *plastic* having a rate of combustion within the limits of a specified standard of subchapter five of this chapter.

**PLATFORM FRAME.**-Light timber *construction* in which the exterior walls and bearing walls consist of studs which are interrupted at floors by the entire thickness of the floor *construction*.

**PLUMBING.**-The practice, materials, and fixtures used in the installation, maintenance, extension, and *alteration* of all piping, fixtures, appliances, equipment, and appurtenances in connection with any of the following: sanitary drainage or storm drainage facilities, the venting system and the public or private water supply systems, within or adjacent to any *building*; also the practice and materials used in the installation, maintenance, extension, or *alteration* of storm water, liquid-waste, or sewerage, and water-supply systems of any *premises* and their connection with any point of public disposal or other acceptable terminal.

**PLUMBING FIXTURES.**-Installed receptacles, devices, or appliances that are supplied with water or which receive or discharge liquids or liquid-borne wastes.

**PLUMBING SYSTEM.**- The water-supply and distribution pipes; plumbing fixtures and traps; soil, waste, and vent pipes; *building house drains* and *building house sewers* including their respective connections, devices, and appurtenances within the property lines of the *premises*; and water-treating or water-using equipment.

**POLE FOOTING.**-A type of *construction* in which a pole embedded in the ground and extending upward to form a column is used for both column and *footing*.

**PONDING.**-The collection of rainwater.

**\*POTABLE WATER.**-Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects. Its bacteriological and chemical quality shall conform to the requirements of the department of health and mental hygiene.

*\*\*Local Law 22-2002*

**POWER-OPERATED SCAFFOLD.**-Any form of scaffold that is propelled vertically by the use of power machinery.

**PREMISES.**-Land, improvements thereon, or any part thereof.

**\*\*\*PRIMARY ENTRANCE(S).**-

The principal entrance(s) to a building primarily and expressly utilized for day-to-day pedestrian ingress and egress. Side, rear and other entrances solely used for freight and service shall not constitute a primary entrance.

*\*\*Local Law 58-1987.*

**PRIVATE GARAGE.**-A *building* or enclosed space used for the parking or storage of not more than four *motor vehicles* having fuel storage tanks of twenty-six gallon capacity or less, and in which no repair, body work, or painting of vehicles is conducted, and in which no gasoline, oil, or similar products are dispensed.

**PRIVATE SEWER.**-A sewer privately owned and controlled by public authority only to the extent provided by law.

**PROJECTING SIGN.**-A *sign* affixed to an exterior wall of a building and extending more than fifteen inches beyond the wall surface.

**PUBLIC AREAS.**-Area(s) within a building usually open to or used by the general public, such as lobbies, corridors, waiting rooms, reception rooms, rest rooms, etc.

**PUBLIC GARAGE.**-A *building* or space used for the parking or storage of *motor vehicles*, other than an *automotive service station*, *automotive repair shop*, *open parking structure*, or *private garage*. Truck loading and shipping areas shall be classified as public garages.

**PUBLIC SEWER.**-A sewer entirely controlled by public authority.

**PUBLIC SPACE.**-An open space outside of a *building*, which is dedicated or devoted to public use by lawful mapping or by any other lawful procedure.

**PURE TONE.**-A soundwave of a single frequency, so called to distinguish it from a complex tone.

**REAR LOT LINE.**-Any *lot line*, except a *street line*, that is parallel or within forty-five degrees of being

parallel to, and does not intersect any *street line* bounding such *lot*.

**REAR YARD.**-A *yard* extending for the full length of a *rear lot line*.

**REBOUND.**-Recovery of displacement due to release or reduction of applied load.

**REFRIGERATION.**-The process by which heat is absorbed from a substance by expansion or vaporization of a refrigerant.

**REQUIRED.**-Shall mean required by the provisions of this code.

**RETAINING WALL.**-A wall designed to prevent the lateral displacement of soil or other materials.

**RIGGING LOFT.**-A space above a stage, designed and used for the flying and storage of *scenery and scenic elements*. A space used for the occasional flying of incidental props during a performance shall not be deemed to constitute a rigging loft.

**ROOF.**-The topmost slab or deck of a *building*, either flat or sloping, with its supporting members, not including vertical supports.

**ROOF COVERING.**-The covering applied to the exterior surface of a *roof* for weather resistances, fire resistance, wear, and/or appearance, but not including insulation.

**ROOF SIGN.**-A *sign* erected and maintained on or above the *roof* of a *building*.

**ROOF STRUCTURE.**-An unenclosed *structure* on or above the *roof* of any part of a *building*. (See BULKHEAD and PENTHOUSE.)

**ROOMER.**-(See BOARDER.)

**SAFE AREA.**-An interior or exterior space that serves as a means of egress by providing a transitional area from, and that also serves as a normal means of entry to, an *assembly space*.

**SAFETY (CAR OR COUNTERWEIGHT).**- A mechanical device attached to an *elevator* car frame or to an auxiliary frame, or to the counterweight frame, to stop and hold the car or counterweight in case of predetermined overspeed or free fall, or if the hoisting ropes slacken.

**SCENERY AND SCENIC ELEMENTS.**-Any or all of those devices ordinarily used on a stage in the presentation of a theatrical performance, such as back drops, side tabs, teasers, borders or scrim, rigid flats, set pieces, and all properties, but not including costumes.

**SCHOOL.**-An elementary school, high school, or college, either public or private.

**SEATING SECTION.**-An area of seating bounded on all sides by aisles, *cross aisles*, walls or *partitions*.

**SELF-CLOSING.**-As applied to an *opening protective shall* mean a door, window, damper, or other device, and its assembly that is normally kept in a closed position and that is equipped with an *approved* device to insure immediate closing after having been opened for use.

**SELF-RELIEVING CONSTRUCTION.**-Construction using a type of framing in which the connections are capable of developing a known and dependable moment capacity but which, under larger moments, are capable of rotating (without fracture) an amount sufficient to accommodate the deflection due to the excess of the applied moment over the moment capacity.

**SERVICE EQUIPMENT.**-Equipment, including all components thereof, which provides sanitation, power, light, heat, cooling, ventilation, air-conditioning, refuse disposal, fire-fighting, transportation, or similar facility for a building which by design becomes a part of the *building*, and which is regulated by the provisions of this code.

**SEWAGE.**-Any liquid waste containing animal or vegetable matter in suspension or solution, and may include liquids containing chemicals in solution.

**SEWAGE DISPOSAL SYSTEM.**-A system for the disposal of *sewage* by means of a septic tank, cesspool, or mechanical treatment, all designed for use apart from a *public sewer* to serve a single establishment, *building*, or development.

**SEWAGE EJECTOR.**-A mechanical device used to pump or eject *sewage*.

**SHAFT.**-A vertical, inclined, or offset passage, or *hoistway*, penetrating through two or more floors of a *building* or through a floor and *roof*. (See CLOSED SHAFT and OPEN SHAFT.)

**SHALL.**-As used in this code, is always to be construed as mandatory.

**SHELL.**-A *structure* consisting of a curved or folded slab whose thickness is small compared to its other dimensions, and which is characterized by its three dimensional load-carrying behavior. The term *shall* include those forms of *construction* that approximate slab surfaces, such as *lamellas* and lattices.

**SIAMESE CONNECTION.**-A fitting connected to a fire extinguishing system and installed on the outside of a *building*, with two hose inlets for use of the fire department, to furnish or supplement the water supply to the system.

**SIDE LOT LINE.**-Any *lot line* that is not a *street line* or a *rear lot line*.

**SIDEWALK ELEVATOR.**-A freight *elevator* that operates between a sidewalk or other area outside of a *building* and floor levels inside the *building* below such area which has no landing opening into the *building* at its upper limit of travel, and which is not used to carry automobiles.

**SIDE YARD.**-A *yard* extending along a *side lot line* from the *required front yard* (or from the *street line* if no *front yard* is *required*) to the *required rear yard* (or to the *rear lot line* if no *rear yard* is *required*).

**SIDEWALK SHED.**-A construction over a public sidewalk, used to protect pedestrians from falling objects.

**SIGN.**-An outdoor *structure*, banner or other device, designed or *used* as an advertisement, or announcement

for the information or attraction of the public; consisting of the *framework* and all letters, words, numerals, illustrations, illumination, decorations, trade marks, emblems, symbols or other figures or characters.

**SINGLE POLE SCAFFOLD.**-A platform resting on putlogs or crossbeams, the outer ends of which are supported on ledgers secured to a single row of posts or uprights, and the inner ends of which are supported by a wall.

**SMOKE BARRIER.**- Any continuous non-combustible construction, vertical, horizontal, or otherwise, such as a wall, floor, or ceiling assembly, that is designed and constructed to restrict the spread of smoke.

**SMOKE-STOP DOOR.**-A door or set of doors placed in a *corridor* to restrict the spread of smoke and to retard the spread of fire by reducing draft.

**SOIL VENT.**-(See STACK VENT.)

**SOUND POWER.**-The rate at which sound energy is radiated by a source.

**SOUND POWER LEVEL.**-The ratio, expressed in *decibels*, [*sic*] of the *sound power* of a source to the reference power of ten-thirteen watts.

**SOUND PRESSURE LEVEL.**-The square ratio, expressed in *decibels*, of a sound pressure to a reference pressure of 0.0002 dynes per square centimeter.

**SPANDREL WALL.**-That portion of an exterior wall between the top of one opening and the bottom of another in the *story* directly above.

**SPARK ARRESTER.**-A device to prevent sparks, embers, or other ignited material above a given size from being expelled to the atmosphere from the top of a *chimney*.

**SPECIAL WASTE.**-Wastes that require special treatment before entry into the normal *plumbing system*.

**SPRAY BOOTH.**-A compartment in which spraying with any substance is carried on, consisting of at least two sides, a back, and a top.

**SPRAYING SPACE OR DIPPING SPACE.**-Any portion of a *building* in which the actual work of spraying, dipping, or immersing any article with or into *flammable* substances takes place.

**SPRINKLER ALARM.**-An apparatus constructed and installed so that a flow of water through the sprinkler system equal to, or greater than, that required for a single automatic sprinkler head will cause an alarm to be given.

**SPRINKLER SYSTEM.**-A system of piping and sprinkler heads connected to one or more sources of water supply.

**STACK.**-(See CHIMNEY.)- Also, a general term applying to any vertical line of soil, waste, vent, or inside leader piping. It shall not include vertical fixture and vent branches that do not extend through the *roof* or that pass through not more than two *stories* before being reconnected to the *vent stack* or *stack vent*.

**STACK VENT.**-The extension of a soil or waste stack above the highest horizontal drain connected to a plumbing *stack*.

**STAGE.**-An area used in the presentation of a live performance at anytime and includes: the performing area and non-audience areas that are open to the performing area. It may be level or raised with or without scenic elements, and generally is serviced by stage illumination appliances and control panels. For places of assembly classified as occupancy group F-1A or F-1B, the word stage shall be defined in accordance with the definition set forth in sections 27-546 and 27-547 of article three of subchapter eight of this code.

**STAGE LIFT.**-A movable section of a stage floor, designed to carry scenery between staging areas and the stage, and also *used* to be raised to and temporarily retained at elevations above or below the stage level.

**STANDPIPE SYSTEM.**-A system of piping, for fire-fighting purposes, consisting of connections to one or more sources of water supply, and serving one or more hose outlets.

**STORM DRAIN.**-(See BUILDING STORM DRAIN.)

**STORM SEWER.**-A sewer used for conveying rain water, surface water, condensate, cooling water, or similar clear liquid wastes which do not contain organic materials or compounds subject to decomposition.

**STORY.**-That portion of a *building* that is between a floor level and the next higher floor level or *roof* above.

**STREET.**-A thoroughfare dedicated or devoted to public use by legal mapping or other lawful means.

**STREET FLOOR.**-A floor, usually the principal entrance floor, that is not more than one-half *story* above or below *grade* at the location from which egress is provided to the *street*.

**STREET LINE.**-A *lot line* separating a *street* from other land.

**STREET MAIN.**-(See WATER MAIN and GAS SERVICE PIPING.)

**STRUCTURE.**-An assembly of materials forming *construction* for *occupancy* or *use*, including among others: *buildings*, *stadia*, *tents*, *reviewing stands*, *platforms*, *stagings*, *observation towers*, *radio towers*, *tanks*, *trestles*, *open sheds*, *coal pockets*, *shelters*, *fences*, and *display signs*.

**SUBSTRATE.**-A surface upon which a finish material is directly applied and which extends completely behind such finish material.

**SUMP PIT.**-A tank or pit that receives clear liquid wastes that do not contain organic materials or compounds subject to decomposition, located below the normal grade of the gravity system and that must be emptied by mechanical means.

**SUMP PUMP.**-A mechanical device used to pump the liquid waste from a *sump pit* into the *gravity drainage system*.

**SUPPLEMENTAL VERTICAL EXIT.**-An enclosed stair, ramp or *escalator* providing means of egress to an area of refuge at another level nearer to the *street floor*.

**THIS CODE.**-The building code.

**TIER OF SEATING.**-A general level of seating, such as an orchestra (usually the main tier), a balcony, or gallery.

**TRAILER CAMP.**-A *lot* or parcel of land used for temporary or permanent *occupancy* by two or more mobile homes or travel trailers.

**TRANSFER COLUMN.**-A column supported by beams, girders, trusses or similar members and reacting on two or more columns at a lower level.

**UNIFORMLY DISTRIBUTED LOAD.**-A conventionalized representation of an element of *dead* or *live load* as a load of uniform intensity, distributed over an area.

**\*USABLE DWELLING UNITS.**-Dwelling units which are accessible, constructed and equipped as set forth in reference standard RS 4-6, so as to be usable by all categories of people having physical disabilities.

*\*Local Law 58-1987.*

**USE (USED).**-The purpose for which a *building*, *structure*, or space is *occupied* or utilized, unless otherwise indicated by the text. Use (used) *shall* be construed as if followed by the words "or is intended, arranged, or designed to be used".

**VAULT (SIDEWALK).**-Any space below the surface of the sidewalk portion of a *street*, that is covered over, except those openings that are used exclusively as places for descending, by means of steps, to the *cellar* or *basement* of any *building*.

**VENT (GAS).**-A *flue* or *duct*, used to convey the products of combustion from gas-fired equipment to the outdoor air by natural draft.

**VENT STACK (PLUMBING).**-A vertical vent pipe extending through more than two *stories*, which is then connected to a *stack vent* or is otherwise extended through the *roof*, installed primarily for the purpose of providing circulation of air to and from any part of a *drainage system*.

**VENT SYSTEM (COMBUSTION).**-A *gas vent* or *chimney*, together with a *vent connector* that forms a continuous unobstructed passageway from gas burning equipment to the outdoor air for the purpose of removing *vent gases*.

**VENT SYSTEM (PLUMBING).**-A pipe or pipes installed to provide a flow of air to or from a *drainage system* or to provide a circulation of air within such system to protect *trap seals* from siphonage and back pressure.

**VERTICAL EXIT.**-A stair, ramp, or *escalator* serving as an *exit* from one or more floors above or below the street floor.

**WALL SIGN.**-A *sign* affixed to the exterior wall of a *building*, no part of which projects more than fifteen inches from the wall surface.

**WATER-DISTRIBUTION PIPING.**-The pipes in a *building* or *premises* that convey water from the *water service pipe* to the *plumbing fixtures* and other water outlets.

**WATER (STREET) MAIN.**-A water-supply pipe for public or community use controlled by public authority.

**WATER-SERVICE PIPE.**-The pipe from the *water (street) main* or other source of water supply to the *building* served.

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**WATER SUPPLY SYSTEM.**-The *water-service pipe*, the *water-distribution piping*, and all of the necessary connecting pipes, fittings, control valves, and appurtenances used for conveying water in a *plumbing system*.

**WET STANDPIPE SYSTEM.**-A *standpipe system* in which all of the piping is filled with water under pressure that is immediately discharged upon the opening of any hose valve.

**WINDING-DRUM MACHINE.**-As applied to an *elevator*, shall mean a geared-drive machine in which the hoisting ropes are fastened to and wind on a drum.

**WORKERS' HOIST.**-A hoisting and lowering mechanism equipped with a car that moves in guides in a substantially vertical direction and that is used primarily for raising and lowering workers to the working levels.

**WRITING (WRITTEN).**-The term shall be construed to include handwriting, typewriting, printing, photo-offset, or any other form of reproduction in legible symbols or characters.

**WRITTEN NOTICE.**-A notification in *writing* delivered by hand to the *person* or parties intended, or delivered at or sent by mail to the last business address known to the party giving such notice.

**YARD.**-That portion of a *lot* extending open and unobstructed from the lowest level to the sky along the entire length of a *lot line*.

**ZONE.**-A vertical division of a *building fire standpipe system* used to establish the water working pressures within the system and also to limit the pressure at the lowest hose outlet in the zone.

**ZONING RESOLUTION.**-The zoning resolution of the city of New York, adopted December fifteenth, nineteen hundred sixty-one, including all amendments thereto.

### ARTICLE 3 ABBREVIATIONS

#### Abbreviations. §[C26-202.0]27-233

bhp: brake horsepower	I.P.S.: iron pipe size
Btu: British [ <i>sic</i> ] thermal unit	lb.: pound
C: centigrade	mph: miles per hour
cfm: cubic feet per minute	oz.: ounce
cps: cycles per second	P.C.E.: pyrometric cone equivalent
cu. ft.: cubic feet	pcf: pounds per cubic foot
db: decibel	plf: pounds per linear foot
dia.: diameter	psf: pounds per square foot
F: fahrenheit	psi: pounds per square inch
fpm: feet per minute	psia: pounds per square inch absolute
fps: feet per second	psig: pounds per square inch gauge
fsp: fire standpipe	rpm: revolutions per minute
ft.: foot	sec.: second
gal.: gallon	swp: steam working pressure
gpm: gallons per minute	sq. ft.: square foot
gps: gallons per second	sq. in.: square inch
h.p.: horsepower	sq. yd.: square yard
hr.: hour	STC: sound transmission class
in.: inch	Tag: tagliabue
INR: impact noise rating	wwp: water working pressure

**Note**—For abbreviation of name of referenced national organizations, see reference standard RS 2-1.

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**SUBCHAPTER 3  
OCCUPANCY AND CONSTRUCTION  
CLASSIFICATION**

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**ARTICLE 1 GENERAL**

§[C26-300.1] 27-234 **Scope.**-The provisions of this subchapter shall establish and control the classification of all buildings, and spaces therein, with respect to occupancy group and class of construction.

§[C26-300.2] 27-235 **Reference standards.-**

Occupancy and construction classifications which appear in the several reference standards of this code shall apply to the provisions of the reference standard only unless otherwise indicated.

§[C26-300.3] 27-236 **Definitions.**-For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

**ARTICLE 2 OCCUPANCY CLASSIFICATIONS**

§[C26-301.1] 27-237 **Occupancy groups.**-Table 3-1 lists occupancy groups and sub groups that shall be established for classifying buildings and spaces in accordance with the provisions of articles three through twelve of this subchapter.

**TABLE 3-1 OCCUPANCY CLASSIFICATIONS**

Occupancy Group	Classification	Fire Index
A	High hazard	4
B-1	Storage (moderate hazard)	3
B-2	Storage (low hazard)	2
C	Mercantile	2
D-1	Industrial (moderate hazard)	3
D-2	Industrial (low hazard)	2
E	Business	2
F-1a	Assembly (theaters, etc.)	1
F-1b	Assembly (churches, concert halls, etc.)	1
F-2	Assembly (outdoors)	1
F-3	Assembly (museums, etc.)	1
F-4	Assembly (restaurants, etc.)	1
G	Education	1
H-1	Institutional (restrained)	1
H-2	Institutional (incapacitated)	1
J-1	Residential (hotels, etc.)	1
J-2	Residential (apartment houses, etc.)	1
J-3	Residential (one-and-two-family dwellings)	1
K	Miscellaneous	1

§[C26-301.2] 27-238 **Classification of spaces.**-Every space or room hereafter altered or erected shall, for the purposes of this code, be classified in one of the occupancy groups listed in Table 3-1 according to the occupancy or use of the space or room.

§[C26-301.3] 27-239 **Classification of buildings.**-Every building hereafter erected or altered under the provisions of section 27-115 of article four of subchapter one of this chapter shall, for the purposes of this code, be classified in one of the occupancy groups listed in table 3-1 according to the main use or dominant occupancy of the building. However, at the option of the applicant, subject to the approval of the commissioner, buildings may be classified in any other occupancy group, provided such occupancy group has a higher fire index, as listed in table 3-1, than the fire index of the occupancy group classification of the main use or dominant occupant.

§[C26-301.4] 27-240 **Separation of occupancies.**-Occupancies within buildings shall be separated from one another as follows:

- a. Spaces classified in occupancy groups having a higher fire index, as listed in table 3-1, than the fire index of the occupancy group classification of the building, shall be separated from adjoining spaces by construction meeting the fire-resistance rating requirements for fire divisions under the provisions of subdivision (a) of section 27-339 of article five of subchapter five of this chapter. Such occupancies shall, for the purposes of this code, be classified and treated as separate buildings (hereinafter referred to as “building section”).
- b. Spaces classified in occupancy groups having the same or lower fire index, as listed in table 3-1, than the fire index of the occupancy group classification of the building, shall be separated from adjoining spaces by construction meeting the fire-resistance rating requirements for fire separations under the provisions of subdivision (b) of section 27-339 of article five of subchapter five of this chapter.



§[C26-301.5] 27-241 **Classification tables.**-Table 3-2 and reference standard RS 3-3 list representative occupancies that shall be used as a basis for classifying buildings and spaces by occupancy.

§[C26-301.6] 27-242 **Multiple occupancy or use.**-When a building or space is used for multiple purposes, involving different activities at different times, the building or space shall be given a separate occupancy group classification for each of the activities involved. The design and construction of the building or space shall be in accordance with the most restrictive provisions of this code that apply to any of the occupancy group classifications utilized. However, a minor variation of any occupancy or use of a space from technical compliance with a particular space occupancy classification shall not be prohibited if such variation is normally associated with the occupancy classification and no specific danger or hazard is created.

### **ARTICLE 3 OCCUPANCY GROUP A-HIGH HAZARD**

§[C26-302.1] 27-243 **Classification.**-Buildings and spaces shall be classified in the high hazard occupancy group when they are used for storing, manufacturing, or processing potentially-explosive products or materials, or highly-combustible or highly-flammable products or materials that are likely to burn with extreme rapidity. The high hazard group shall also include: uses that involve storing, processing, or handling any materials that produce explosive dust, or that result in the division of matter into fine particles subject to spontaneous ignition; uses that employ solids or substances that ignite or produce flammable gases on contact with water; and any other uses that constitute a high fire hazard because of the form, character, or volume of the materials involved.

(a) Typical material contents.-Acetylene gas and gases under pressure of fifteen psig or more and in quantities greater than twenty-five hundred cubic feet, including hydrogen, illuminating gas, natural gas, and all other gases subject to explosion; gas piping at pressure levels above fifteen psig regardless of the quantities of gas; celluloid and celluloid products; cotton batting; kerosene; fuel or other oils having a flash point under 200 F [*sic*] (tag closed cup), except five hundred fifty gallons or less in one- and two-family dwellings; refrigerating systems using high hazard refrigerants as defined in subchapter thirteen of this chapter, and except that in buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight the storage of tank trucks or other vehicles, approved by the fire commissioner for the transportation of products having a flash point of over 100 F [*sic*] (tag open cup), and where the product contained in the cargo space of the vehicles is pending delivery, shall

only be considered to constitute a high hazard occupancy when the product is stored in quantities greater than forty-five thousand gallons.

(b) Typical occupant activities.-Artificial [*sic*] flower and synthetic leather manufacture; ammunition, explosives, and fireworks manufacture, sales or storage; dry cleaning or dyeing; using or storing gasoline or other combustible solvents as outlined in article six of subchapter seven of this chapter; feather renovating; fruit ripening processes; hydrogenation processes; match manufacture or storage; metal enamelling or japanning; paint and varnish manufacture; paint spraying or dipping, as specified in article three of subchapter seven of this chapter; derivation of petroleum products by application of heat; processing of paper or cardboard in loose form; pyroxylin products manufacture and storage; rag sorting and storage; shoe polish manufacture; straw goods manufacture or broom corn storage; tar, pitch, or resin processing; waste paper sorting, shredding, storage, or baling; cotton waste processes.

§[C26-302.2] 27-244 **Location restrictions.**-No space classified in the high hazard occupancy group shall be located above the second story of any building or building section classified in construction group II containing a space classified in occupancy group J-1 or J-2.

### **ARTICLE 4 OCCUPANCY GROUP B-STORAGE**

§[C26-303.1] 27-245 **Classification.**-Buildings and spaces shall be classified in the storage occupancy group when they are used primarily for storing goods. When the goods stored are highly combustible, flammable, or potentially explosive, the building or space shall meet the requirements for high hazard occupancies when the latter are more restrictive than the corresponding requirements for the storage classification. The storage occupancy group consists of sub groups B-1 and B-2.

§[C26-303.2] 27-246 **Occupancy group B-1.**-Shall include buildings and spaces used for storing any flammable or combustible materials that is likely to permit the development and propagation of fire with moderate rapidity.

(a) Typical material contents: bags (cloth, burlap, and paper); bamboo and rattan; baskets; belting (canvas and leather); books and paper in rolls or packs; buttons, including cloth-covered, pearl, or bone; boots and shoes; cardboard and cardboard boxes; wearing apparel; cordage; furniture; furs; glue, mucilage, paste, and size; horn and combs other than celluloid; leather enamelling or japanning; linoleum; livestock; lumber; photo-engraving supplies; silk; soap; sugar; tobacco; cigars, cigarettes, and snuff; upholstery and mattresses; wax candles.

**\*TABLE 3-2 TYPICAL OCCUPANCIES  
FOR OCCUPANCY CLASSIFICATION**

Occupancy Group	Designation	Representative Occupancies
HIGH HAZARD	A	Paint shop and storerooms; industrial smoke houses; grain elevators; tanneries with enamelling or japanning; distilleries; sugar, starch, cereal, feed, flour, and grist mills; any space containing gas distribution piping at pressure levels above fifteen psig
STORAGE	B-1	Warehouses; storerooms; freight depots; stables; coal pockets; group 1 public garages**
	B-2	Warehouses; storerooms; private garages; green houses; group 2 public garages**
MERCANTILE	C	Retail stores; shops; sales rooms; markets
INDUSTRIAL	D-1	Baking plants; breweries; automotive repair shops; foundries [ <i>sic</i> ]; heliports; scenery shops
	D-2	Mechanical and electrical equipment rooms; power plants, and boiler and furnace rooms, except those containing gas distribution piping at pressure levels above fifteen psig; commercial laundries; vocational training shops; laboratories; nonresidential kitchens
BUSINESS	E	Office buildings; banks; civic administration buildings; radio and television stations not classified as places of assembly or as equipment rooms; telephone exchanges; barber and beauty shops; automotive service stations; neighborhood family care centers; medical offices or group medical centers
[ASSEMBLY	F-1a	Theaters; playhouses; opera houses]***
	F-1b	Churches; lecture halls; court rooms; convention halls; concert halls; sports arenas; planetariums; motion picture theaters
	F-2	Grandstands; bleachers; stadiums; drive-in theaters; amusement attractions and devices; bandstands; skating rinks
	F-3	Exhibition halls; galleries; gymnasiums; museums; passenger terminals; bowling alleys; billiard parlors; skating rinks
	F-4	Restaurants; night clubs; cabarets; dance halls; ballrooms; banquet rooms; cafeterias; snack bars; taverns; coffee houses
EDUCATIONAL INSTITUTIONAL	G	Schools; academies; universities; libraries
	H-1	Jails; prisons; reformatories; mental institutions
	H-2	Hospitals; sanitariums; clinics; nursing homes; orphanages; homes for the aged; day nurseries
RESIDENTIAL	J-1	Hotels; motels; lodging houses; rooming houses
	J-2	Apartment houses; apartment hotels; school dormitory buildings
	J-3	One-family and two-family dwellings; rectories; convents; [group homes]***
MISCELLANEOUS	K	Sheds; fences; signs

\*This list of occupancies is representative only and is not complete.

See reference standard RS 3-3 for additional listings.

\*\*See article ten of subchapter seven of this chapter.

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

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§[C26-303.3] 27-247 **Occupancy group B-2.**-Shall include buildings and spaces used for storing noncombustible materials and materials that do not ordinarily burn rapidly.

### ARTICLE 5 OCCUPANCY GROUP C - MERCANTILE

§[C26-304.1] 27-248 **Classification.**-Buildings and spaces shall be classified in the mercantile occupancy group when they are used for display and sales of goods accessible to public inspection. Highly combustible or flammable goods, such as those made of pyroxylin products, shall be limited to small quantities that do not constitute a high hazard; if not so limited, the occupancy shall meet the requirements for high hazard occupancies when the latter are more restrictive than the corresponding requirements for the mercantile classification.

### ARTICLE 6 OCCUPANCY GROUP D- INDUSTRIAL

§[C26-305.1] 27-249 **Classification.**-Buildings and spaces shall be classified in the industrial occupancy group when they are used for fabricating, assembling, manufacturing, or processing products, materials, or energy, except that when any products or materials, or other products or materials used in their manufacture are highly combustible, flammable, or explosive, the occupancy shall meet the requirements for high hazard occupancies when the latter are more restrictive than the corresponding requirements for the industrial classification. The industrial occupancy group consists of sub groups D-1 and D-2.

§[C26-305.2] 27-250 **Occupancy group D-1.**-Shall include buildings and spaces in which the fabrication, assembly, manufacturing, or processing represents a moderate fire hazard due to the extent and nature of such operations, or to the materials involved.

(a) Typical occupant activities-Canning, including food products and condensed and powdered milk manufacturer; dry cleaning or dyeing using or storing solvents having a flash point between 100° F and 138.2° F (Tag closed-cup); electrolytic processes; glass manufacture, leather tanning and treating, excluding enamelling or japanning; sugar refining; textile milling, including canvas, cotton, cloth, bagging, burlap, carpets, and rugs; upholstering; woodworking; cotton dressmaking; and manufacturing or processing materials such as those outlined in subdivision (a) of section 27-246 of article four of this subchapter.

§[C26-305.3] 27-251 **Occupancy group D-2.**-This group shall include buildings and spaces in which the fabrication, assembly, manufacturing, or processing represents a low fire hazard.

§[C26-305.4] 27-252 **Location restrictions.**-No space classified in the industrial group D shall be located above the second story of any building or building section classified in construction group II containing a space classified in occupancy group J-1 or J-2.

### ARTICLE 7 OCCUPANCY GROUP E-BUSINESS

§[C26-306.1] 27-253 **Classification.**-Buildings and spaces shall be classified in the business occupancy group when they are occupied for transacting business; for rendering professional services; or for performing other commercial services that may incidentally involve the storage of limited quantities of stocks of goods for office use or purposes. Buildings and spaces used for prosecuting public or civic services shall also be classified in this group.

### ARTICLE 8 OCCUPANCY GROUP F- ASSEMBLY

\*§[C26-307.1] 27-254 **Classification.**-Buildings and spaces exclusive of dwelling units shall be classified in the assembly occupancy group when they are designed for use by any number of persons for religious, recreational, political or social purposes, or for the consumption of food or drink or for similar group activities; or when occupied by seventy-five people or more for educational purposes. When such occupancies are enclosed and contain or are designed for use by seventy-five or more persons or are outdoor spaces and contain or are designed for use by two hundred or more persons, they shall comply with the requirements of subchapter eight of this chapter for places of assembly.  
*\*Local Law 23-1990.*

§[C26-307.2] 27-255 **Occupancy group F-1.**-Shall include those buildings and spaces in which, during the major period of occupancy, the persons assembled comprise a seated or otherwise passive audience to a performance or presentation, and have their attention focused in a common direction or at a common subject. Occupancy group F-1 consists of two subdivisions F-1a and F-1b.

(a) Occupancy group F-1a.-Includes buildings and spaces in which scenery and scenic elements are used.

(b) Occupancy group F-1b.-Includes buildings and spaces in which scenery and scenic elements are not used.

§[C26-307.3] 27-256 **Occupancy group F-2.**-Shall include all outdoor structures and spaces.

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§[C26-307.4] 27-257 **Occupancy group F-3.**-Shall include buildings and spaces in which the persons assembled are physically active and do not have a common center of attention.

§[C26-307.5] 27-258 **Occupancy group F-4.**-Shall include buildings and spaces in which persons assemble for dancing or for the consumption of food or drink, or for any combination of dancing, eating, drinking, or entertainment.

**ARTICLE 9 OCCUPANCY GROUP G-  
EDUCATIONAL**

§[C26-308.1] 27-259 **Classification.**-Buildings, building sections and spaces shall be classified in the educational occupancy group when persons occupy them for instruction or other educational purposes except those spaces occupied as a place of assembly. These spaces shall be classified in occupancy group F-assembly, under the provisions of article eight of this subchapter. Such buildings, building sections and spaces occupied for instruction and used exclusively by adults may be classified, by the commissioner in occupancy group E-business and if so classified such buildings, building sections and spaces shall comply with the requirements for such classification.

**ARTICLE 10 OCCUPANCY GROUP H-  
INSTITUTIONAL**

§[C26-309.1] 27-260 **Classification.**-Buildings and spaces shall be classified in the institutional occupancy group when persons suffering from physical limitations because of health or age are harbored therein for care or treatment; when persons are detained therein for penal or correctional purposes; or when the liberty of the inmates is restricted. The institutional occupancy group consists of sub groups H-1 and H-2.

§[C26-309.2] 27-261 **Occupancy group H-1.**-Shall include buildings and spaces used for the detention of persons under restraint.

§[C26-309.3] 27-262 **Occupancy group H-2.**-Shall include buildings and spaces used for the care or treatment of persons with physical limitations because of health or age. This shall not include medical or dental offices providing services to ambulatory non-hospitalized persons, such as neighborhood family care centers, medical or dental offices, group medical offices, and the like.

**ARTICLE 11 OCCUPANCY GROUP J-  
RESIDENTIAL**

§[C26-310.1] 27-263 **Classification.**-Buildings and spaces shall be classified in the residential occupancy group when families or households dwell therein, or when sleeping accommodations, with or without dining facilities, are provided therein for individuals. Excluded from this group are those buildings and spaces classified under the institutional occupancy group. The residential occupancy consists of sub groups J-1, J-2, and J-3.

§[C26-310.2] 27-264 **Occupancy group J-1.**-Shall include buildings and spaces that are primarily occupied for the shelter and sleeping accommodation of individuals on a day-to-day or week-to-week basis.

§[C26-310.3] 27-265 **Occupancy group J-2.**-Shall include buildings with three or more dwelling units that are primarily occupied for the shelter and sleeping accommodation of individuals on a month-to-month or longer-term basis.

§[C26-310.4] 27-266 **Occupancy group J-3.**-Shall include buildings occupied as one-family or two-family dwellings, or as convents or rectories.

**ARTICLE 12 OCCUPANCY GROUP K-  
MISCELLANEOUS**

§[C26-311.1] 27-267 **Classification.**-Structures of a temporary character, and minor occupancies not classified in any other specific occupancy group, shall be classified in the miscellaneous occupancy group. Such structures and occupancies shall be constructed, equipped, and maintained to meet the requirements of this code commensurate with the fire and life hazard incidental to their use. The miscellaneous occupancy group includes all accessory structures such as sheds, fences, and similar constructions.

**ARTICLE 13 DOUBTFUL OCCUPANCIES**

§[C26-312.1] 27-268 **Classification.**-When a building or space is used for an occupancy not specifically provided for in this code, or when its classification is otherwise uncertain, such building or space shall be included in the occupancy group that it most nearly resembles with respect to the existing or proposed life and fire hazard, and it shall be so classified by the architect or engineer subject to the approval of the commissioner.

**ARTICLE 14 CONSTRUCTION CLASSIFICATIONS**

§[C26-313.1] 27-269 **Construction classes.**-Table 3-3 lists construction classes that shall be established for classifying buildings and spaces by construction in accordance with the provisions of articles fifteen, sixteen and seventeen of this subchapter.

**TABLE 3-3 CONSTRUCTION CLASSES**

Construction Group	Class
I- Noncombustible	I-A— (4-hr. protected)
	I-B— (3-hr. protected)
	I-C— (2-hr. protected)
	I-D— (1-hr. protected)
	I-E— (unprotected)
II- Combustible	II-A— (heavy timber)
	II-B— (protected wood joist)
	II-C— (unprotected wood joist)
	II-D— (protected wood frame)
	II-E— (unprotected wood frame)

§[C26-313.2] 27-270 **Classification of buildings and spaces.**-Every building, room, or space hereafter altered or erected shall, for the purposes of this code be classified in one of the construction classes listed in table 3-3.

§[C26-313.3] 27-271 **Classification table.**-The fire-resistance ratings of construction elements in hours listed in table 3-4 shall be used as a basis for classifying buildings and spaces by construction. Fire-resistance ratings shall be based on the test procedures of reference standard RS 3-1 and shall apply to all occupancy groups except as specifically noted. For hazardous occupancies involving an exceptionally high degree of fire risk or an exceptionally high concentration of combustible or flammable contents, the commissioner may increase the requirements of table 3-4.

§[C26-313.4] 27-272 **False designation.**-No building or space shall be designated a given construction class unless it conforms to the minimum requirements for that class; and no building or space shall be posted, used, designated, or advertised as of a given construction class unless it complies with the minimum requirements of this code for that class.

§[C26-313.5] 27-273 **Minimum requirements.**-When a class of construction is utilized which is superior to that required for any particular use, nothing in this code shall be construed to require full compliance with the requirements for the higher class; the designated construction classification of the building or space shall be that of the lesser classification, unless all of the requirements for the higher class are met.

**ARTICLE 15 CONSTRUCTION GROUP I- NONCOMBUSTIBLE**

§[C26-314.1] 27-274 **Classification.**-Buildings or spaces in noncombustible construction group I are those in which the walls, exitways, shafts, structural members, floors, and roofs are constructed of noncombustible materials and assemblies affording the fire-resistance ratings specified in table 3-4. The noncombustible construction group I consists of classes I-A, I-B, I-C, I-D, and I-E.

§[C26-314.2] 27-275 **Construction class I-A.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of four-hour fire-resistance rating.

§[C26-314.3] 27-276 **Construction class I-B.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of three-hour fire-resistance rating.

§[C26-314.4] 27-277 **Construction class I-C.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of two-hour fire-resistance rating.

§[C26-314.5] 27-278 **Construction class I-D.**-Includes buildings and spaces in which the bearing walls and other major structural elements are generally of one-hour fire-resistance rating.

§[C26-314.6] 27-279 **Construction class I-E.**-Includes buildings and spaces in which the bearing walls and other major structural elements generally have no fire-resistance rating.

**ARTICLE 16 CONSTRUCTION GROUP II- COMBUSTIBLE**

§[C26-315.1] 27-280 **Classification.** - Buildings and spaces in combustible construction group II are those in which the walls, partitions, structural members, floors, and roofs are constructed wholly or partly of combustible materials affording the required degree of fire-resistance specified in table 3-4. The combustible construction group II consists of classes II-A, II-B, II-C, II-D, and II-E.

TABLE 3-4

†TABLE 3-4 CONSTRUCTION CLASSIFICATIONS	CONSTRUCTION ELEMENT		CLASS I-A		CLASS I-B		CLASS I-C		CLASS I-D		CLASS I-E			
			Rating in Hrs.	Ext. <sup>a,b</sup> Open'g	Rating in Hrs.	Ext. <sup>a,b</sup> Open'g	Rating in Hrs.	Ext. <sup>a,b</sup> Open'g	Rating in Hrs.	Ext. <sup>a,b</sup> Open'g	Rating in Hrs.	Ext. <sup>a,b</sup> Open'g		
CONSTRUCTION GROUP 1 NONCOMBUSTIBLE	Exterior Walls with an Exterior Separation of	3'-0" or less	Bearing	4	N.P.	3	N.P.	2	N.P.	2	N.P.	2	N.P.	
			Non-bearing <sup>f</sup>	2		2		2		2		2		
		More than 3'-0" but less than 15'-0"	Bearing	4	3 1/3 % protected	3	3 1/3 % protected	2	3 1/3 % protected	2	3 1/3 % protected	2	6 2/3 % protected	
			Non-bearing <sup>f</sup>	2		2		2		2		2		
		15'-0" or more but less than 30'-0"	Bearing	4	3 1/3 %	3	3 1/3 %	2	3 1/3 %	1	3 1/3 %	0	N.L.	
			Non-bearing <sup>f</sup>	1½		1½		1		1		0		
		30'-0" or more	Bearing	4	N.L.	3	N.L.	2	N.L.	1	N.L.	0		
			Non-bearing <sup>f</sup>	0		0		0		0		0		
		Required fire-resistance ratings of construction elements in hours, based on the test procedures of reference standard RS 3-1.	Interior bearing walls and bearing partitions.		4		3		2		1		0 <sup>g,i</sup>	
			Enclosure of vertical exits <sup>c</sup> , exit passageways, hoistways and shafts.		2		2		2		2		2	
Fire divisions and fire separations.			See Article 5											
Columns <sup>k</sup> , girders, trusses (other than roof trusses) and framing.	Supporting one floor		3		2		1½		1		0 <sup>g,i</sup>			
	Supporting more than one floor <sup>l</sup>		4		3		2		1		0 <sup>g,i</sup>			
Structural members supporting a wall.			Same as required fire resistance of wall supported, but not less than rating required for member by the class of construction.											
Floor construction including beams.			3		2		1½		1		0 <sup>g,i</sup>			
Roof construction, including beams, trusses and framing, including arches, domes, shells, cable supported roofs and roof decks <sup>h</sup> .	15'-0" or less in ht. above floor to lowest member		2		1½		1 <sup>i</sup>		1 <sup>i</sup>		0 <sup>g,i</sup>			
	15'-0" to 20'-0" in ht. above floor to lowest member		2 <sup>c,i</sup> or 1 <sup>d,i</sup>		1½ <sup>c,i</sup> or 1 <sup>d,i</sup>		1 <sup>i</sup>		1 <sup>i</sup>		0 <sup>g,i</sup>			
	20'-0" or more in ht. above floor to lowest member		2 <sup>c,i</sup> or 0 <sup>d,g,i</sup>		1½ <sup>c,i</sup> or 0 <sup>d,g,i</sup>		1 <sup>c,i</sup> or 0 <sup>d,g,i</sup>		1 <sup>c,i</sup> or 0 <sup>d,g,i</sup>		0 <sup>g,i</sup>			
Key:	N.P.—Not permitted													
	N.L.—No limit													
Noncombustible Materials														

Notes:

a. The area of openings permitted in exterior walls at any story shall be obtained by multiplying the percentage shown in the table by the exterior separation distance in feet, and then multiplying that product by the square-foot area of the façade of that story. Requirements for protected exterior openings shall not apply to churches. [Protected openings within an exterior separation of 3 ft. 0 inch or less are permitted for buildings classified in Occupancy Groups J-2 and J-3 provided, however said openings do not exceed in total area 10% of the façade of the story in which they are located. The openings however, may not be credited towards meeting any of the mandatory natural light or ventilation requirements of Art. 12\* Protection of openings with an exterior separation of 3 ft. to 30 ft. shall not be required for J2 and J3 occupancy groups.]\*\* or to buildings classified in occupancy groups J-2 and J-3\*\*\* See section 27-331 of article four of subchapter five of this chapter for additional requirements for exterior walls and exterior wall openings.

b. Upon special application, the commissioner may permit exterior wall openings to be constructed in excess of the permitted area established by table 3-4 if such openings at the time of their construction are located at least sixty feet in a direct line from any neighboring building except as otherwise permitted by footnote f. Such additional openings may not, however, be credited toward meeting any of the mandatory natural light or ventilation requirements of subchapter twelve of chapter on of this title. If any neighboring building is later altered or constructed to come within the above distance limitation, the affected exterior openings shall immediately be closed with construction meeting the fire-resistance rating requirements for exterior wall construction of the building in which they are located.


\*Now Subchapter 12.

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

\*\*\*Copy from closing brackets to these asterisks enacted but probably intended to be omitted.

† Local Law 77-1988

TABLE 3-4 (continued)

TABLE 3-4 CONSTRUCTION CLASSIFICATIONS (continued)	CONSTRUCTION ELEMENT	CLASS II-A		CLASS II-B		CLASS II-C		CLASS II-D		CLASS II-E				
		Rating	Ext. <sup>a,b</sup>	Rating	Ext. <sup>a,b</sup>	Rating	Ext. <sup>a,b</sup>	Rating	Ext. <sup>a,b</sup>	Rating	Ext. <sup>a,b</sup>			
		in Hrs.	Open'g	in Hrs.	Open'g	in Hrs.	Open'g	in Hrs.	Open'g	in Hrs.	Open'g			
CONSTRUCTION GROUP II COMBUSTIBLE	Exterior Walls with an Exterior Separation of	3'-0" or less	Bearing	2	N.P.	2	N.P.	2	N.P.	2	N.P.	2	N.P.	
			Non-bearing <sup>f</sup>	2		2		2		2		2		
		More than 3'-0" but less than 15'-0"	Bearing	2	3 1/3 %	2	3 1/3 %	2	3 1/3 %	1	6 2/3 %	1	6 2/3 %	
			Non-bearing <sup>f</sup>	2	protected	2	protected	2	protected	1		1		
		15'-0" or more but less than 30'-0"	Bearing	2	3 1/3 %	2	3 1/3 %	2	3 1/3 %	1	N.L.	0	N.L.	
			Non-bearing <sup>f</sup>	2		2		2		1		0		
		30'-0" or more	Bearing	1	N.L.	1½	N.L.	1½	N.L.	1		0		
			Non-bearing <sup>f</sup>	0		0		0		0		0		
		Required fire-resistance ratings of construction elements in hours, based on the test procedures of reference standard RS 3-1.	Interior bearing walls and bearing partitions.		2		1		0		1		0	
			Enclosure of vertical exits <sup>e</sup> , exit passageways, hoistways and shafts.		2		2		1 <sup>i</sup>		1 <sup>i</sup>		1	
			Fire divisions and fire separations.		See Article 5									
			Columns <sup>k</sup> , girders, trusses (other than roof trusses) and framing.	Supporting one floor	see section 27-623		1		0 or 1 <sup>j</sup>		1		0	
Supporting more than one floor	see section 27-623			1		0 or 1 <sup>j</sup>		1		0				
Structural members supporting a wall.			Same as required fire resistance of wall supported, but not less than rating required for member by the class of construction.											
Floor construction including beams.			see section 27-623		1		0 or 1 <sup>j</sup>		1		0			
Roof construction including beams, trusses and framing, including arches, domes, shells, cable supported roofs and roof decks <sup>h</sup> .	15'-0" or less in ht. above floor to lowest member		see section 27-623		¾		0		¾		0			
	15'-0" to 20'-0" in ht. above floor to lowest member		see section 27-623		¾		0		¾		0			
	20'-0" or more in ht. above floor to lowest member		see section 27-623		¾		0		¾		0			
Key:	N.P.—Not permitted													
	N.L.—No limit													
	 Noncombustible Materials													

<sup>c</sup> Applies to occupancy groups A,B-1,B-2, and D-1

<sup>d</sup> Applies to all occupancy groups other than those described in footnote c.

<sup>e</sup> See subdivision (i) of section 27-375 of article five of subchapter six of this chapter for exceptions to stair enclosure requirements.

<sup>f</sup> When two or more buildings are constructed on the same lot, and the combined floor area of the buildings does not exceed the limits established by tables 4-1 and 4-2 for any one of the buildings, no fire-resistance rating shall be required for nonbearing portions of the exterior walls of those buildings facing each other, and there shall be no limitation on the permitted amount of exterior openings.

<sup>g</sup> Fire retardant treated wood complying with the requirements of section 27-328 of article three of subchapter five of this chapter may be used.

<sup>h</sup> Tabulated ratings apply to buildings over one story in height. In one story buildings roof construction may be of material having 0 hour fire-resistance rating.

<sup>i</sup> Materials which are not noncombustible, as defined in subchapter two of chapter one of this title, may be used in nonbearing construction elements if they fall into one of the following categories:

1. Materials having a structural base of noncombustible materials as defined in subchapter two, and having a surface not over one-eighth inch thick which when tested in accordance with the provisions of reference standard RS 3-2 has a flame spread rating not higher than fifty.

2. Materials which when tested in accordance with the provisions of reference standard RS 3-2 have a surface flame spread rating not higher than twenty-five without evidence of continued progressive combustion, and which are of such composition that surfaces which would be exposed by cutting through the material in any way would not have a flame spread rating higher than twenty-five without evidence of continued progressive combustion.

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### Notes for Table 3-4 (continued)

j. Applies to the construction of the street floor and all construction below the level of the street floor in building or spaces classified in occupancy group J-2 except where the space below the street floor does not exceed five feet in height.

k. Columns supporting the roof of a one-story building shall have the same fire-resistance rating as required for a column supporting one floor in a building of the same construction class.

l. Members supporting loads of not more than two floors or one floor and a roof need not have a fire-resistance rating greater than the floor construction fire-resistance requirement in buildings classified in occupancy groups G, H, and J-2, not including unsprinklered spaces of other occupancies, and in fully sprinklered buildings in occupancy groups E and J-1.

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### §[C26-315.2] 27-281 Construction class II-A.-

Includes heavy timber construction in which fire-resistance is attained by limiting the minimum sizes of wood structural members and the minimum thickness and composition of wood floors and roofs; by avoiding concealed spaces under floors and roofs or by providing fire-stopping protection for these spaces; and by using fastenings, construction details, and adhesives for structural members as required by article seven of subchapter ten of this chapter. The minimum dimensions for framing members shall be prescribed in section 27-623 of article seven of subchapter ten of this chapter, except that members which are protected to provide a fire-resistance rating of at least one hour need not comply with this requirement.

### §[C26-315.3] 27-282 Construction class II-B.-

Includes buildings and spaces in which the exterior walls, fire walls, exitways, and shaft enclosures are of noncombustible materials having the required fire-resistance ratings; and in which the floors, roofs, and interior framing are wholly or partly of wood of smaller dimensions than required for class II-A construction, or are of other combustible or noncombustible materials, having the required fire-resistance ratings.



**SUBCHAPTER 4  
BUILDING LIMITATIONS**

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## ARTICLE 1 GENERAL

§[C26-400.1] 27-288 **Scope.** -The provisions of this article establish building access requirements; shall regulate the division of the city of New York into fire districts and control the occupancy groups and construction classes permitted therein; shall regulate permissible building areas, height and projections beyond the street line and shall establish special flood hazard areas and a regulatory flood datum in the city of New York and regulate permissible occupancies and construction or other improvement below such flood datum within such flood hazard areas.

§[C26-400.2] 27-289 **Standards.** - The provisions of reference standard RS-4 shall be a part of this subchapter.

§[C26-400.3] 27-290 **Definitions.** - For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

### \* ARTICLE 2 BUILDING ACCESS SUBARTICLE 1 FIRE DEPARTMENT ACCESS

§[C26-401.1] 27-291 **Frontage.** - Every building, exclusive of accessory buildings, shall have at least eight per cent of the total perimeter of the building fronting directly upon a street or frontage space. For the purposes of this section, building perimeter shall be measured at that story having the maximum enclosed floor area.

§[C26-401.2] 27-292 **Building access.** - Provisions shall be made for access by the fire department to every building as follows:

(a) **Above grade.** - Access shall be provided directly from the outdoors to each story below a height of one hundred feet except to the first story or ground floor, by at least one window or readily identifiable access panel within each fifty feet or fraction thereof of horizontal length of every wall that fronts on a street or frontage space. Windows shall be openable or breakable from both the inside and the outside, and shall have a size when open of at least twenty-four inches by thirty-six inches. Panels shall be openable from both the inside and outside and shall have a height when open of forty-eight inches and a width of at least thirty-two inches. The sill of the window or panel shall not be higher than thirty-six inches above the inside floor.

(b) **Below grade.** - Access shall be provided directly from the outdoors to the first basement or cellar story below grade, except as provided in paragraphs two, three and four of this subdivision, within each one hundred feet or fraction thereof of horizontal length of every wall that fronts on a street or frontage space. Such access shall be by stairs, doors, windows or other

means that provide an opening forty-eight inches high and thirty-two inches wide, the sill of which shall not be higher than thirty-six inches above the inside floor. If an areaway is used to provide below grade access, the minimum horizontal dimension shall be at least one-third the depth of the areaway or six feet whichever is less.

(1) Access to additional stories below grade is not mandatory since they are required to be sprinklered as provided in subdivision k of section 27-954 of article four of subchapter seventeen of this chapter.

(2) One- and two-family dwellings need not provide direct access.

(3) Any building classified in occupancy group J-2 not more than three stories in height and with not more than two dwelling units on any story need not provide direct access when such first basement or cellar story is used for dwelling units or for uses accessory to the residential use in the building.

(4) Except as provided in paragraph three of this subdivision, for buildings classified in occupancy group J-1 or J-2 only one direct access from the outdoors to the first basement or cellar story consisting of a stair or door shall be required when such story is used for dwelling units or for uses accessory to the residential use in the building.

(c) **Signs.** - Where wall signs are erected to cover doors or windows of existing buildings, access panels shall be provided as necessary to comply with the requirements of subdivisions (a) and (b) of this section.

(d) **Location.** - Wherever practicable, one access opening in each story shall provide access to a stairway, or where there is no stairway at the exterior wall, one access opening in each story shall be located as close as practicable to a stairway.

(e) **Exemptions.** - The provisions of subdivisions (a) through (d) of this section shall not apply to any story that is completely protected by an automatic sprinkler system conforming to the construction requirements of subchapter seventeen.

*\*Local Law 58-1987.*

### \*SUBARTICLE 2 FACILITIES FOR PEOPLE HAVING PHYSICAL DISABILITIES

§27-292.1 **Scope.** - As set forth in this subarticle, buildings shall be provided with accessible routes, usable or adaptable space and accessible elements and facilities to make buildings accessible and usable by, and to establish a safe environment for, all categories of people having physical disabilities.

§27-292.2 **Standards.** - The pertinent provisions of reference standard RS 4-6 shall be part of this subarticle.

§27-292.3 **Definitions.** - For definitions to be used in

the interpretation of this subarticle, see section 27-232 and reference standard RS 4-6.

**§27-292.4 General Requirements. -**

(a) This subarticle shall apply to all buildings or portions thereof and their accessory areas, except as specified in this subarticle.

(b) The provisions of this subarticle shall be supplemental to and take precedence over less restrictive provisions of this code in the following articles and sections and in their referenced national standards:

- (1) Subchapter four, building limitations
  - a. §27-308 ramps
  - (2) Subchapter six, means of egress
    - a. §27-357 (d) building access
    - b. §27-371 (e) door opening width
    - c. §27-377 ramps
  - (3) Subchapter seven, special uses and occupancies
    - a. Article ten, public garages
    - b. Article eleven, open parking structures
    - c. Article thirteen, open parking lots
    - d. Article fifteen, swimming pools
  - (4) Subchapter eight, places of assembly
    - a. §27-531 Seating in assembly spaces
  - (5) Subchapter sixteen, plumbing and gas piping
    - a. Reference standard RS-16, paragraph (c) of section P104.1 Facilities for physically handicapped
    - b. Reference standard RS-16, paragraph (d) of section P104.1 accessibility
  - (6) Subchapter seventeen, fire alarm, detection and extinguishing equipment
    - c. Article six, smoke detecting devices
  - (7) Subchapter eighteen, elevators and conveyors
    - a. Reference standard RS 18-1

(c) Facilities in existence on the effective date of this subarticle which comply with the requirements of this subarticle or of other provisions of this code relating to the provision of facilities for people with physical disabilities shall not be diminished to less than those which would be required were the building in which the facilities are located hereafter erected.

**§27-292.5 Accessibility. -**

**(a) Primary entrance(s).** - The primary entrance(s) for buildings shall be accessible, except for buildings classified in occupancy group A, J-3 and/or other spaces which normally are not frequented by the public or employees of the facility.

**(b) Exterior accessible route.** - Except as provided in this subarticle, buildings shall be provided with an exterior accessible route to permit entry at the primary entrance(s) of the building from the following locations:

- (1) Public street or sidewalk
- (2) Driveways
- (3) Parking areas

(4) Passenger loading zones

(5) Transportation stops

**(c) Interior accessible route.** - Except as provided in this subarticle, in buildings having (an) interior route(s) to one or more of the following spaces or facilities, such route(s) shall be (an) interior accessible route(s) from the entrance(s) usable by all categories of people having physical disabilities to adaptable or usable dwelling units and other spaces and facilities on the same premises including but not limited to:

- (1) Laundry rooms
- (2) Refuse disposal locations
- (3) Mailbox areas
- (4) Recreational, assembly and tenants' meeting rooms
- (5) Storage rooms
- (6) Management offices
- (7) Stores
- (8) Dining areas
- (9) Parking areas

Where the only route to one or more of such spaces or facilities is an exterior route, such route shall be accessible.

**(d) Path of travel.** - The path of travel in exterior and interior accessible routes shall provide unobstructed safe access and applicable items in such path of travel shall comply with the requirements set forth in reference standard RS 4-6.

**(e) Elevators.** - Where provided, all elevators shall comply with subchapter eighteen, reference standard RS 18-1, where an interior accessible route is required.

**(f) Assembly occupancies.** - For assembly occupancies having a mezzanine or balcony which provides a similar view as that from the main floor, accessibility to the mezzanine or balcony shall not be required provided toilet rooms are on the main floor.

**(g) Restaurants.** - For restaurants, dining rooms and similar occupancies having the same services on levels other than the main floor, accessibility to such levels shall not be required provided that toilet rooms are on the main floor.

**(h) Storage.** - For buildings in which the intended use is the storage of goods or merchandise, the only requirement shall be accessibility at the primary entrance and an interior accessible route to offices where business may be conducted.

**(i) Non-grade stories of small non-residential buildings.** - The following non-residential buildings or parts thereof are exempt from the provisions of this subarticle concerning requirements for people having physical disabilities, to the extent set forth in subdivisions (1) and (2) of this subsection:

- (1) construction of such new buildings the total floor area of which is two thousand five hundred square feet or less;
- (2) alterations to such building already existing where the alterations are being made to an above-grade story

having a total floor area of two thousand five hundred square feet or less or to a below-grade story having a total floor area of two thousand square feet or less.

Notwithstanding the foregoing, floor areas frequented by the public for assembly, governmental, public utility or health facility purposes shall not be exempted unless equivalent functional accessible facilities are provided on the first story.

(j) Where the floor area is more than two thousand five hundred square feet but less than five thousand square feet, a vertical wheelchair lift enclosed in construction having the required fire-resistance rating and connecting not more than two contiguous levels is permitted in lieu of an accessible route as set forth in reference standard RS 4-6.

(k) Where the below-grade cumulative floor area is more than two thousand square feet but not more than five thousand square feet, a vertical wheelchair lift enclosed in construction having the required fire-resistance rating and connecting not more than two contiguous levels is permitted in lieu of an accessible route as set forth in reference standard RS 4-6.

**\*§27-292.6 Waiver of requirements.** (1) The commissioner may waive the requirements of this subarticle or of subdivision (d) of section 27-357 of this code for the alteration of existing buildings, and for any new building for which a formal application together with plans required by such application was filed with an agency of the city or with the battery park city authority prior to September first, nineteen hundred eighty-seven, when such application was required by law or regulation to be approved by such agency; provided, however, that such waiver would not significantly adversely affect provisions for health, safety and security and that equally safe and proper alternatives are prescribed and, further, that such waiver is based upon a specific finding that strict compliance with the requirement:

- (a) would create an undue economic burden; or
- (b) would not achieve its intended objective; or
- (c) would be physically or legally impossible; or
- (d) would be unnecessary in light of alternatives which insure the achievement of the intended objective or which, without a loss in the level of safety, achieve the intended objective more efficiently, effectively or economically; or
- (e) would entail a change so slight as to produce a negligible additional benefit consonant with the purposes of this code.

(2) Each application for a waiver under subdivision one of this section shall be made to the commissioner in writing, setting forth each requirement sought to be waived and the specific reason or reasons therefor. The commissioner shall determine, under all of the circumstances presented by such application, which of

such requirements may appropriately be waived. The commissioner shall render such determination in a writing, which shall set forth in detail, the commissioner's findings and conclusions with respect to each requirement sought to be waived. A copy of such written determination shall be forwarded to the applicant. Such written determination shall be filed with the department and shall be available for public inspection.

(3) The mayor's office for the handicapped or its successor agency shall be consulted by and shall advise the commissioner concerning each application for a waiver under this section.

*\* Local Law 65-1988.*

**§27-292.7 Special requirements of other city departments.** - The commissioner upon good cause may waive the requirements of this subarticle for the construction of buildings or spaces, or for the alteration of existing buildings to meet the special requirements of other city departments in regard to any of the following:

- (a) Firehouses
- (b) Correctional facilities
- (c) Cargo handling facilities on the waterfront
- (d) Wholesale food markets

**§27-292.8 Adaptable dwelling units. - (a) General requirements.**

(1) Adaptable dwelling units are units that contain habitable rooms, kitchens, kitchenettes and bathrooms in residential buildings other than in occupancy group J-3 which when constructed are on an accessible route (except as set forth in this subdivision) and are constructed and equipped as defined in section 27-232 and as set forth in this subarticle so that they can be converted to be used, with a minimum of structural change, by all categories of people having physical disabilities.

(2) Such units shall be provided with door widths and clear floor spaces for making dwelling units usable as set forth in reference standard RS 4-6 when occupied by people having physical disabilities.

(3) Interior access, floor surfaces, adaptable kitchens, adaptable kitchenettes and adaptable bathrooms in these dwelling units shall comply with the requirements set forth in reference standard RS 4-6.

(4) Where an adaptable dwelling unit occupies two or more stories within itself, accessibility shall only be required at the first story of such dwelling unit provided that:

- a. The second story is accessible from without; or that
- b. Equivalent accessible functional facilities are provided on the first story; or that
- c. The stair within the dwelling unit has a minimum width of three feet.

**(b) Number of adaptable dwelling units. -**

(1) All dwelling units in buildings with elevators shall

be adaptable unless usable dwelling units are provided in accordance with section 27-292.9.

(2) At least one but not less than twenty-five percent of the total number of dwelling units in buildings without an elevator, which have dwelling units on the ground floor and which contain three or more dwelling units, shall be adaptable, unless usable dwelling units are provided in accordance with section 27-292.9. Such adaptable dwelling unit(s) shall be located on the ground floor. Where determination by percentage results in a number containing a decimal of 0.5 or more, the next higher number shall be used, but such number shall not exceed the number of dwelling units actually proposed for the ground floor.

**(c) Adaptable bathrooms, kitchens and kitchenettes.**

- Adaptable bathrooms, kitchens and kitchenettes within adaptable dwelling units shall be constructed and equipped in accordance with requirements set forth in reference standard RS 4-6 with respect to the following:

Access doorway or opening

Clear floor space

Floor surface

Bathroom, kitchen and kitchenette facilities and controls capable of being made usable

Space and utilities for usable range, (or cooktop or oven), refrigerator/freezer, (dishwasher if provided).

Such items shall include water closet and toilet paper dispenser, lavatory and removable base cabinet, mirrors, medicine cabinet, bathtub and controls, bathtub and shower enclosure, reinforced areas for grab bars, clearance between opposing base cabinets, counter tops, appliances and walls, adjustable or replaceable sink and removable base cabinet, as well as storage cabinets, drawers and shelves.

**(d) Washing machines and clothes dryers within adaptable dwelling units.** - Where washing machines and clothes dryers are located within adaptable dwelling units, they shall comply with or be capable of being converted to the requirements set forth in reference standard RS 4-6.

**(e) Emergency warning devices within adaptable dwelling units.** - Emergency warning devices within adaptable dwelling units shall be capable of being converted to audible and visual indication as required and to conform to the requirements set forth in subchapter seventeen, article six, reference standard RS 17-11, reference standard RS 17-12 and reference standard RS 4-6.

**§27-292.9 Usable dwelling units. -**

**(a) General requirements. -**

(1) Usable dwelling units are units in residential buildings in other than occupancy group J-3 which are accessible, constructed and equipped, as defined in section 27-232 and as set forth in this subarticle, so as to be usable by people having physical disabilities. A

usable dwelling unit shall be established by conversion from an adaptable dwelling unit when the unit becomes occupied by a person having a physical disability.

(2) Access, storage, controls, windows, doors, floor surfaces, kitchens, kitchenettes and bathrooms, appliances and emergency warning devices in these units shall comply with the requirements set forth in reference standard RS 4-6.

**(b) Number of usable dwelling units.** (1) Hotels. - In lieu of the requirements of section 27-292.8 in buildings in occupancy group J-1 having ten or more units, not less than five percent of the total number of units shall be constructed as usable units. In all buildings in occupancy group J-1 there shall be available portable smoke detectors of both audible and visual design. The number of detectors available shall be three percent of the number of sleeping rooms with a minimum of one operational detector per building. Proprietors shall post conspicuously a sign at least three inches in height, at the main desk or other similar station, advising of the availability of such detectors. Such detectors shall have a flash frequency range of sixty to one hundred twenty flashes per minute; and, where the average illuminance with motion present is more than twenty lumens per square foot, the visible signaling appliance shall have an effective intensity rating between one hundred and one thousand candela. Hard wiring of audible/visual detectors into an existing central closed-circuit alarm system shall be permitted in lieu of such portable detectors. Where determination by percentage results in a number containing a decimal of 0.5 or more, the next higher number shall be used. Notwithstanding the foregoing, entrance doors to all dwelling units in occupancy group J-1 having ten or more units, and to all bathrooms in such units, shall be no less than thirty-two inches in width.

(2) Adult residential care facilities.- All units in adult residential care facilities shall be usable. "Adult residential care facility" shall mean a family type home for adults, a shelter for adults, a residence for adults, an enriched housing program or an adult home, which contains three or more dwelling units and which provides board and temporary or long-term residential care and services to adults who, though not requiring continual medical or nursing care, are by reason of physical or other limitations associated with age, physical or mental disabilities or other factors unable or substantially unable to live independently. Such facilities shall be considered to be within occupancy group J-2.

**(c) Usable bathrooms, kitchens and kitchenettes. -** Usable bathrooms, kitchens and kitchenettes within usable dwelling units shall be constructed and equipped in accordance with requirements set forth in reference standard RS 4-6 with respect to the following:

Access doorway or opening

Clear floor space

Floor surface

Bathroom, kitchen and kitchenette facilities and controls

Space and utilities for usable range, (or cooktop or oven), refrigerator/freezer, (dishwasher if provided).

Such items shall include usable water closet and toilet paper dispenser, lavatory and base cabinet, bathtub and controls, bathtub and shower enclosure, grab bars, clearance between opposing base cabinets, counter tops, appliances and walls, sink and base cabinet.

**(d) Washing machines and clothes dryers within usable dwelling units.** - Where washing machines and clothes dryers are located within usable dwelling units, they shall comply with or be capable of being converted to the requirements set forth in reference standard RS 4-6.

**(e) Emergency warning devices within usable dwelling units.** - Emergency warning devices within usable dwelling units shall be capable of being converted to audible and visual indication as required and to conform to the requirements set forth in subchapter seventeen, article six, reference standard RS 17-11, reference standard RS 17-12 and reference standard RS 4-6.

**§27-292.10 Usable spaces. -**

**(a) Functional spaces and rooms.**

(1) Except as otherwise provided in section 27-292.5, spaces and rooms intended for general public and occupant use shall be accessible and usable. Such spaces and rooms include but are not necessarily limited to the following:

Mercantile spaces

Industrial spaces

Business spaces

Assembly spaces

Educational spaces

Institutional spaces

Toilet rooms

Bathrooms, bathing facilities, shower rooms.

(2) Doors and floor surfaces in usable spaces shall comply with the requirements set forth in reference standard RS 4-6.

(3) Where seating, tables and/or work stations are provided in usable spaces, at least one and not less than five percent shall comply with the requirements set forth in reference standard RS 4-6.

**(b) Toilet rooms. -**

(1) The location and number of water closets, urinals and lavatories shall be provided in accordance with the requirements set forth in table RS 16-5.

(2) Except where exempted in subdivision (i) of section 27-292.5 or section 27-292.6, facilities for people having physical disabilities shall be provided in toilet rooms or in a readily accessible location. Where such

toilet room is designed for use by not more than one person at a time and has provision for locking from the inside, such toilet room shall be permitted to be used by either sex.

(3) Where toilet rooms are not accessible by elevator, they shall be located so that people with physical disabilities need not travel more than one story thereto by ramp.

**(c) Bathing facilities. -**

(1) The location and number of plumbing fixtures shall be provided in accordance with the requirements set forth in table RS 16-5 and in reference standard RS 4-6.

(2) Each required bathing facility shall be accessible and at least one of each type of fixture or accessory that is provided in such bathing facility shall comply with the requirements set forth in table RS 16-4 and in reference standard RS 4-6.

**§27-292.11 Assembly spaces. -**

(a) Assembly spaces other than places of assembly shall be provided with a minimum of accessible wheelchair viewing positions as follows:

Capacity of Assembly Space	Number of Viewing Positions
1 to 25	Minimum 1
26 to 50	Minimum 2
51 to 74	Minimum 3

(b) Places of assembly shall be provided with accessible wheelchair viewing positions in accordance with subparagraph h of paragraph (1) of subdivision (a) of section 27-531.

(c) Size and placement of wheelchair location, surfaces, access to performing area and listening systems, where required, shall comply with the provisions of reference standard RS 4-6. These positions may be utilized by persons who do not use wheelchairs provided that the positions are delineated on the approved seating plans, the seating is readily removable and the positions are unsold one full working day before the performance.

**§27-292.12 Public toilet rooms. -** Where public toilet rooms are provided, there shall be at least one water closet stall and lavatory fixture for each sex which is accessible to and usable by people having physical disabilities and complies with the requirements of paragraph (c) of section P104.1 of reference standard RS 16-1 and reference standard RS 4-6.

**§27-292.13 Drinking fountains. -**

(a) Location and number of drinking fountains shall be provided in accordance with the requirements set forth in table 16-5.

(b) At least one drinking fountain on a story on which drinking fountains are provided shall be accessible and

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comply with the requirements set forth in reference standard RS 4-6.

(c) Where outside drinking fountains are provided, at least one shall be accessible and comply with the requirements set forth in reference standard RS 4-6.

**§27-292.14 Public telephones.** - At each location where public telephones are provided, at least one telephone shall be accessible and usable by people who use wheelchairs and at least one telephone shall be accessible and usable by persons with hearing impairment, and each such accessible telephone shall comply with the requirements set forth in reference standard RS 4-6.

**§27-292.15 Alarms.** - Where emergency warning systems are provided in spaces used by people having physical disabilities such systems shall comply with the requirements set forth in reference standard RS 4-6. Portable audible/visual smoke detecting devices in existing group J-1 occupancies shall comply with the provisions of paragraph (1) of subdivision (b) of section 27-292.9.

**§27-292.16 Controls and operating mechanisms.** - Where controls and operating mechanisms for light switches, dispensers, alarms and other similar devices are provided, they shall be accessible and comply with the requirements set forth in reference standard RS 4-6.

**§27-292.17 Tactile warnings.** - Tactile warnings shall be provided at hazardous locations on floors, doors, stairs, hazardous vehicular areas and pools, and shall comply with applicable requirements as set forth in reference standard RS 4-6.

**§27-292.18 Signage.** -

(a) Symbols of accessibility shall be provided at the following locations:

Parking spaces designated as reserved for people having physical disabilities

Passenger loading zones

Public toilet and bathing facilities

Drinking fountains

Public telephones

(b) Information and directional signage shall be provided where deemed necessary.

(c) Symbols and characters shall comply with the applicable requirements set forth in reference standard RS 4-6.

**§27-292.19 Parking spaces.** -

(a) Where parking areas or garages are provided, at least one parking space but not less than five percent of the total number of parking spaces provided shall be suitable for use by people having physical disabilities.

Where determination by percentage results in a number containing a decimal of 0.5 or more, the next higher number shall be used.

(b) Location, space, size and signage for parking spaces suitable for use by people having physical disabilities shall comply with provisions set forth in reference standard RS 4-6.

**§27-292.20 Passenger loading zones.** - Where passenger loading zones are provided, location and access aisles for at least one vehicle (with respect to multiple dwellings) or zones (with respect to other buildings) shall comply with the requirements set forth in reference standard RS 4-6.

*\*Local Law 58-1987.*

**ARTICLE 3 FIRE DISTRICTS**

**§[C26-402.1] 27-293 Inside fire districts.** - The following city areas are hereby established as being inside the fire districts:

(a) All of the borough of Manhattan.

(b) All of the borough of Bronx.

(c) All of the borough of Brooklyn.

(d) Such portions of the boroughs of Staten Island and Queens as are indicated on the "fire district maps" (reference standards RS 4-1 and RS 4-2).

**§[C26-402.2] 27-294 Outside fire districts.** - All areas not included inside the fire districts shall be designated as outside fire districts.

**§[C26-402.3] 27-295 Mixed districts.** - Any building located on the boundary line of a fire district, so that it is both inside and outside the district, shall be of a type of construction required for the fire districts if more than twenty-five per cent of the total floor area of the building is located therein.

**ARTICLE 4 LIMITATIONS INSIDE THE FIRE DISTRICTS**

**§[C26-403.1] 27-296 Limitations.** - No buildings in those combinations of construction classes and occupancy groups prohibited by tables 4-1 and 4-2 shall be erected inside the fire districts or shall be moved from outside to inside the fire districts, or from one lot to another inside the fire districts. No building or space classified in occupancy group J-1 or J-2 may be located on a lot containing a building classified in construction group I-E, II-D or II-E.

**§[C26-403.2] 27-297 Exemptions.** - The following constructions shall be exempt from the provisions of section 27-296 of this article:

(a) **One- or two-family dwellings.** - One- or two-

family detached or semi-detached dwellings of two stories or less in height and two thousand five hundred square feet or less in area located within zoning residence districts [R-2, R3-1, R3-2, R-4 and R-5]\* may be constructed or reconstructed of construction groups II-D combustible materials, or if damaged for any cause, only the damaged portions shall be required to be reconstructed to conform to II-D construction. In addition, one-family dwellings located within zoning residence district [R. -1]\* anywhere in the city, may be of combustible group II-E construction in conformance with the area and height limits established by tables 4-1 and 4-2.

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

**(b) Fences.** - Fences not over six feet high may be erected of wood or other combustible material.

**(c) Storm enclosures, bay windows, etc.** - Storm enclosures, bay windows and similar appendages may be constructed of combustible materials in accordance with the provisions of section 27-336 of article four of subchapter five of this chapter.

**(d) Accessory buildings for open parking lots.** - Parking lot offices and similar accessory buildings not more than ten feet high and not more than one hundred fifty square feet in area may be constructed of combustible materials when on the same lot or accessory to a lot used for motor vehicle parking, and when located at least six feet from any lot line or building.

**(e) Temporary structures.** - Temporary platforms, reviewing stands, and similar miscellaneous structures may be constructed of combustible materials and used for a limited period of time, subject to the approval of the commissioner.

**(f) Greenhouse.** - Greenhouses may be constructed of combustible materials when accessory to a one - or two-family dwelling on the same lot and when located at least six feet from any lot line or building.

**(g) Roof structures.** - Cooling towers, antenna supports, and other roof structures may be constructed of combustible materials in accordance with the provisions of section 27-338 of subchapter five of this chapter.

**(h) Bins, tanks, and towers.** - Coal and material bins, water towers, tank structures, and trestles may be constructed of wood planking and timbers of dimensions not less than as required for class II-A construction when not over thirty-five feet high and having an exterior separation of at least thirty feet.

**(i) Signs.** - Ground signs, wall signs, roof signs, and temporary signs may be constructed of combustible materials within the limitations established in article eighteen of subchapter seven of this chapter.

**§[C26-403.3] 27-298 Additions to existing buildings.** - No building inside the fire districts may be increased

in area or height to exceed the limitations of tables 4-1 and 4-2. (See Tables 4-1 and 4-2).

## ARTICLE 5 LIMITATIONS OUTSIDE THE FIRE DISTRICTS

**§[C26-404.1] 27-299 Limitations.** - No buildings in those combinations of construction classes and occupancy groups prohibited by tables 4-1 and 4-2 shall be erected outside the fire districts. No building or space classified in occupancy group J-1 or J-2 may be located on a lot containing a building classified in construction group I-E, II-D or II-E. No building classified in construction group I-E, II-D or II-E shall be located on a lot containing a building or space classified in occupancy group J-1 or J-2.

**§[C26-404.2] 27-300 Additions to existing buildings.** - No building outside of the fire districts may be increased in area or height to exceed the limitations of tables 4-1 and 4-2.

## ARTICLE 6 AREA LIMITATIONS

**§[C26-405.1] 27-301 Area limitations of buildings.** - No building or building section shall be constructed or altered so as to exceed the area limits established by tables 4-1 and 4-2 based on the occupancy group classification of the building or building section, except as these may be specifically modified by other provisions of this code.

**§[C26-405.2] 27-302 Area limitations of spaces.** - No occupancy within a building or building section shall be constructed or altered so as to exceed in total cumulative area the area limits established by tables 4-1 and 4-2, except as these may be specifically modified by other provisions of this code.

**§[C26-405.3] 27-303 Frontage increase.** - When a building has more than twenty-five per cent of the total perimeter of the building fronting directly upon a street or frontage space, the tabular areas listed in tables 4-1 and 4-2 may be increased 1.33 per cent for each one per cent of such excess frontage.

**§[C26-405.4] 27-304 Existing excessive area.** - Any building existing on December sixth, nineteen hundred sixty-eight that exceeds the maximum allowable area permitted under the provisions of this section, may be enlarged if the addition is separated from the existing building by a fire division meeting the requirements of subchapter five of this chapter, and if the additional area does not exceed the limits established by tables 4-1 and 4-2 for the specific occupancy group and construction class.



**ARTICLE 7 HEIGHT LIMITATIONS**

**§[C26-406.1] 27-305 Height limitations of buildings.**

- No building or building section shall be constructed or altered so as to exceed the height limits established by tables 4-1 and 4-2 based on the occupancy group classification of the building or building section, except as these may be specifically modified by other provisions of this code.

**§[C26-406.2] 27-306 Measurement.** - In applying the provisions of this code governing height limits, the following appurtenant structures shall not be included in the height of the building unless the aggregate area of all such structures exceeds thirty-three and one-third percent of the area of the roof of the building upon which they are erected:

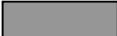
- (a) Roof tanks and their supports.
- (b) Ventilating, air conditioning, and similar building service equipment.
- (c) Roof structures, bulkheads, and penthouses.
- (d) Chimneys.
- (e) Parapet walls four feet or less in height.

**\*TABLE 4-1 AREA AND HEIGHT LIMITATIONS FOR UNSPRINKLERED BUILDINGS AND SPACES**

Occupancy Group		NONCOMBUSTIBLE CONSTRUCTION GROUP I					COMBUSTIBLE CONSTRUCTION GROUP II				
		Class IA	Class IB	Class IC	Class ID	Class IE	Class IIA	Class IIB	Class IIC	Class IID	Class IIE
HIGH HAZARD A <sup>c</sup>	Area	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
	Height	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
STORAGE B-1	Area	1,000	1,000	1,000	1,000	1,000	1,000	1,000	N. P.	1,000	N. P.
	Height	75'-0"	75'-0"	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)	N. P.	40'-0"(3)	N. P.
STORAGE B-2 <sup>d</sup>	Area	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	2,100
	Height	75'-0"	N.L.	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
MERCANTILE C	Area	7,500	7,500	7,500	7,500	7,500	7,500	7,500	5,600	8,400	2,100
	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
INDUSTRIAL D-1	Area	7,500	7,500	7,500	7,500	3,500	7,500	7,500	N. P.	1,400	N. P.
	Height	75'-0"	75'-0"	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)	N. P.	40'-0"(3)	N. P.
INDUSTRIAL D-2	Area	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
BUSINESS E	Area			N.L.		10,500	14,700	14,700	5,600	8,400	2,100
	Height	75'-0" <sup>d,f</sup>	75'-0" <sup>d,f</sup>	75'-0" <sup>d,f</sup>	75'-0" <sup>d,f</sup>	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-1	Area			N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-2 <sup>c</sup>	Area	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height	N.L.	N.L.	N.L.	N.L.	75'-0"(6)	75'-0"(6)	75'-0"(6)	65'-0"(5)	75'-0"(6)	65'-0"(5)
ASSEMBLY F-3	Area			N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-4 <sup>b</sup>	Area			N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
EDUCATIONAL G	Area	N.L.		N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height	75'-0"	75'-0"	75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
INSTITUTIONAL H-1	Area	17,500	14,000	10,500	7,000	N.P.	4,200	4,200	N. P.	N. P.	N. P.
	Height	N.L.	75'-0"	65'-0"(5)	50'-0"(4)	N.P.	50'-0"(4)	50'-0"(4)	N. P.	N. P.	N. P.
INSTITUTIONAL H-2	Area	17,500	14,000	10,500	7,000	N.P.	4,200	4,200	N. P.	N. P.	N. P.
	Height	N.L.	75'-0"	65'-0"(5)	50'-0"(4)	N.P.	50'-0"(4)	50'-0"(4)	N. P.	N. P.	N. P.
RESIDENTIAL J-1	Area	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
	Height	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
*RESIDENTIAL J-2 When Constructed Subject to the Requirements of §27-954(t) or Altered Subject to the Requirements of §27-123.2	Area	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
	Height	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.	N. P.
*RESIDENTIAL J-2 When Not Subject to the Requirements of §27-954(t) or Altered Subject to the Requirements of §27-123.2	Area	N.L.	N.L.	N.L.	17,500	N. P.	10,000	10,000	5,600	N. P.	N. P.
	Height			75'-0"	75'-0"(6)		75'-0"(6)	75'-0"(6)	40'-0"(3)		
RESIDENTIAL J-3	Area	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height			75'-0"	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)

N.L.– No Limit

N.P.– Not Permitted

 Not Permitted Inside Fire Districts<sup>a</sup>

**Notes for Table 4-1:**

Tabulated areas are given in sq. ft. and establish maximum gross area permitted on any one story within a building or fire area. See section 27-303 and subdivision (c) of section 27-328 for permissible area increases. Tabulated heights are given in feet and number of stories (in parentheses).

<sup>e</sup> Spaces in occupancy group A solely due to their containing gas

distribution piping at pressure levels above fifteen psig may be unsprinklered and conform with the area and height limitations set forth in table 4-2, provided other fire protection requirements set forth in section 27-404 and subchapters five and seventeen of chapter one of this title are met.

<sup>a</sup> See section 27-297 for construction exemptions.  
<sup>b</sup> See article eleven of subchapter seven of chapter one of this title for area and height limitations of open parking structures.

<sup>f</sup> See section 27-954 for area limitations for buildings less than seventy-five ft. in height.

<sup>c</sup> See paragraph two of subdivision (b) of section 27-548 for grandstand limitations.

<sup>g</sup> See subdivisions (u) and (v) of section 27-954 for requirements pertaining to F-4 spaces within J-1 buildings, catering establishments and banquet halls with occupant load of three hundred or more persons.

<sup>d</sup> See subdivision (c) of section 27-339 for area limitations for existing office buildings one hundred feet or more in height with mechanical ventilation and/or air-conditioning systems that serve floors other than the floor on which the equipment is located.

<sup>\*</sup> **Local Law 10-1999.**

**TABLE 4-2 AREA AND HEIGHT LIMITATIONS FOR SPRINKLERED BUILDINGS AND SPACES**

Occupancy Group		NONCOMBUSTIBLE CONSTRUCTION GROUP I					COMBUSTIBLE CONSTRUCTION GROUP II				
		Class IA	Class IB	Class IC	Class ID	Class IE	Class IIA	Class IIB	Class IIC	Class IID	Class IIE
HIGH HAZARD A	Area	N.L.	17,500	14,000	10,500	3,500	7,700	7,700	N.P.	1,400	N.P.
	Height		75'-0"(6)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)		50'-0"(4)	
STORAGE B-1	Area	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height			85'-0"(7)	75'-0"(6)	50'-0"(4)	75'-0"(6)	75'-0"(6)	40'-0"(3)	50'-0"(4)	40'-0"(3)
STORAGE B-2 <sup>b</sup>	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
MERCANTILE C	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
INDUSTRIAL D-1	Area	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	Height			85'-0"(7)	75'-0"(6)	50'-0"(4)	75'-0"(6)	75'-0"(6)	40'-0"(3)	50'-0"(4)	40'-0"(3)
INDUSTRIAL D-2	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
BUSINESS E	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
ASSEMBLY F-1	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
ASSEMBLY F-2	Area	N.L.	N.L.	N.L.	N.L.	N.L.	N.L.	N.L.	19,600	N.L.	16,100
	Height			85'-0"(7)	N.L.	75'-0"(6)			75'-0"(6)		
ASSEMBLY F-3	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	75'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
ASSEMBLY F-4	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	75'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
EDUCATIONAL G	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	75'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	
INSTITUTIONAL H-1	Area	N.L.	N.L.	17,500	11,200	7,000	11,200	11,200	3,500	4,000	N.P.
	Height		85'-0"(7)	75'-0"(6)	65'-0"(5)	50'-0"(4)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	
INSTITUTIONAL H-2	Area	N.L.	N.L.	17,500	11,200	7,000	11,200	11,200	3,500	4,000	N.P.
	Height		85'-0"(7)	75'-0"(6)	65'-0"(5)	50'-0"(4)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	
RESIDENTIAL J-1	Area	N.L.	N.L.	N.L.	N.L.	N.P.	N.L.	N.L.	N.P.	N.P.	N.P.
	Height			85'-0"(7)	N.P.	85'-0"(7)	85'-0"(7)				
RESIDENTIAL J-2	Area	N.L.	N.L.	N.L.	N.L.	N.P.	N.L.	N.L.	12,600	N.P.	N.P.
	Height			85'-0"(7)	N.P.	85'-0"(7)	85'-0"(7)	50'-0"(4)			
RESIDENTIAL J-3	Area	N.L.	N.L.	N.L.	17,500	17,500	N.L.	N.L.	12,600	15,400	9,100
	Height			85'-0"(7)	50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)	

N.L. — No Limit

N.P.—Not Permitted

 Not permitted inside Fire Districts<sup>a</sup>

**Notes for Table 4-2:**

Tabulated areas are given in square feet and establish maximum gross area permitted on any one story within a building or fire area. See section 27-303 for permissible area increases. Tabulated heights are given in feet and number of stories (in parentheses).

<sup>a</sup> See section 27-297 for construction exemptions.

<sup>b</sup> See article eleven of subchapter seven of this chapter for area and height limitations of open parking structures.

**ARTICLE 8 GENERAL PROJECTION  
LIMITATIONS**

**§[C26-407.1] 27-307 Permissible projections beyond the street line.** - No part of a new building, or of any alteration or addition to an existing building, shall be constructed to extend beyond the street line, except as specifically provided in this subchapter.

**\*§[C26-407.2] 27-308 Ramps.** -

(a) When a building erected prior to December sixth, nineteen hundred sixty-nine is altered to provide access to individuals who use wheelchairs, ramps constructed to provide such access may, with the approval of the commissioner, project beyond the street line for a distance of not more than forty-four inches.

(b) Ramps shall comply with the applicable provisions of reference standard RS 4-6.

*\*Local Law 58-1987.*

**§[C26-407.3] 27-309 Special restrictions.** - The provisions of this subchapter shall not authorize any projections beyond the street line on those streets where removal of all, or certain projects has been directed by any action of the board of estimate or the former board of estimate and apportionment, or which has been, or may be, directed by any action of the council or the board of estimate, except those projections that are permitted in conformity with such actions.

**§[C26-407.4] 27-310 Projections removable.** - All projections permitted beyond the street line by the provisions of this subchapter shall be constructed so that they may be removed at any time without endangering the structural safety or fire safety of the building except that footings as permitted under subdivision (a) of section 27-314 of article nine of this subchapter need not be removable.

**§[C26-407.5] 27-311 Permission revocable.** - Any permission, expressed or implied, permitting the construction of projections within the area of the street under the provisions of this subchapter shall be revocable by the council or the board of estimate, except footings as permitted under subdivision (a) of section 27-314 of article nine of this subchapter.

**§[C26-407.6] 27-312 Existing projections.** - Any part of a building that projects beyond a street line on January first, nineteen hundred thirty-eight may be

maintained as constructed until its removal is directed by the council or the board of estimate.

**(a) Alterations.** -

Alterations to existing projections beyond the street line may be permitted in whole or in part, provided that such alterations conform with the requirements of this subchapter.

**ARTICLE 9 PERMISSIBLE PROJECTIONS  
BEYOND STREET LINES**

**§[C26-408.1] 27-313 Projections above grade.** - Subject to the provisions of article eight of this subchapter the following projections may be constructed, above grade, to project beyond the street line:

**(a) Fixed Projections.** - Fixed projections are those elements listed below, generally of an architectural character, that form an integral part of the building facade. The aggregate area of all fixed projections constructed to extend beyond the street line shall not exceed ten square feet within any one hundred square feet of wall area, except that a veneer may be applied to the entire facade of a building erected before December sixth, nineteen hundred sixty-eight, if such veneer does not project more than four inches beyond the street line. The area of any fixed projection shall be measured at that vertical plane, parallel to the wall, in which the area of the projection is greatest. This plane of measurement may be at the street line, the line of maximum projection, or any point in between.

(1) **ENTRANCE DETAILS.** - Entrance details, including steps, and doors when fully open, may be constructed to project beyond the street line not more than eighteen inches. Entrance steps that project beyond the street line shall be guarded at each end by railings or check pieces at least three feet high or by other members of the entrance detail providing equivalent protection.

(2) **ARCHITECTURAL DETAILS.** - Details such as cornices, eaves, bases, sills, headers, band course, opening frames, sun control devices, rustications, applied ornament or sculpture, grilles, windows when fully open, air conditioning units, and other similar elements may be constructed to project not more than four inches beyond the street line when less than ten feet above the ground or sidewalk level, and not more than ten inches beyond the street line when more than ten feet above the ground or sidewalk level.

(3) **BALCONIES.** - Balconies, including railings and supporting brackets, no parts of which are less than ten

feet above the ground or sidewalk level, may be constructed to project not more than twenty-two inches beyond the street line. When permitted by the provisions of subchapter six of this chapter, fire escapes that are part of a required exit may be constructed to project not more than four feet six inches beyond the street line provided no part, including any movable ladder or stair, is lower than ten feet above the ground or sidewalk level when not in use.

(4) **MARQUEES.** - Marquees may be erected on public buildings, theaters, hotels, terminals, large department stores, supermarkets, multi-family dwellings, and similar buildings of an essentially public nature, or upon a warehouse or market in an established market area as designated by reference standard RS 4-3, so as to project beyond the street line, but not nearer than two feet to the curb line, provided that no parts of such marquees are less than ten feet above the ground or sidewalk level. Marquees must not be more than two feet to curb lines hereafter established or changed. When measured from top to bottom, marquees shall not be thicker nor shall the fascia be higher than three feet. This dimension shall include all decorations, but shall exclude any tension supports suspending the marquee from the wall. Marquees shall be supported entirely from the building and be constructed of noncombustible materials, except that the roof or any part of the roof may contain skylights complying with the requirements of subdivision (d) of section 27-338 of article four of subchapter five of this chapter. Marquee roofs shall be drained in accordance with the provisions of subchapter sixteen of this chapter. When the occupancy or use of a building with a marquee projecting beyond the street line is changed to occupancy or use for which a marquee is not permitted by this section the marquee shall be removed.

(5) **LIGHT FIXTURES.** - Light fixtures that are supported entirely from the building may be constructed to project not more than two feet beyond the street line, provided no part of the fixture is less than eight feet above the ground or sidewalk level.

(6) **FLAGPOLES.** - Flagpoles that are supported entirely from the building may be constructed to project not more than eighteen feet beyond the street line, but not closer than two feet to the curb line, provided that no part of the flagpole is less than fifteen feet above the ground or sidewalk level.

(7) **WALL SIGNS.** - Wall signs may be constructed to project not more than twelve inches beyond the street line when conforming to the requirements of subchapter seven of this chapter.

(8) **PROJECTING SIGNS.** - Projecting signs may be constructed to project not more than ten feet beyond the street line, but not closer than two feet to the curb line, when conforming to the requirements of subchapter seven of this chapter, and provided that no part of the

sign is less than ten feet above the ground or sidewalk level.

**(b) Awnings.** - Awnings supported entirely from the building may be constructed to project beyond the street line as follows:

(1) **STORE FRONT AWNINGS.** - Store front awnings may be constructed to project beyond the street line not more than eight feet, provided no part of the awning is less than eight feet above the ground or sidewalk level, except for a flexible valance, which may be not less than seven feet above the ground or sidewalk level, and provided that the awning box or cover does not project more than twelve inches.

(2) **AWNINGS.** - Awnings over windows or doors may be constructed to project beyond the street line not more than five feet, provided that no part of the awning is less than eight feet above the ground or sidewalk level.

(3) **CONSTRUCTION.** - Awnings shall be constructed of a noncombustible frame covered with flameproofed canvas or cloth, slow-burning plastic, sheet metal, or other equivalent material.

**(c) Storm enclosures.** - Storm enclosures projecting not more than eighteen inches beyond the street line may be permitted during the period between November fifteenth and the following April fifteenth. Such enclosures shall be removed at the end of this period. Construction shall follow the requirements of section 27-336 of subchapter five of this chapter.

**(d) Bridges between buildings.** - Bridges connecting buildings, and projecting beyond street lines, may be constructed subject to the approval of the board of estimate and the department of highways. Such bridges shall be of a construction class that is at least equal to the higher class of the two buildings connected, and shall otherwise comply with the provisions of this code and other applicable laws and regulations.

**(e) Sidewalk cafes.** - (1) Enclosures for sidewalk cafes, where permitted by the commissioner of consumer affairs, may be provided beyond the building line, within a street, provided such enclosures are constructed of incombustible material or slow-burning plastic or other material which will not support combustion, and provided the sides of such enclosures do not extend more than eight feet above the sidewalk.

(2) Awnings supported entirely from the building may be placed over sidewalk cafes provided they are at least eight feet clear above the sidewalk and provided they are within the limits specified by the commissioner of consumer affairs. Such awnings shall be supported on metal frames and constructed of canvas treated to render it fire-resistive or other material, which will not support combustion.

(3) No part of any awning, enclosure, fixture or equipment of a sidewalk cafe shall be located beneath a fire-escape so as to obstruct operation of fire-escape

drop ladders or counter-balanced stairs or to obstruct any exit from a building.

(4) a. Removable platforms shall be constructed to provide for a continuous unbroken and level floor without openings or cracks so as to prevent any material or liquid from falling through to the area beneath; no papers, trash or other materials may be permitted to accumulate in the area beneath the floor of the platform.

b. No part of the platform shall obstruct an exit from any building.

c. No part of the platform shall cover a cellar entrance, areaway or other vent, except that an easily removable section, prominently designated, will be permitted if acceptable to the commissioner.

d. No siamese connection or hydrant may be obstructed in any way that would hinder its use by the fire department.

(5) In addition to the requirements specified herein, the commissioner may promulgate such additional regulations necessary to secure safety.

**(f) Curb cuts.** - The lowering of any curb or the change of grade of any sidewalk for the purpose of providing a driveway across such curb or sidewalk shall be constructed in accordance with the specifications prescribed in section 27-558 of article three of subchapter nine of this chapter or as required by the commissioner. The commissioner shall limit the length of any curb cut for the purpose of providing a driveway across such curb or sidewalk, when in the opinion of the commissioner the actual use or intended use of such driveway would endanger the public. The owner shall maintain every part of such driveway in accordance with the specifications prescribed in section 27-558 of article three of subchapter nine of this chapter. Where the vehicular use of such driveway, in the opinion of the commissioner is dangerous to the public, the commissioner shall order the owner to discontinue use of such driveway and restore the curb and sidewalk as required by the department of transportation. Upon the failure of the owner to comply with such order, the commissioner may inform the commissioner of transportation of such failure to comply and request the cooperation of the commissioner of transportation acting under his or her authority pursuant to section twenty-nine hundred four of the New York city charter in the enforcement of this section.

**§[C26-408.2] 27-314 Projections below grade.** - Subject to the provisions of article eight of this subchapter the following projections may be constructed below grade to project beyond the street line:

**(a) Footings.** - Exterior wall and column footings may be constructed to project beyond the street line not more than twelve inches, provided that the top of the footing is not less than eight feet below the ground or

sidewalk level.

**(b) Foundation walls.** - Foundation walls required to support permitted projections may be constructed to project not more than the permitted projection beyond the street line.

**(c) Vaults.** - Vaults licensed by the commissioner of transportation may be constructed to project beyond the street line but not beyond the curb line. Vault covers shall be set flush with the sidewalk and surfaced with non-skid material.

**(d) Tunnels between buildings.** -

Tunnels connecting buildings, and projecting beyond street lines, may be constructed subject to the approval of the board of estimate and the department of transportation. Such tunnels shall comply with the provisions of this code and other applicable laws and regulations.

**\*§[C26-408.3] 27-315- Restrictions on construction and projections on certain streets, parkways, boardwalks and beaches.** -

Notwithstanding the foregoing provisions of this article, it shall be unlawful to build, erect, make areaways, steps or other projections prohibited by sections 19-131, 19-132, 19-135 of the code.

\* *Local Law 104-1993.*

#### **\* ARTICLE 10 GENERAL LIMITATIONS ON OCCUPANCY AND CONSTRUCTION WITHIN SPECIAL FLOOD HAZARD AREAS**

**§[C26-409.1] 27-316 Permit restrictions.** - Within special flood hazard areas, as delineated in reference standard RS 4-4, applications for permits shall be subject to the following:

(a) Permissible uses and other measures to reduce flood losses shall take precedence over any conflicting laws.

(b) Major repairs or alterations shall be with construction materials and utility equipment that are resistant to flood damage, and use construction methods and practices that will minimize flood damage.

(c) New and proposed construction or substantial improvements shall be protected against flood damage, be designed (or modified) and anchored to prevent flotation, collapse, or lateral movements of the structure, use construction materials and utility equipment that are resistant to flood damage, and use construction methods and practices that will minimize flood damage.

(d) New and proposed developments and construction shall minimize flood damage, locate, elevate and construct all public utilities such as gas, sewer, electrical and water systems to minimize or eliminate flood damage, and provide adequate drainage so as to reduce exposure to flood hazards.

(e) New or replacement water supply systems and/or sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems, and discharges from the systems into floodwaters, and require on-site disposal systems to be located so as to avoid impairment of them or contamination from them during flooding.

(f) Subdivision proposals and other proposed new developments and construction shall (i) minimize flood damage, (ii) have all public utilities, such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage, and (iii) provide adequate drainage so as to reduce exposure to flood hazards.

(g) Upon placement of the lowest floor, or flood-proofing by any means, the holder of any permit to which this section applies shall submit to the department a certification of the elevation of the lowest floor, or where applicable of the lowest flood-proofed elevation, in relation to mean sea level. Provided, however, that in areas designated as Zone V in reference RS 4-4, such permit holder shall certify to the department the elevation, in relation to mean sea level, of the bottom of the lowest structural member of the lowest floor. Such certification shall be prepared by a registered architect or licensed professional engineer.

(h) Compliance with the foregoing shall be accomplished in accordance with sections 27-317, 27-317.1, 27-317.2, 27-550, 27-580, 27-652, 27-771, 27-787 and subdivision (aa) of section 27-901 of this title and reference standards RS 4-4 and RS 4-5.

**§ 27-316.1 Permit application contents.** - Applications for permits for construction within special flood hazard areas, as delineated in reference standard RS 4-4, shall contain the following information:

(a) the elevation in relation to mean sea level of the proposed lowest floor (including basement or cellar);

(b) for non-residential structures, the elevation in relation to mean sea level to which such structure will be flood-proofed;

(c) a certification from a registered architect or licensed professional engineer that heating, ventilation, air conditioning, plumbing, electrical and other services facilities within the structure will be located or constructed so as to prevent water from entering or accumulating within the components during conditions of flooding;

(d) for non-residential structures intended to be floodproofed, a certification from a registered architect or licensed professional engineer that the flood-proofing design and methods of construction of such structure are in accordance with reference standard RS 4-5 and with accepted standards of practice to make such structure watertight, with walls substantially impermeable to the passage of water, and with structural components

having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(e) for structures within Zone V, as delineated in reference standard RS 4-4, a certification from a registered architect or licensed professional engineer that the design and methods of construction of such structure are in accordance with reference standard RS 4-5 and with accepted standards of practice for meeting the requirements of subdivision (f) of section 27-317 of this code; and

(f) a description, where applicable, of the extent to which any watercourse will be altered or relocated as a result of the proposed work.

**§[C26-409.2] 27-317 Occupancy and construction restrictions.** -

(a) Within special flood hazard areas, as delineated in reference standard RS 4-4, no building in occupancy group classification J1, J2 or J3 shall be constructed or altered so as to have the lowest floor below the base flood elevation.

(b) New construction or substantial improvements of non-residential buildings within special flood hazard areas, as delineated in reference standard RS 4-4, shall have the lowest floor elevated to or above the base flood elevation; or, together with attendant utilities and sanitary facilities, shall be floodproofed up to the level of the base flood elevation, in accordance with the requirement of reference standard RS 4-5. Provided, however, that new construction or substantial improvements of non-residential buildings within area designated as Zone V in reference standard RS 4-4 shall meet the requirements of subdivision (f) of this section.

(c) Any encroachment in the floodway, as delineated in reference standard RS 4-4, including fill, new construction, substantial improvement, or any other development that would result in any increase in flood levels within the community during the occurrence of the base flood discharge, shall be prohibited.

(d) Manufactured homes shall be anchored to resist flotation, collapse or lateral movement and shall be elevated on a permanent foundation to or above the base flood elevation or, when no base flood elevation has been determined, two feet above the highest adjacent grade. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. No park trailers or travel trailers shall be permitted within special flood hazard areas, as delineated in reference standard RS 4-4.

(e) In the case of alterations constituting a substantial improvement to parts of non-residential and non-institutional buildings below the base flood elevation, all parts below the base flood elevation need comply with the applicable requirements of reference standard RS 4-5.

(f) All new construction and substantial improvements



of buildings within Zone V, as delineated in reference standard RS 4-4, shall be performed pursuant to the provisions of RS 4-5. Such construction and improvements shall have the lowest floor elevated on adequately anchored pilings or columns and securely anchored to such piles or columns to prevent flotation, collapse or lateral movement resulting from the simultaneous action of wind and water loads on all building components, and, the lowest portion of the structural members of the lowest floor, other than the pilings or columns, shall be elevated to or above the base flood elevation. For purposes of this subdivision, wind and water loading values shall each have a one percent chance of being equalled or exceeded in any given year (one hundred year mean recurrence interval). In addition:

- (1) The installation of anchoring to anchored pilings or columns shall be subject to controlled inspection.
  - (2) The space below the lowest floor shall be free of obstruction or, alternatively, such space shall be constructed with break-away walls of an open lattice type construction, which is intended to collapse under stress from abnormally high tides or wind driven water without jeopardizing the structural support of the building. Such space shall not be used for human habitation.
  - (3) The use of fill for structural support of buildings within Zone V shall not be permitted.
  - (4) The man-made alteration of sand dunes within Zone V which would increase potential flood damage to buildings shall not be permitted.
  - (5) All new construction within Zone V shall be located landward of the reach of mean high tide.
- (g) All new construction and substantial improvements of buildings within Zone A, as delineated in reference standard RS 4-4 shall be performed pursuant to the provisions of reference standard RS 4-5. Where such construction or improvement is not floodproofed, any fully enclosed space below the lowest floor that is subject to flooding, as defined in section 27-317.1 of this code, shall be designed to equalize hydrostatic flood forces on exterior walls automatically (without human intervention) by allowing for the entry and exit of floodwaters. Design for meeting this requirement shall be certified by a registered architect or licensed professional engineer or shall meet or exceed the following minimum criteria:
- (1) A minimum of two openings, having a total net area of not less than one square inch for every square foot of enclosed space subject to flooding, shall be provided.
  - (2) The bottom of all openings shall be no higher than one foot above grade.
  - (3) Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(h) When used within special flood hazard areas, as delineated in reference standard RS 4-4, breakaway walls shall have a design safe loading resistance of not less than ten and no more than twenty pounds per square foot. Use of a breakaway wall which exceeds a design safe loading resistance of twenty pounds per square foot shall be permitted only if a registered architect or licensed professional engineer certifies that the proposed design meets the following conditions:

- (1) Breakaway wall collapse will result from a water load less than that which would occur during the base flood; and
- (2) the elevated portion of the building and supporting foundation system will not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Maximum wind and water loading values used in this determination shall each have a one percent chance of being equalled or exceeded in any given year (one hundred year mean recurrence interval).

**§[C26-409.3] 27-317.1 Definitions for special flood hazard areas.** - The following definitions shall supplement the definitions that appear in article two of subchapter two of this chapter and shall apply only to the provisions of article ten of subchapter four of this chapter and to the reference standards contained therein:

**AREA OF SPECIAL FLOOD HAZARD.** - The land in the flood plain delineated in reference standard RS 4-4 as subject to a one percent or greater chance of flooding in any given year. Such area is designated on the Flood Insurance Rate Map (FIRM) as Zone A, AE, AH, AI-99, V, VE or VI-30. Such area is also known as the base flood plain or one hundred year flood plain.

**BASEFLOOD.** - The flood having a one percent chance of being equalled or exceeded in any given year.

**BASEFLOOD ELEVATION.** - The level (in feet) indicated on the Flood Insurance Rate Map (FIRM).

**BREAKAWAY WALL.** - wall that is not part of the structural support of the building to which it is attached and is intended through its design and construction to collapse under specific later loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

**DEVELOPMENT.** - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

**ELEVATED BUILDING.** - A non-basement building (i) constructed, in an area designated as Zone A in reference standard RS 4-4, to have the top of the elevated floor, or in an area designated as Zone V in reference standard RS 4-4, to have the bottom of the

lowest horizontal structural member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the flow of water, and (ii) adequately anchored so that the structural integrity of such building is not impaired during a flood of up to the magnitude of the base flood. In an area designated as Zone A in reference standard RS 4-4, such term also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to permit the unimpeded movement of flood waters. In an area designated as Zone V in reference standard RS 4-4, such term also includes a building otherwise meeting the definition of elevated building in which the lower area is enclosed by means of breakaway walls meeting the standards of subdivision (h) of section 27-317 of this code.

**FLOOD OR FLOODING.** - A general and temporary condition of partial or complete inundation of normally dry land areas resulting from:

- (1) the overflow of inland or tidal waters; or
- (2) the unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD BOUNDARY AND FLOODWAY MAP (FBFM).** - An official map issued by the Federal Emergency Management Agency on which the regulatory floodway along water courses is delineated.

**FLOOD HAZARD BOUNDARY MAP (FHB).** - An official map issued by the Federal Emergency Management Agency on which areas of special flood hazard are delineated.

**FLOOD INSURANCE RATE MAP (FIRM).** - The official map on which the Federal Emergency Management Agency has delineated the areas of special flood hazards. Such map includes the flood boundary and floodway map and the flood hazard boundary map, as defined in this section.

**FLOOD PLAIN.** - Any land area susceptible to being inundated by water from any source (see "flood or flooding").

**FLOOD PROOFING.** - Any combination of structural and non-structural additions, changes or adjustments to structures to reduce or eliminate flood damage to real estate, improved real property, water and sanitary utilities, or structures and their contents.

**FLOODWAY OR REGULATORY FLOODWAY.** - The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

**HIGHEST ADJACENT GRADE.** - The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

**LOWEST FLOOR.** - The lowest level including cellar or basement of the lowest enclosed area. For the purpose of this article, an unfinished or flood resistant

enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement, is not considered a structure's lowest floor, provided that such enclosure shall not be built so as to render the structure in violation of the requirements of subdivision (g) of section 27-317 of this code.

**MANUFACTURED HOME.** - A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to required utilities.

**MIXED USE BUILDING.** - Any building occupied in part for residential use, with one or more nonresidential uses located on a story below the lowest story occupied entirely by such residential use.

**NATIONAL GEODETIC VERTICAL DATUM (NGVD).** - A vertical control used as a reference for establishing elevations within the flood plain, as provided in section 27-158 of this code.

**NEW CONSTRUCTION.** - Buildings for which the "start of construction" commenced on or after November sixteenth, nineteen hundred eighty-three.

**SAND DUNES.** - Naturally occurring accumulations of sand in ridges or mounds landward of a beach.

**START OF CONSTRUCTION.** - The date on which the building permits was issued, provided, however, that the actual start of construction, repair, reconstruction, placement or substantial improvement is within one hundred eighty days of such date. "Actual start" means either the first placement of permanent construction of a building on a site, such as pile driving, the pouring of slabs, or footings, or any work beyond the stage of excavation; or, for a building without a cellar, basement or poured footings, the first permanent framing or assembly of such building or any part thereof on its piling or foundations. "Permanent construction" does not include land preparation, such as clearing, grading and filling; nor does it include excavation for a cellar, basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main building.

**SUBSTANTIAL IMPROVEMENT.** - Any repair, reconstruction, alteration, or improvement of a building, the cost of which equals or exceeds fifty percent of its market value either:

- (1) before the alteration, improvement, or repair is started, or
- (2) if the building has been damaged and is being restored, before such damage occurred.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural parts of the building commences, whether or not that alteration affects the external dimensions of the

building. The term "substantial improvement" does not, however, include either:

- (1) any project for improvement of a building to comply with state or local health, sanitary, or safety code specifications which are solely necessary to assure safe conditions, or
- (2) any alteration of a building designated as worthy of preservation because of historic or architectural importance, or a building within an area so designated by the landmarks preservation commission, or listed on the national register of historic places or state inventory of historic places.

**ZONE A.** - A symbol used on the flood insurance rate map to designate an area of special flood hazard without velocity (wave action). When not shown on the flood insurance rate map, the water surface elevation may be determined from available data by the registered architect or licensed professional engineer of record.

**ZONE V.** - A symbol used on the flood insurance rate map to designate an area of special flood hazard with velocity (wave action). When not shown on the flood insurance rate map, the water surface elevation may be determined from available data by the registered architect or licensed professional engineer of record.

**§[C26-409.4] 27-317.2 Exceptions within special flood hazard areas.** - Mixed use buildings may be constructed within Zone A, as delineated in reference standard RS 4-4, with non-habitable portions below the base flood elevation, provided all of the following conditions are met:

- (a) The building is constructed so as to provide entrance access at or above the base flood elevation.
- (b) The portion of the building and all service equipment below the base flood elevation are floodproofed, in accordance with reference standard RS 4-5.
- (c) No habitable rooms may be located in such cellar or basement.
- (d) A water closet and/or a wash basin may be located in an enclosed space not to exceed four feet by four feet six inches in such cellar or basement, and no roughing therein shall be allowed to accommodate any additional fixtures.
- (e) No accessory kitchens shall be allowed in such cellar or basement; however, one two-compartment laundry tray or similar appliance may be installed outside the water closet compartment.

**\*\***(f) The building permit application filed with the department of buildings or the work permit application filed with the department of ports and trade shall state that:

- (1) The premises is located within the special flood hazard area;
- (2) The cellar or basement is located below the level of the base flood elevation; and

(3) No portion of the cellar or basement may be used for living purposes.

**\*\***(g) A deed restriction noting all of the above is to be recorded in the county clerk's office and the page and liber number indicated on either the building permit application and certificate of occupancy filed with and issued by the department of buildings or the work permit application and the certificate of completion filed with and issued by the department of ports and trade.

**\*\*** *Local Law 14 -1989.*

**\*** *Local Law 33-1988.*

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**SUBCHAPTER 5  
FIRE PROTECTION CONSTRUCTION  
REQUIREMENTS**

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\*\*\*“27” omitted from section numbers in this column.*

**ARTICLE 1 GENERAL**

§[C26-500.1] 27-318 **Scope.** - The provisions of this subchapter shall govern the use and assembly of all materials of construction with respect to fire resistance, flame spread resistance, and smoke and toxic fume limitation. The provisions shall also control the location and function of integral structural and fire protective elements of buildings, and provide for the installation of safeguards against the spread of fire within buildings and between buildings.

§[C26-500.2] 27-319 **Standards.** - The provisions of the reference standard RS-5 shall be a part of this subchapter.

§[C26-500.3] 27-320 **Definitions.** - For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-500.4] 27-321 **Use of combustibles.** - The use of combustible component materials in units or assemblies shall be limited to construction group II, except as hereinafter expressly permitted in construction group I. Combustible aggregates may be integrated with other materials to form a noncombustible material provided that the entire mixture, in the form in which it is to be used in construction, meets the requirement of this code for noncombustibility.

**ARTICLE 2 FIRE PROTECTION TEST PROCEDURES**

§[C26-501.1] 27-322 **Tests.** - Samples of all materials or assemblies of materials required by this code to have a fire-resistance rating, fire-protection rating, or flame spread rating, or required to be noncombustible, fire-retardant treated, or slow burning, shall be tested under the applicable test procedures specified herein, in accordance with the acceptance requirements of section 27-131 of article seven of subchapter one of this chapter. The fire-resistance rating of materials and assemblies listed in reference standard RS 5-1 may be used to determine conformance with the fire resistance requirements of this code. In addition to the performance results, test reports shall give all technical data pertaining to the nature of the constituent materials, such as the physical properties, chemical composition and properties, coefficient of expansion, thicknesses of materials, etc. Except as listed in reference standard RS 5-1, any assembly using a component having a structural base of noncombustible material covered with an integrally manufactured combustible surfacing material, shall be approved for fire-resistance rating.

**ARTICLE 3 FIRE-RESISTANCE REQUIREMENTS**

§[C26-502.1] 27-323 **Requirements for structural members and assemblies.** - The fire-resistance rating of construction assemblies and the protection of structural members shall comply with the requirements of table 3-4, based on the test procedures of reference standard RS 5-2, and their materials or combinations of materials shall be in accordance with the specifications of materials used in the test.

\*§[C26-502.2] 27-324 **Protection of structural members.**- Columns, girders, trusses, beams, lintels, etc. that are required to be fire protected, and that support only one floor or a roof, and/or a non-bearing wall not more than one story high, shall be individually encased on all sides with materials having the required fire-resistance rating; or shall be protected by a ceiling as specified in section 27-327 of this article having the required fire-resistance rating; or shall be protected by a combination of both a ceiling and individual encasement which, together, provide the required fire-resistance rating. Columns, girders, trusses, beams, lintels, etc. that are required to be fire protected, and that support more than one floor or support a bearing wall or wall more than one story high, shall be individually encased on all sides for their entire length or height with materials having the required fire-resistance rating. Trusses that support only two stories or one story and a roof may be fire protected by an envelope that encompasses the entire truss with materials of the required fire-resistance rating.

(a) **Embedments and enclosures.** - Pipes, wires, conduits, ducts, or other service facilities shall not be embedded in the required fire protection of a structural member that is required to be individually encased; except that pipes, wires, and conduits may be installed in the space between the required fire protection and the structural member protected, provided that where such facilities pierce the required fire protection, the area of the penetrations does not exceed two percent of the area of the fire protection on any one face, the penetrations are closed off with close-fitting metal escutcheons or plates and the concealed space shall be firestopped at each story in accordance with the provisions of section 27-345 of article five of this subchapter.

(b) **Impact protection.** - Where the fire protective covering of a structural member is subject to impact damage from moving vehicles, the handling of merchandise, or other activity, the fire protective covering shall be protected by corner guards or by a substantial jacket of metal or other noncombustible material, to a height adequate to provide full protection. Where applicable, such protection shall be designed in accordance with the requirements of section 27-558 of article three of subchapter nine of this chapter.

(c) **Structural members in cavity walls.** - Where structural members occur within exterior cavity walls,

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portions of such structural members facing the exterior need not be individually fire protected if the outer width of the cavity wall provides the required fire-resistance rating and is located not more than two and one-half inches from such structural members, and if all surfaces of the structural members are fire protected from the interior of the building by materials having the required fire-resistance rating.

**(d) Prestressing steel.** - Minimum covering of prestressing steel shall comply with the requirements of reference standard RS 5-15.

**(e) Exterior exposed structural members.** - Structural members exposed to the outdoors on buildings that do not exceed two stories or thirty feet in height, which are required by table 3-4 to have a fire-resistance rating not exceeding one hour, need not be protected on any face of the member that has an exterior separation of thirty feet or more, provided the outdoor area within the thirty feet separation distance is not used for storage of materials, or for motor vehicle parking.

**(f) Inspection of fire protection.** - The installation of all required sprayed-on fire protection of structural members except those encased in concrete shall be subject to the controlled inspection requirements of section 27-132 of article seven of subchapter one of this code.

*Local Law 34-1988.*

**§[C26-502.3] 27-325 Elevators.** - Structural members or car frames for elevators located within shaft enclosures need not be fire protected.

**§[C26-502.4] 27-326 Lintels.** - Lintels over openings wider than four feet in masonry walls, other than in walls of masonry veneer on wood frame structures, shall be fire protected as required by section 27-324 of this article for structural members, when the full load over the opening is not relieved by a masonry arch of required strength. The members of an assembled metal lintel that support only outer face masonry that is securely bonded or anchored to backing need not be fire protected, provided that the inner members of the assembly support the full load imposed upon the lintel and are fire protected as required for structural members supporting masonry.

**(a) Stone lintels.** - The use of stone lintels on spans exceeding four feet shall not be permitted unless supplemented by fire protected structural members or masonry arches of the required strength to support the superimposed loads.

**§[C26-502.5] 27-327 Ceilings.** -

(a) Ceilings that contribute to the required fire-resistance rating of a floor or roof assembly shall be continuous between exterior walls, vertical fire divisions, fire separations, corridor partitions or any other partitions having at least the same fire resistance rating as the ceiling. All such fire-rated partitions shall be constructed as set forth in section 27-340 or

subdivision (a) of section 27-341, as appropriate. The concealed space above such ceiling shall be firestopped into areas not exceeding three thousand square feet with materials listed in section 27-345 of this subchapter for the full height of the concealed space. Access to each such concealed space may be through one or more openings, not exceeding nine square feet and protected by self-closing opening protectives having the fire-protection rating required by table 5-3.

(1) Firestopping shall not be required where the structural members within the concealed space are individually protected with materials having the required fire-resistance rating, or where the ceiling is not an essential part of the fire-resistive assembly; nor shall firestopping be required where a concealed space is sprinklered in accordance with the construction requirements of subchapter seventeen of this chapter.

**(b) Electrical and other openings in ceilings.** - Ceilings required to have a fire-resistance rating may be pierced to accommodate noncombustible electric outlet boxes or recessed lighting fixtures if the aggregate area of such openings does not exceed sixteen square inches in each ninety square feet of ceiling area and the electrical outlet boxes or recessed lighting fixtures are constructed of steel at least .022 inches thick and sealed tightly at the ceiling. Noncombustible pipes, ducts, and additional or larger electrical or other service facilities may pierce ceilings that are required to have a fire-resistance rating only when the type of ceiling to be used has been tested with such types of facilities installed in place and the proportionate area of openings for such facilities to be installed in the ceiling does not exceed the proportionate area of such openings in the assembly tested, and provided no opening is larger than that in the assembly tested. Protection for such openings shall be the same as provided in the test. Duct openings installed in accordance with the foregoing shall be protected by fire dampers complying with the requirements of subchapter thirteen of this chapter.

**§[C26-502.6] 27-328 Fire retardant treated wood.** -

**(a) Material.** - Fire retardant treated wood shall be pressure treated with fire retardant chemicals in accordance with reference standards RS 5-3 and RS 5-4. Where used as a structural element or as furring, the material shall have a flame spread rating not greater than twenty-five when tested in accordance with reference standard RS 5-5 when exposed for a period of at least thirty minutes, with no evidence of significant progressive combustion. Where used as interior finish or trim, the material shall have a flame spread rating that meets the requirements of section 27-348 of this subchapter for the location in which it is used. Subsequent to treatment, material two inches thick or less shall be air dried or kiln dried to an average moisture content of not more than nineteen percent.

**(b) Label.** - All fire-retardant treated wood shall bear the identification of a testing laboratory or producer

certifying to the performance thereof, in accordance with the acceptance requirements of section 27-131 of article seven of subchapter one of this chapter.

**(c) Application.** - Fire-retardant treated wood may not be used where exposed to the weather or in interior spaces where the relative humidity is normally eighty percent or more. There shall be no fabrication of the material after treatment, such as cutting, shaping, or grooving for splines or ring connectors so as to expose untreated surfaces, except that the material may be cut to length, shaped, or grooved if the exposed surfaces or edges are tightly butted against other material that is noncombustible or that is fire retardant treated, so that no untreated wood is left exposed to danger of ignition. Holes may be bored or cut for plumbing or heating pipes and for electric outlets only if the openings are covered [*sic*] with tightly-fitted noncombustible escutcheons or cover plates. The allowable working stresses of the material shall be ninety percent of the allowable stresses for untreated lumber of like classification.

**(d) Where permitted in construction group I.** - Fire-retardant treated wood may be used in buildings of construction group I in the following cases:

- (1) As permitted by table 3-4.
- (2) For interior non-bearing partitions that are not required to have a fire-resistance rating.
- (3) For interior furring and blocking of exterior walls, furring and blocking of interior walls and partitions, and framing of suspended ceilings provided the furring, blocking, and framing do not affect the integrity, or reduce the fire-resistance rating, of the construction element.
- (4) For interior finish and trim.

**(e) Area increase.** - Fire-retardant treated wood may be used in construction group II buildings in lieu of untreated wood for wall studs, bearing partition studs, columns, beams, girders, joists, rafters, trusses, sole and cap plates, subflooring and roof decks, and when so used, the area limitations of tables 4-1 and 4-2, for buildings of construction group II, may be increased by thirty-three and one-third percent.

**§[C26-502.7] 27-329 Opening protectives.** - Opening protectives, including frames, self-closing devices, and hardware, shall be classified as to fire-protection rating in accordance with the test procedures of reference standards RS 5-6 and RS 5-7, and shall be installed, maintained, and operated in accordance with the provisions of reference standard RS 5-8. All opening protectives shall bear the identification of a testing laboratory or agency certifying to the performance rating thereof, in accordance with the acceptance requirements of section 27-131 of subchapter one of this chapter.

**§[C26-502.8] 27-330 Slow burning plastic.** - Slow burning plastic shall be of a material that burns no faster than two and one-half inches per minute in sheets

0.060 in. thick when tested in accordance with reference standard RS 5-12 or that is not consumed in less than two minutes when tested in accordance with reference standard RS 5-13. The thickness of the plastic material shall be determined by method "B" of reference standard RS 5-14.

#### ARTICLE 4 PREVENTION OF EXTERIOR FIRE SPREAD

**§[C26-503.1] 27-331 Exterior walls.** - Exterior walls shall comply with the fire-resistance rating requirements of table 3-4. Where provisions of this code require a space or facility to be enclosed, the construction requirements for the enclosure shall not apply to any exterior wall that forms part of the enclosure.

**(a) Openings in exterior walls.** - In addition to the requirements of table 3-4 and subchapters six and eight of this chapter, exterior openings above the third floor level of a building or above a height of forty feet, except buildings in occupancy group J-3, open parking structures, and buildings of construction class II-D and II-E, shall have opening protectives when (1) any part of the opening is less than thirty feet distant in a direct unobstructed line not in the same plane, from an opening in another building or from a wood frame building or (2) any part of the opening is above and less than thirty feet in a direct unobstructed line from, any roof construction that has a fire-resistance rating of less than one hour or that has unprotected openings therein within this distance, whether the roof construction is on the same building or on an adjacent building.

**(b) Opening protective required ratings.** - In a building or space classified in occupancy group A, all opening protectives shall be three-quarter hour (class E) opening protectives meeting the requirements of reference standard RS 5-8. Such protectives shall be fixed self-closing or automatic. Alternatively, these openings may be protected with three-quarter hour (class F) protectives together with outside sprinklers installed in accordance with construction requirements of subchapter seventeen of this chapter. In such cases, there shall be an automatic dry pipe sprinkler head centered over each opening with the orifice directed against the opening. All opening protectives required by table 3-4 or by subdivision (a) above in buildings classified in other than occupancy group A shall be three-quarter hour (class F) openings.

**(c) First story openings.** - Opening protectives required by table 3-4 may be omitted in show windows or other openings on the lowest story of a building facing on a street or public space.

**(d) Nonautomatic protectives.** - Required opening protectives in exterior openings, if not self-closing or automatic, shall be kept closed by the occupants at all times when not required for light or ventilation under



the provisions of subchapter twelve of this chapter.

**(e) Construction of unprotected openings.** - Exterior windows and doors, including their frames and glazing, that are not required by this code to have a fire-protection rating, may be of combustible materials. Below a height of seventy-five feet, slow-burning plastic glazing may be used in windows. Glazing in balcony doors shall comply with the requirements of paragraph four of subdivision (g) of section 27-369 of article five of subchapter six of this chapter.

**(f) Vertical separation of openings.** - In buildings classified in occupancy groups A, B, C, D and E, exceeding three stories or forty feet in height, openings located vertically above one another in exterior walls except in stairway enclosures, shall be separated by a spandrel wall at least three feet high between the top of one opening and the bottom of the opening immediately above; or each such opening above the lower one shall be protected against fire by an opening protective; or a fire canopy of noncombustible materials, extending out at least two feet horizontally from the wall and at least as long as the width of the lower opening, shall be constructed between the two openings. Spandrels and fire canopies shall be constructed to provide at least the fire-resistance rating required for the exterior wall, but in no event less than one hour.

**§[C26-503.2] 27-332 Party walls.** - The construction, design, and fire-resistance rating of party walls shall be the same as required by this code for vertical fire divisions. Concealed spaces in cornices and eaves shall be fire-stopped as a continuation of the party wall.

**§[C26-503.3] 27-333 Parapets on exterior walls.** - Parapets shall be provided on all exterior walls of buildings of construction class II-A, II-B, or II-C that have roof construction of combustible materials.

**(a) Exceptions.** - A parapet need not be provided on the exterior wall of any building:

- (1) That is less than twenty-two feet high; or
- (2) Whose roof has a pitch of more than twenty degrees to the horizontal and whose overhang, fascia, cornice or gutter is of noncombustible construction, or if of combustible construction is separated from the roof and ceiling construction by construction having the fire-resistance rating required for the exterior wall of the building. Combustible members, excluding roof sheathing and its supporting members, if covered by a class A roof covering and complying with the restrictions as required by section 27-335 of this article, shall not extend through this construction, but shall have at least four inches of solid noncombustible material below, at the sides, and at the ends of such members; or
- (3) That is provided with a fire canopy at, or not more than two feet below the roof level, continuous around that portion of the wall that is without a parapet, constructed as required by subdivision (f) of section 27-

331 of this article.

**(b) Construction.** - Parapets required under this section shall be of materials and assembly having at least the fire-resistance rating of the wall below, and shall be at least two feet high.

**§[C26-503.4] 27-334 Protective guards.** - Buildings that are more than twenty-two feet in height and have roofs that are flatter than twenty degrees to the horizontal shall be provided with a parapet not less than three feet six inches high, or be provided with a three foot six inch high railing or fence, or a combination of a parapet and railing or fence which together are not less than three feet six inches high. Railings or fences may be located inward from the face of the exterior wall a distance not exceeding six feet, and shall be of a type that will prevent children from crawling through or over them. Where roofs are used for recreational purposes, wire fencing at least ten feet high shall be constructed. Where ball games are played on roofs the wire fencing shall be extended to provide an overhead closure. Except on buildings of classes II-D or II-E construction, railings or fences shall be of noncombustible material. Railings shall be constructed as required in section 27-558 of article three of subchapter nine of this chapter.

**§[C26-503.5] 27-335 Exterior trim.** - For the purposes of this section, exterior trim shall be defined as any material, other than door and window frames and sash, that is applied to exterior walls and which, if removed or destroyed, will not reduce the structural stability of the building enclosure, and which is installed so as not to reduce the required fire-resistance rating of the enclosure. Exterior trim shall include cornices, overhanging eaves, fascias, belt courses, pilasters, surrounds, gutters, leaders, half-timber work, shutters, trellises, etc.

**(a) Combustible exterior trim:**

(1) May not be used on buildings required to be of construction group 1 except that slow-burning plastics or approved equivalent materials may be used up to a height of twenty-five feet, provided that such trim covers not more than five percent of the surface area of the building enclosure (openings not included), or not more than one thousand square feet.

(2) May be used to a height of forty feet on buildings of construction class II-A, II-B, and II-C provided that such trim covers not more than ten percent of the surface area of the building enclosure (openings not included), projects not more than eight inches beyond the outside face of the building enclosure, and has an exterior separation of at least fifteen feet measured from the outermost surface of the trim.

EXCEPTION - Cornices, gutters, or overhanging roofs, when permitted, may project up to three feet beyond the outside face of the building enclosure if they are at least eight inches above the topmost opening, are

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firestopped as required by section 27-345 of article five of this subchapter and either:

- a. have their combustible structural members protected by soffits and fascias of a material or assembly having at least a one hour fire-resistance rating, or
  - b. have all their combustible members separated from the roof and ceiling construction by construction having the fire-resistance rating required for the exterior wall, with at least four inches of solid noncombustible material below, at the sides, and at the ends of such members;
- (3) May be used to an unlimited extent in buildings of construction classes II-D and II-E on exterior walls that are not required to have a fire-resistance rating.

### \* §27-335.1 Acoustical and thermal insulation; use in noncombustible construction. -

(a) Notwithstanding any provision of this code to the contrary, acoustical or thermal insulation, which is not noncombustible, may be used where noncombustible construction is required if:

(1) it satisfactorily passes a test for determining noncombustibility of elementary materials, based on the test procedures of A.S.T.M. E136-65, and, upon exposure to fire will not produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions; or

(2) it has a flame-spread rating not greater than twenty-five, a smoke developed rating not greater than fifty, is without evidence of continued progressive combustion when tested in accordance with the test procedure of reference standard RS 5-5, and upon exposure to fire will not produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions.

(b) Notwithstanding any provision of subdivision a of this section or any other provision of this code to the contrary, acoustical or thermal insulation, which is not noncombustible and which does not meet the requirements of subdivision a of this section, may be used where noncombustible construction is required subject to the approval of the commissioner, and provided it is installed in a composite method of construction, with a minimum of three inches of unpierced masonry or concrete on all sides.

(c) Notwithstanding any provision of subdivision a or b of this section or any other provision of this code to the contrary, thermal insulation, which is not noncombustible and which does not meet the requirements of subdivisions a and b of this section, may be installed in an exterior wall system in any noncombustible construction group, provided that:

(1) such insulation is of a thickness no greater than four inches; provided, additional thickness used exclusively for decorative or leveling purposes shall be permissible, where the area of such additional thickness

does not exceed fifteen percent of the [sic] wall area on any single story;

(2) such insulation has a heat value not in excess of six thousand Btu per square foot;

(3) such insulation is installed in a composite method of construction and is separated from interior spaces by a thermal barrier having at least a one-hour fire resistance rating;

(4) such insulation has a flame spread rating not greater than twenty-five and a smoke developed rating not greater than four hundred fifty, and is covered with, and sealed or joined by, material having a flame spread rating not greater than twenty-five and a smoke developed rating not greater than fifty, when tested in accordance with the procedures of reference standard RS 5-5;

(5) such insulation is installed in a manner which meets the requirements for firestopping set forth in section 27-345;

(6) upon exposure to fire, the exterior wall system and each of its components will not produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions;

(7) the structure on which the exterior wall system is installed meets the requirements of section 27-331 pertaining to minimum horizontal and vertical separation distances; provided, however, that such insulation shall not be used on the exterior surface of a wall of a court or shaft if the horizontal or vertical separation distance between such wall and another wall of such court or shaft is less than twenty feet;

(8) the use of such insulation on soffits or other horizontal areas shall not extend more than three feet beyond the outside face of the building enclosure;

(9) the use of such insulation on buildings having party walls meets the requirements of section 27-332;

(10) such insulation meets the acceptance requirements of section 27-131;

(11) the results of a fire test of a representative portion of the exterior wall system meet the requirements of reference standard RS 5-21;

(12) the edge or face of the assembly containing such insulation is labeled with the following information:

a. the name of a nationally recognized testing laboratory acceptable to the commissioner which has inspected such insulation;

b. the model of the exterior wall assembly for which such insulation is listed by a nationally recognized testing laboratory acceptable to the commissioner;

c. the identity of the manufacturer of such insulation;

d. the flame spread and smoke developed ratings; and

(13) the installation of such insulation shall be subject to controlled inspection to ensure that the installation is fully consistent with the terms of the listing by a nationally recognized testing laboratory acceptable to the

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commissioner, acceptance requirements of section 27-131 and the manufacturer's installation recommendations.

(d) The commissioner may, with regard to thermal insulation, the use of which is authorized by this subdivision, establish by regulation training criteria for persons installing such insulation, and prohibit the installation of such insulation by persons not adequately trained. Any person installing such insulation shall certify to the commissioner that the installation is fully consistent with the terms of the listing by a nationally recognized testing laboratory acceptable to the commissioner, acceptance requirements of section 27-131 and the manufacturer's installation recommendations.

(e) Definitions. As used in this section:

(1) "Composite method of construction" shall mean a method of construction in which diverse materials are combined to form an assembly, whether the assembly is prefabricated or fabricated at the site of installation.

(2) "Exterior wall system" shall include the exterior walls of a building and the appurtenances thereof.

*\*Local Law 13-1987.*

### §[C26-503.6] 27-336 Porticos, porches, etc. -

Porticos, entranceways, storm enclosures, bay windows, oriel windows, porches, or similar appendages may be constructed of combustible materials or assemblies on buildings of construction class II-E to an unlimited extent, and on buildings of construction classes II-A, II-B, II-C, and II-D under all of the following conditions:

(a) The building is classified in occupancy group J-2 or J-3.

(b) The building is not more than three stories or forty feet high.

(c) The appendage has an exterior separation on all exposed sides of at least fifteen feet, measured from the outermost surface of the appendage.

(d) The appendage is so constructed that its removal or destruction will not reduce the structural stability or fire resistive integrity of the building.

(e) The vertical surface area of the combustible portions of the appendage, including any exterior trim, is not more than ten percent of the total wall area (windows excluded) of the building.

(f) The appendage has a superficial roof area not exceeding one hundred fifty square feet and is included in the area limitations of table 4-1 and 4-2 for the entire building.

(g) The appendage is not higher than the sills of the second story windows.

(h) The roof of the appendage has a class A roof covering.

(i) The soffit or ceiling covering the combustible roof framing of the appendage has a one hour fire-resistance rating.

(j) The requirements of subdivisions (h) and (i) of this section shall not apply in the case of roofs or awnings over patios or entrance platforms where the area of

vertical exposure of the patios or platforms to the outdoors is equal to at least that of the patio or platform area. Plastic shall be slow burning; canvas or other fabric shall be noncombustible or flameproofed in accordance with the provisions of title fifteen of the administrative code.

### §[C26-503.7] 27-337 Roof coverings. -

Roof coverings shall be classified as A, B, or C on the basis of their resistance to exterior fire exposure as listed in reference standard RS 5-9, or as determined by tests made in conformance with reference standard RS 5-10 for those not listed.

(a) **Limitations of use.** - Every roof placed on a building shall be covered with Class A or B roof covering, except Class C roof coverings may be placed on buildings classified in occupancy group J when not more than three stories or forty feet in height, and on buildings permitted by this code to be of Class II-D or II-E construction. The use of roofing having no rating is prohibited, except for replacement to the extent of twenty-five percent of the roof area in any twelve month period.

(b) **Combustible roof decking.** - Unless attached directly to noncombustible framework, all roof coverings shall be applied to a closely fitted deck; except that wood shingles, to the extent permitted in subdivision (a) of this section, may be applied to wood slats.

(c) **Roof insulation.** - Combustible roof insulation may be applied on top of roof decking or slab provided that it is protected with the roof covering applied directly thereto.

### §[C26-503.8] 27-338 Roof structures. -

(a) **Construction of penthouses.** - Enclosure walls of penthouses shall comply with the requirements for exterior walls of table 3-4 for the construction class of the building on which they are erected. Roofs of penthouses shall comply with the requirements for roof construction of table 3-4 and section 27-337 of article five of subchapter six of this chapter.

(b) **Construction of bulkheads.** - Bulkheads shall be constructed of noncombustible materials having a one hour fire-resistance rating, except that in buildings of construction class II-E, they may be constructed of combustible materials having a one hour fire-resistance rating.

(c) **Scuttles.** - Scuttles shall be constructed of noncombustible materials, or of combustible materials covered on the top, sides, and edges with noncombustible materials.

(d) **Skylights.** - For the purposes of this section, the term "skylight" shall be construed to include the sash, frames, and glazing of roof monitors and sawtooth roofs.

(1) **SASH AND FRAMES.** - Skylights that are inclined at less than sixty degrees to the horizontal on all buildings of other than construction classes II-D and II-E, shall have sash and frames constructed of noncombustible materials, and their glazing shall be as

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prescribed in paragraph two of this subdivision. Skylights that are inclined at greater than sixty degrees to the horizontal shall have sash and frames constructed as required for windows, and their glazing shall be as required for windows. Glass, glass blocks, or plastic used in skylights shall be designed and constructed to withstand the same live loads as required for roofs plus any concentrated live loads required herein.

### (2) GLAZING. -

a. Skylights over stairways and shafts. - Skylights placed over stairways and shafts shall be glazed with plain glass not more than one-eighth inch thick or unreinforced plastic not more than three-sixteenths of an inch thick.

b. Skylights over other spaces. - Skylights in all locations other than over stairways and shafts shall be glazed with one-quarter inch wired glass, plain glass, glass block, or plastic of material and installation complying with subparagraph c of this paragraph.

c. Plastic. - Plastic used for the glazing of skylights other than skylights over stairways and shafts shall be slow burning plastic. The aggregate area of skylight openings, other than over stairways and shafts, shall not exceed thirty per cent of the floor area of any room or space sheltered by the roof in which they are located. The edges of plastic, if exposed, shall be protected by metal or other noncombustible material. Skylights in which plastic is used, if on roofs having a pitch of twenty degrees to the horizontal or less, shall be constructed in accordance with the following:

1. The area within the curbs of each skylight shall not exceed five square feet, except that this area may be of any size, limited only by other provisions of this section, if the opening is protected on all sides by a noncombustible railing thirty-six inches in height complying with the provisions of section 27-558 of article three of subchapter nine of this chapter for railings; or the skylight is subdivided into areas of five square feet or less by noncombustible muntins or bars capable of supporting a live load of three hundred pounds at any point; or a noncombustible screen or grid capable of supporting a load of three hundred pounds over any one foot by two foot area as provided above, integral with, or not more than three feet below the skylight, with the wire or bars spaced into areas of five square feet or less (if above the roof, the wires shall be of corrosion resistive metal).

2. There shall be a minimum clear distance of three feet between skylights.

### (3) SEPARATION OF SKYLIGHTS FROM STRUCTURES. -

There shall be at least ten feet between a plain glass or plastic skylight and any door in a stair bulkhead located above the roof in which the skylight is located, and at least ten feet between such a skylight and any opening in any roof structure or other wall above the roof not equipped with an opening protective. On buildings up

to one hundred feet in height, there shall be at least ten feet from such a skylight to the outside face of an exterior wall facing on a frontage space.

(4) SCREENS. - Plain glass skylights shall be protected on their underside by noncombustible screens having a mesh not smaller than three-quarters of an inch by three-quarters of an inch nor larger than one inch by one inch of at least No. 12 B. & S. gage [*sic*] wires. The screen shall be installed tight against the roof opening or shall project on all sides for a distance of not less than the distance of the screen below the glass, and shall be of such material and construction so as to support a load of three hundred pounds over any one foot by two foot area. The provisions for wire glass or screen protection shall not apply to glass block skylights.

(e) **Greenhouses.** - Greenhouses on the roofs of buildings other than buildings of construction class II-D or II-E shall be constructed of noncombustible framework and shall be glazed with plain or wire glass, or slow burning plastic. The floors of greenhouses shall be constructed at least as required for roof construction in table 3-4 for the construction class of the building on which it is located.

(f) **Construction of sloping roofs.** - Roofs having a slope of more than sixty degrees to the horizontal shall be constructed of material having the same fire-resistance rating as required for an exterior non-bearing wall of the building of which it is a part. When the slope is sixty degrees or less to the horizontal, the sloping roof shall be constructed as required for the roof of the building. Where the back of a false mansard is exposed to the outdoors, the back shall be covered with noncombustible material or with roof coverings as required for the roof of the building.

(g) **Dormers.** - Roofs of dormers shall be of the same type of construction and have roof covering of the same class as required for the roof of the building on which they are located. The walls of dormers shall be constructed of materials having the same fire resistance rating as required for non-bearing exterior walls of the building on which they are located; except that in buildings of construction classes II-A, II-B, II-C, and II-D, the walls may be constructed of combustible framing provided that the outside face of the framing is protected with noncombustible sheathing and the aggregate area of all such dormer walls, including openings therein, does not exceed twenty percent of the roof area.

### (h) **Water tanks.** -

(1) **SUPPORTS.** - All water tanks placed in or on a building and having a capacity of more than five hundred gallons shall be supported on noncombustible walls or framing. When such tank is located within the building, above the lowest story, its framing shall be fire protected as required for columns supporting one

floor or the tank shall be located within a room or space that is enclosed with construction having a fire-resistance rating equivalent to that otherwise required for the protection of the framing.

**(i) Cooling towers.** - Cooling towers shall be constructed of noncombustible materials, except as follows:

(1) Outside the fire districts, when located on a building three stories or forty feet in height or less of construction group I, cooling towers may be constructed of combustible materials provided they are not more than fifteen feet high and do not exceed seven hundred fifty square feet in area.

(2) Outside the fire districts, when located on the ground and not exceeding three stories or forty feet in height or one thousand five hundred square feet in area, cooling towers may be constructed of combustible material provided they are protected by a noncombustible screen, fence, or wall at least twenty feet from the tower and at least seven feet high.

(3) Filling and drift eliminators may be of combustible materials if the towers are provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen.

(4) Filling and drift eliminators may be of combustible materials where the towers are not provided with automatic sprinkler protection, provided all of the following conditions are met:

a. The cooling tower is constructed of noncombustible material;

b. The cooling tower is located on a building in construction group I-A or I-B;

c. The cooling tower and filling and drift eliminators are located at least thirty feet away from any windows or fresh air intakes which are at an elevation above the roof on which the cooling tower is located, whether in the same building or in an adjoining building;

d. The cooling tower is located not less than fifteen feet from the nearest lot line; and

e. The cooling tower is located not less than ten feet from any chimney, except that the distance shall be not less than twenty feet from a chimney venting products of combustion other than from gas or oil fired appliances, whether on the same building or an adjoining building.

(5) In no event shall cooling towers or filling and drift eliminators be constructed of materials that contain asbestos.

**(j) Miscellaneous roof structures.** - The following roof structures may be constructed of combustible material if less than twelve feet high above the roof: antenna supports; flagpoles; clothes drying frames; duckboarding or platforms that do not cover more than twenty per cent of the roof area at that level.

## ARTICLE 5 PREVENTION OF INTERIOR FIRE SPREAD

§[C26-504.1] 27-339 Fire segregation of occupancies.-

**(a) Segregation by fire divisions.** - When different occupancies are to be segregated by fire divisions under the provisions of section 27-240 of subchapter three of this chapter, the occupancies shall be separated from each other, vertically and horizontally, by fire divisions having at least the fire-resistance ratings listed in table 5-2 for the occupancy groups involved. Every building section shall be constructed of elements having at least the fire-resistance rating of a construction class required for the area and height of the building section as listed in tables 4-1 and 4-2.

**(b) Segregation by fire separations.** - When different spaces are to be segregated by fire separations under the provisions of section 27-240 of subchapter three of this chapter, the occupancies shall be separated from each other, vertically and horizontally, by fire separations having at least the fire-resistance ratings listed in table 5-1. In buildings of construction group I, fire separations shall be constructed of noncombustible materials.

**(c) Compartmentation.** - Notwithstanding the provisions of Table 4-1, in existing office buildings one hundred feet or more in height having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, unsprinklered floor areas, more than forty feet above curb level, shall be subdivided by fire separations into spaces or compartments of the size required by paragraphs one through five of this subdivision. Floor area shall be defined as the area within exterior walls and excluding any areas enclosing stairs, corridors, elevators and shafts:

(1) Unless otherwise provided below, all unsprinklered floor areas shall be segregated by one-hour fire separations into spaces or compartments not to exceed seventy-five hundred square feet.

(2) Where the floor area exceeds ten thousand square feet, at least one of the subdividing fire separations shall be of two-hour fire-resistive construction, creating areas of refuge, complying with section 27-372 of article five of subchapter six of this code except that the requirement for an elevator in each area shall not apply.

(3) The floor area or any subdivided area may be increased to not more than fifteen thousand square feet if complete area protection by approved devices for the detection of products of combustion other than heat is provided within such increased area and provided further than\*\*\* at least one of the subdividing fire separations shall be of two-hour fire-resistive construction where the floor area exceeds fifteen thousand square feet, creating areas of refuge in the same manner and under the same conditions as provided in two of this subdivision. The activation of any such detectors shall have the same effect as provided in subdivision (f) of section 27-972 of article five of subchapter seventeen of this code.

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**TABLE 5-1 FIRE SEPARATIONS**

**Key:** Fire-resistance ratings are given in hours. For Table 5-1, read above heavy line. For Table 5-2, read below heavy line.  
**NR**—No Requirement

OCCU-PANCY	A	B-1	B-2	C	D-1	D-2	E	F-1a	F-1b	F-2	F-3	F-4	G	H-1	H-2	J-1	J-2	J-3
A	4	4	4	4	4	4	4 <sup>c</sup>	4	4	4	4	4	4	4	4	4	4	4
B-1	4	3	NR	1 <sup>bc</sup>	NR	NR	1 <sup>ac</sup>	1 <sup>c</sup>	1 <sup>c</sup>	—	1 <sup>c</sup>	1 <sup>c</sup>	1 <sup>c</sup>	1½ <sup>c</sup>	1½ <sup>c</sup>	1 <sup>c</sup>	1 <sup>c</sup>	1 <sup>c</sup>
B-2	4	3	2	NR	NR	NR	NR	NR	NR	—	NR	NR	NR	NR	NR	NR	NR	NR
C	4	3	2	2	1	NR	NR	NR	NR	—	NR	NR	NR	1	1	1	1	1
D-1	4	3	3	3	3	NR	1 <sup>a</sup>	1	1	—	1	1	1	1½	1½	1	1	1
D-2	4	3	2	2	3	2	NR	NR	NR	—	NR	NR	NR	NR	NR	NR	NR	NR
E	4	3	2	2	3	2	2	NR	NR	—	NR	NR	NR	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>
F-1a	4	3	2	2	3	2	2	2	NR	—	NR	NR	NR	1	1	1	1	1
F-1b	4	3	2	2	3	2	2	2	2	—	NR	NR	NR	1	1	1	1	1
F-2	4	3	2	2	3	2	2	2	2	2	—	—	—	—	—	—	—	—
F-3	4	3	2	2	3	2	2	2	2	2	2	NR	NR	1	1	1	1	1
F-4	4	3	2	2	3	2	2	2	2	2	2	2	NR	1½	1½	1	1	1
G	4	3	2	2	3	2	2	2	2	2	2	2	2	NR	NR	NR	NR	NR
H-1	4	3	2	2	3	2	2	2	2	2	2	2	2	2	NR	1	1	1
H-2	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	1	1	1
J-1	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	NR	NR
J-2	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	NR
J-3	4	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2

**TABLE 5-2 FIRE DIVISIONS**

**NOTES FOR TABLES 5-1 AND 5-2**

<sup>a</sup>An office, or group of offices, whose use is accessory to an occupancy, and totals four hundred square feet or less in area shall not be required to have a fire separation. Such office, or group of offices, totalling more than four hundred square feet in area shall not be required to have a fire separation if such offices exit directly, without having to pass through the area of the related occupancy.

<sup>b</sup>Counters and backbars for the sale of publications, tobacco products, liquors, or candies, or for making of reservations for travel, car rental, or theatre, or otherwise involving similar business and mercantile activities that are accessory to an occupancy and are limited in area to one hundred square feet, within the area of the occupancy, need not comply with the requirements of this table.

<sup>c</sup>The provisions of this table shall not apply to closets seventy-five square feet or less in area.

<sup>d</sup>Nonresidential kitchens need not be separated by fire separations from adjoining dining spaces, provided:

- (1) The cooking equipment is vented directly to the outdoors, and
- (2) 2\* draft curtain of noncombustible material, at least twenty-four inches down from the ceiling, is provided to separate the cooking facilities from dining spaces, and
- (3) Sprinkler heads constructed in accordance with the provisions of subchapter seventeen of this chapter, are provided on the cooking facilities side of the curtain, or any opening between the kitchen and dining space, located within twenty-four inches of the curtain or opening, and spaced not more than forty-eight inches on centers if the opening is more than sixty inches wide. When fire separations are provided double-action doors may be permitted.

<sup>e</sup>Kitchens having a floor area of fifty-nine square feet or less located within dwelling units shall be separated from adjacent spaces by partitions having a fire-resistance rating of at least one hour except for the entrances thereto which need [not]\*\* comply with section 27-342 of this article. If doors are provided they may be of wood.

<sup>f</sup>In buildings or spaces classified in occupancy group J-1 or J-2 all partitions in dwelling units located in cellars shall have a minimum fire-resistance rating of one hour.

\*As enacted; "A" probably intended.

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

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(4) In existing buildings, existing fire separations of one-hour fire-resistive construction may be accepted in lieu of the fire separation of two hour fire-resistive construction providing all other requirements of paragraphs two and three of this subdivision are complied with.

(5) Regardless of the floor area, no subdivision of the floor area shall be required under this subdivision when complete sprinkler protection is provided in accordance with the construction provisions of subchapter seventeen of this chapter.

(6) Existing office buildings one hundred feet or more in height shall comply with the requirements of this subdivision as follows:

a. Whenever an alteration is performed involving partition changes, compliance with this subdivision shall be required in that portion of the building being altered.

b. At least one-third of the total floor area of the building not in compliance with the requirements of this subdivision on February seventh, nineteen hundred seventy-three, shall comply with such requirements on or before December thirteenth, nineteen hundred eighty-one. Complete plans showing such compliance for the phase of the work to be done shall be filed with, and a permit secured from, the commissioner on or before September thirteenth, nineteen hundred eighty.

c. At least two-thirds of the total floor area of the building not in compliance with the requirements of this subdivision on February seventh, nineteen hundred seventy-three, shall comply with such requirements on or before August seventh, nineteen hundred eighty-four.

d. Full compliance shall be provided on or before February seventh, nineteen hundred eighty-eight.

(7) In existing office buildings one hundred feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraphs one through five of this subdivision and accept alternatives fulfilling the intent of these requirements. Where compliance with the time requirements of paragraph six of this subdivision would cause undue hardship, the commissioner, with the approval of the fire commissioner, may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved, permits obtained and a good faith effort towards completion of the work shall have been made.

*\*\*\*As enacted; "that" probably intended.*

**§[C26-504.2] 27-340 Fire divisions.** - Fire divisions shall be constructed of noncombustible materials or assembly of noncombustible materials to provide the fire-resistance ratings required by table 5-2. Vertical fire divisions shall be continuous between foundation,

roof, or horizontal fire divisions, and through any concealed space in floor or roof construction. Horizontal fire divisions shall be continuous between exterior walls and/or vertical fire divisions.

(a) When roof construction is combustible on both sides of a vertical fire division, the vertical fire division shall extend through the roof construction to a height of at least four inches above the high point at the roof framing. Decking shall tightly butt the fire division. Above the decking of roofs that are flatter than twenty degrees to the horizontal, blocking shall be constructed to form cants on both sides of the fire division with slopes not steeper than 1:4. Combustible decking shall not extend over the top of the fire division.

(b) Except as required in subdivision (c) of this section, when roof construction is noncombustible on one or both sides of a vertical fire division, the vertical fire division may terminate at the underside of the noncombustible roof construction provided the junction of the wall and roof construction is made smoke tight.

(c) When a vertical fire division is required by table 5-2 to have a fire-resistance rating of three or four hours, and the roof construction has a fire-resistance rating of less than two hours, the fire division shall extend above the roof construction to form a parapet at least three feet high.

(d) Fire divisions shall be so constructed that the removal or collapse of construction on one side will not endanger the support of construction on the other side.

(e) Fire divisions shall be made smoke tight at their junction with exterior walls. In buildings of construction class II-D and II-E, exterior walls shall be constructed of noncombustible materials for a distance of at least eighteen inches on each side of the fire division, or the fire division shall project at least twelve inches through the exterior wall.

(f) Fire divisions may be offset if the construction between the offset divisions, including their supports, has at the same fire-resistance rating as the fire division, with all hollow spaces within the construction firestopped with noncombustible material.

(g) Where combustible members such as joists, beams, or girders bear on, or frame into, vertical fire divisions, such members shall not extend through the wall and shall have at least four inches of solid noncombustible material below, at the sides, and at the ends of each such member.

(h) Chases or recesses shall not be cut into fire divisions so as to reduce their thickness below that required for the fire-resistance rating.

(i) Vertical fire divisions that are hollow shall be firestopped with at least four inches of noncombustible material so as to prevent passage of flame, smoke, or hot gases through the hollow spaces to the story above or below, or to hollow spaces within connecting floor or roof construction.

§[C26-504.3] 27-341 **Fire separations.** - Fire separations shall be constructed of materials or assembly of materials having at least the fire-resistance ratings required by table 5-1.

(a) **Different tenancies.** - Different tenant apartments, suites, stores, offices, or other spaces that are not separated from each other by fire divisions, shall be separated from each other by fire separations having at least the fire-resistance rating prescribed in table 5-1, but in no case less than one hour, and shall continue through any concealed spaces of the floor or roof construction above.

§[C26-504.4] 27-342 **Openings in fire divisions and separations.** - Openings in fire divisions and fire separations that are required to have a fire-resistance rating, shall be protected by opening protectives having the fire-resistance ratings prescribed in table 5-3, shall not exceed the limits in size and area herein prescribed, and shall comply with the provisions of section 27-329 of article three of this subchapter. Door and other openings in enclosures of vertical exits, exit passageways, corridors, and places of assembly shall be protected by opening protectives as required by the provisions of subchapters six and eight of this chapter. When such enclosures also serve as fire divisions or fire separations, openings therein shall be protected as required by the provisions of this subchapter.

**TABLE 5-3 OPENING PROTECTIVES FOR FIRE DIVISIONS AND FIRE SEPARATIONS**

Fire-resistance Rating of Fire Division or Fire Separation in which Opening Occurs (hr.)	Fire Protection Rating of Opening Protective
3 or 4	3 hr. (Class A)*
2 or 1 ½	1 ½ hr. (Class B)
1	¾ hr. (Class C)

\* **Notes for Table 5-3:**

Shall consist of two one and one-half hour (class B) opening protectives, with one protective installed on each face of a fire division or fire separation.

(a) **Size of opening.** - In buildings that are not sprinklered no opening through a fire division or fire separation shall exceed one hundred twenty square feet in area, with no dimension greater than twelve feet, and the aggregate width of all openings at any level shall not exceed twenty-five percent of the length of the wall. Where the areas on both sides of a fire division or fire separation are sprinklered in accordance with the construction provisions of subchapter seventeen of this

chapter, the size of the opening may be one hundred fifty square feet in area, with no dimension greater than fifteen feet. In buildings fully sprinklered in compliance with the provisions of subchapter seventeen of this chapter, the size and aggregate width of openings through fire divisions or fire separations shall be unlimited. When a fire division or fire separation serves as a horizontal exit also, it shall have no opening other than door openings not exceeding fifty-six square feet in area, the aggregate width of all openings at any level shall not exceed twenty-five percent of the length of the wall, and shall comply with the provisions of section 27-373 of article five of subchapter six of this chapter.

(b) **Conveyor openings.** - Where fire doors or shutters are impractical for the protection of conveyor openings in fire divisions or fire separations, a system of water spray nozzles may be used. At least four nozzles shall be provided on each side of the opening so as to give complete coverage of the opening. Nozzles shall be controlled by an automatic valve actuated by a heat detector. Nozzles shall be located at an angle not more than thirty degrees between the centerline of nozzle discharge and a line perpendicular to the plane of the opening. The water discharge rate shall be at least three gallons per square foot per minute. When conveyor openings through floors are protected by this method, the openings shall also be provided with a noncombustible enclosure constructed around the conveyor from the floor up to or slightly beyond the spray nozzles, and draft curtains shall be provided extending twenty-four inches below and around the floor opening.

§[C26-504.5] 27-343 **Ducts, pipes and conduits through rated construction.** -

(a) Installation of ducts which pass through construction required to have a fire-resistance rating shall comply with the requirements of subchapter thirteen, provided that, notwithstanding the provisions of subchapter thirteen or reference standard RS 13-1, noncombustible ducts which pass through construction required to have a fire-resistance rating of one hour must be provided with fire dampers unless:

- (1) The building is classified in occupancy group C, E, or H-2; and
- (2) Complete sprinkler protection is provided for the floor in accordance with subchapter seventeen; or
- (3) The openings for the ventilation ducts do not exceed three square feet in area; or
- (4) The duct is protected on both sides of the partition for a distance equal to the maximum duct dimension by a sleeve affording one hour fire separation for such horizontal distance.

(b) **Noncombustible pipes and conduits.** - Noncombustible pipes and conduits may pass through construction required to have a fire-resistance rating



provided that the space between the pipe or conduit and its sleeve or opening does not exceed one-half inch and is completely packed with mineral wool or equivalent noncombustible material and is closed off by close-fitting metal escutcheons on both sides of the construction; and provided further that the aggregate net area of such openings does not exceed twenty-five square inches in any one hundred square feet of wall or floor area (excluding the areas of openings for sleeves which are firestopped in conformance with this section and section 27-345).

(c) Openings for passage of pipe and ducts whose aggregate net area exceeds twenty-five square inches in any one hundred square feet of wall or floor area (excluding opening for sleeves which are firestopped in conformance with this section and section 27-345) may pierce constructions required to have a fire-resistance rating only when the type of construction to be used has been tested with such types of facilities installed in place and the proportionate area of openings of such facilities to be installed in the construction does not exceed the proportionate area of openings in the assembly tested, and provided no opening is larger than that in the assembly tested. Protection of such openings shall be the same as provided in the test. All openings through hollow fire rated construction shall be sleeved with sheet metal least No. 14 U.S. std. gage thick.

**§[C26-504.6] 27-344 Shafts.** - The requirements of this section shall apply to all shafts, except that floor openings accommodating a slide pole in a fire house and openings other than for ventilation, chimneys or gas vents in buildings three stories or less in height classified in occupancy group J-3 shall be exempt from these requirements, and except as more restrictive requirements may be specified for chimneys and gas vents in subchapter fifteen of this chapter, stairway enclosures in subchapter six, duct enclosures in subchapter thirteen, elevator, escalator, and dumbwaiter enclosures in subchapter eighteen of this chapter, and except as permitted in reference standard RS 5-18.

**(a) Construction.** - Shafts shall be enclosed with materials having at least fire-resistance rating required by table 3-4. A shaft that serves the topmost story of a building shall extend through the roof at least thirty-six inches above any combustible roof construction. Where the roof construction is of noncombustible materials, the shaft shall extend through any concealed space within the roof construction and may terminate at the underside of the roof deck. Pipes and ducts penetrating shaft construction shall comply with the requirements of section 27-343 of this article.

**(b) Combustible contents.** - Shafts shall be kept free of bookstacks or other combustible contents except for stair construction as permitted under subchapter six of this chapter, duct and pipe coverings as permitted under

subchapters thirteen and sixteen, and elevator car enclosures as permitted under subchapter eighteen of this chapter.

**(c) Openings in shafts.** - All shaft openings below the top terminus shall be provided with opening protectives that comply with section 27-329 of this subchapter and table 5-3. In shafts that contain only one opening below the roof terminus, no opening protective need be provided. Openings in elevator and dumbwaiter shafts shall comply only with the requirements of subchapter eighteen of this chapter. Where a window is located in a shaft wall that is an exterior wall and is ten stories or less above grade or three stories or less above a roof, it shall be protected against entrance by a permanently secured grille consisting of 5/8 in. dia. bars, 10 in. o. c. vertically, or by a stationary metal sash window having 1/8 in. thick solid section steel muntins, 8 in. o. c. one way. This protection shall not be required in stair shafts where there is a stair landing or platform not more than three feet directly below the window sill.

**(d) Smoke venting of closed shafts.** - All closed shafts having an area exceeding four square feet, other than elevator or dumbwaiter shafts, shall be provided with a smoke vent having an area of at least three and one-half percent of the maximum shaft area at any floor, but in no event less than one-half square foot. Elevator and dumbwaiter shaft vents shall comply with the requirements of subchapter eighteen of this chapter. Smoke vents may be windows, louvers, skylights, vent ducts, or similar devices. Vent ducts shall be enclosed by construction having the same fire resistance rating as required for the shaft enclosure. Such vent ducts shall extend vertically, diagonally, or horizontally as provided below.

(1) Through any roof of the building provided the vent opening is at least ten feet from any window, door, outside stairway, or interior lot line. This dimension may be reduced to five feet if the vent duct is extended up to at [*sic*] least the level of the top of the window or door. A vent that is required to extend above a roof shall extend at least eight inches above a roof assembly constructed of noncombustible materials, and at least thirty-six inches above a roof assembly constructed of combustible materials that are within a horizontal distance of ten feet.

(2) Through an exterior wall of the building, provided there are no openings in the wall within a distance of thirty feet vertically above the vent opening, and within five feet either side of the vent opening. When a side of a shaft is an exterior wall or a wall of a roof bulkhead, the required vent may be a louver or window. Any window or louver located in a shaft wall above a roof constructed of combustible materials shall have its sill at least thirty-six inches above the roof.

**(e) Terminus of shaft vents.** - Of the total required vent area for shafts, at least one-third shall be clear opening to

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the outdoors, either in the form of fixed louvers, ridge vents, or hooded or goosenecked openings. In lieu thereof, skylights or trap doors may be used if constructed and arranged to open automatically by fusible link or other mechanical device when subjected to a temperature of one hundred sixty degrees Fahrenheit or to a rapid rise in temperature at a rate of fifteen to twenty degrees Fahrenheit per minute. The remaining portion of the required vent area may be a window or skylight glazed with plain glass not more than one-eighth inch thick or slow burning plastic.

**(f) Machine rooms.** - Any compartment containing machinery that communicates with a shaft enclosure shall comply with all requirements for shafts. The required louver or glazing shall not be located in any door leading into such compartment.

**§[C26-504.7] 27-345 Firestopping.** -Concealed spaces within partitions, walls, floors, roofs, stairs, furring, pipe spaces, column enclosures, etc. that would permit passage of flame, smoke, fumes, or hot gases from one floor to another floor or roof space, or from one concealed area to another, shall be firestopped to form an effective draft barrier, or shall be filled with noncombustible material in accordance with the requirements of this section. Firestopping shall not be required where a concealed space is sprinklered in accordance with the construction provisions of subchapter seventeen of this chapter, or is constructed as a shaft.

**(a) Firestopping materials.** -In buildings of construction group I, firestopping or fill shall be of noncombustible material that can be shaped, fitted, and permanently secured in position. In buildings of construction group II, firestopping may be of combustible material consisting of wood not less than two inches nominal thickness with tight joints, two layers of one inch nominal thickness assembled so that there are no through joints or of one-half inch exterior type plywood with joints backed, except that noncombustible firestopping shall be used in concealed spaces of fire divisions and where in contact with fireplaces, flues, and chimneys. Noncombustible firestopping may be masonry set in mortar, concrete, three-quarter inch thick mortar or plaster on noncombustible lath, plasterboard at least three-eighths of an inch thick, fire-rated wallboard at least five-eighths of an inch thick, sheet metal at least No. 14 U.S. std. gage thick, solid web metal structural members, asbestos-cement board at least one-quarter of an inch thick, or equivalent rigid noncombustible material. Mineral, slag, or rockwool may be used for firestopping when compacted to a density of at least three and one-half pounds per cubic foot into a confined space of least dimension not more than one-third its second dimension.

(1) The performance of through-penetration fire stops shall be measured and specified according to reference

standard RS 5-19.

(2) The commissioner may accept reference standard RS 5-19 test data results from an independent laboratory acceptable to the commissioner pursuant to subdivision (c) of section 27-131, when such data is submitted by a registered architect or licensed professional engineer to justify the usage of fire stops or the details of their installation not specified herein.

**(b) Hollow partitions and furred spaces.** - All hollow partitions and furred out spaces shall be firestopped at each floor level. Firestops shall be the full thickness of the hollow space or furred out space.

**(c) Stairs.** - Concealed spaces within stair construction shall be firestopped between stringers at the top and bottom of each flight of stairs so as not to communicate with concealed spaces in the floor, roof or intermediate landing construction.

**(d) Ceiling spaces.** - Floor or roof assemblies required to have a fire-resistance [*sic*] rating shall have any concealed spaces therein firestopped in accordance with section 27-327 of this subchapter.

**(e) Exterior cornices.** - Exterior cornices and eaves, constructed of combustible materials or with combustible framing, shall be firestopped at the ends of fire divisions and party walls, and at maximum intervals of twenty feet. If not continuous, they shall have closed ends and at least four inches separation between adjoining sections.

**(f) Trim and finish.** - Where combustible trim and finish is permitted all hollow spaces shall be firestopped at ten foot intervals or shall be solidly filled with noncombustible materials.

**(g) Duct and pipe spaces.** - Ducts and pipes enclosed in construction that does not meet the requirements of this code for shaft construction shall be firestopped at every floor level.

**(h) Inspection of firestopping.** -The installation of all required firestopping shall be subject to the controlled inspection requirements of section 27-132 of article seven of subchapter one of this chapter, except that the architect or engineer need not be retained by the owner. Firestopping shall not be concealed from view until inspected.

**§[C26-504.8] 27-346 Partitions and furring.** - In buildings of construction group I, partitions and furring shall be constructed of noncombustible materials, except that nonbearing partitions that are not required to have a fire-resistance rating, and furring may be constructed of fire retardant treated wood as provided in subdivision (d) of section 27-328 of article three of this subchapter, and except that such partitions and furring, may be constructed of combustible materials in spaces classified in occupancy group E, J-2, or J-3, provided the following conditions are met:

(a) the space containing the combustible partitions does not exceed five thousand square feet in area within a noncombustible enclosure having a fire-resistance

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rating of at least one hour.

(b) the space is in a single tenancy.

(c) glass or slow burning plastic is used for glazing.

**§[C26-504.9] 27-347 Folding partitions.** -Folding partitions shall not be used as partitions that are required by this code to have a fire-resistance rating.

**(a) Construction group I.** - In buildings of construction group I, folding partitions may be used if they are constructed of noncombustible materials, or of fire retardant treated wood, or are constructed of noncombustible frame covered with fabric that has a class A interior finish rating. Where partitions of combustible materials are permitted by section 27-346 of this article, folding partitions may also be constructed of combustible materials.

Where doors constructed of materials having a class C interior finish rating are permitted by section 27-348 of this article, folding doors may be constructed of combustible materials.

**(b) Construction group II.** - In buildings of construction group II, folding partitions may be constructed of combustible materials, surfaced with interior finish materials meeting the requirements of section 27-348 of this article.

**§[C26-504.10] 27-348 Interior finish.** -

**(a) Definition.** - For the purposes of this section, interior finish shall mean those materials that form the exposed interior surfaces of a building and that are part of or affixed to walls, fixed or folding partitions, ceilings, and other construction elements.

**(b) Classification.** - Interior finish materials shall be classified in accordance with the surface flame-spread rating obtained as prescribed in the provisions of reference standard RS 5-5. Where an interior finish material is comprised of two or more materials laminated, glued, nailed, or otherwise secured together, the test rating for flame spread shall be based upon the composite of the materials in the form in which it will be used in construction. Interior finish materials shall be grouped in the following classes, in accordance with their surface flame spread characteristics:

Interior Finish Class	Flame Spread Rating
A	0 to 25
B	26 to 75
C	76 to 225
D	Over 225

**(c) Requirements.** - Interior finishes and exposed structural or construction materials shall have a flame-spread rating not greater than that designated by the class prescribed for the various occupancy groups in

which they are used, as listed in table 5-4. Exceptions to these requirements are:

(1) Finish flooring and floor coverings, which are subject to the requirements of section 27-351.

(2) Wall coverings and coatings that are less than 0.036 in. [*sic*] in total thickness, when applied directly to a noncombustible, or fire-retardant treated wood, substrate.

(3) Exposed structural members and planking in buildings of class II-A construction, which may be left exposed in any room or space, except in exits.

(4) Twenty per cent (20%) of the aggregate wall and ceiling area of any room, space, or corridor required to have a class A or B rating may be finished with materials having a class C rating. This allowance shall include the area of doors, folding partitions, windows, glazing, skylights, luminous ceilings, trim, bases, chair rails, panels, moldings, etc. This exception shall not operate as a waiver of other requirements of this code relating to opening protectives.

(5) When a sprinkler system is provided in any room or space, and is installed in compliance with the construction provisions of subchapter seventeen of this chapter, interior finish materials may be one class higher in flame-spread rating than required by table [*sic*] 5-4.

**(d) Smoke density.** - No material shall be used for interior finish in the following locations if the material develops smoke in greater density than the rating shown, based upon a test conducted in accordance with the provisions of reference standard RS 5-5. Materials used for interior finish that cover not more than twenty percent of the aggregate wall and ceiling area of any room, space, or corridor shall be exempt from the above requirements.

Location or Occupancy.....	Smoke Developed Rating
Exits, Corridors.....	25
Occupancy groups H-1 and H-2.....	50
Rooms in which the net floor area per occupant is ten square feet, or less.....	100

**(e) Toxicity.** - No material shall be used in any interior location that, upon exposure to fire will produce products of decomposition or combustion that are more toxic in point of concentration than those given off by wood or paper when decomposing or burning under comparable conditions.

**(f) Attachment of interior finish.** -

(1) To be credited with the same rating, interior finish materials that were applied to a substrate when tested shall be applied at the building to an equivalent substrate.

**\*TABLE 5-4 INTERIOR FINISH REQUIREMENTS CLASS**

Occupancy Group Classification of the Space	Occupancy Group Designation	Exits and Shafts	Corridors <sup>b</sup>	Rooms More Than 1500 Sq. Ft. in Area <sup>a</sup>	Rooms Less Than 1500 Sq. Ft. in Area <sup>a</sup>
High Hazard	A	A	A	B	B
Storage	B-1	A	A	B	C
Storage	B-2	A	B	B <sup>c</sup>	C
Mercantile	C	A	B	B <sup>c</sup>	C
Industrial	D-1	A	A	B	C
Industrial	D-2	A	B	B <sup>c</sup>	C
Business	E	A	B	C	C
Assembly	F-1 <sup>a</sup>	A	B	B	B <sup>d</sup>
Assembly	F-1b	A	B	B <sup>c</sup>	B <sup>c, d</sup>
Assembly	F-2	A	B	B <sup>c</sup>	B <sup>c, d</sup>
Assembly	F-3	A	B	B <sup>c</sup>	B <sup>c, d</sup>
Assembly	F-4	A	B	B <sup>c</sup>	C
Educational	G	A	A	B	C
Institutional	H-1, H-2	A	A	B	B <sup>d</sup>
Residential	J-1, J-2	A	A	B <sup>e</sup>	B <sup>e, f</sup>
Residential	J-3	B	D	D	D

**NOTES FOR TABLE 5-4:**

<sup>a</sup>In determining the applicable requirements for rooms or enclosed spaces, the occupancy group classification of the room or enclosed space shall be the governing factor, regardless of the occupancy group classification of the building. For the purposes of this table, the area of a room shall be that floor area contained within enclosing construction in which interior doors or other interior openings represent not more than ten percent of the area of the enclosing construction. Interior doors or windows that are constructed of noncombustible materials and that are self-closing or automatic may be ignored in computing door or opening area. Rooms or spaces that have unprotected openings constituting more than ten percent of the area of enclosing construction shall not be considered as a room. Interior finish requirements for rooms are based upon rooms being enclosed in ceiling high partitions. Partitions, to be considered ceiling high, shall extend up to the floor or roof construction above or to a ceiling having at least a three-quarter hour fire-resistance rating. Partitions that do not comply with this requirement shall not be considered as enclosing the spaces, and the rooms or spaces on both sides thereof shall be considered as one.

<sup>b</sup>Rooms or spaces through which it is necessary for occupants of an adjacent room to pass in order to reach the only exit shall, for the purposes of this table, be considered as corridors. Where used in corridors, class B finish material shall not extend more than fifty feet between separations of class A finish material that are at least two feet wide.

<sup>c</sup>On the street floor of one-story buildings in construction group II, ceilings, beams, trusses, etc. that are twenty feet or more in height from the floor to their lowest part, may have a class C finish.

<sup>d</sup>Class C interior finish may be used in offices, or groups of offices, whose use is accessory to an occupancy, provided such offices are separated from the occupancy, by construction having at least a two hour fire-resistance rating.

<sup>e</sup>Class C interior finish may be used in the residential rooms of one- and two-story motels when there is a direct exit from each room to the exterior.

<sup>f</sup>Interior finish when used in the following spaces shall be at least class B:

- (1) Kitchens, cooking spaces, and pantries in buildings classified in occupancy groups other than J-2 and J-3.
- (2) Repair and maintenance rooms.
- (3) Boiler rooms and incinerator combustion rooms.

*\*Superscripts in body of this table (which refer to notes) not enacted but probably intended.*

(2) Interior finish materials shall be cemented or otherwise secured in place in the same manner and with materials equivalent to those used in flame-spread tests conducted in accordance with subdivision (b) of this section for the applicable classification.

(3) Where walls, ceilings, partitions, or other construction elements are required to have a fire-resistance rating or are required to be constructed of

noncombustible materials, and the interior finish is secured to studs or furring, the surface of the interior finish facing the concealed space shall either have a class A rating, shall be applied to a substrate that has a class A rating, or shall have the concealed space completely filled with noncombustible material.

§[C26-504.11] 27-349 **Coatings.** - Coatings applied in the field by brush or spray shall not be used as flame-spread retardants except on existing surfaces of buildings existing on December sixth, nineteen hundred sixty-eight, and then only with the express permission of, and in a manner directed by, the commissioner.

§[C26-504.12] 27-350 **Ceiling construction.** - Ceilings that are to be suspended below floor or roof construction by means of a framing system shall consist of supporting hangers, carrying channels and a supporting grid complying with reference standard RS 5-16 or shall have supporting hangers and carrying channels and a supporting grid that can be demonstrated to the satisfaction of the commissioner to be of strength adequate to support the ceiling material. The hangers and supporting grid shall be of noncombustible materials. In buildings of construction group II, every other hanger supported from wood members shall be attached by a through bolt or clinched through nail. Where, in table 3-4, floor or roof construction is required to have a fire-resistance rating, a ceiling having no fire-resistance rating may be suspended below the fire-resistance construction.

(a) **Luminous ceilings.** - For the purpose of this section, a luminous ceiling shall be defined as a ceiling consisting of translucent, louvered, egg-crated, mesh, or similar light-diffusing material suspended from the ceiling or structural framework. A suspended ceiling containing less than twenty square feet of translucent, louvered, egg-crated, mesh, or similar material in any one hundred square feet of ceiling area shall not be considered a luminous ceiling, and shall be constructed and installed in accordance with department of buildings requirements for lighting fixtures. Luminous ceilings shall, in addition to the requirements of this section, conform to all of the requirements of section 27-348 of this article for interior finish.

*\*Local Law 59-1996.*

(1) **LUMINOUS CEILINGS OF NONCOMBUSTIBLE MATERIAL.**- Luminous ceilings constructed of glass and/or metal or other noncombustible materials may be used in any location.

(a) Glass used in luminous ceilings, unless it is wire glass or heat-resistant glass as specified below, shall not weigh more than two psf, nor shall any pane be larger than eight square feet in area. If glass used in luminous ceilings is wire glass, or is heat resistant by reason of having a maximum coefficient of expansion of 36 x 10.7 in. per in. per degree C, the glass may be of any weight and any size, limited only by considerations of structural safety.

(b) Luminous ceilings installed below sprinkler heads shall be constructed of a type of noncombustible louver, mesh, or other open material that will not impede the flow of water from the sprinkler heads over the intended area of coverage. The luminous ceiling shall be constructed so as

to provide access to all heads and valves.

(2) **LUMINOUS CEILINGS OF COMBUSTIBLE MATERIAL.**- Luminous ceilings constructed of combustible materials shall not be installed in:

a. Any exit or corridor.

b. Any room classified in occupancy group H, or any room leading therefrom as defined in note b of table 5-4.

c. Any room in which the net floor area per occupant is twenty square feet or less, or any room leading therefrom as defined in note b of table 5-4.

d. Luminous ceilings constructed elsewhere than in the spaces listed in subparagraphs a, b, and c above shall be exempt from the provisions of section 27-348 of this article, provided that:

1. The panels of such ceilings are of slow-burning plastic;

2. The panels are installed above or below sprinklers that are constructed in accordance with the provisions of subchapter seventeen of this chapter;

3. No individual plastic panel exceeds ten feet in maximum dimension. Where installed below sprinkler heads, the plastic shall be a material that will fall from its mounting at a temperature at least fifteen degrees lower than the temperature at which the sprinkler heads are designed to operate or are constructed of open material which will not impede the flow of water from the sprinkler heads. Luminous ceilings shall be installed so as to provide ready access to all heads and valves.

(b) **Suspension of new ceilings below existing suspended ceilings.** - In construction group I a new ceiling may be suspended below not more than one existing suspended ceiling and shall be supported directly from the ceiling carrying channels adjacent to the hangers. In construction group II, an existing suspended ceiling shall be completely removed before a new ceiling may be suspended.

§[C26-504.13] 27-351 **Finish flooring and floor coverings.** - Finish flooring and floor coverings shall comply with the following:

(a) **In buildings or spaces classified in occupancy group A** and in all exits except those in buildings of construction group II-E, finish flooring shall be of noncombustible material and except as otherwise provided for stairs in subdivision (h) of section 27-375 of article five of subchapter six of this chapter.

(b) **Flooring in buildings or spaces of construction group I.** - Except as provided in subdivision (a) of this section combustible finish flooring may be used in buildings or spaces of construction group I when cemented directly to the top surface of noncombustible floor construction, or attached to combustible or noncombustible sleepers. When attached to sleepers, the space between the noncombustible floor construction and the bottom of flooring shall be solidly filled with noncombustible material to within one-quarter inch of the flooring, or the space between the sleepers under the flooring shall be firestopped into areas of not more than twenty square feet, and provided further that no open

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spaces shall extend under or through fire divisions or through fire separations. Combustible insulating or sound absorbing boards not more than one-half inch thick and having a flame-spread rating not greater than Class C may be used when attached directly to noncombustible floor construction and covered with finish flooring.

**(c) Flooring in buildings or spaces of construction group II.** - Except as provided in subdivision (a) of this section, finish flooring in buildings or spaces of construction group II may be of combustible material.

**(d) Floor coverings.** -

(1) Exits. - Where exits are required under any provision of this code, carpets and carpet assemblies shall not be installed in such exits, except that wool carpeting may be installed in lobby areas, exit passageways and convenience stairs.

(2) Flammability requirements. - The requirements of this subdivision shall apply to carpets and carpet assemblies only when used as a floor covering (for requirements pertaining to carpets and carpet assemblies used as interior finishes, see section 27-348 of this article). For purposes of this subdivision, carpeting assemblies shall include the carpet, its underlay, and adhesives which when tested as a composite shall be representative of the proposed installation.

a. Pill test. - All carpets and underlayments shall pass a methanine pill test in accordance with the requirements of reference standard RS 5-20.

b. Critical radiant flux test. - Carpets and carpet assemblies shall be tested by the method for critical radiant flux in accordance with the requirements of reference standard RS 5-20. The time frame for such test shall be at least a fifteen minute exposure.

1. Carpets and carpet assemblies representative of the actual installation on floors of corridors, shall have a minimum critical radiant flux of 0.5 watts per square centimeter ( $W/cm^2$ ).

2. Carpets and carpet assemblies representative of the actual installation on floors of general areas shall have a minimum critical radiant flux of  $0.4 W/cm^2$ .

c. Smoke developed ratings. - Carpets and carpet assemblies representative of the actual installation on floors of corridors or general areas shall be tested for smoke developed ratings in accordance with the requirements of reference standard RS 5-20. The smoke developed ratings in either the flaming or no-flaming mode shall not exceed three hundred within the first four minutes of the test.

d. The manufacturer of the carpets and carpet assemblies shall submit a certificate from an independent laboratory acceptable to the commissioner pursuant to section 27-131, showing the complete test data results, prior to final acceptance. The certification shall state that the material is treated for fire resistance and shall indicate the service life of the treatment or that the material is inherently fire resistant by virtue of its construction, chemical properties and/or composition. Materials which are not inherently fire

resistant may be used only when the certified fire resistant service life exceeds that of the planned service life of the carpets and carpet assemblies with consideration being given to cleaning, traffic, and other conditions of use which may affect the treatment.

\* **§[C26-504.14] 27-352 Fireplaces. - REPEALED**

*\*Local Law 80-1989.*

**§[C26-504.15] 27-353 Smoke and heat venting. -**

(a) Where the floor area of a one-story building classified in occupancy group A, B-1, or D-1 is greater in depth than one hundred feet from a frontage space, that portion beyond one hundred feet shall be provided with roof vents and smoke curtains complying with the requirements of reference standard RS 5-11. Where the effective area of vents are glazed with plain glass or plastic not thicker than one-eighth inch, they need not be provided with automatic opening devices.

(b) Buildings classified in occupancy group E, one hundred feet or more in height, having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, shall be provided with at least one smoke shaft by means of which smoke and heat shall be mechanically vented to the outdoors as provided in reference standard RS 5-17. Buildings that are sprinklered throughout shall be exempt from the smoke shaft requirements.

(c) Existing office buildings, one hundred feet or more in height, having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, shall be provided with at least one smoke shaft by means of which smoke and heat shall be mechanically vented to the outdoors as provided in reference standard RS 5-17, or in lieu of such smoke shaft or shafts, all interior enclosed stairs other than a fire tower or access stairs may be provided with a system of pressurization for fire emergency use.

Such pressurization shall be provided by means of a system or systems as provided in reference standard RS 5-18. Such buildings shall comply with the smoke and heat venting requirements herein on or before September thirteenth, nineteen [sic] hundred eighty-two. Complete plans showing such compliance shall be filed with, and a permit secured from, the commissioner on or before September thirteenth, nineteen hundred eighty.

Existing buildings that are sprinklered throughout shall be exempt from the smoke shaft and stair pressurization requirements.

An existing building, which is to be sprinklered throughout, shall be exempt from the smoke shaft and stair pressurization requirements under the following conditions:

(1) the installation proceeds in conformance with a schedule acceptable to the commissioner, setting forth the sequence and corresponding time for installation in the various locations. On or before September thirteenth, nineteen hundred eighty such a schedule, as well as complete plans of the installation, shall be filed with, and a

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permit secured from, the commissioner for the phase of the work to be done as required by paragraph two of this subdivision.

(2) at least one-third of the total floor area of the building, including but not limited to the entrance lobby, corridors and elevator landing areas, is sprinklered on or before December thirteenth, nineteen hundred eighty-one.

(3) at least two-thirds of the total floor area of the building is sprinklered on or before December thirteenth, nineteen hundred eighty-two.

(4) the building is sprinklered throughout on or before December thirteenth, nineteen hundred eighty-three.

Where compliance with the time requirements of this subdivision would cause undue hardship, the commissioner, with the approval of the fire commissioner, may extend the time for compliance, in accordance with rules and regulations to be promulgated. Before such application for a time extension shall be considered all required applications and plans must be filed and approved, permits obtained and a good faith effort towards completion of the work shall have been made.

### §[C26-504.16] 27-353.1 Smoke protection for elevators and escalators. -

(a) Elevators.- In existing buildings classified in occupancy group J-1, at every floor above the main entrance floor, all passenger elevators [*sic*] shall open only into elevator vestibules, except for:

(1) Such existing buildings which contain spaces classified in occupancy group C or F and have an automatic sprinkler system protecting all spaces (except boiler rooms) not in occupancy group J-1 and all exits and corridors serving such spaces located on or below the lowest floor containing sleeping rooms as well as all storage closets no matter where located, except that storage closets less than seventy-five square feet may, in the alternative, be provided with smoke detectors which shall be of the central supervisory type connected to an approved central station; or

(2) Such existing buildings, which contain no, spaces in occupancy group C or F, and have either:

a. An automatic sprinkler system protecting all public areas and storage closets; or

b. An automatic sprinkler system protecting all sleeping rooms and storage closets.

c. Notwithstanding subparagraphs a and b of this paragraph, storage closets less than seventy-five square feet may be provided with smoke detectors of the central supervisory type connected to an approved central station.

d. Notwithstanding any other provision of this code, the sprinklers serving the storage closets may be connected with the domestic water supply.

(b) Escalators. - In buildings and existing buildings classified in occupancy group J-1, fire protection for escalators shall be provided by any one of the following methods:

(1) Enclosure in accordance with sections 27-375 and

27-378 if escalator is used as an exit; or

(2) Automatic rolling shutters in accordance with reference standard RS 18-1; or

(3) Kiosks in accordance with reference standard RS 18-1; or

(4) Where the building section is fully protected by a supervised automatic sprinkler system and the escalator sprinklers are spaced to protect exposed sides of the escalator opening, a noncombustible heat apron constructed to bank heat around the sprinkler heads adjacent to the opening where the bottom edge of the draft curtain is not less than twelve inches below the bottoms of sprinkler heads when heads are in operation, and in no event less than twenty-four inches below the ceiling; or

(5) Spray nozzles in accordance with reference standard RS 18-1.

(c) The requirements of this subdivision shall be complied with on or before April first, nineteen hundred eighty-seven.

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**SUBCHAPTER 6  
MEANS OF EGRESS**

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**ARTICLE 1 GENERAL**

**§[C26-600.1] 27-354 Scope. -**

The provisions of this subchapter shall control the design, construction, protection, location, arrangement and maintenance of required exit facilities to provide safe means of egress from all buildings hereafter erected, altered or changed in occupancy, except that exit requirements for special uses and occupancies, as provided in subchapters seven and eight of this chapter, shall take precedence over the provisions of this subchapter and except further that buildings in existence on December sixth, nineteen hundred sixty-eight shall comply with the applicable requirements of section 27-356 of this article, section 27-371 of article five of this subchapter and articles eight and nine of this subchapter.

**§[C26-600.2] 27-355 Definitions. -** For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

§[C26-600.3] 27-356 **Inadequate exits for existing structures.**- Every structure existing on December sixth, nineteen hundred sixty-eight which is not provided with exit facilities as prescribed in this code, and in which the exit facilities are, in the opinion of the commissioner, inadequate for the safety of the occupants, shall be provided with such means of egress or fire protection as the commissioner shall direct.

## ARTICLE 2 DETERMINATION OF EXIT REQUIREMENTS

### §[C26-601.1] 27-357 **Exit requirements.** -

The determination of exit requirements for a building shall be based upon the occupancy group classification of the building, the number of occupants, the floor area, the travel distance to an exit, and the capacity of the exits, as provided in table 6-1 and herein. Every floor of a building shall be provided with exit facilities for its occupant load. The occupant loads of floors shall not be cumulative for the purpose of designing vertical exits, except where one floor is used by another as a means of egress. Vertical exits provided from any floor above grade may serve simultaneously all floors above grade, and vertical exits provided from any floor below grade may serve simultaneously all floors below grade.

**(a) Mixed occupancy.** - When a building is classified in more than one occupancy group in accordance with the provisions of section 27-239 of article two of subchapter three of this chapter, the exit requirements for the entire building shall be determined on the basis of the occupancy group having the strictest exit requirements, or the exit requirements for each building section shall be determined separately.

**(b) Incidental occupancies.** - When a building contains incidental occupancies classified in occupancy groups other than that under which the building is classified, the exit requirements for the floor on which such occupancies occur shall be based upon those of the occupancy group under which the building is classified; but the access and exit requirements for the incidental occupancy shall be based upon the occupancy group classification of the incidental occupancy.

**(c) Multiple occupancy or use.** - Where a building, floor, or space is used for multiple purposes involving different activities at different times, that occupancy involving the greatest number of occupants shall be used in determining the exit requirements.

\*\*\***(d) Building access.** - All buildings classified in other than occupancy groups A, mechanical and electrical equipment rooms and boiler and furnace rooms of D-2 or J-3 shall have at least one primary entrance accessible to and usable by individuals who use wheelchairs. Such

entrance shall provide access to a level that makes elevators available in buildings where elevators are provided. Where ramps are used to comply with this requirement, they shall have a slope not greater than one in twelve and shall otherwise conform to the provisions of section 27-377 and reference standard RS 4-6.

The commissioner may waive the requirements of this section in the alteration of buildings existing on the effective date of this code in accordance with section 27.292† of this code.

\*\*\**Local Law 58-1987.*

†*As enacted but "27-292" probably intended.*

### §[C26-601.2] 27-358 **Occupant load.** -

The number of occupants for whom exit facilities shall be provided shall be established either (1) by the actual number of occupants for whom each occupied space, floor, or building, as the case may be, is designed, or (2) by using the appropriate occupant-area ratios from table 6-2, whichever is larger. The occupant load of any space shall include the occupant load of all spaces that discharge through it in order to gain access to an exit.

**(a) Unlisted occupancies.** - Where data regarding the sq. ft. per person for an occupancy is not listed in table 6-2, the occupant load shall be established by an architect or engineer, subject to the approval of the commissioner.

#### **(b) Modifications.** -

(1) When the actual occupant load of any space will be significantly lower than that listed in table 6-2, the commissioner may establish a lower basis for the determination of the occupant load.

(2). When a building existing on December sixth, nineteen hundred sixty-eight is altered or changed in occupancy or use so as to require enlarged exit facilities, the commissioner may authorize the alteration or change in occupancy or use without an enlargement of exit facilities, provided the occupant load is limited to that accommodated by the existing exit facilities as determined by the provisions of this code, and the building or space is posted accordingly with a sign. Such signs shall be at least twelve inches in width and sixteen inches in height. The lettering shall be red on a white background. The letters shall be not less than one inch high and the numerals not less than one and one-quarter inches high.

**(c) Nonsimultaneous occupancy.** - The occupant load of toilets, locker rooms, meeting rooms, storage rooms, employee cafeterias, and similar rooms or spaces that are not occupied at the same time as other rooms or spaces on the same floor of a building, may be omitted from the occupant load calculation of the floor on which they are located to the extent that such spaces serve occupied rooms on the same floor.

**TABLE 6-1 DETERMINATION OF EXIT AND ACCESS REQUIREMENTS**

Occupancy Group of Building or Space	Group Designation	Maximum Travel Distance (ft.) <sup>a</sup>		Capacity Number of Persons per Unit of Width				Corridors <sup>i</sup>	
		Unsprinklered	Sprinklered	Doors Openings <sup>m</sup>		Stairs, Escalators <sup>k</sup>	Ramps, <sup>b</sup> Corridors, Exit Passage-ways, <sup>j</sup> Horizontal Exits	Min. Width (in.)	Max. Dead End <sup>h</sup> (length in ft.)
				To Outdoors at Grade	All Other Exit and Corridor Doors				
High Hazard	A	N.P.	150	50	40	30	50	36	N.P.
Storage	B-1 <sup>c</sup>	100	150	75	60	45	75	36	50
	B-2 <sup>c</sup>	125	175	75	60	45	75	36	N.R.
Mercantile	C	150	200	100	80	60	100	36	50
Industrial	D-1	125	175	100	80	60	100	44	50
	D-2	150	200	100	80	60	100	44	50
Business	E	200	300	100	80	60	100	44	50
Assembly*	F	150	200	100	80	60	100	44	30
Educational	G	150	200	100	80	60	100	66 <sup>e</sup>	30 <sup>d</sup>
Institutional	H-1	125	175	50	40	30	50	36	40
	H-2	125	175	30	30	15	30	96 <sup>f</sup>	30 <sup>g</sup>
Residential	J-1	150	200	50	40	30	50	36	40
	J-2	150	200	50	40	30	50	36	40
	J-3	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.

N.P. — Not Permitted  
 N.R. — No Requirements (except as provided in section 27-375)  
 \*See Table 8-1 for exit and access requirements applying to places of assembly.

**\*\*Notes:**

- <sup>a</sup>For method of measurement, see subdivision (c) of section 27-360 of this article.
- <sup>b</sup>Reduce listed capacity of ramps by twenty-five percent when slope exceeds one in ten.
- <sup>c</sup>Except for public garages. (See article ten of subchapter seven of this chapter.)
- <sup>d</sup>There shall not be more than one classroom on each side of a corridor between an exit and the end of the corridor (dead end).
- <sup>e</sup>Applies to corridors serving classrooms. Other corridors shall have a minimum width of forty-four inches.
- <sup>f</sup>Applies to corridors serving patients. Other corridors shall have a minimum width of forty-four inches.
- <sup>g</sup>There shall be no patient bedrooms between an exit and the end of the corridor (dead end).
- <sup>h</sup>See subdivision (d) of section 27-369 of article five of this subchapter for permissible increase.
- <sup>i</sup>See section 27-369 of article five of this subchapter.
- <sup>j</sup>See section 27-370 of article five of this subchapter.
- <sup>k</sup>See section 27-378 of article five of this subchapter.
- <sup>m</sup>Where a door opening is divided by mullions into two or more doors openings, each such opening shall be measured separately in computing the number of units of exit width.

**\*\*There is no note l.**

**§[C26-601.3] 27-359 Capacity of exits. -**

The capacity of exits and access facilities shall be measured in units of width of twenty-two inches, and the number of persons per unit of width shall be determined by the occupancy group classification and type of exit as listed in table 6-1. Fractions of a unit of width less than twelve inches shall not be credited. Where twelve inches or more are added to one or more full units of width, one-half unit of width may be credited. Where

computations of total required width give fractional results, the next larger integral number of exit units or integral number plus one-half, shall be used. A fraction less than one-half may be neglected in cases where such fraction constitutes less than ten per cent of the total required number of units. Notwithstanding any of the above computations, no exit or access facility shall be narrower than the minimum width requirements specified in table 6-1, or elsewhere in this code.

**TABLE 6-2 OCCUPANT LOAD REQUIREMENTS NET AREA TABLE**

Occupancy	Net Floor Area per Occupant (sq. ft.)
Billiard rooms.....	50
Bowling alleys.....	50
Classrooms.....	20
Dance floors.....	10
Dining spaces (nonresidential).....	12
Exhibition spaces.....	10
Garages and open parking structures..	250
Gymnasiums.....	15
Habitable rooms.....	140
Industrial shops.....	200
In schools.....	30
Institutional sleeping rooms	
Adults.....	75
Children (except as listed below)...	50
Day Care	
a. under 6 mos.....	50
b. 6 mos. *- 2 yrs.....	40
c. 2 yrs. *- 6 yrs.....	30
Institutional staff, all.....	30
Kindergartens.....	35
Kitchens (nonresidential).....	200
Laboratories.....	50
Preparation rooms.....	100
Libraries.....	25
Locker rooms.....	12
Offices.....	100
Passenger terminals or platforms.....	1.5xC
Sales areas (retail).....	
1 <sup>st</sup> floor or basement.....	25
All other floors.....	50
Seating areas (audience) in all places of assembly	
Fixed seats.....	D
Moveable seats.....	10
Skating rinks.....	15
Stages (See subchapter eight).....	—
Standing room (audience) in all places of assembly.....	4
Storage rooms.....	200

**Notes:**

C—capacity of all passenger vehicles that can be unloaded simultaneously.

D—designed number of seats or occupants.

*\*Dash not enacted but probably intended*

**§[C26-601.4] 27-360 Travel distance. -**

**a) General requirement. -**

The maximum travel distance from the most remote point in any room or space to the center of a door opening directly on an open exterior space, a vertical exit, an interior stair, an exit passageway or to a horizontal exit shall not be greater than the limit specified in table 6-1 for the occupancy group classification of the room or space.

**(b) Travel distance within dwelling units. -**

In buildings classified in occupancy groups J-1 and J-2, the maximum travel distance from the centerline of a door from any habitable room within a dwelling unit either to the centerline of a door opening on a corridor or to the center of a door opening on an exit shall not be greater than forty feet, except that for buildings classified in occupancy group J-2 of construction class I-A, the distance may be increased to fifty feet. Such travel distances shall be included in the maximum travel distance established in subdivision (a) of this section.

**(c) Measurement. -**

Travel distance shall be measured along a natural and unobstructed path of travel. Where the path of travel is over an access stair, it shall be measured along an inclined straight line through the center of the outer edge of each tread.

**ARTICLE 3 LOCATION OF EXITS**

**§[C26-602.1] 27-361 Arrangement. -**

All exits and access facilities shall be located so that they are clearly visible, or their locations clearly indicated, and they shall be kept readily accessible and unobstructed at all times.

**§[C26-602.2] 27-362 Tenant spaces. -**

When more than one tenant occupies a building or floor area, each tenant shall have direct access to the required number of exits without passing through premises occupied by other tenants, except as permitted for balconies in subdivision (g) of section 27-369 of article five of this subchapter.

**§[C26-602.3] 27-363 Remote location. -**

When more than one exit is required from a floor of a building, each exit shall be placed as remote from the others as is practicable. Door openings to scissor stairs shall be\* at least fifteen feet distant from each other. In all other buildings, the minimum distance between such doors shall be the greater of thirty feet or one-third the maximum travel distance of the floor, provided, however, that where such distance will result in travel distances exceeding those authorized in section 27-357 additional vertical exits shall be provided.

*\* As enacted but this sentence probably intended to begin "Door openings to vertical exits in buildings in occupancy group G or J-2 shall be"...*

**§[C26-602.4] 27-364 Exit discharge. –**

All vertical exits shall extend in a continuous enclosure to discharge directly, or by way of a yard, court, or exit passageway, to an open exterior space. When vertical exits serving floors above grade continue in the same enclosure to serve floors below grade, the portion of such vertical exits above grade shall be separated from the portion below grade by construction having at least a one hour fire-resistance rating, with three-quarter hour self-closing doors opening in the direction of exit travel from the floors below grade, except that buildings classified in residential occupancy group J-3 and educational occupancy group G shall be exempt from this requirement.

**ARTICLE 4 NUMBER OF EXITS**

**§[C26-603.1] 27-365 Egress from rooms and spaces. -**

(a) There shall be at least two door openings, remote from each other and leading to exits, from every room or enclosed space in which the total occupant loads exceeds the number of persons listed in table 6-3.

**TABLE 6-3 MAXIMUM OCCUPANT LOAD—  
SPACES WITH ONE DOOR  
[Max. Occupant Load]\*\***

Occupancy Group Classification	Max. Occupant Load with One Door
A	10
B	50
C	75
D	50
E	75
F	75
G	75
H	15
J	20

*\*\*]] As enacted but this heading probably intended to be omitted.*

(b) Except as otherwise provided for in subdivisions (c) and (d) of this section, in buildings of combustible construction group II exceeding two stories in height there shall be at least two door openings from each J-1 or J-2 dwelling unit which shall be remote from each other. Each door opening shall lead to separate exits either directly or by separate corridors or one door opening shall lead to an exit and the other to a balcony complying with subdivision (g) of section 27-369 of article five of this subchapter.

(c) In buildings or spaces classified in occupancy group J-2 not more than three stories and forty feet in height, occupied by not more than four families on each story and of combustible construction group II there shall be at least two door openings from each J-2 dwelling unit which shall be remote from each other. One door opening shall lead to an exit and the other to a balcony complying with subdivision (g) of section 27-369 of article five of this subchapter.

(d) Buildings not exceeding three stories in height and occupied exclusively by not more than one family on each story without boarders, roomers or lodgers are exempt from the provisions of subdivisions (b) and (c) of this section.

**§[C26-603.2] 27-366 Exits from floors. -**

1. There shall be at least two independent exits, remote from each other, from every floor of a building, except that only one exit may be provided from floors in:

(a) One and two family dwellings.

(b) Buildings classified in occupancy group J-2 of Noncombustible construction group I or occupancy group E that are not more than sixty feet in height, have a gross area of two thousand square feet or less per floor, and have a maximum travel distance of fifty feet on any floor.

(c) Buildings classified in occupancy group J-1 or J-2 that are not more than two stories and thirty feet in height and have a maximum travel distance of eighty feet and the corridors and stair enclosure are provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter.

(d) Buildings classified in occupancy group J-2 occupied exclusively by not more than one family on each story without boarders, roomers or lodgers and not more than three stories and forty feet in height, and the stair enclosure is provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter and without openings between any garage and the exit passageway.

(e) Buildings classified in occupancy group J-2 not more than three stories and forty feet in height occupied by not more than four families on each story.

2. Notwithstanding the exit requirements of this section, in buildings classified in occupancy group J-2 of construction class I-A, one level of an apartment occupying a part of not more than two floors need only be provided with a balcony that complies with subdivision (g) of section 27-369 of article five of this subchapter, provided that, in addition, the stair within such apartment shall be at least two feet six inches in width and terminates not more than twenty feet from a corridor door on the other level that shall provide the required access to at least two independent exits. The center line of such corridor door shall be not more than fifty feet from any room within such apartment.

3. Notwithstanding any other provision of this section, when, within a building, any place of assembly has an occupant load between five hundred and nine hundred ninety-nine persons, there shall be provided at least three independent exits, remote from each other, from each floor; any such place of assembly with an occupant load of one thousand or more persons shall be provided with at least four independent exits, remote from each other, from each floor.

§[C26-603.3] 27-367 Exit reduction. -

When a floor area has access to areas of refuge that comply with the requirements of section 27-372 of article five of this subchapter; the number of persons for whom vertical exits are to be provided may be reduced to fifty per cent of the occupant load of the floor area when one area of refuge is provided, and may be reduced to thirty-three and one-third percent of the floor area when two areas of refuge are provided. This section shall not be applicable to any new or altered place of assembly, except for such places of assembly in fully sprinklered office buildings which occupy less than twenty per cent of the floor area occupied by the principal use.

ARTICLE 5 ACCESS REQUIREMENTS AND EXIT TYPES

§[C26-604.1] 27-368 General. -

(a) Means of egress shall be provided for all buildings by one or more of the facilities listed below. Access and exit facilities not specifically covered in this section shall not be used to satisfy the exit requirements of this code. Fire escapes shall not be permitted on new construction, with the exception of group homes. Fire escapes may be used as exits on buildings existing on December sixth, nineteen hundred sixty-eight when such buildings are altered, subject to the approval of the commissioner, or as provided in subdivision (b) hereof. Elevators or escalators shall be provided in all new buildings exceeding four stories in height except that buildings or building sections classified in occupancy group H-2 exceeding one story in height and buildings or building sections classified in occupancy group G or J-1 exceeding two stories in height shall be provided with elevators.

(b) In group homes all floors used by children shall have alternate exits remotely located from each other and readily accessible to the occupants. Fire escapes shall be permitted as the second means of egress.

§[C26-604.2] 27-369 Corridors.-

Corridors shall be kept readily accessible and unobstructed at all times. Corridors shall be kept free of combustible contents except that in buildings classified in occupancy groups G, H-1 and H-2, combustible contents may be stored in noncombustible lockers and combustible bulletin boards meeting the requirements of table 5-4 shall be permitted.

(a) Capacity. - The capacity and minimum width of corridors shall be as listed in table 6-1. Width shall be measured in the clear between the narrowest points produced by any projections such as radiators, lockers, drinking fountains, or room or locker door swings, except that such width may be reduced by projections up to eighteen inches wide to the extent of two inches per unit of

exit width if the total area of such projections does not exceed five percent of the area of the wall on which they occur.

(b) Height. - Corridors shall have a clear height of seven feet six inches for at least seventy-five percent of the floor area, with no point less than seven feet in height. No projection below the ceiling shall be located so as to obstruct full view of exit signs.

(c) Length. - Corridors shall be subdivided by smoke barriers, as defined in subchapter two, into the following lengths:

Educational occupancy group G.....	300 ft.
Institutional occupancy groups H-1 and H-2.....	150 ft.
Residential occupancy groups J-1 and J-2.....	150 ft.

Where smoke barriers are penetrated by doors, such doors shall be smoke stop doors in conformance with subdivision (c) of section 27-371 of this article.

(d) Dead ends. - Dead ends in corridors shall not exceed the length listed in Table 6-1, except that in all occupancy groups except occupancy group H, when a corridor is completely enclosed in construction having a two hour fire-resistance rating, with all corridor doors being self-closing and having a fire protection rating of one and one-half hours, the permissible length of dead ends may be increased one hundred percent above the length listed in table 6-1. Dead end distance shall be measured from the centerline of the door opening nearest to the closed end of the corridor to the center of an exit door opening, or the center of that point in the corridor where travel to two or more exits becomes available in two directions.

(e) Changes in level. - Changes in level requiring less than two risers in a corridor shall be by a ramp complying with section 27-377 of this article. Risers and treads shall comply with the requirements of subdivision (e) of section 27-375 of this article.

(f) Exterior corridors. - Exterior corridors shall be roofed, and shall have solid floors drained to prevent accumulations of standing water. Such floors may serve as fire canopies when so constructed. Exterior corridors shall be protected along their outer side by guards or parapets at least three feet six inches high. Openings in guards or parapets shall be of such dimensions as to prevent the passage of a five-inch dia. ball. Where the outer side of an exterior corridor is more than fifty percent enclosed with solid material, it shall be treated as an interior corridor.

(g) Balconies. - Balconies may serve as a means of egress from dwelling units in buildings classified in occupancy group J-2 under the following conditions:

(1) They shall serve at least two dwelling units.

(2) They shall be constructed as required for exterior corridors, except that parapets or guards shall not be higher than four feet on the outer side of the balcony.

(3) The dwelling units served by balconies shall be

separated from each other by construction having at least a two hour fire-resistance rating. Such separation shall extend at least three feet beyond the outside face of the exterior wall of the building, although such projection may be reduced to two feet six inches provided that any window opening on each such balcony served by the fire separation shall be at least two inches from such fire separation for every one inch that such separation is less than thirty-six inches. An opening at least twenty inches wide shall be provided between the end of this separation and the balcony parapet or guard, and the opening shall be maintained free and unobstructed for the full height of the balcony, except that privacy screens openable from either side may be permitted in the opening.

(4) Access from dwelling units to the balconies shall be through doors having glass panels at least two feet wide and four feet high, without muntins, screens, or other obstructions to hinder entry by breaking the glass panels. The doors shall be lockable only from the inside by devices that can be easily released from the outside after breaking the glass. A combination lock or lock required to be opened by a key or removable device or tool shall not be used.

**(h) Construction. -**

(1) INTERIOR CORRIDORS. - Interior corridors shall be completely enclosed within fire separations to provide a minimum fire-resistance rating of one hour except as otherwise provided in subparagraphs a through c of this paragraph:

a. For buildings or spaces classified in occupancy group J-1 or J-2 of combustible construction group II exceeding two stories in height, except for buildings not exceeding three stories in height and occupied exclusively by not more than one family on each story without boarders, roomers or lodgers, corridors shall be enclosed within fire separations providing a minimum fire-resistance rating of two hours.

b. Corridor partitions may be omitted or may be constructed of unrated noncombustible material in buildings in occupancy group H-2 in the following instances: nurses stations not exceeding three hundred fifty square feet in area, waiting spaces, lounges and recreational spaces for patients and visitors which do not exceed five hundred square feet in area, spaces used solely for public telephones, and all other spaces which are completely protected by an automatic wet sprinkler system complying with the construction requirements of subchapter seventeen of this code.

c. Corridor partitions may be omitted in spaces of occupancy group H-1 used for detention of persons under legal restraint.

(2) EXTERIOR CORRIDORS AND BALCONIES. - Exterior corridors and balconies shall be constructed of non-combustible materials.

**(i) Borrowed lights. -** No operable transoms shall be permitted in walls of corridors. In corridors required to

have a one hour fire-resistance rating, fixed one-quarter inch wire glass panels may be installed in not more than twenty percent of the common wall between the corridor and any room or space, provided that no panel exceeds seven hundred twenty square inches in area; however, openings permitted in paragraph three of subdivision (h) of section 27-370 of this article may be permitted provided all of the limitations and requirements specified in that section are complied with, except that openings in corridor walls serving as fire divisions required to have a fire-resistance rating shall be limited to those specified in section 27-342 of article five of subchapter five of this chapter.

**(j) Ventilation. -** Corridors shall be ventilated in accordance with the requirements of subchapter twelve of this chapter. Corridors shall not be used as open plenums or as ducts to exhaust air from rooms or spaces opening upon them, except as permitted in reference standard RS 13-1.

**(k) Interior finish. -** The interior finish of corridors shall be in accordance with the requirements of table 54.

**§[C26-604.3] 27-370 Exit passageways. -**

Exit passageways shall be maintained free of obstructions at all times. Not more than fifty percent of the total number of vertical exits provided for a building may be served by a single exit passageway, except as provided in subdivision (h) of section 27-370 of this article.

**(a) Capacity. -** The capacity of exit passageways shall be as listed in table 6-1.

**(b) Width. -** The width of an exit passageway serving one vertical exit shall be equal to the width of the vertical exit. The width of an exit passageway serving two or more vertical exits shall be equal to seventy-five percent of the width of all of the vertical exits that it serves. Width shall be measured in the clear between the narrowest points at any projections such as radiators, door swings, or pilasters.

**(c) Height. -** Exit passageways shall have a clear height of seven feet six inches for at least seventy-five percent of the floor area, with no point less than seven feet in height. No projection below the ceiling shall be located so as to obstruct full view of exit signs.

**(d) Changes in level. -** Changes in level requiring less than two risers in an exit passageway shall be by a ramp complying with section 27-377 of this article. Risers and treads shall comply with the requirements of subdivision (e) of section 27-375 of this article.

**(e) Construction. -** The construction of exit passageways shall be as required by table 3-4 for the applicable construction class of the building.

**(f) Openings. -** No openings other than exit doors shall be permitted in exit passageways, except as provided in subdivision (h) of this section.

**(g) Interior finish. -** The interior finish of exit passageways shall be in accordance with the requirements of table 5-4.

**(h) Street floor lobbies.** - Street floor lobbies may be used as exit passageways when they comply with the requirements of subdivisions (a) through (g) of this section subject to the following modifications:

(1) VERTICAL EXITS SERVED. - One hundred percent of the total number of vertical exits provided for a building may be served by a street floor lobby, if egress is provided in two different directions from the discharge points of all vertical exits to open exterior spaces that are remote from each other.

(2) WIDTH. - Street floor lobbies serving as exit passageways shall be increased in width to accommodate the occupant load of all communicating spaces on the lobby floor that exit through them. The capacity per unit of width shall be as listed in table 6-1.

(3) OPENINGS.- Openings between street floor lobbies serving as exit passageways and elevators or communicating spaces shall comply with the following:

a. Doors. -

1. Doors to stairways and elevators, and unsprinklered communicating spaces classified in occupancy group B-2, D-2, F-1 or F-2 shall be self-closing fire doors having a one and one-half hour fire protection rating.

2. Doors to unsprinklered communicating spaces classified in occupancy group G, H or J, or sprinklered communicating spaces classified in occupancy group B-2, D-2, F-1 or F-2 may be either:

(a) self-closing fire doors having a three-quarter hour fire protection rating, or

(b) glass or other noncombustible doors installed in conjunction with automatic fire doors having a one and one-half hour fire protection rating, with sprinkler heads installed over the doors on the room side.

3. No other door openings shall be authorized except as otherwise provided in this section.

b Other openings. - Other openings to spaces classified in occupancy group C, E, F, G, H or J shall be permitted, provided they have a maximum length of eight feet and a maximum height of eight feet, are glazed by one-quarter inch polished plate glass or equivalent and are protected by automatic fire doors having a one and one-half hour fire protection rating and by automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter over the openings on the room side.

c. Separations and limitations. - Openings permitted by subparagraphs a and b of this paragraph shall not exceed in total length fifty percent of the length of such enclosure wall except where the length of such wall is less than sixteen feet. Adjoining openings shall be separated from each other a minimum of three feet by construction having a two hour fire-resistance rating.

d. Notwithstanding the restrictions in subparagraphs

a, b, and c of this paragraph, the following openings may be authorized:

1. A space classified in occupancy group C, E, F-3 or F-4 within fire separations having a minimum fire-resistance rating of one hour, with an area not exceeding twenty-five hundred square feet, may have an unlimited length of show window under the following conditions:

(a) The maximum depth of show window shall be three feet.

(b) Automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter, shall be provided in the show window display area.

(c) The show window display area shall be protected on all sides, except for the glazed window, by construction having a two hour fire-resistance rating with access provided by means of a fireproof self-closing door having a three-quarter hour fire protection rating.

(d) The show window shall be glazed by one-quarter inch polished plate glass or equivalent.

(e) Glass or other noncombustible doors may be used for entrance to or egress from the space within fire separations when installed in combination with automatic fire doors having a one and one-half hour fire protection rating. Such automatic fire doors shall be located on the room side and shall be held open by approved door-holding devices actuated to release automatically upon the activation of smoke detecting devices, whether of the photoelectric cell or other approved type. In addition, automatic sprinkler heads, complying with the construction requirements of subchapter seventeen of this chapter, shall be provided over the door openings on the room side.

2. A space classified in occupancy group C, E, F-3, or F-4 within fire separations having a minimum fire-resistance rating of one hour, with an area not exceeding three thousand square feet, may have a maximum total length of unprotected openings upon a corridor or exit passageway not exceeding fifty percent of the space frontage along such corridor or exit passageway under the following conditions:

(a) The entire space shall be provided with automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter.

(b) The show window shall be glazed by one-quarter inch polished plate glass or equivalent.

(c) All corridor or exit passageway doors shall be self-closing, noncombustible, and smokeproof.

3. Show windows or other openings of unlimited lengths and heights shall be permitted on any corridor or exit passageway without requirements for fire-resistance doors under the following conditions:

(a) The entire floor area, including the corridors or exit passageways, shall be provided with automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter.



(b) The occupancy of all spaces on the floor shall be limited to occupancy groups C, E, F-3 and F-4.

(c) The widths of the corridors or passageways shall exceed the requirements of table 6-1 or subdivision (b) of this section, whichever is applicable, by at least fifty percent.

(d) All doors opening on the corridors or exit passageways shall be smokeproof, noncombustible, self-closing doors.

(e) Show windows or other openings shall be glazed by one-quarter inch polished plate glass or equivalent.

(f) Each corridor or exit passageway shall be provided with a fresh air intake, a positive smoke exhaust system and smoke detectors which, when activated, shall permit circulation only of fresh air.

(4) OCCUPANCY. - Street floor lobbies serving as exit passageways may be occupied by newsstands, candy and tobacco stands, information booths or similar occupancies, if such stands or booths are constructed of noncombustible materials, or of materials which comply with the requirements of section 27-348 of article five of subchapter five of this chapter for interior finish for exit passageways, provided that such stands or booths:

a. do not occupy more than one hundred square feet or five percent of the net floor area of the lobby, whichever is greater; and

b. do not reduce the required clear width of the lobby at any point; and

c. if constructed of combustible materials are protected by no less than two automatic sprinkler heads. Water for such sprinkler heads may be supplied from the domestic water supply system.

**§[C26-604.4] 27-371 Doors. -**

Exit doors and doors providing access to exits shall comply with the following:

(a) **Exit doors.** - Doors for required exits shall be self-closing swinging doors with a one and one-half hour fire protection rating, except in occupancy group J-3 buildings and except that:

(1) Exterior street floor exit doors having an exterior separation of more than fifteen feet need not have a fire-protection rating.

(2) Doors into stairs and exit passageways shall have at least a three-quarter hour fire protection rating.

(b) **Corridor doors.** - Doors that provide access to interior corridors required to have a one hour fire-resistance rating shall be self-closing swinging fire doors with a three-quarter hour fire-protection rating, except that in buildings classified in occupancy group G, in which an acceptable interior fire alarm system is installed and in which regular supervised fire drills are held, the doors to rooms or spaces devoted exclusively to non-hazardous uses in occupancy group G need not

be fire-rated, provided they are swinging, self-closing one and three-quarter inch solid core wood, and have a maximum area of seven hundred twenty square inches of one-quarter inch thick wired glass vision panels. Other corridor doors except those provided for in subdivision (d) of section 27-369 of this article, shall be self-closing, swinging, noncombustible or one and three-quarter inch solid core wood doors, except that in buildings classified in occupancy group H-2 the doors need not be self-closing. Noncombustible mail slots having an area not exceeding forty square inches may be provided in corridor doors when the opening is protected by a closure activated by gravity or a spring device so as to keep it closed when not in use. Noncombustible louvers may be installed in corridor doors opening into toilets, service sink closets, and electric closets. Notwithstanding the foregoing restrictions in this subdivision, doors not prohibited by subdivision (d) of this section may open from spaces into corridors when in compliance with all of the provisions of paragraph three of subdivision (h) of section 27-370 of this article.

(c) **Smoke stop doors.** - Smoke stop doors shall be self-closing, swinging doors of metal, metal covered, or one and three-quarter inch solid core wood with clear wire glass panels having a minimum area of six hundred square inches per door and a maximum area of twelve hundred ninety-six square inches per door, except that in buildings not over two stories high, smoke stop doors may be of one and three-eighths inch solid core wood with clear wire glass panels, unless the doors are also used as horizontal exits in which case they shall comply with the provisions of subdivision (b) of section 27-373 of this article. Smoke stop doors may be double-acting but shall close the opening completely with only such clearance as is reasonably necessary for proper operation. Smoke stop doors shall normally be in the closed position, except that they may be left open if they are arranged to close automatically by an approved device which is actuated by an interior fire alarm system meeting the requirements of subchapter seventeen of this chapter.

(d) **Prohibited doors.** - Vertically sliding doors, rolling shutters, and folding doors shall not be used as exit doors or as corridor doors, except that overhead garage doors may serve as exits from buildings classified in occupancy group J-3, and except that sliding or rolling doors or gates may be used in F-2 places of assembly provided they are kept open when the place of assembly is occupied. Revolving doors may be used only to the extent permitted by subdivision (m) of section 27-371 of this article. Automatic horizontally sliding fire doors shall be permitted only in horizontal exits in fire divisions required to have a four hour fire-resistance rating as specified in Table 5-3.

(e) **Door opening widths.**- The capacity of exit and corridor door openings shall be as listed in table 6-1.

Door jambs or stops and the door thickness when open shall not reduce the required width by more than three inches for each twenty-two inches of width. The maximum width of any swinging door leaf shall be forty-eight inches. The minimum nominal width of corridor and exit door openings shall be thirty-six inches, except that where a door opening is divided by mullions into two or more door openings, the minimum nominal width of each such opening shall be thirty-two inches. The minimum nominal width of other door openings shall be as follows:

(1) Door openings to all habitable and occupiable rooms. - thirty-two inches.

(2) Door swinging in pairs (no mullion), opening. - forty-eight inches.

(3) Door openings to rooms used by bedridden patients and all single door openings used by patients in buildings classified occupancy group H-2. - forty-four inches.

(4) Door openings to toilet rooms in buildings to which the public has free access shall be thirty-two inches.

(5) Door openings giving access to at least one toilet, lavatory and bathtub or shower in each dwelling unit, in buildings or spaces classified in occupancy group J-1 or J-2, when such dwelling unit is accessible to individuals in wheelchairs [*sic*] - thirty-two inches.

(6) Door openings giving access to all toilets, lavatories and bathtubs or showers serving single room occupancies, which are accessible to individuals in wheelchairs-thirty-two inches.

\*(7) Door openings for people having physical disabilities shall additionally comply with the requirements of reference standard RS 4-6.

\**Local Law 58-1987.*

**(f) Door heights.**- The minimum nominal door opening height for exit and corridor doors shall be six feet eight inches. Door jambs, stops, sills, and closers shall not reduce the clear opening to less than six feet six inches.

**(g) Door swing.**- Exit doors, corridor doors from rooms or spaces classified in high hazard occupancy group A, or from factories as defined in the labor law, and corridor doors from rooms required to have more than one door under the provisions of section 27-365 of article four of this subchapter, shall swing in the direction of exit travel, except:

(1) Doors from rooms of instruction in buildings classified in occupancy group G, having an occupant load of less than seventy-five persons.

(2) Exterior street floor exit doors from lobbies in buildings classified in occupancy groups J-2 and J-3.

(3) Exterior street floor exit doors from spaces in occupancy group C or E not exceeding two thousand square feet in area, and occupied by less than fifty persons, where the maximum travel distance to a door does not exceed fifty feet.

**(h) Floor level.** - The floor on both sides of all exit and corridor doors shall be essentially level and at the same elevation for a distance, perpendicular to the door opening, at least equal to the width of the door leaf, except that where doors lead out of a building the floor level inside may be seven and one-half inches higher than the level outside.

**(i) Closed doors.** - Exit doors and corridor doors shall normally be kept in the closed position, except that corridor doors in buildings classified in occupancy group H-2 shall be exempt from this requirement.

**(j) Door and window hardware.** - Doors and windows shall be equipped with hardware as follows:

(1) FIRE PROTECTION REQUIREMENTS. -

a. Exit doors and corridors shall be readily openable at all times from the side from which egress is to be made and shall not require a key to operate from that side, except that:

1. Locks may be used in penal and mental institutions and areas, where required for security.

2. Locks may be used in banks, museums, jewelry stores and other places where extra safeguards are required, subject to the approval of the commissioner, and provided the locks are equipped with electrical release devices for remote control in case of emergency.

3. Stairways leading from the top floor to a roof may be provided with locked wire mesh gates openable by key in buildings classified in occupancy group G. The use of a hook and eye closing device on the inside of all doors to roofs shall be permitted.

\*b Doors opening into interior stair enclosures shall not be locked from either side with the following exceptions:

1. Doors may be locked to prevent access to the stair at the street floor.

2. In buildings classified in occupancy group E, less than one hundred feet in height, the doors may be locked on the stair side on each floor above the street floor.

3. In buildings classified in occupancy group E, one hundred feet or more in height, and existing office buildings one hundred feet or more in height, the doors may be locked on the stair side above the street floor except that at intervals of four stories or less, doors shall be openable from the stair side without the use of a key to permit reentry at such floors. In addition, the door on every floor where a keyed switch is required by the provisions of subchapter eighteen of this chapter shall be openable from the stair side without the use of a key to permit reentry at such floors.

4. When a locked door is provided with an automatic fail safe system for opening such door in the event of the activation of any automatic fire detecting device or when any elevator in readiness as provided in section 27-989 of subchapter eighteen of this chapter is activated, such door shall be deemed as openable from

the stair side [*sic*]. The installation of such automatic fail safe system shall comply with the requirements of reference standards RS 17-3A and RS 17-3B, whichever is applicable. Stair reentry signs required under section 27-394 of article nine of this subchapter shall specify that reentry is provided only during fire emergencies.

*\*Local Law 14-1993.*

c. Latch bolts shall be provided on all exit doors and corridor doors to hold them in a closed position against the pressure of expanding gases except that this requirement shall not apply to doors in stair enclosures in buildings classified in occupancy group G.

(2) SECURITY REQUIREMENTS. - The following provisions shall apply to all buildings erected or altered after December sixth, nineteen hundred sixty-eight that may be classified in residential occupancy group J-2. Existing buildings in such group shall comply with the requirements of article eleven of subchapter two.

a. Building entrance doors and other exterior exit doors shall be equipped with heavy duty lock sets with auxiliary latch bolts to prevent the latch from being manipulated by means other than a key. Latch sets shall have stopwork in the inside cylinder controlled by a master key only. Outside cylinders of main entrance door locks shall be operated by the tenants' key, which shall not be keyed to also open the tenants' apartment door. A light or lights shall be provided at or near the outside of the front entranceway of the building providing not less than five foot candles intensity measured at the floor level for the full width of the entranceway.

b. Doors to dwelling units shall be equipped with a heavy duty latch set and a heavy duty dead bolt operable by a key from the outside and a thumbturn from the inside. Those doors shall also be equipped with a chain guard so as to permit partial opening of the door. Dwelling unit entrance doors shall also be equipped with a viewing device located so as to enable a person on the inside of the entrance door to view a person immediately outside.

c. All openable windows shall be equipped with sash locks designed to be openable from the inside only. Grilles lockable from the inside only may be placed on the inside or outside of windows that are accessible from grade but that do not serve to provide access to exits.

d. Buildings classified in occupancy group J-2 containing eight or more dwelling units shall be provided with an intercommunication system located at the door giving access to the main entrance hall or lobby, consisting of a device or devices for voice communication between the occupant of each dwelling unit and a person outside said door to the main entrance hall or lobby, and permitting such dwelling unit occupant to release the locking mechanism of said door from the dwelling unit.

**(k) Panic hardware. -**

(1) Exit doors shall be equipped with fire exit bolts when providing an exit from:

a. Buildings classified in occupancy group G, except exit doors opening directly outdoors at grade from rooms having an occupant load of less than seventy-five persons,

b. F-1 places of assembly,

c. F-2, F-3 and F-4 places of assembly having an occupant load exceeding three hundred persons, except places of assembly having doors that are not equipped with locks and are openable at all times.

(2) Fire exit bolts shall be of an approved type, and shall release when a pressure exceeding fifteen pounds is applied to the releasing device in the direction of exit travel. The bars or panels shall extend at least two-thirds of the width of the door and shall be placed at least thirty inches, but not more than forty-four inches above the floor.

**(l) Power operated doors. -** Power operated doors or power assisted manually operated doors, may be used as exit or corridor doors provided they remain closed in case of power failure but shall be manually operable. No power operated door shall be credited as a required exit unless it swings in the direction of exit travel.

**(m) Revolving doors. -** Revolving doors shall not be used as exits in buildings classified in occupancy group F-1 or F-2, G, or H; nor shall revolving doors be used in any occupancy as interior doors providing access to exits, at the foot of stairs, or at the head of basement stairs. Where revolving doors are used as exits, they shall comply with the following:

(1) They may provide not more than one unit or exit width for each revolving door and not more than fifty percent of the required exit capacity at any location, provided that the revolving doors are located adjacent to, or within twenty feet, of swinging doors that provide the remaining required exit capacity at that location.

(2) They shall be collapsible, and designed and constructed so that:

a. Each wing is independently supported by a hanger with a corrosion resistant safety release which, when pressure of between sixty to eighty pounds is exerted simultaneously on the wings on opposite sides of the door pivot, the door wings will fold back on themselves in the direction of egress.

b. Each wing is provided with at least one push bar and glazed with at least 7/32 in. plate or tempered glass.

c. The inside diameter of the enclosure is at least six feet six inches.

d. The freely operable maximum rate of revolving speed is controlled so that it is not greater than fifteen rpm.

e. The upper surface of the floor finish within the door enclosure is flush with the adjacent floor area, and permanently secured in place.

(3) The owner shall be responsible at all times for the operation and maintenance of revolving doors, and shall have the doors inspected at intervals not to exceed

six months. All parts of the doors, including the safety releases and speed control mechanism, shall be maintained in good working order. Inspection reports shall be made in writing and kept on file at the premises for at least two years.

**(n) Turnstiles.** - No turnstile or other device designed to restrict travel shall be placed so as to obstruct any required exit, except that approved turnstiles that turn freely in the direction of exit travel may be used in any occupancy where revolving doors are permitted. Turnstiles shall be not more than thirty-six inches nor less than thirty inches high and shall be of such design as to provide twenty-two inches clear width as the turnstile rotates. Each turnstile may be credited with a capacity of one unit of exit width. Not more than fifty percent of the required exit capacity may be provided by turnstiles at any location. The balance of the required exit capacity shall be provided by swinging doors located within twenty feet of the turnstiles. Turnstiles over thirty-six inches high shall meet the applicable requirements of this code for revolving doors.

**§[C26-604.5] 27-372 Area of refuge.** -

Areas of refuge shall comply with the following:

**(a) Separation.** - Areas of refuge shall be separated from the area which they serve by construction having at least a two hour fire-resistance rating.

**(b) Floor area.** - Areas of refuge shall provide clear public space or space occupied by the same tenant or owner, adequate in size to hold the occupant load it receives from the floor area it serves as computed by the provision of section 27-367 of article four of this subchapter, in addition to its own occupant load, allowing at least three square feet per person, except that in buildings classified in occupancy group H-2 for patient areas only, the allowance shall be at least thirty square feet per person.

**(c) Required exits.** - Areas of refuge shall be provided with at least one vertical exit. When an area of refuge is located higher than the eleventh floor of a building, the vertical exit shall be supplemented by at least one elevator.

**(d) Locking.** - Doors providing access to areas of refuge shall be kept unlocked at all times when any floor area served by the area of refuge is occupied.

**§[C26-604.6] 27-373 Horizontal exits.** -

A horizontal exit to an area of refuge may consist of doors through walls or partitions having at least a two hour fire-resistance rating; of a balcony or exterior vestibule leading around the end of a fire division to another fire area or building; or it may be a bridge or tunnel between two buildings. Horizontal exits shall comply with the following:

**(a) Capacity.** - The capacity of horizontal exits shall be as listed in table 6-1. Only the widths of doors swinging in the direction of exit travel to the area of refuge shall

be counted.

**(b) Door requirements.** - Doors shall be swinging, self-closing doors having a fire protection rating of one and one-half hours, except that doors [*sic*] in fire divisions having a three hour or four hour fire-resistance rating shall have opening protective as required by table 5-3. Each swinging door shall swing in the direction of exit travel, and when travel is in both directions, as when two areas of refuge serve as areas of refuge for each other, at least two door openings shall be provided, the doors of which shall swing in opposite directions. Signs shall be placed over each door on the side from which egress is made, indicating the exit door.

**(c) Balconies, bridges and tunnels.** -

When serving as horizontal exits, balconies, bridges, and tunnels shall comply with the following:

(1) Their width shall be equal to at least the width of the doors opening on them, but in no case less than three feet eight inches.

(2) They shall be enclosed at each end by doors complying with subdivision (b) of this section.

(3) The floor level at doors shall be the same as that of the building except that the floor level of open balconies or open bridges shall be approximately seven and one-half inches lower.

(4) Where there is a difference in level between the areas connected, the floors of the horizontal exit shall be ramped not more than one inch in ten inches.

(5) Exterior wall openings within thirty feet horizontally of any open bridge or balcony or below any open bridge or balcony shall be provided with opening protectives having a three-quarter hour fire protection rating.

(6) Balconies shall not face or open on yards or courts less than twelve feet wide, and shall be constructed as required for exterior corridors.

(7) Exterior bridges shall be constructed of noncombustible materials. Interior bridges or tunnels shall be constructed of materials providing a two hour fire-resistance rating.

**§[C26-604.7] 27-374 Supplemental vertical exits.** -

Enclosed interior stairs, ramps, or escalators may provide access to an area of refuge located on a floor nearer to the street floor, when complying with the following:

**(a) Limitation.** - They shall be supplemental vertical exits serving no other purpose than to connect a floor area with an area of refuge.

**(b) Capacity.** - The capacity of supplemental vertical exits shall be as listed for stairs in table 6-1.

**(c) Construction.** - Supplemental vertical exits shall comply with all of the construction requirements for interior stairs as provided in section 27-375 of this article.

**(d) Openings.** - There shall be no openings insupplemental vertical exit enclosures other than the exit doors and doors leading into the area of refuge.

**(e) Identification.** - Every supplemental vertical exit shall have a sign at the entrance designating its destination reading, "EXIT TO AREA OF REFUGE ON..... FLOOR."

§[C26-604.8] 27-375 **Interior stairs.** - Interior stairs shall comply with the following requirements:

(a) **Capacity.** - The capacity of interior stairs shall be as listed in table 6-1.

(b) **Width.** - The width of interior stairs shall be the clear width between walls, grilles, guards, or newel posts. Stair stringers may project into the required width not more than two inches on each side of the stair. No interior stair shall be reduced in width in the direction of exit travel. Interior stairs shall be at least forty-four inches wide except as follows:

(1) Interior stairs may be not less than thirty-six inches wide when serving not more than thirty occupants per stair on any floor in buildings classified in occupancy groups J-1 and J-2, or when serving buildings classified in occupancy group J-3 and exceeding four stories in height, or when serving not more than sixty occupants per stair on any floor in buildings classified in occupancy groups E, B, and D.

(2) Interior stairs may be not less than thirty inches wide when serving mezzanines having an occupant load not exceeding twenty-five persons or when located in buildings classified in occupancy group J-3 not more than three stories in height. Interior stairs in four story buildings classified in occupancy group J-3 shall be a minimum of thirty-three inches in width.

(c) **Headroom.** - The clear headroom shall be at least seven feet, except that in buildings classified in occupancy groups J-2 and J-3, the minimum clear headroom may be six feet eight inches. Headroom in a flight of stairs shall be measured vertically between two parallel inclined planes, one of which contains the line of the nosing or upper front edge of each tread and extends to its intersection with a landing and the other of which is through any point directly above the first plane that limits the headroom of the stair.

(d) **Landings and platforms.** - Landings and platforms shall be provided at the head and foot of each flight of stairs, except at the head of basement stairs in one-and two-family dwellings, and shall comply with the following:

(1) The minimum width of landings and platforms perpendicular to the direction of travel shall be equal to at least the width of the stairs except that on a straight-run stair, the distance between risers of upper and lower flights at intermediate landings or platforms need not be more than forty-four inches.

(2) The maximum vertical rise of a single flight of stairs between floors, between landings or platforms, or between a floor and a landing or platform, shall not exceed eight feet in buildings classified in occupancy groups F and H, and twelve feet in all other occupancy groups. No flight of stairs shall have less than two risers.

(3) Landings and platforms shall be enclosed on sides by walls, grilles or guards at least three feet high.

(e) **Risers and treads.** - Risers and treads shall comply with table 6-4 and with the following:

(1) The sum of two risers plus one tread exclusive

of nosing shall be not less than twenty-four nor more than twenty-five and one-half inches.

(2) Riser height and tread width shall be constant in any flight of stairs from story to story.

(3) Winders shall not be permitted in required exit stairs except in one- and two-family dwellings and except as permitted in subdivision 1 of this section. The width of winder treads when measured eighteen inches from the narrower end shall be at least equal to the width of treads above or below the winding section.

(4) Curving or skewed stairs may be used as exits when the tread and riser relationship is in accordance with table 6-4 when measured at a point eighteen inches in from the narrow end of the tread; and no tread shall be more than three inches narrower or three inches wider at any point than the width established eighteen inches in from the narrow end.

(f) **Guards and handrails.** - Stairs shall have walls, grilles, or guards at the sides and shall have handrails on both sides, except that stairs less than forty-four inches wide may have a handrail on one side only. Handrails shall provide a finger clearance of one and one-half inches, and shall project not more than three and one half inches into the required stair width.

(1) Stairs more than eighty-eight inches wide shall have intermediate handrails dividing the stairway into widths that maintain the nominal multiples of twenty-two inches, but the widths shall not be greater than eighty-eight inches nor less than forty-four inches.

(2) The height of handrails above the nosing of treads shall be not more than thirty-four inches nor less than thirty inches.

(3) Handrails shall be returned to walls and posts when terminated, except in one and two-family dwellings.

(4) Handrails shall be designed to support loads in compliance with the requirements of subchapter nine of this chapter.

(5) Handrails in all stairs shall be of materials having a flame-spread rating not exceeding one hundred fifty.

(g) **Stair doors.** - Doors providing access to stairs shall comply with the requirements of subdivision (a) of section 27-342 of article five of subchapter five of this chapter and subdivision (e) of section 27-371 of this article. The swing of stair doors shall not block stairs or stair landings, nor shall any door at any point of its swing reduce the effective width of the landing or stair to less than seventy-five percent of the required width of the landing or stair, or to less than the width of the door opening on them. The width of doors from a stair shall not be less than the number of units of exit width required for the capacity of the stair, but in no case shall the door width be less than required by subdivision (e) of section 27-371 of this article.

(h) **Stair construction.** - Risers, treads, stringers, landings, platforms, and guards, exclusive of handrails, shall be built of noncombustible materials except that interior stairs in buildings of construction group II may be built of combustible materials in buildings classified in occupancy group B-

2, C, D or E when the buildings are two stories in height or less, and in buildings classified in occupancy group J-2 or J-3 when the buildings are not more than three stories in height, and in the case of J-2 occupancy group, when occupied by not more than three families. Interior stairs shall have solid treads. All risers shall be closed except as otherwise provided in subdivision (i) of this section. When of combustible construction, the soffit of interior stairs shall be fire protected by material having a minimum fire resistive rating of one hour or five-eighths inches gypsum wall board or equivalent, or the space beneath shall be enclosed without openings by material having a one hour fire resistance rating unless permitted to have open risers by subdivision (I) of this section. Where two separate interior stairs are contained within the same enclosure (so called "scissor stairs"), each stair shall be separated from the other by noncombustible construction having a fire resistance rating equal to that required for the stair enclosure. Stairs, platforms, and landings shall be designed to support all loads in compliance with the requirements of subchapter nine of this chapter. Treads and landings shall be built of or surfaced with nonskid materials.

**(i) Stair enclosures. -**

(1) Interior stairs shall be enclosed with construction complying with the requirements of Table 3-4 except that:

a. In buildings three stories or less in height excluding those classified in occupancy group J-1 or J-2 combustible construction group II, the enclosing construction may have a one hour fire resistant rating.

b. Stairs in buildings or spaces classified in occupancy group J-3 and not more than three stories in height, need not be enclosed except as otherwise required in subdivision (a) of section 27-341 of article five of subchapter five of this chapter. Stairs may have open risers in one family dwellings and group homes.

c. Unenclosed stairs in buildings classified in assembly occupancy group F may be permitted as provided in subchapter eight of this chapter.

d. Stairs from floors or mezzanines may be unenclosed, with open or closed risers.

e. In buildings classified in occupancy group J-2 occupied exclusively by not more than one family on each story without boarders, roomers or lodgers and not more than three stories in height, the enclosing construction may have a one hour fire-resistance rating which may be constructed of combustible material provided that the stair enclosure is protected with an automatic sprinkler system complying with the construction provisions of subchapter seventeen of this chapter.

f. In buildings classified in occupancy group J-1 or J-2 not more than two stories in height of combustible construction group II, the enclosing construction may have a one hour fire-resistance rating which may be constructed of combustible material; however, where only one vertical exit is provided the

stair enclosure shall be protected throughout with an automatic sprinkler system constructed in accordance with the provisions of subchapter seventeen of this chapter.

g. Except as provided in subparagraphs (a), (e) and (f) of this paragraph, in all buildings or spaces classified in occupancy group J-1 or J-2, the enclosing construction shall be of masonry or an approved equivalent material having at least a two hour fire-resistant rating.

(2) Access stairs connecting not more than two stories which do not serve as a required exit may be constructed without an enclosure in buildings classified in other than occupancy group H-2. Such stairs shall be additional to and shall not obstruct or interfere with required exit facilities. When the first story below grade is served by an interior, unenclosed access stair, it shall be sprinklered in accordance with the construction provisions of subchapter seventeen of this chapter.

(3) The interior finish of interior stair enclosures shall be in accordance with the requirements of table 5-4.

(4) Stair enclosures shall be vented in accordance with the requirements for shafts in subdivision (d) of section 27-344 of article five of subchapter five of this chapter except that stair enclosures for buildings or spaces classified in occupancy group J-1 or J-2 shall be vented as follows:

a. In occupancy group J-2 buildings three stories in height and with not more than one dwelling unit per story or two stories in height with not more than two dwelling units per story, shall be provided with a skylight at least nine square feet in area, glazed with plain glass with a wire screen over and under and provided with fixed or movable ventilators having a minimum open area of forty square inches.

b. In occupancy group J-1 or J-2 buildings two stories in height with more than two dwelling units per story shall be provided with a skylight of at least twenty square feet in area, glazed with plain glass, with a wire screen over and under and provided with fixed or movable ventilators having a minimum open area of forty square inches.

c. In occupancy group J-1 buildings exceeding two stories in height and in occupancy group J-2 buildings three stories in height with more than one dwelling unit per story or exceeding three stories in height shall be provided with a skylight at least twenty square feet in area, glazed with plain glass with a wire screen over and under and provided with fixed or movable ventilators having a minimum open area of one hundred forty-four square inches. In lieu of the skylight and ventilators a window of equal area may be provided with fixed louvers having a minimum open area of one hundred forty-four square inches installed in or immediately adjacent to the window.

(5) When dwelling units are located over a space classified in occupancy group C or E on the street floor, they shall be provided with a separate enclosed interior stair, or with an exterior stair.

**(j) Openings and obstructions to stair enclosures.-** No piping of any kind, with the exception of piping

required or permitted in subchapter seventeen of this code, shall be permitted within a stair enclosure. No openings of any kind, other than windows, fire department access panels, exit doors and openings specifically authorized in reference standard RS 5-18 shall be permitted within a stair enclosure. Pipes required or permitted by such subchapter seventeen and protected in accordance therewith which do not reduce the required clearances of the enclosure may be permitted. Ducts protected in accordance with the requirements of subchapter thirteen of this chapter, which do not reduce the required clearances of the enclosure, may be permitted. In addition, in buildings in occupancy group J-2, which are three stories or less in height and occupied by not more than two families on each story, a door from an apartment may open directly into a stair, and the door may swing into the apartment.

**(k) Roof access. -**

(1) Except as otherwise provided for in paragraphs two and three of this subdivision, in buildings or in building sections more than three stories or forty feet high with roofs having a slope of less than twenty degrees, access to the roof shall be provided by at least one interior stair, except that access to setback roof areas may be through a door or window opening to the roof. Interior stairs extending to roofs shall be enclosed in bulkheads of fire-resistant construction meeting the requirements of subchapter five of this chapter.

(2) In buildings or in building sections classified in occupancy group J-1 or J-2 more than two stories in height, except as otherwise provided for in paragraph three of this subdivision, with roofs having a slope of fifteen degrees or less all interior stairs, except those terminating at a level of a setback roof, shall extend to the roof and shall be enclosed in bulkheads of fire-resistive construction meeting the requirements of subchapter five of this chapter. Stairs terminating at the level of a setback shall provide access to the setback roof areas through a door except where the setback is less than four feet in width, measured from the inside of the parapet wall, and less than ten feet in length.

(3) In buildings or in building sections classified in occupancy group J-1 or J-2 two stories in height and in occupancy group J-2 three stories in height with not more than one dwelling unit per story with roofs having a slope of fifteen degrees or less, access to the roof shall be provided through a scuttle at least twenty-one inches in width and twenty-eight inches in length and shall comply with subdivision (c) of section 27-338 of article four of subchapter five of this chapter. Scuttles shall be located within each stair enclosure with a stationary iron ladder leading thereto.

**(l) Spiral stairs. -** Spiral stairs may serve as access stairs between two floors or levels in accordance with the provisions of paragraph two of subdivision (i) of this section. Such stairs may not serve as required exits, except that unenclosed spiral stairs when built of noncombustible materials and having a tread length of

at least thirty inches may serve as exits from mezzanines or balconies having an occupant load not exceeding twenty-five persons.

**TABLE 6-4 MAXIMUM RISER HEIGHT AND MINIMUM TREAD WIDTH**

Occupancy Group Classification of Building	Maximum Riser Height (in.)	Minimum Tread <sup>1</sup> Width (in.)
Residential J-3 (with closed risers)...	8 ¼	9 plus 1 ¼ nosing
Residential J-3 (with open risers)...	8 ¼	9 plus ½ nosing
Residential J-2 (with only three dwelling units).....	8 ¼	9 plus 1 ¼ nosing 9 ½ plus nosing
Assembly F.....	7 ½	10 plus nosing
Institutional H-2.....	7	9 ½ plus nosing
All others <sup>2</sup> .....	7 ¾	nosing

**Notes for TABLE 6-4:**

<sup>1</sup>Treads may be undercut a distance equal to the nosing. A nosing shall not be required when tread width is eleven inches or wider.

<sup>2</sup>The proportions and dimensions of treads and risers may be adjusted in buildings classified in occupancy group G to suit the age of occupants, subject to the approval of the commissioner.

**§[C26-604.9] 27-376 Exterior stairs. -**

Exterior stairs may be used as exits in lieu of interior stairs provided they comply with all of the requirements for interior stairs, except enclosure, and except as modified below:

**(a) Capacity. -**The capacity of exterior stairs shall be as listed in Table 6-1.

**(b) Height limitation. -** No exterior stair shall exceed seventy-five feet or six stories in height.

**(c) Construction. -** Exterior stairs shall be constructed entirely of non-combustible materials, except that in buildings classified in occupancy groups other than G, F, or H, or construction group II, located outside the fire districts, exterior stairs may be built of combustible materials when the buildings are two stories or thirty feet in height or less and have an occupant load not exceeding forty persons per floor above the street below. Exterior stairs shall be roofed, and shall be protected along their outer sides as required for exterior corridors in subdivision (f) of section 27-369 of this article. Treads, landings, and platforms shall be solid and unperforated. Risers may be partially open to permit water and snow to drain.

**(d) Opening protective. -** In buildings four stories or fifty feet in height or more, there shall be no openings

in the building walls adjoining exterior stairs other than one-quarter\* hour self-closing swinging fire doors, and no openings nearer than ten feet to the stair (measured horizontally) that are not provided with three-quarter hour opening protectives.

(e) **Location** - No exterior stair shall be located nearer than ten feet to an interior lot line.

(f) **Discharge**- Exterior stairs shall extend continuously to grade.  
*\*As enacted but "three-quarter hour" probably intended.*

**§[C26-604.10] 27-377 Ramps. -**

Interior or exterior ramps may be used as exits in lieu of interior or exterior stairs provided they comply with the applicable requirements for interior stairs in section 27-375 of this article or exterior stairs in section, 27-376 of this article respectively, and with the following:

(a) **Capacity**- The capacity of ramps shall be as listed in Table 6-1.

(b) **Maximum grade**. - Ramps shall not have a slope steeper than 1 in 8, except that in buildings classified in occupancy group H the slope shall not exceed 1 in 12, and except as provided in subchapter eight of this chapter for places of assembly.

(c) **Design**-

(1) **CHANGES IN DIRECTION**- Ramps shall be straight, with changes in direction being made at level platforms or landings, except that ramps having a slope not greater than 1 in 12 at any place, may be curved.

(2) **LENGTH**- The sloping portion of ramps shall be at least three feet but not more than thirty feet long between level platforms or landings.

(3) **PLATFORMS** - Level platforms or landings, at least as wide as the ramp, shall be provided at the bottom, at intermediate levels where required, and at the top of all ramps. Level platforms shall be provided on each side of door openings into or from ramps having a minimum length in the direction of exit travel of three feet, and when a door swings on the platform or landing a minimum length of five feet.

(4) **DOORS**. - Door openings into or from ramps shall comply with the requirements for stairs in subdivision (g) of section 27-375 of this article. No door shall swing over the sloping portion of a ramp.

(5) **GUARDS AND RAILINGS** - Guards and railings of ramps shall comply with the applicable requirements of subdivision (f) of section 27-375 of this article except that only ramps having a slope steeper than 1 in 12 need comply with the requirements for handrails and intermediate handrails shall not be required.

(6) **SURFACE**. - Interior ramps exceeding a slope of 1 in 10 and all exterior ramps shall be provided with nonslip surfaces.

\*\***(7)**Ramps for people having physical disabilities shall additionally comply with the requirements of reference standard RS 4-6.

*\*\*Local Law 58-1987.*

**§[C26-604.11] 27-378 Escalators. -**

Escalators may be used as exits in lieu of interior stairs provided they comply with all of the requirements of subchapter eighteen of this chapter and with the applicable requirements for enclosed interior stairs, except as modified below:

(a) **Capacity**. - The capacity of escalators as listed in table 6-1 shall be based on the following:

**MINIMUM WIDTH (IN.) AT:**

Step	Balustrade <sup>1</sup>	Enclosure <sup>2</sup>	Units of Exit Width
24	32	52	1 ½
40	48	68	2

**Notes:**

<sup>1</sup> Measured twenty-seven inches above front edge of tread.

<sup>2</sup> Clear width above handrails.

(b) **Acceptable exits. -**

Only escalators moving in the direction of exit travel may be credited as exits, except that any escalator may be credited when it is connected to an automatic fire detection system that will cause it to stop simultaneously with the detection of fire. The detection system shall comply with the construction provisions of subchapter seventeen of this chapter. Where an escalator provides exit facilities from only one floor of a building, the automatic detection system shall be located on that floor. Where escalators provide exit facilities from more than one floor, the detection system shall be located on all floors so served, and shall cause escalators on all floors of the section of the building that they serve to stop operating. The stopping mechanism shall operate to bring the escalator to a gradual, rather than an abrupt stop.

(c) **Escalators not used as exits**. - Escalators that do not serve as exits, and that connect more than two stories of a building, shall be completely enclosed with noncombustible construction having a three-quarter hour fire-resistance rating, except that in buildings completely protected by an automatic sprinkler system complying with the construction requirements of subchapter seventeen of this chapter, such escalators may, alternatively, be protected by one of the methods specified in subchapter eighteen of this chapter.

**§[C26-604.12] 27-379 Moving walkways. -**

Pedestrian walkways consisting of conveyor belts shall be considered as exit passageways if level, or as ramps if inclined, and shall be acceptable as exits if they comply with the applicable requirements for exit passageways or ramps, and with the following:

(a) **Capacity** - The capacity shall be as listed under exit passageways or ramps, as the case may be, in table 6-1.

(b) **Acceptable exits**- Only walkways moving in the direction of exit travel may be credited as exits, except that any moving walkway may be credited when it is connected to an automatic fire detection system that



will cause it to stop simultaneously with the detection of fire on the floor it serves. Such detection system shall comply with the construction provisions of subchapter seventeen of this chapter.

**(c) Design and construction.** - Walkways shall comply with the requirements of subchapter eighteen of this chapter.

**(d) Enclosure.** - Walkways that do not serve as exits, but are inclined so as to require an opening in any floor, shall be enclosed as required for escalators in subdivision (c) of section 27-378 of this article.

**§[C26-604.13] 27-380 Fire escapes. -**

Fire escapes constructed on existing buildings when altered or as a second means of egress for group homes as permitted by section 27-368 of this article shall comply with the following:

**(a) Capacity.** - The capacity of fire escapes shall be as listed in table 6-1 for stairs.

**(b) Stairs.** -The minimum width of fire escape stairs shall be twenty-two inches. Treads shall have a minimum width of eight inches, exclusive of a required one inch nosing. The maximum height of risers shall be eight inches. No flight of stairs shall exceed twelve feet in height between landings.

**(c) Landings.** - Landings shall be provided at each story served by fire escapes. The minimum width of landings shall be three feet, and the minimum length shall be four feet six inches. Floor openings in landings shall be at least twenty-two inches by twenty-eight inches.

**(d) Handrails and guards.** - Handrails having a minimum height of thirty-two inches above the tread nosing shall be provided on both sides of stairs, and guards having a minimum height of thirty-six inches shall be provided on all open sides of landings, openings in guards shall be of such dimensions as to prevent the passage of a five inch dia. ball.

**(e) Construction.** - Fire escapes shall be constructed of noncombustible materials adequately protected against deterioration by corrosion or other effects of exposure to the weather, and shall be designed to comply with the requirements of subchapter nine of this chapter.

**(f) Access** - Access to fire escapes shall be by doors or windows having a minimum clear opening of twenty-four inches in width and thirty inches in height. Such doors or windows shall have a fire protection rating of three-quarters of an hour except in buildings classified in occupancy group J-2.

**(g) Discharge.-** The top landing of fire escapes shall be provided with a stair or gooseneck ladder leading to the roof, except that this requirement shall not apply to buildings having a roof pitch of more than twenty degrees. The lowest landing of fire escapes shall be not more than sixteen feet above grade and shall be provided with a stair to grade, which may be counterbalanced.

**ARTICLE 6 EXIT LIGHTING**

**§[C26-605.1] 27-381 Requirements. -**

Corridors and exits shall be provided with artificial lighting facilities, except as otherwise permitted by the provisions of subchapter twelve of this chapter, in accordance with the following:

(a) Illumination of at least two foot candles measured at the floor level shall be maintained continuously, during occupancy, in exits and their access facilities for their full length, at changes in direction in and intersections of corridors, balconies, exit passageways, stairs, ramps, escalators, bridges, tunnels, landings, and platforms, and as provided in subchapter eight of this chapter for places of assembly, except that this requirement shall not apply to dwelling units.

(b) In buildings classified in occupancy groups B-1 and B-2, exit lighting need only be maintained when a section of floor is occupied.

(c) Illumination shall be so arranged that the failure of any one light shall not leave any area in darkness.

(d) Phosphorescent materials shall not be used as a method of providing illumination, nor shall battery operated electric lights or portable lamps or lanterns be used as primary sources of lighting.

\* (e) (1) Buildings and existing buildings containing an F-4 place of assembly with an occupant load of three hundred or more persons shall install emergency lighting in each vertical exit serving the floor on which the place of assembly is located so as to provide a continuously lighted passage to the exterior of the building. Such lighting shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner.

*\*Local Law 59-1996.*

(2) Existing buildings required to comply with this subdivision shall install the emergency lighting on or before April first, nineteen hundred eighty-seven.

**§[C26-605.2] 27-382 Power source. -**

\* (a) Where a total of more than four lights is required, exit lighting shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner, provided, however, that in existing buildings, the exit lighting may be on circuits that are separate from the general lighting and power circuits, taken off ahead of the main switch.

(b) Existing high rise buildings classified in occupancy group C, D or H and existing buildings classified in occupancy group E, G or J-1 (except for "residential hotels," as such term is defined by the commissioner pursuant to rules and regulations) shall comply with the requirements of this section on or before April first, nineteen hundred eighty-seven.

*\*Local Law 59-1996.*

## ARTICLE 7 EXIT SIGNS

### §[C26-606.1] 27-383 Requirements. -

Except in occupancy groups J-2 and J-3, the location of every exit on every floor and every opening from a room classified in occupancy group J-1 and containing cubicles shall be clearly indicated by exit signs. Such signs shall be placed at an angle with the exit opening if such placement is required for the signs to serve their purpose. In long corridors, in open floor areas, and in all other situations where the location of the exit may not be readily visible or understood, directional signs shall be provided to serve as guides from all portions of the corridor or floor.

### §[C26-606.2] 27-384 Power source. -

\*(a) Where a total of more than four exit and/or directional signs is required, the signs shall be connected to an emergency power source or to storage battery equipment meeting the requirements of the commissioner, provided, however, that in existing buildings, the signs may be on circuits that are separate from the general lighting and power circuits, taken off ahead of the main switch.

*\*Local Law 59-1996.*

(b) Existing high rise buildings classified in occupancy group C, D or H and existing buildings classified in occupancy group E, G or J-1 (except for "residential hotels," as such term is defined by the commissioner pursuant to rules and regulations) shall comply with the requirements of this section on or before April first, nineteen hundred eighty-seven.

### §[C26-606.3] 27-385 Exit sign design. -

Exit signs shall read only "exit" and shall be of the externally lighted, internally lighted, or electroluminescent type, except that they may be nonilluminated in buildings not provided with artificial lighting.

(a) The artificial light source on externally lighted signs shall provide a red light, either by the use of an incandescent colored bulb or other visible red light source, so as to provide at least twenty-five foot candles on the exposed face of the sign. Visibility of the sign shall not be obscured by the location of the light source.

(b) For internally lighted signs, the average initial brightness of the letters shall be at least twenty-five ft. lamberts, and where an illuminated background is used, its average initial brightness shall be at least two hundred fifty ft. lamberts. The light source shall not be modified or changed nor shall lamp life multipliers be used so as to reduce these brightness levels.

(c) The letters of exit signs shall be red. The background of externally lighted signs shall be white. The background of internally lighted signs shall be either stenciled metal with a light gray or white color, or translucent frosted, opal glass, slow-burning plastic, or the plastic edge-glow type with white plastic separators. The letters for internally lighted signs shall be translucent red.

(d) The letters shall be block lettering at least four and one-half inches high with nine-sixteenths inch strokes, except in buildings and spaces classified in occupancy group F and J-1, where they shall be at least eight inches high with the strokes at least three-quarters of an inch wide.

(e) In locations where breakage may occur, exit signs shall be of shock resistant materials, or shall otherwise be protected against breakage.

(f) Except for buildings not provided with artificial lighting and buildings which maintain one or more auxiliary systems for emergency exit lighting in the event of a public utility failure, there shall be either (1) an illuminated exit sign with the background thereon made of an approved phosphorescent material or (2) a material with an opaque text and placed adjacent to or as close as possible to such illuminated sign. The phosphorescent material after exposure to normal lighting conditions shall be capable of remaining visible in total darkness for a period of at least eight hours. The signs shall be washable, non-toxic, non-radioactive and if subjected to fire must be self-extinguishing when the flame is removed.

### §[C26-606.4] 27-386 Directional sign design.-

Directional exit signs shall comply with all of the requirements for exit signs in section 27-385 of this article, and shall read "EXIT" with a horizontal arrow or arrows indicating the direction to the exit or exits. However, when the arrow is below the letters, the letters may be three and three-eighths inches high and nine-sixteenths inch strokes, except in buildings and spaces classified in occupancy group F where they shall be at least five inches high with nine-sixteenths inch strokes. The arrow or arrows shall be red.

### §[C26-606.5] 27-387 False exits. -

Any door, passageway, stair, or other means of communication that is not an exit or that is not a way to an exit, but is so located as to be mistaken for an exit, shall be identified with a sign reading "NOT AN EXIT," shall be identified by a sign indicating its use or purpose or shall be provided with a directional exit sign.

## ARTICLE 8 EXIT SIGNS FOR EXISTING BUILDINGS

### §[C26-607.1] 27-388 Retroactive provisions. -

Except as otherwise provided, the provisions of this subchapter are not retroactive except that the provisions of this article and article nine of subchapter six of this chapter for certain existing office buildings are retroactive. Signs required by this article must be installed no later than March sixth, nineteen hundred sixty-nine. Where auxiliary systems for emergency exit lighting are to be provided, the installation must commence no later than May sixth, nineteen hundred sixty-nine.

**§C26-60[7.2] 27-389 Designation of required means of egress. -**

(a) Except for spaces classified in occupancy J-2 and J-3, the location of each required means of egress on every floor of every structure shall be clearly indicated by exit signs. Such signs shall be placed at an angle with the exit doorway if such placement shall be required for such signs to serve their purpose adequately. These signs shall be of an approved phosphorescent material, which after exposure to normal lighting conditions shall be capable of remaining visible in total darkness for a period of at least eight hours. They shall also be washable, non-toxic, non-radioactive, and if subjected to fire must be self-extinguishing when the flame is removed. Except for illuminated signs, these signs shall have a phosphorescent background and opaque text. Where means of egress were required to be indicated by an illuminated sign, there shall be either (1) an illuminated exit sign with the lettering thereon made of the approved phosphorescent material, or (2) a supplemental exit sign made of the approved phosphorescent material with an opaque text, and placed adjacent to or as close as possible to such illuminated sign.

(b) Except for spaces classified in occupancy groups J-2 and J-3, in long corridors, in open floor areas and in all other situations where the location of the means of egress may not be readily discernible or understood by the occupants, directional signs shall be provided and maintained to serve as guides from all portions of the floor or corridor. These signs shall be of an approved phosphorescent material which after exposure to normal lighting conditions shall be capable of remaining visible in total darkness for a period of at least eight hours. They shall also be washable, non-toxic, non-radioactive, and if subjected to fire must be self-extinguishing when the flame is removed. Except for illuminated signs these signs shall have a phosphorescent background and opaque text. Where a directional sign was required to be illuminated there shall be either (1) an illuminated directional sign with the lettering, indicator, symbol or other device thereon made of the aforesaid phosphorescent material, or (2) a supplemental directional sign with the same lettering, indicator, symbol or device as appears on the illuminated sign, but opaque, on a background made of the aforesaid phosphorescent material and placed adjacent to or as close as possible to such illuminated sign.

(c) Except where otherwise permitted by the provisions of any law, the lettering of exit signs shall be of letters of at least eight inches high.

(d) In those buildings not provided with artificial lighting, in those buildings which maintain one or more auxiliary systems for emergency exit lighting in the event of a public utility failure, and in those buildings for which the installation of one or more such auxiliary systems is commenced on or before August sixth, nineteen hundred sixty-nine, the signs need not be phosphorescent but shall otherwise conform to this section.

**ARTICLE 9 STAIR AND ELEVATOR SIGNS**

**\*§[C26-608.1] 27-390 Applicability. -**

This article is applicable to all buildings and existing buildings which have at least one elevator which is subject to periodic inspections pursuant to section 27-998, any existing office building occupied or arranged to be occupied for an occupant load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building.

*\*Local Law 96-1985, language juxtaposed per Ch. 907-1985.*

**§[C26-608.2] 27-391 Signs at elevator landings.-**

A sign shall be posted and maintained on every floor at the elevator landing. The sign shall read "IN CASE OF FIRE, USE STAIRS UNLESS OTHERWISE INSTRUCTED." The lettering shall be at least one-half inch block letters in red with white background or as otherwise approved by the commissioner. Such lettering shall be properly spaced to provide good legibility. The sign shall also contain a diagram showing the location where it is posted and the location and letter identification of the stairs on the floor. The sign shall be at least ten inches by twelve inches, located directly above a call button and securely attached to the wall or partition. The top of such sign shall not be above six feet from the floor level. The diagram on such sign may be omitted provided that signs containing such diagram are posted in conspicuous places on the respective floor. In such case, the sign at the elevator landing shall be at least two and one half inches by ten inches and the diagram signs shall be at least eight inches by twelve inches.

**§[C26-608.3] 27-392 Floor numbering signs. -**

A sign shall be posted and maintained within each stair enclosure on every floor, indicating the number of the floor. The numerals shall be of bold type and at least three inches high. The numerals and background shall be in contrasting colors. The sign shall be securely attached to the stair side of the door.

**§[C26-608.4] 27-393 Stair and elevator identification signs. -**

Each stair and each bank of elevators shall be identified by an alphabetic letter. A sign indicating the letter of identification for the elevator bank shall be posted and maintained at each elevator landing directly above or as part of the sign specified in section 27-391 of this article. The stair identification sign shall be posted and maintained on the occupancy side of the stair door. The letter on the sign shall be at least three inches high, of bold type and of contrasting color from the background. Such signs shall be securely attached.

**§[C26-608.5] 27-394 Stair re-entry signs in office buildings.-**

Signs shall be posted and maintained on the stair door at each floor in buildings classified in occupancy group E occupied or arranged to be occupied for an occupant

load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building indicating whether re-entry is provided into the building and the floor where such re-entry is provided. The lettering and numerals of the signs shall be at least one-half inch high of bold type. The lettering and background shall be contrasting colors and the signs shall be securely attached approximately five feet above the floor. The signs shall read as follows and may be either independent or combined with the corresponding sign required by sections 27-392 and 27-393 of this article.

(a) Where no re-entry is provided from the stairs to any floor, the sign shall read "NO RE-ENTRY FROM THIS STAIR" and such sign shall be on the occupancy side of the stair door at each floor. No re-entry sign shall be required on the stair side of the door.

(b) Where re-entry is provided to specified floors:

(1) On the stair side of the door at floors where re-entry is provided, the sign shall read "RE-ENTRY ON THIS FLOOR."

(2) Where no re-entry is provided on that floor, the sign on the stair side of the door shall read "NO RE-ENTRY, NEAREST RE-ENTRY ON THE... AND... FLOORS" The floor numbers of the nearest re-entry below and the nearest re-entry floor above shall be entered in the blank spaces.

**§[C26-608.6] 27-395 Materials for signs. -**

Signs required by this article shall be of metal or other durable material.

**§[C26-608.7] 27-396 Signs in existing buildings. -**

(a) Signs installed prior to the enactment of this article may be accepted by the commissioner, provided that such signs will adequately accomplish the intended purpose.

(b) In buildings existing prior to January eighteenth, nineteen hundred seventy-three, the commissioner may modify the requirements as to location of signs where compliance would cause practical difficulty or undue hardship.

(c) All existing buildings not already subject to the requirements of this article as of January eighteenth, nineteen hundred seventy-three shall comply with the requirements of this article on or before October first, nineteen hundred eighty-five.

**ARTICLE 10 SIGNS IN SLEEPING ROOMS**

**§[C26-609.1] 27-396.1 Applicability. -**

This article is applicable to buildings and existing buildings classified in occupancy group J-1.

**§[C26-609.2] 27-396.2 Requirements. -**

All buildings and existing buildings classified in occupancy group J-1 shall post and maintain a sign on the inside of every door opening onto a public corridor giving access to a sleeping room. The sign shall contain a diagram showing the location where it is posted and the location and letter

identification of the exit stairs on the floor. The diagram shall indicate the number of doors opening onto the public corridor which must be passed to reach each exit stair. The sign shall be at least eight inches by ten inches, located on the inside of the door and securely attached thereto. The top of such sign shall not be more than six feet from the floor level. Such sign shall contain such additional information as the fire department may require.

**§[C26-609.3] 27-396.3 Retroactive requirements. -**

All existing buildings required to comply with the provisions of this article shall post the requisite signs on or before April first, nineteen hundred eighty-seven. Signs installed prior to such date may be accepted by the commissioner, provided that such signs adequately accomplish the intended purpose.

**ARTICLE 11 EMERGENCY POWER**

**§[C26-610.1] 27-396.4 Requirements. -**

Where required by this article or any other provision of this code, an emergency power system shall be provided. The emergency power system shall have a power source and fuel supply sufficient to operate the following equipment in accordance with rules and regulations promulgated by the department, where such equipment is required to be provided by this code:

- (a) Fire pumps and booster pumps.
- (b) At least three elevators at one time, with manual transfer to other elevators.
- (c) Alarm systems.
- (d) Communication systems.
- (e) Emergency lighting, if battery packs are not provided.
- (f) Ventilating systems used for smoke venting or control.
- (g) Stair pressurization.

**§[C26-610.2] 27-396.5 Registration. -**

Emergency power generation equipment shall be registered with the department of environmental protection, bureau of air resources in accordance with the requirements of section 24-109 of title twenty-four of the administrative code.

**§[C26-610.3] 27-396.6 Applicability. -**

Emergency power systems meeting the requirements of this article shall be provided in the following buildings and building sections:

- (a) High rise buildings and building sections classified in occupancy group C, E, G or H.
- (b) Buildings and building sections classified in occupancy group E or G which do not exceed seventy-five feet in height but have a gross area of over fifteen thousand square feet per floor or a total gross area of one hundred thousand square feet or more.
- (c) Spaces classified in occupancy group F-4 having an occupant load of three hundred or more persons.
- (d) Buildings and building sections classified in occupancy group J-1.
- (e) Buildings and building sections containing an atrium.

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SPECIAL USES AND OCCUPANCIES**

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## ARTICLE 1 GENERAL

### §[C26-700.1] 27-397 Scope. -

This subchapter shall apply only to those building types, uses, and occupancies specifically regulated herein, and the requirements of this subchapter shall be in addition to the general requirements of other subchapters of this code governing the size, location, fire protection, means of egress, construction, and service equipment of buildings. Chemical plants, packing plants, refineries, and similar special occupancies may be constructed in accordance with the practices and requirements of the particular industry, subject to the approval of the commissioner.

### §[C26-700.2] 27-398 Standards. -

The provisions of reference standard RS-7 shall be a part of this subchapter.

### §[C26-700.3] 27-399 Definitions. -

For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

## ARTICLE 2 HIGH HAZARD OCCUPANCIES

### §[C26-701.1] 27-400 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for high hazard occupancies classified in occupancy group A under the provisions of subchapter three of this chapter.

**§[C26-701.2] 27-401 Explosion hazard and unlisted occupancies.-** Buildings or spaces of high hazard occupancies that involve explosion hazards or that are not specifically provided for in this code, shall be constructed to provide any necessary additional protection adequate for the hazard involved subject to approval by the commissioner.

### §[C26-701.3] 27-402 Other requirements. -

The occupancy and use of high hazard buildings and spaces shall also be subject to the applicable requirements of chapter four of this title.

### §[C26-701.4] 27-403 Location. -

High hazard occupancies shall not be located within, or attached to, a building occupied for any other use, unless separated from such other use by noncombustible construction having not less than a four hour fire resistance rating.

### §[C26-701.5] 27-404 Sprinkler requirements. -

Sprinkler protection meeting the construction requirements of subchapter seventeen of this chapter shall be installed in all high hazard occupancies. Where the nature of the fire hazard is such that water is not effective as an extinguishing agent, the extinguishing agent to be used,

shall be subject to the approval of the fire commissioner.

### §[C26-701.6] 27-405 Ventilation of storage occupancies.-

Rooms or spaces used for the storage of flammable paints, solvents, anesthetic agents, fuel or other oils having a flash point under two hundred degrees Fahrenheit (Tag closed cup) or other inflammable vaporous materials shall be vented to the outdoors by gravity or mechanical means, with independent supply and exhaust openings or ducts. If ventilation is provided by gravity means, the total net free openable area of supply and exhaust openings shall be equal to at least one percent of the floor area of the room, equally divided between supply and exhaust. If ventilation is provided by mechanical means, the system shall be designed to provide at least two air changes per hour. Where there are explosion hazards, see section 27-401 of this article. The construction of all ventilating systems shall be in accordance with the requirements of subchapter thirteen of this chapter.

## ARTICLE 3 OCCUPANCIES INVOLVING SPRAY OR DIP FINISHING

### §[C26-702.1] 27-406 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces for the spraying, dipping, or drying of flammable paints, varnishes, and lacquers or other flammable materials, mixtures, or compounds used for painting, varnishing, staining, or similar purposes.

### §[C26-702.2] 27-407 Classification. -

All occupancies involving spray painting, dipping, and drying with flammable materials shall be classified in high hazard occupancy group A.

### §[C26-702.3] 27-408 Location of processes. -

Spraying, dipping, or drying processes shall be located in accordance with the requirements of 27-403 of article two of this subchapter.

### §[C26-702.4] 27-409 Construction. -

**(a) Spray Booths. -** Spray booths shall be substantially constructed of noncombustible materials. Panels of polished wired glass at least one-quarter inch thick, not exceeding seven hundred twenty square inches in area and not more than forty-eight inches in any linear dimension, may be used in the sides of spray booths.

(1) Spray booths shall be provided with a mechanical ventilating system meeting the requirements of section 27-410 of this article.

(2) Each spray booth having a frontal area larger than nine square feet shall have a noncombustible deflector or curtain at least six inches deep installed along the upper outer edge of the booth, over the opening, and shall be protected with an automatic sprinkler system. The interior of ducts shall be

protected with sprinklers complying with the construction requirements of subchapter seventeen of this chapter, installed not more than twelve feet apart in horizontal ducts, and the sprinklers shall be accessible through duct access doors.

**(b) Dip tanks.** - Dip tanks, including their supports and drainboards when provided, shall be of an approved type.

**§[C26-702.5] 27-410 Ventilation. -**

Spraying or dipping spaces shall be mechanically ventilated during spraying or dipping operations so that the velocity of air is at least one hundred linear feet per minute in the breathing zone of the operator, conveying air toward the exhaust hood. The ventilating system shall be of sufficient capacity to prevent the accumulation of mist or vapors. Air shall be admitted to the spraying or dipping spaces in an amount equal to the capacity of the fan or fans and in a manner that prevents short-circuiting the path of air in the working zone of such spaces. The exhaust fan control shall be interconnected with spray guns so that they cannot be operated without the ventilation system being in operation. Exhaust fans shall, in addition, be arranged to operate independently of spray guns. Ventilation equipment shall be kept in operation for a sufficient length of time after spraying or dipping operations to exhaust all vapors, fumes, or residues of spraying materials from the spray, space dip space,\* or drying room.

(a) Ventilating ducts shall run directly to the outer air and be protected with a hood against the weather. Ventilating ducts shall be installed in accordance with the requirements of subchapter thirteen of this chapter, but shall not terminate within ten feet horizontally of any chimney outlet, or within twenty feet of any exit or any opening in an adjoining wall.

(b) Make-up air shall be supplied from a point outside the spraying or dipping space.

(c) The exhaust system from any spraying, dipping or drying space shall not be connected to any other ventilating system or be discharged into a chimney or flue used for the purpose of conveying gases of combustion.

(d) Exhaust fan blades shall be constructed of nonferrous material. Fan blades not coming in direct contact with spraying fumes need not comply with this requirement.

(e) Adequate access doors or panels, tightly fitted, shall be provided to permit inspection and cleaning of ducts.

*\*As enacted but probably intended to read "spray space, dip space".*

**§[C26-702.6] 27-411 Drying equipment. -**

Ovens and furnaces operated in connection with spray or dip finishing processes shall be of an approved type.

**§[C26-702.7] 27-412 Sprinklers. -**

Sprinkler protection shall be provided in all spraying, dipping, or drying spaces using flammable materials in

accordance with the construction requirements of subchapter seventeen of this chapter.

**ARTICLE 4 USES AND OCCUPANCIES INVOLVING RADIOACTIVE MATERIALS AND RADIATION-PRODUCING EQUIPMENT**

**§[C26-703.1] 27-413 Application. -**

This section shall apply to the construction, alteration, and use of buildings or spaces for radioactive materials and radiation-producing equipment.

**§[C26-703.2] 27-414 City, state and federal regulations. -**

In addition to the requirements of this section, occupancies involving radioactive materials and radiation-producing equipment shall also comply with applicable requirements of the city health code, relating to radiological hazards, of part thirty-eight of the state industrial code relating to radiation protection, and of title ten of the code of federal regulations relating to atomic energy.

**§[C26-703.3] 27-415 Laboratories. -**

All laboratories required to register under the requirements of the New York City health code shall comply with the following:

**(a) Construction-** All buildings in which such laboratories occur shall be of noncombustible group I construction.

**(b) Floors -** All floors shall comply with the fire-resistance requirements for the class of construction, and provide the degree of radioactive resistance required by applicable city, state, and federal regulations. A finished material shall be applied to provide a continuous nonporous surface, which may be readily removed.

**(c) Interior finish. -** All insulation of acoustical treatments and interior partitions shall be of noncombustible material. Walls and ceilings shall have nonporous finishes of class A rating.

**(d) Sprinkler protection. -** Automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter shall be provided, and such protection shall be designed for the type of combustible materials wherever such material is used, and for the radioactive material that may be expected to melt, vaporize, or oxidize under fire conditions. Laboratory equipment susceptible to damage from water or other materials used in the sprinkler system may be shielded by hoods except when the equipment provides a source of combustion. Where sprinkler protection uses water, or small water-spray installations are used to fight small isolated fires, floors shall be provided with drainage so that water may be carried to retention tanks for later disposal as required by the New York city health code when contamination of the water is to be anticipated.

**(e) Electrical controls. -** Electrical controls and equipment shall be installed in accordance with the



requirements of the electrical code of the city of New York.

**(f) Ventilation.** - Exhaust air from areas in which radioactive materials are used or stored shall be exhausted to the outdoors in such manner as not to create a health hazard, and shall not be recirculated to other areas of the building. Air pressure in rooms in which radioactive materials are used or stored shall be maintained below the [*sic*] air pressure of adjoining rooms, so that there is no flow of radioactive gases or dusts into adjoining rooms.

(1) Ducts shall be of sheet steel of not less than No. 16 manufacturers' standard gage [*sic*] or of other equivalent noncombustible material having a melting point above eighteen hundred degrees Fahrenheit. Exhaust ducts within the building, on the discharge side of the fan, shall be welded airtight. Exhaust ducts within the building, on the suction side of the fan shall have laps in the direction of air flow with smoke-tight joints, and shall be subjected to a smoke test in accordance with the requirements for chimneys in subchapter fifteen of this chapter. Access hatches with tight-closing covers shall be provided for cleaning and for fire-fighting in the exhaust system ducts.

(2) Fume hoods shall be exhausted to the outdoors. Controls for hood fans shall be interlocked so that contaminated air cannot be drawn into any space from a hood where the exhaust fan is not in operation.

(3) Fan equipment other than the impeller and impeller housing shall be located outside the exhaust stream.

(4) When the degree of contamination of the exhaust stream exceeds the concentration limits permitted by the health code, the duct system shall be equipped with devices to decontaminate the air to a safe level before discharging to the outdoor air.

**(g) Plumbing.** - Drainage lines from sinks used for radioactive wastes shall be without traps, and shall lead to retention tanks when required by the provisions of the New York city health code.

**§[C26-703.4] 27-416 Radiation machines.**-Radiation machines or particle accelerators, linear accelerators, cyclotrons, synchrotrons, betatrons, or bevatrons shall be located only in buildings of noncombustible group I construction; however, this requirement shall not apply to conventional medical, dental, research, or industrial x-ray machines of less than one million volt capacity.

**§[C26-703.5] 27-417 Storage.** -

Radioactive materials shall be stored in sealed containers. When required by the commissioner to avoid too concentrated an exposure within any one space, radioactive materials shall be stored in vaults designed in accordance with the radiation shielding or other requirements for the materials to be stored. When any materials are subject to melting, vaporization, or oxidation under fire conditions, the storage vaults shall be constructed of walls having a fire-resistance rating of at

least four hours, and the vaults shall be equipped with automatic sprinklers complying with the construction requirements of subchapter seventeen of this chapter and shall be vented through devices to decontaminate the air to a safe level. Doors opening into storage vaults shall meet shielding requirements and have a fire-protection rating of not less than three hours. All bins, shelving, partitions, and pallets in storage vaults shall be of noncombustible materials. Other methods of storage permitted by the health department or the atomic energy commission, such as storage under water, may be used.

**ARTICLE 5 BOILER AND FURNACE ROOMS**

**§[C26-704.1] 27-418 Application.** -

This section shall apply to the construction, alteration, and use of buildings or spaces for the enclosure of boilers, furnaces, and similar fuel-burning, heat-producing equipment.

**§[C26-704.2] 27-419 Enclosure.** -

Boilers or furnaces hereafter installed in any building, other than replacement boilers and furnaces and boilers or furnaces used to heat one- or two-family dwellings, shall be enclosed and separated from the rest of the building by noncombustible construction having at least a one hour fire-resistance rating, except that:

(a) All boilers carrying more than fifteen psi pressure and having a rating in excess of ten horsepower, shall be located in a room or compartment separated from the rest of the building by noncombustible construction having at least a two hour fire-resistance rating.

(b) Boilers or furnaces located adjacent to, or within, automotive repair shops, public garages (group 1), or any occupancy classified in high hazard occupancy group A shall be located in separate buildings or, in rooms enclosed by noncombustible construction having at least a two hour fire-resistance rating. Entrance to such enclosed rooms shall be from the outdoors, or through an intervening vestibule constructed of materials having a two hour fire-resistance rating. The floor area of such vestibules shall be at least fifty square feet, but not more than seventy-five square feet. Ventilation shall be provided by a louver permanently open to the outdoor air having a net free area of one hundred forty-four square inches, located near the floor. Vestibule doors shall be one and one-half hour self-closing fire doors, with a six inch high sill provided at the door between the vestibule and the boiler room. Both doors shall swing in the direction of the boiler room.

(c) Boilers having a rated gross capacity of less than sixty-seven thousand btu per hour for generating steam shall not be required to be enclosed, except as provided in subdivision (b) of this section.

(d) Electric or fuel-fired space heaters need not be enclosed when they are approved for installation without enclosure and are installed in accordance

with the conditions of approval.

(e) Boilers and furnaces used in conjunction with commercial and industrial processes need not be enclosed, subject to the approval of the commissioner.

**§[C26-704.3] 27-420 Location. -**

Rooms containing boilers or furnaces, or other equipment of similar or greater explosion hazard, shall not be located within fifty feet of any place of assembly, unless separated from such place of assembly by construction complying with the provisions of section 27-401 of article two of this subchapter.

**§[C26-704.4] 27-421 Clearances. -**

Enclosing construction for boilers and furnaces shall meet the minimum clearance requirements prescribed in subchapter fourteen of this chapter.

**§[C26-704.5] 27-422 Ash storage pits and bins.-**

Ash storage pits and bins not located within a boiler room enclosure shall be constructed of two hour fire-resistive construction, except that roofs over ash pits may be constructed of noncombustible materials.

**§[C26-704.6] 27-423 Exit requirements. -**

In every room containing a boiler, furnace, or incinerator, the maximum travel distance from any point within the room to an exit shall not exceed fifty feet. When two or more exits are so required, only the main exit shall comply with the size and construction requirements of subchapter six of this chapter. The other exit or exits may be noncombustible ladders or stairs leading to exit openings not less than thirty-two inches by forty-eight inches.

**§[C26-704.7] 27-424 Ventilation. -**

Boiler and furnace rooms shall be ventilated in accordance with the provisions of section 27-807 of article nine of subchapter fourteen of this chapter.

**ARTICLE 6 DRY CLEANING ESTABLISHMENTS**

**§[C26-705.1] 27-425 Application. –**

This section shall apply to the construction, alteration, and use of buildings or spaces for dry cleaning or dry dyeing operations.

**§[C26-705.2] 27-426 Classification. –**

Dry cleaning and dry dyeing establishments shall be classified as follows:

**(a) High hazard.-** All establishments employing gasoline or other solvents having a flash point below 100°F (tag. closed-cup).

**(b) Moderate hazard. -** All establishments employing solvents having a flash point between 100°F and 138.2°F (tag. closed-cup).

**(c) Low hazard. -** All establishments employing solvents with a flash point higher than 138.2°F (tag. closed-cup).

**§[C26-705.3] 27-427 Construction requirements. -**

**(a) High hazard. -** The construction or installation of high hazard dry cleaning establishments shall be prohibited.

**(b) Moderate hazard. -** Moderate hazard dry cleaning establishments shall meet all of the requirements of this code applicable to industrial occupancy group D-1 buildings. The floor finish in moderate hazard dry cleaning establishments shall be noncombustible and impervious.

**(c) Low hazard. -**

Low hazard dry cleaning establishments shall meet all of the requirements of this code applicable to industrial occupancy group D-2 buildings.

**(d) Equipment.-** All dry cleaning machines and equipment shall be of an approved type.

**§[C26-705.4] 27-428 Ventilation. –**

Mechanical ventilation systems in moderate hazard plants shall be adequate to effect ten complete air changes per hour. Low hazard dry cleaning establishments shall be provided with mechanical ventilation adequate to effect four complete air changes per hour. Ventilating systems shall be arranged in such manner as to prevent solvent vapors from being admitted to the combustion area of any device requiring an open flame. Sufficient make-up air shall be introduced into all parts of the establishment to equal the air exhausted by the dry cleaning units, dryers, and exhaust ventilating system. Such air shall not contain any flammable vapors. Openings or stacks discharging solvent vapor-air mixtures to the outdoors shall be located in accordance with the provisions of subchapter thirteen of this chapter.

**§[C26-705.5] 27-429 Coin-operated units-**

In coin-operated establishments all dry cleaning units shall be installed in such a manner that the working or maintenance portion of the equipment shall be separated from the front of the units by solid noncombustible partitions. Coin-operated units shall be located within a diked area, all parts of which are impervious to the solvent used in such units. The diked section shall be a four inch curb above the floor. Provisions shall be made for the collection of solvent spillage into tanks of capacity sufficient to contain all of the solvent in the dry cleaning units served, and for return of the solvent to the cleaning units through a closed pipe system. Access doors to the space in back of the units shall be kept closed and locked. Solvent storage tanks and other sources of danger shall be so situated as to be inaccessible to the general public. In addition to the mechanical ventilation required for low hazard dry cleaning establishments, the following mechanical ventilation shall be provided:

(a) All dry cleaning units shall have facilities that create an inward flow of one hundred cubic feet of air per minute into the unit when the loading door is opened.

(b) Emergency ventilation of the space in back of the dry cleaning units shall be provided so that in emergencies a minimum of one air change per minute in the enclosed space will be provided. Emergency ventilation equipment shall be on a circuit that is separate from the general lighting and power circuits, and shall be taken off ahead of the main switchboard, or shall be connected to the emergency lighting power source when such source is provided.

(c) A scavenger duct system shall be provided in the space in back of the units at each unit, and shall be designed to pick up vapor surrounding the equipment near the floor and exhaust it at the rate of one hundred cubic feet per minute. Scavenger ducts shall not be less than five square inches in area.

**§[C26-705.6] 27-430 Sprinklers. -**

Automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter as required for occupancy group D-1, shall be provided for moderate hazard dry cleaning establishments. In addition, in moderate hazard establishments each dry cleaning unit shall be provided with automatic extinguishing equipment, such as a carbon dioxide system, or a steam jet of not less than three-quarters of an inch at a pressure of fifteen psi.

**§[C26-705.7] 27-431 Separation of direct-fired dryers. -**

In moderate hazard dry cleaning establishments, direct-fired dryers shall not be used. In low hazard dry cleaning establishments using nonflammable solvents only, direct fired dryers may be used, but such dryers shall not be located within twenty-five feet of a dry cleaning unit unless a noncombustible partition (which may be glazed), equipped with self-closing doors, is provided between the dry cleaning unit and the flame producing device. This partition may provide either complete or partial separation, provided that any partial separation shall be so arranged that the line of air travel around the partition from the cleaning units to the dryer is a minimum of twenty-five feet. Where a solid noncombustible partition is constructed extending to the ceiling and all portions of the enclosure are solid, except for self-closing access doors, and outdoor air for combustion and drying is supplied, the separation may be reduced to fifteen feet.

**ARTICLE 7 HELIPORTS**

**§[C26-706.1] 27-432 Application. -**

This section shall apply to the construction, alteration, and use of building roofs, or parts thereof, as heliports.

**§[C26-706.2] 27-433 Classification. -**

Heliports on building roofs shall be classified in

industrial occupancy group D-1. They shall be separated from all other portions of the building by construction meeting the requirements of table 5-2 for fire divisions.

**§[C26-706.3] 27-434 Construction. -**

Heliports shall be permitted only on buildings classified in noncombustible construction group I. All heliport construction above the building roof shall be noncombustible. No openings in the roof shall be permitted in the landing area. Roof openings outside the landing area shall be protected from flammable liquid spillage by four inch curbs and shall be surrounded by metal railings at least three feet complying with the requirements of subchapter nine of this chapter. The landing area shall be enclosed with a substantial metal fence or skirt.

**§[C26-706.4] 27-435 Limitations. -**

No refueling facilities shall be provided, and no major aircraft repair or maintenance facilities shall be provided.

**§[C26-706.5] 27-436 Exits. -**

At least two means of egress, meeting the requirements of subchapter six of this chapter, shall be provided for each landing area. The exits shall be remote from each other and shall lead to the building stairways.

**§[C26-706.6] 27-437 Fire protection. -** Heliports shall be provided with fire-foam extinguishing equipment and fire alarm facilities meeting the following requirements:

(a) At least two hose stations housing approved foam generating equipment shall be provided remote from each other and located adjacent to outlets of the building standpipe system or other source of water supply. Hoses shall be provided with nozzles and related equipment for dispensing foam to all portions of the roof.

(b) The building standpipe system or other source of water supply shall be capable at all times of providing two hose streams simultaneously, each of which will afford foam application at a total water rate of at least sixty gallons per minute at a nozzle pressure [*sic*] of seventy-five psi for a period of ten minutes.

(c) A fire alarm system meeting the installation requirements of subchapter seventeen of this chapter shall be provided with a direct connection to the central station of an operating fire alarm company and with a local alarm to all heliport personnel.

**ARTICLE 8 AUTOMOTIVE SERVICE STATIONS**

**§[C26-707.1] 27-438 Application. -**

This section shall apply to the construction, alteration, and use of buildings or spaces as automotive service stations.

**§[C26-707.2] 27-439 Classification. -**

Automotive service stations shall be classified in business occupancy group E.

§[C26-707.3] \*27-440 Gasoline and diesel oil motor vehicle fuel storage. - All volatile flammable liquids and diesel oil motor vehicle fuel storage tanks shall be installed below ground and vented to the open air except for such above ground [*sic*] installation as may be authorized by the rules of the fire commissioner. The installation and venting of storage tanks shall be in accordance with applications and plans approved by the commissioner and shall also meet the requirements of chapter four of this title and the rules of the fire commissioner. Except as otherwise provided for in chapter four of this title or the rules of the fire commissioner, underground tank installations shall comply with the following:

(a) The top of the tanks shall be at least two feet below finished grade and at least two feet below the level of any cellar or basement floor within ten feet of the tanks.

(b) Tanks shall be supported on foundations complying with subchapter eleven of this chapter.

(c) Tanks shall be located so that the forces from any building foundation and support loads are not transmitted to the tanks. The distance from any part of a tank to the nearest wall of any basement, pit or cellar, or from any property line that may be built upon, shall not be less than three feet.

(d) Tanks shall be covered with a structurally supported reinforced concrete slab at least eight inches thick extending at least twelve inches beyond the horizontal outlines of the tanks and placed over a coverage of suitable clean backfill material.

(e) All concrete shall have a minimum compressive strength of twenty-five hundred pounds per square inch at twenty-eight days.

\*Local Law 68-1999.

§[C26-707.4] 27-441 Location of pumps. -

No gasoline pumps or other mechanical equipment shall be installed so as to permit servicing of motor vehicles standing on a public street. Canopies and supports over pumps and service equipment shall be noncombustible, except that they may be of construction having a one hour fire resistance rating or of heavy timber construction meeting the requirements of section 27-623 of article seven of subchapter ten of this chapter when located more than twenty feet from interior lot lines and from any building or structure.

§[C26-707.5] 27-442 Heating equipment. -

Heat generating equipment for automotive service stations shall be enclosed in accordance with the requirements of section 27-419 of article five of this subchapter.

ARTICLE 9 AUTOMOTIVE REPAIR SHOPS

§[C26-708.1] 27-443 Application. -

This section shall apply to the construction, alteration, and

use of buildings or spaces as automotive repair shops.

§[C26-708.2] 27-444 Classification. -

Automotive repair shops shall be classified in industrial occupancy group D-1.

§[C26-708.3] 27-445 Volatile flammables. -

All volatile flammables shall be stored and handled in accordance with the provisions of chapter four of this title.

§[C26-708.4] 27-446 Ventilation. -

All spaces used for the repair of motor vehicles shall be provided with mechanical ventilation adequate to provide four air changes per hour.

(a) Exhaust gases. - Where engines are to be run for test purposes or adjustments, provisions shall be made to collect the exhaust gases from each vehicle and to discharge such gases to the outer air by means of a positively induced draft. The discharge opening from such system shall be located as required by subchapter thirteen of this chapter.

(b) Pits. - All pits for inspection or repair shall have mechanical exhaust ventilation taken from near the bottom of the pits. Pit exhaust systems shall be adequate to provide at least four air changes per hour.

§[C26-708.5] 27-447 Sprinklers. -

Automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter shall be provided as required by occupancy group D-1.

§[C26-708.6] 27-448 Heating equipment. -

Heat generating equipment for automotive repair shops shall be enclosed in accordance with the requirements of section 27-419 of article five of this subchapter.

§[C26-708.7] 27-449 Pits. -

All pits shall be provided with two means of egress.

ARTICLE 10 PUBLIC GARAGES

§[C26-709.1] 27-450 Application. -

This section shall apply to the construction, alteration, and use of buildings or spaces as public garages. Any areas of such buildings in which gasoline, oil, and similar products are dispensed shall meet the requirements of article eight of this subchapter; any areas in which motor vehicles are repaired shall meet the requirements of article nine of this subchapter; and any areas in which any paint spraying is done shall meet the requirements of article three of this subchapter.

§[C26-709.2] 27-451 Classification. -

Public garages shall be classified according to their specific uses as follows:

**(a) Group 1.** - Buildings or spaces used for the parking of vehicles having fuel storage tanks in excess of twenty-six gallon capacity; or used for the parking of vehicles of any size, and in which mechanical repair, body work, or painting of vehicles is conducted, or in which gasoline, oil, or similar products are dispensed. Group 1 public garages shall be classified in storage occupancy group B-1.

**(b) Group 2.** - Buildings or spaces used exclusively for the parking of vehicles having fuel storage tanks of twenty-six gallon capacity or less, and in which no repair, body work or painting of vehicles is conducted, and in which no gasoline, oil, or similar products are dispensed. Group 2 public garages shall be classified in storage occupancy group B-2.

**§[C26-709.3] 27-452 Construction. -**

The street floor construction of group 1 public garages shall have at least a two hour fire-resistance rating. Where openings are provided in the floor of any public garage, they shall be protected by railings complying with the requirements of subchapters nine and ten of this chapter, with a curb or ramp at least six inches high above the floor. All floors shall be concrete or equivalent noncombustible material. Columns in parking areas shall comply with the provisions of section 27-559 of article three of subchapter nine of this chapter.

**§[C26-709.4] 27-453 Group 1 public garages in buildings of other occupancy classification. -**

No group 1 public garage shall be located within, or attached to, a building occupied for any other use, unless separated from such other use by construction meeting the requirements of table 5-2 for fire divisions. Elevators, stairways, and exit passageways connecting group 1 garages to other occupancies shall be accessible only through vestibules constructed of materials having a two hour fire-resistance rating. The floor area of such vestibules shall be at least fifty square feet but not more than seventy-five square feet. Ventilation shall be provided by a louver permanently open to the outdoor air having a net free area of one hundred forty-four square inches, located near the floor. Vestibule doors shall be one and one-half hour self-closing fire doors, with a six inch high sill provided at the door between the vestibule and the garage. Both doors shall swing in the direction of the elevators, stairways or exit passageways.

**§[C26-709.5] 27-454 Roof storage of motor vehicles.-**

Roofs of buildings shall not be used for the parking or storage of motor vehicles unless the building is of class 1-A, 1-B, or 1-C construction, or is an open parking structure. When the roof of a building is used for parking of motor vehicles, it shall be provided with a parapet wall or guard rail at least three feet six inches high, and with curbs or wheel guards of noncombustible

materials of at [sic] least eight inches high. Such guards shall be substantially anchored to prevent any vehicle from striking the parapet wall or guard rail. Guard rails shall comply with the requirements for railings in subchapter nine of this chapter.

**§[C26-709.6] 27-455 Sprinklers. -**

(a) Automatic sprinkler protection complying with the construction provisions of article four of subchapter seventeen shall be provided as required for occupancy group B-1 or B-2 respectively, except that in existing buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight, storage of forty-five thousand gallons or less of product having a flash point over one hundred degrees [sic] F (tag open cup) in the cargo space of tank truck or other vehicles approved for such storage by the fire commissioner, pending delivery, shall not be deemed to require sprinkler protection.

(b) Smoke detection or thermostatic alarm with central office connection. -A thermostatic alarm system or smoke detection system equipped with a central office connection complying with subchapter seventeen of this code, and reference standard RS 17-3 of the appendix to this code may be provided in lieu of the sprinkler system required under the preceding subdivision in existing buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight, when the storage of fuel oils or other products having a flash point over one hundred degrees F (tag open cup) is twenty-two thousand five hundred gallons or more but not exceeding forty-five thousand gallons in the cargo space of tank trucks or other vehicles approved for such storage by the fire commissioner, pending delivery.

(c) Portable fire fighting appliances, as the fire commissioner may direct, shall be provided in existing buildings lawfully occupied as garages prior to December sixth, nineteen hundred sixty-eight, when the storage of fuel oils or other products, having a flash point over one hundred degrees F (tag open cup), in the cargo space of tank trucks or other vehicles approved for such storage by the fire commissioner, pending delivery, is less than twenty-two thousand five hundred gallons.

**§[C26-709.7] 27-456 Ventilation. -**

Public garages shall be ventilated in accordance with provisions of section 27-766 of article eight of subchapter twelve of this chapter and the following:

(a) Garage spaces above or below grade except as provided in subdivision (e) of this section shall be provided with mechanical ventilation according to one of or a combination of the following methods:

(1) Air exhaust at the rate of not less than one cfm per square foot of total floor area with properly designed means for air inflow.

(2) Air supply at the rate of not less than one cfm per square foot of total floor area with properly designed means for air outflow.

(3) Air exhaust or air supply at a rate sufficient to maintain an average concentration of carbon monoxide not to exceed one hundred parts per one million parts of air for periods longer than one hour and with a maximum concentration at any time not to exceed four hundred parts of carbon monoxide per one million parts of air. The concentration of carbon monoxide shall be determined by periodic tests taken between three and four feet from the floor by means of approved carbon monoxide detector tubes or other equivalent means. This method of mechanical ventilation may be used only if the overall design includes automatic ventilating fan control by means of approved carbon monoxide monitoring devices or by other approved means located so as to provide full protection for the occupancy.

(b) The provisions of section 27-766 of article eight of subchapter twelve of this chapter shall apply.

(c) Air supply shall be taken from an uncontaminated source. Exhaust outlets shall be located in accordance with the requirements of subchapter thirteen with one-half of them located six inches above floor level. In public garages where motor vehicles are parked by mechanical means, the ventilation requirements shall be one-half of those required above.

(d) No automotive service pits shall be installed in floors below the street floor. Pits shall have mechanical exhaust ventilation taken from near the bottom.

(e) Garage spaces above grade provided with natural ventilation having a free openable area of at least five percent of the total floor area of the space and having adjustable openings measuring at least six inches by four inches located within six inches of the floor and at most sixteen feet apart on all outside and court walls need not be provided with mechanical ventilation.

**§[C26-709.8] 27-457 Exits. -**

Public garages shall be provided with at least two exits from each tier of parking. One of the exits may be a ramp used by motor vehicles, when serving not more than one level below grade. All vertical exits shall have a minimum width of thirty-six inches and shall be enclosed in two hour fire-resistive construction, except as permitted by section 27-458 of article ten of subchapter seven of this chapter. No exit in a group 1 public garage shall have a path of travel through a fuel dispensing area. In group 2 public garages occurring *[sic]* in occupancy group J-2 buildings, overhead doors shall be of the automatic self-closing type.

**(a) Travel distance. -**No point in any public garage shall be more than one hundred feet from an exit, except that such distance may be increased to one hundred fifty feet when the garage is fully sprinklered.

**(b) Repair and fuel spaces. -** Spaces in group 1 public garages used for the repair of motor vehicles or the dispensing of fuel shall be provided with at least two exits, within the travel distance limitations of subdivision (a) of this section.

**(c) Roof parking. -** When the roof of a building is used for parking, interior vertical exits shall be enclosed in a bulkhead constructed as required by subchapter five of this chapter.

**§[C26-709.9] 27-458 Ramps. -**

Vehicular ramps in public garages shall not exceed a gradient of one in seven, and their surfaces shall be nonslip. A landing having a minimum length of twenty feet shall be provided at the discharge point at the street level, within the street line. Ramps serving as required exits shall be enclosed in construction having a two hour fire-resistance rating except that openings for motor vehicles at each parking tier may be protected by a water curtain consisting of deluge-type sprinkler heads supplying at least three gallons of water per minute per linear foot of opening.

**§[C26-709.10] 27-459 Heating equipment. -**

Heat generating equipment for public garages shall be enclosed in accordance with the requirements of section 27-419 of article five of subchapter seven of this chapter.

**\*§27-459.1 Parking spaces for people having physical disabilities. -**

Parking spaces for people having physical disabilities *[sic]* shall comply with the requirements of section 27-292.19 and reference standard RS 4-6.

*\*Local Law 58-1987.*

**ARTICLE 11 OPEN PARKING STRUCTURES**

**§[C26-710.1] 27-460 Application. -**

This section shall apply to the construction, alteration, and use of open parking structures. Open parking structures in buildings of other occupancy group classification shall not be permitted unless separated from other occupancies by construction having at least a two hour fire resistance rating.

**§[C26-710.2] 27-461 Height and area limitations. -**

The height of the top parking surface, and the area per parking tier, shall not exceed the limitations listed in table 7-1.

**TABLE 7-1  
HEIGHT AND AREA LIMITATION[S] \*\* OF  
OPEN PARKING STRUCTURES**

Construction Classification	Maximum Allowable Height (ft.)	Allowable area per Parking Tier (sq. ft.)
1A	Unlimited	Unlimited
1B	Unlimited	Unlimited
1C	100	50,000
1D	100	50,000
1E	75	30,000

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

a. The area of an open parking structure having not more than two tiers above grade shall not be limited.

b. Open parking structures of construction class 1C, or 1D exceeding three parking levels may be sixty thousand square feet on any parking level provided they shall have at least fifty percent of their perimeter, fifty percent open.

c. Open parking structures of construction class 1C or 1D, exceeding three parking levels, may be one hundred thousand square feet on any parking level when fifty percent of the perimeter is fifty percent open, and may be one hundred twenty-five thousand square feet on any parking level when seventy-five percent of the perimeter is fifty percent open and may be one hundred fifty thousand square feet on any parking level when one hundred percent of the perimeter is fifty percent open in all aforementioned cases and shall have frontage space on at least two sides, and the horizontal distance on any level to an open exterior wall shall not exceed two hundred feet.

d. Open parking structures of construction class 1E exceeding three parking levels may be fifty thousand square feet on any parking level when fifty percent of the perimeter is fifty percent open and may be sixty-two thousand five hundred square feet on any parking level when seventy-five percent of the perimeter is fifty percent open and may be seventy-five thousand square feet on any parking level when one hundred percent of the perimeter is fifty percent open in all aforementioned cases and shall have frontage space on at least two sides, and the horizontal distance on any level to an open exterior wall shall not exceed two hundred feet.

e. The allowable areas specified in notes b, c and d above shall apply only to open parking structures used exclusively for the parking and storage of passenger vehicles accommodating not more than nine passengers but not including trailers, campers or similar vehicles.

**§[C26-710.3] 27-462 Construction. -**

All materials used in the construction of open parking structures shall be noncombustible. Columns in parking areas shall comply with the provisions of section 27-559 of article three of subchapter nine of this chapter. Interior finishes shall be class A. The minimum clear height of any parking tier shall be at least six feet six inches.

**(a) Below grade.-** Any portion of an open parking structure extending below grade shall comply with all of the requirements for public garages as provided in article ten of this subchapter.

**§[C26-710.4] 27-463 Exterior walls. -**

An exterior enclosure wall shall be required on any side of an open parking structure located within fifteen feet of an interior lot line. Such walls shall be noncombustible construction having at least a two hour fire-resistance rating.

**§[C26-710.5] 27-464 Curbs and bumpers. -**

Curbs or bumpers of noncombustible materials shall be provided at the perimeter of each parking tier. Such curbs or bumpers shall be at least eight inches high, substantially anchored, and so located that no part of any motor vehicle will contact a wall, partition or railing.

**§[C26-710.6] 27-465 Railings. -**

Substantial railings or protective guards of noncombustible materials shall be provided at the perimeter of all parking tiers, except where exterior walls are provided, and around all interior floor openings. Such railings or guards shall be at least three feet six inches high, and shall be designed in accordance with the requirements of subchapter nine of this chapter.

**§[C26-710.7] 27-466 Floor openings. -**

A curb or ramp at least six inches high shall also be provided at all interior floor openings. All floors shall be pitched to provide adequate drainage.

**§[C26-710.8] 27-467 Motor fuel pumps. -**

Motor fuel pumps and facilities may be provided within an open parking structure as an accessory use. Such facilities shall comply with the requirements for the storage and handling of volatile flammables as provided in chapter four of this title. The area used for such purpose shall be located on the street floor. No pedestrian exit from any parking area shall have a path of travel through any fuel dispensing area.

**§[C26-710.9] 27-468 Mechanical parking. -**

Open parking structures in which motor vehicles are parked by mechanical means shall comply with the requirements for open parking structures, except that the requirements for means of egress may be modified as provided in section 27-469 of this article.

**§[C26-710.10] 27-469 Exits. -**

(a) Driver parking. - Open parking structures with driver parking shall be provided with at least two exits from each tier. One of the exits may be a ramp used by motor vehicles, when serving not more than one level below grade. Exit stairs shall have a minimum width of thirty-six inches and may be unenclosed, except that they shall be enclosed in noncombustible construction having at least a two hour fire-resistance rating if the first riser of the stair is more than thirty feet from one of the open exterior walls of the structure. No point on any tier of parking shall be more than one hundred feet from an exit.

(b) Mechanical parking. - Open parking structures with mechanical parking equipment shall be provided with at least one exit from each tier of parking. Such exit may be unenclosed, but shall have a minimum width of thirty-six inches. No point on any tier of parking shall be more than two hundred feet from an exit.

**§[C26-710.11] 27-470 Ramps. -**

Ramps used for the movement of motor vehicles and as required exits need not be enclosed when serving tiers above grade. Such ramps shall have a gradient not exceeding one in seven, with nonslip surfaces. A landing

having a minimum dimension of twenty feet shall be provided at the discharge point of all ramps at the street level, within the street line. Where a ramp is also used for the parking of motor vehicles, it shall be considered as a parking tier and may not serve as an exit for the occupants of the structure.

**§[C26-710.12] 27-471 Elevators. -**

Passenger elevators in open parking structures shall comply with the requirements of subchapter eighteen of this chapter, except that hoistways may be enclosed with noncombustible construction.

**§[C26-710.13] 27-472 Standpipes.-**

Open parking structures shall be provided with standpipe in accordance with the requirements of subchapter seventeen of this chapter.

**\*§27-472.1 Parking spaces for people having physical disabilities. -** Parking spaces for people having physical disabilities shall comply with the requirements of section 27-292.19 and reference standard RS 4-6.

*\*Local Law 58-1987.*

**ARTICLE 12 PRIVATE GARAGES**

**§[C26-711.1] 27-473 Application. -**

This section shall apply to the construction, alteration, and use of buildings or spaces as private garages.

**§[C26-711.2] 27-474 Classification. -**

Private garages shall be classified in storage occupancy group B-2.

**§[C26-711.3] 27-475 Attached garages. -**

Private garages attached to, or located above or below, a dwelling shall have walls, partitions, floors, and ceilings separating the garage from the dwelling, having a fire-resistance rating of at least one hour, except that such fire-resistive construction shall not be required between a dwelling and a carport when such carport is open on at least two sides. Any openings to the dwelling in required walls or partitions shall be protected with one and three-quarter inch solid core wood doors or equivalent

**§[C26-711.4] 27-476 Connection by breezeway. -**

When a breezeway connects a garage with a dwelling, such a breezeway shall be firestopped at all points of connection to the garage.

**§[C26-711.5] 27-477 Floors. -**

Garage floors shall be of concrete or equivalent noncombustible material that will not absorb flammable liquids. The sills of all door openings connecting a garage with a dwelling shall be raised at least four inches above the garage floor.

**§[C26-711.6] 27-478 Ventilation. -**

No air used for heating, cooling, or ventilation shall be circulated through garages to dwellings.

**ARTICLE 13 OPEN PARKING LOTS**

**§[C26-712.1] 27-479 Application. -**

This section shall apply to the construction, alteration, and use of open parking lots. Open parking lots shall be unobstructed and free of other uses. All driveways and open spaces used for the parking or storage of motor vehicles shall be surfaced with concrete asphalt, or equivalent durable, dustless material.

**§[C26-712.2] 27-480 Curb cuts. -**For the purpose of this section, a curb cut shall be defined as the total length of cut curb, including splays.

(a) For street frontages of one hundred feet or less, the amount of cut curb shall not exceed sixty percent of the frontage of the lot. No single curb cut shall exceed thirty feet in length, and there shall not be more than two curb cuts on any street frontage of one hundred feet or less. The minimum distance between two curb cuts shall be five feet.

(b) For additional street frontage over one hundred feet there may be an additional curb cut for each fifty feet of frontage.

(c) No curb cut shall commence within eight feet of a side lot line, except that on lots with street frontages of fifty feet or less, or on corner lots, the curb cut may commence two feet six inches from the side lot line.

(d) The distance of curb cuts from the intersection of street lines shall comply with the zoning resolution.

(e) Notwithstanding any of the above computations, no curb cut shall be less than ten feet.

**§[C26-712.3] 27-481 Protection of adjoining property. -**

**(a) Curbs and bumpers. -** Open parking lots shall be completely separated from adjoining land by curbs or bumpers of concrete, masonry, steel, heavy timber, or other similar and equally substantial materials, securely anchored so as to stop motor vehicles. Curbs and bumpers shall be at least eight inches high and eight inches wide. The only openings permitted in required curbs and bumpers shall be for drainage and for motor vehicle entrances and exits, and at pedestrian entrances.

**\*\* (b) Drainage. -** Where the surface paving of an open parking lot is non-porous, such lot shall be drained as required by subdivisions (b), (c) or (d) of section P110.2 of reference standard RS-16, as applicable. An asphaltic concrete surface, not to exceed one and one-half inches in thickness after compaction, shall be considered a porous surface provided such surface will pass an amount of water equivalent to one-half inch of rainfall per hour and provided such surface is underlaid by permeable soil, except that whenever an off-street



parking facility is constructed in connection with the construction of a new building, or whenever such parking facility falls within the definition of a substantial horizontal enlargement as set forth in subdivision (a) of section P110.2 of reference standard RS-16, all storm water falling or coming to rest on such parking facility shall be disposed of as provided in section P110.2 of reference standard RS-16.

*\*\* Local Law 103-1989.*

**§[C26-712.4] 27-482 Accessory uses and occupancies.** - Parking lot offices, attendant shelters, storage facilities, and similar structures used in conjunction with open parking lots may be provided for accessory use, but shall comply with all of the provisions of this code applicable to the specific use or occupancy.

Motor vehicle fuel pumps. - Fuel pumps for the servicing of motor vehicles may be provided for accessory use in conjunction with open parking lots when complying with the requirements for the storage and handling of volatile flammables as provided in chapter four of this title. Fuel pumps shall be at least thirty feet from any parking space or interior lot line.

**\*§27-483 Parking spaces for people having physical disabilities.** - Parking spaces for people having physical disabilities shall comply with the requirements of section 27-292.19 and reference standard RS' 4-6.

*\* Local Law 58-1987.*

## ARTICLE 15 SWIMMING POOLS

**§[C26-714.1] 27-488 Application.** -

This section shall apply to the construction, alteration and use of all indoor and outdoor pools intended for swimming or bathing purposes, except for pools that have less than eighteen inches in depth of water at every point. Pools above grade having a maximum water depth of forty-eight inches above grade and an area not exceeding five hundred square feet that are accessory to J-3 occupancies and that are privately used for noncommercial purposes shall be exempt from the provisions of this subchapter except that such pools shall comply with the requirements of section 27-493 of this article. All pools not exempt from the provisions of this subchapter shall comply with the applicable provisions of subchapter sixteen of this chapter. No building permit shall be required for pools exempted by this section.

Regardless of any contrary provision, any pool existing on January first, nineteen hundred sixty-nine, which is accessory to J-3 occupancies, and that is privately used for noncommercial purposes shall be exempt from the provisions of this subchapter except that such pools shall comply with the requirements of section 27-493 of this article.

**§[C26-714.2] 27-489 Construction.** -

Pools shall be constructed so as to be water tight and easily cleaned. They shall be built of nonabsorbent materials with smooth surfaces and shall be free of open cracks and open joints.

**(a) Walls.** - The walls of pools shall be vertical for at least the top two feet six inches below the normal water level. The junctions between the side walls and the bottom shall be coved. A pool overflow shall be provided meeting the requirements of reference standard RS-16.

**(b) Bottom slopes.**- The bottom of any portion of a pool where the water is less than five feet six inches deep shall have a maximum slope of one foot vertically for every fifteen feet horizontally.

**(c) Ladders.**- There shall be a ladder or steps with handrails at the deep end and at the shallow end of every pool. Ladders and steps shall have nonslip treads.

**(d) Walkways.**- Every pool shall have a walkway at least five feet wide around its entire perimeter. The walkway shall have a nonslip surface and be so constructed that it does not drain into the pool.

**(e) Hand-holds.** - Every pool shall be constructed so that either the overflow gutter, if provided, or the top of the side walls afford a continuous hand-hold for bathers.

**(f) Markings.**- Permanent markings showing the depth of the shallow end, break points, diving depth, and deep end shall be provided so as to be visible from both inside and outside the pool.

**(g) Spectator area.** - Areas exclusively intended for spectators shall meet the applicable requirements of subchapter eight of this chapter for places of assembly.

**(h) Diving boards and towers.**- Diving towers shall be rigidly constructed and permanently anchored. The depth of the water below a diving board shall be at least eight feet six inches for boards one meter (3.28 ft.) or less above the water. For diving boards more than one meter and not more than three meters (9 ft. 10 in.) above the water, the depth below the board shall be at least twelve feet. For diving boards or platforms more than three meters above the water, the depth below the board shall be at least sixteen feet. Indoor pools shall provide at least twelve feet overhead clearance above all diving boards.

**§[C26-714.3] 27-490 Dressing facilities.** -

Toilet rooms, shower rooms, and indoor dressing areas shall be constructed of nonabsorbent materials with smooth-finish walls and partitions. Floors shall have a nonslip surface impervious to moisture, free of cracks or open joints, and sloped to drains. The junctions between the side walls and floors shall be covered. Individual dressing rooms or cubicles within indoor dressing areas shall be excluded from the above requirements. Cabanas and dressing rooms that are not a part of any other occupancy shall also be excluded.

**Toilets and Showers.**- Toilets, lavatories, and showers, including piping, shall be provided in accordance with the requirements of subchapter sixteen of this chapter.

**§[C26-714.4] 27-491 Ventilation and heating. -**

Indoor pools, dressing rooms, toilets, and shower rooms shall be ventilated in accordance with the requirements of subchapter twelve of this chapter. Unless used only between May first and October thirty-first, such spaces shall be heated in accordance with the requirements of subchapter twelve of this chapter.

**§[C26-714.5] 27-492 Water circulation, water treatment, and drainage. -**

The supply, circulation, treatment, and drainage of water for pools shall meet the requirements of subchapter sixteen of this chapter and the health code.

**§[C26-714.6] 27-493 Safety precautions. -**

(a) No overhead electrical conductors shall be installed within fifteen feet of any swimming pool. All metal fences, enclosures, or railings that might become electrically charged as a result of contact with broken overhead conductors or from any other cause near, or adjacent to, a swimming pool shall be grounded in accordance with the provisions of lightning protection in the electrical code of the city of New York.

(b) Every outdoor swimming pool, fish pond, or other pool greater than eighteen inches deep at any point shall be protected by an enclosure, barrier or other means adequate to make such pool inaccessible to small children which including gates thereto shall be at least four feet high above the adjacent ground.

All gates shall be self-latching with latches located at least four feet high above the ground or otherwise made inaccessible to small children from the outside.

**\*§27-493.1 Facilities for people having disabilities. -** Facilities for people having physical disabilities shall comply with the requirements of subarticle two of article two of subchapter four and of subchapter sixteen.

*\*Local Law 58-1987.*

**ARTICLE 16 RADIO AND TELEVISION TOWERS**

**§[C26-715.1] 27-494 Application. -**

This section shall apply to the construction, alteration, and use of radio and television towers on buildings. Radio and television receiving antennas more than twenty feet high above a roof shall be deemed to be such towers and shall be subject to the requirements of this section.

**§[C26-715.2] 27-495 Location and access. -**

Towers shall be so located, and equipped with ladders or other devices, as to be readily accessible for inspection purposes. No guy wire or other accessories shall cross or encroach upon any street or pass over any electric power line.

**§[C26-715.3] 27-496 Construction. -**

Towers located on the roofs of buildings shall be constructed of noncombustible materials. Isolated towers less than one hundred feet high and supported directly from the ground may, when located outside of the fire districts, be constructed of timber meeting the requirements of construction class II-A. All towers shall be grounded for lightning protection in accordance with the provisions of the electrical code of the city of New York.

**§[C26-715.4] 27-497 Loads. -**

Towers shall be designed in accordance with the load requirements of subchapter nine of this chapter.

**ARTICLE 17 OUTDOOR SIGNS AND DISPLAY STRUCTURES**

**§[C26-716.1] 27-498 Application. -**

This section shall apply to the construction, alteration, and use of all outdoor signs and display structures, together with their appurtenant and auxiliary devices.

(a) No sign may be hung or attached upon or on the outside of any building unless such work is performed by or under the supervision of a licensed sign hanger.

(b) No sign shall be erected until a permit therefor has been obtained from the commissioner in accordance with the provisions of article two of subchapter eleven of this chapter.

**§[C26-716.2] 27-499 Obstructions. -** No sign shall be erected so as to obstruct free ingress to, or egress from, a required door, window, stairs, or other required exits, or be placed so as to prevent free passage from one part of a roof to any other part. No sign shall be attached in any manner to a fire escape or exterior stair, or placed so as to interfere with any opening for light or ventilation required under the provisions of subchapter twelve of this chapter.

**§[C26-716.3] 27-500 Ground signs. -**

(a) **Location.** -No part of a ground sign shall be erected so as to project beyond the street line, except as specifically permitted by the provisions of subchapter four of this chapter.

(b) **Material** -Inside the fire districts, ground signs shall be constructed entirely of noncombustible materials, except as permitted in sections 27-506 and 27-507 of this article. Outside the fire districts, the structure of ground signs exceeding twenty-five hundred square feet in facing or display area shall be constructed of noncombustible materials, and the facing of such signs shall be noncombustible, except as permitted in sections 27-506 and 27-507 of this article. The bottom of the facing of all ground signs shall be at least thirty inches above the ground, which space may be filled with open lattice work or decorative trim.

**(c) Support.** -Ground signs shall be constructed and anchored to resist loads acting in any direction on the sign, in accordance with the provisions of subchapter nine of this chapter.

(1) Anchors and supports shall be designed for safe bearing loads on the soil and for an effective resistance to pullout amounting to a force twenty-five percent greater than the required resistance to overturning. Anchors and supports shall penetrate to a depth of at least four feet.

(2) Whenever anchors or supports consist of wood embedded in the soil, the wood shall be treated under pressure as specified in subchapter eleven of this chapter before erection. This requirement shall not apply to signs, which are not to remain in place for more than six months.

(3) Members furnishing structural support for signs shall be designed in accordance with the requirements of subchapter ten of this chapter, and shall be of adequate thickness to meet the corrosion conditions.

#### §[C26-716.4] 27-501 Wall signs. -

**(a) Limitations.** - Wall signs shall not extend beyond the top or ends of the wall surface on which they are placed unless meeting all the requirements of this code regulating roof signs, projecting signs, or ground signs as the case may be. Wall signs shall not project beyond street lines except as permitted in subchapter four of this chapter.

**(b) Materials.** -Inside the fire districts, wall signs shall be constructed entirely of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article. Outside the fire districts, the framework of wall signs exceeding five hundred square feet in facing or display area shall be constructed of noncombustible materials, and the facing of such signs shall be noncombustible except as permitted in sections 27-506 and 27-507 of this article.

**(c) Supports.** -Wall signs shall be constructed and supported to resist loads acting in any direction on the sign in accordance with the provisions of subchapter nine of this chapter. Attachment shall be by means of metal anchors, bolts, or similar devices. Wooden blocks or anchorage with wood used in connection with screws or nails shall not be used, except in the case of wall signs attached to buildings having walls of wood.

**(d) Fire department access.** -Wall signs that are, or have been, erected to cover doors or windows required by this code for fire department access to existing buildings shall be provided with access panels as required by section 27-292 of article two of subchapter four of this chapter. Existing wall signs shall be altered or otherwise arranged to comply with this requirement on or before December sixth, nineteen hundred seventy.

#### §[C26-716.5] 27-502 Projecting signs. -

**(a) Location.** -Projecting signs, other than temporary signs, shall not be constructed on those streets and avenues listed in reference standard RS 7-2, and shall not be

constructed to project beyond the street line except as permitted in subchapter four of this chapter.

**(b) Limitations.** -Projecting signs whose width when measured at a plane parallel to the building wall, does not exceed two feet may extend not more than five feet above the main roof level of the building to which they are attached; except that for buildings thirty-five feet high or less, such projecting signs may be erected to a maximum height of forty feet above grade but in no case to a height of more than fifteen feet above the main roof level.

**(c) Materials.** -All projecting signs shall be constructed of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article.

**(d) Supports.** -Projecting signs shall be constructed and supported to resist loads acting in any direction on the sign in accordance with the provisions of subchapter nine of this chapter. Attachment shall be by means of metal anchors, bolts, supports, chains, wire ropes, rods, or other similar devices. No staples or nails shall be used to secure any projecting sign to any building. Turnbuckles or other equivalent means of adjustment shall be placed in all chains, wire ropes, or rods supporting or bracing projecting signs. All chains, wire ropes, or rods, and their attachments, shall be galvanized or of corrosion-resistant material, and no such supports shall be attached to an unbraced parapet wall.

#### §[C26-716.6] 27-503 Roof signs. -

**(a) Location.** -Roof signs shall be set back a minimum of six feet from the face of the walls of the building on which they are erected.

**(b) Materials.** -Inside the fire districts, roof signs shall be constructed entirely of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article. Outside the fire districts, the framework of roof signs exceeding fifteen hundred square feet in facing or display area or having any part more than sixty-five feet above grade shall be constructed of noncombustible materials, and the facing of such signs shall be noncombustible, except as permitted in sections 27-506 and 27-507 of this article.

**(c) Supports.** -Roof signs shall be constructed and anchored to resist loads acting in any direction on the sign in accordance with the provisions of subchapter nine of this chapter. Such signs shall be so constructed as to leave a clear space of at least seven feet between the roof and the lowest part of the sign, and at least five feet between the vertical supports thereof.

#### §[C26-716.7] 27-504 Marquee signs. -

**(a) Limitations.** -No part of a marquee sign shall project above or below the marquee fascia, except that in the case of theaters licensed under the provisions of subchapters one and three of chapter two of title twenty of the administrative code, marquee signs may project not more than eight feet above nor more than one foot below the fascia, provided that the total height of such

signs does not exceed nine feet and the lowest part of such signs is at least ten feet above the ground or sidewalk level. Marquee signs may extend the full length of the marquee on all sides, but in no case shall they project beyond the ends of the marquee.

**(b) Materials.** -All marquee signs shall be constructed of noncombustible materials except as permitted in sections 27-506 and 27-507 of this article.

**(c) Supports.** -Construction and anchorage of marquee signs shall conform to the requirements for projecting signs under subdivision (d) of section 27-502 of this article.

**§[C26-716.8] 27-505 Illuminated signs. -**

**General.** -All ground signs, wall signs, roof signs, projecting signs, and marquee signs may be lighted by internal or external sources when complying with the following requirements:

(1)ILLUMINATION. - No sign shall be illuminated by other than electrical means. All wiring and accessory electrical equipment shall conform to the provisions of the electrical code of the city of New York.

(2)MATERIALS. -Every illuminated sign shall be constructed of noncombustible materials except as permitted in section 27-507 of this article.

(3)PERMISSIBLE PROJECTIONS.-Lighting reflectors may project beyond the top or face of all signs, provided that every part of such reflector is at least ten feet above the ground or sidewalk level. In no case shall such reflectors project beyond a vertical plane two feet inside the curb line. Reflectors shall be constructed, attached, and maintained so that they shall not be, or become, a hazard to the public.

**§[C26-716.9] 27-506 Temporary signs. -**

**(a) Materials.** -Temporary signs not more than five hundred square feet in area may be constructed of combustible materials. Temporary signs more than one hundred square feet in area shall be made of rigid materials with rigid frames. Temporary signs shall be securely attached to their supports, and shall be removed as soon as they are torn or damaged, but in no case later than thirty days after their erection.

**(b) Limitations.** -Temporary signs of combustible materials shall not extend more than one foot over, or into, a street, except that when permitted by the department of transportation, temporary banners or signs of combustible materials may be suspended from buildings or poles to extend across streets, and except that temporary signs of combustible materials constructed without a frame may be attached flat against, or suspended from the fascia of a canopy or marquee, provided that the lowest part of any such sign is at least nine feet above the ground or sidewalk level.

**§[C26-716.10] 27-507 Use of combustible materials. -**

**(a) General.** -In all signs required to be constructed of noncombustible materials under the provisions of this code, wood or other materials of combustible characteristics similar to wood may be used for moldings, cappings, trim, nailing blocks, letters, latticing, and other purely ornamental features.

**(b) Slow-burning plastics.** -Slow-burning plastics may be used in sign construction subject to the following conditions and requirements.

(1) If all parts of the sign other than the letters and decorations are made from noncombustible materials, the display surface or sign facing may be made of slow-burning plastic, or may be occupied or covered by letters and decorations made from, or faced with, slow-burning plastics not exceeding a total area calculated from the values given in tables 7-2 and 7-3.

**TABLE 7-2 GROUND SIGNS AND WALL SIGNS (NONCOMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
150 sq. ft. or less	100 per cent of display surface area
Over 150 sq. ft. but not over 2,000 sq. ft.	150 sq. ft. plus 50 per cent of the difference between 150 sq. ft. and the area of the display surface
Over 2,000 sq. ft.	Not over 1,050 sq. ft. without permission of the commissioner

**TABLE 7-3 ROOF SIGNS, PROJECTING SIGNS, AND MARQUEE SIGNS (NONCOMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
150 sq. ft. or less	100 per cent of display surface area
Over 150 sq. ft. but not over 2,000 sq. ft.	150 sq. ft. plus 25 per cent of the difference between 150 sq. ft. and the area of the display surface
Over 2,000 sq. ft.	Not more than 575 sq. ft. without permission of the commissioner

(2) If combustible materials are permitted in the framework, moldings, cappings, trim, nailing blocks, latticing or other parts of the sign, the display surface or sign facing may be occupied or covered by letters and decorations made from or faced with slow-burning plastics not exceeding a total area calculated from the values given in tables 7-4 and 7-5.

**TABLE 7-4 GROUND SIGNS AND WALL SIGNS  
(COMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
300 sq. ft. or less	50 per cent of display surface area
Over 300 sq. ft. but not over 2,000 sq. ft.	150 sq. ft. plus 25 per cent of the difference between 150 sq. ft. and the total area of the display surface
Over 2,000 sq. ft.	Not more than 575 sq. ft. without permission of the commissioner

**TABLE 7-5  
ROOF SIGNS (COMBUSTIBLE MATERIALS)**

Area of Facing or Display Surface	Area Occupied or Covered by Plastics
1,000 sq. ft. or less	25 per cent of display surface area
Over 1,000 sq. ft. but not over 2,000 sq. ft.	250 sq. ft. plus 10 per cent of the difference between 1,000 sq. ft. and the total area of the display surface
Over 2,000 sq. ft.	Not more than 350 sq. ft. without permission of the commissioner

**§[C26-716.11] 27-508 Maintenance and inspection.-**

**(a) Maintenance.** -All signs, together with all supports, braces, guys, and anchors, shall be kept in good repair at all times, and when not adequately galvanized or constructed of corrosion-resistant materials, shall be painted periodically to prevent corrosion. It shall be the duty and responsibility of the owner or lessee of every sign to maintain the immediate premises occupied by the sign in a safe, clean, sanitary, and inoffensive condition and free and clear of all obnoxious substances.

**(b) Annual inspection.** - Every sign for which a permit is required shall be inspected at least once in every calendar year.

**\* ARTICLE 17-A**

**YOUTH PROTECTION AGAINST TOBACCO  
ADVERTISING AND PROMOTION ACT**

**§ 27-508.1 Short title. -**

This article shall be known and may be cited as the "Youth Protection Against Tobacco Advertising and Promotion Act."

**§ 27-508.2 Definitions. -**

For the purposes of this article, the following terms shall be defined as follows:

a. "Amusement arcade" means any enclosed business establishment, open to the public, whose primary purpose is the operation of coin-operated amusement devices within the meaning of subchapter three of chapter two of title 20 of this code.

b. "Child day care center" means (I) any child care arrangement, public, private or parochial child care center, school-age child care program, day nursery school, kindergarten, play school or other similar school or service operating pursuant to authorization, license or permit of the city or state, (ii) any facility that provides child care services as defined in section four hundred ten-p of the New York State social services law, or (iii) any child day care center as defined in section three hundred ninety of the New York State social services law. The definition of "child day care center" applies whether or not care is given for compensation but does not include child day care centers located in private dwellings and multiple dwelling units.

c. "Cigarette" means any product which consists of (i) any roll of tobacco wrapped in paper or in any substance not containing tobacco or (ii) any roll of tobacco wrapped in any substance containing tobacco which, because of its appearance, the type of tobacco used in the filler, or its packaging and labeling is offered for use or purchase by consumers as a cigarette described in (i) of this subdivision.

d. "Cigarette tobacco" means any product that consists of loose tobacco and is intended for use by consumers in a cigarette.

e. "Multiple dwelling" means any building or structure that may lawfully be occupied as the residence or home of three or more families living independently of each other.

f. "Multiple dwelling unit" means any unit of residential accommodation in a multiple dwelling.

g. "Person" means any natural person, partnership, co-partnership, firm, company, corporation, limited liability corporation, agency as defined in section eleven-hundred fifty of the New York City charter, association, joint stock association or other legal entity.

h. "Playground" means any outdoor premises or grounds owned or lawfully operated by or on behalf of, the board of education, the department of parks and recreation, or any public, private or parochial school, any child day care center or any youth center, which contains any device, structure or implement, fixed or portable, used or intended to be used by persons under the age of eighteen for recreational or athletic purposes including, but not limited to, play equipment such as a sliding board swing, jungle gym, sandbox, climbing bar, wading pool, obstacle course, swimming pool, see-saw, baseball diamond, athletic field, or basketball court.

i. "Private dwelling" means any building or structure or portion thereof that may lawfully be occupied for residential purposes by not more than two families,

including the grounds of such building or structure.

j. "School building" means any building or structure or any portion thereof, owned, occupied by, or under the custody or control of any public, private or parochial institution and lawfully used for the primary purpose of providing educational instruction to students at or below the twelfth grade level.

k. "Smokeless tobacco" means any product that consists of cut, ground, powdered, or leaf tobacco that is intended to be placed by the consumer in an oral cavity.

l. "Tobacco product" means a cigarette, smokeless tobacco or cigarette tobacco.

m. "Tobacco product advertisement" means any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any brand of tobacco product, or any combination thereof, the purpose or effect of which is to promote the use or sale of a tobacco product through such means as, but not limited to, the identification of a brand of a tobacco product, a trademark of a tobacco product or a trade name associated exclusively with a tobacco product.

n. "Tobacco product promotion" means (i) any item or service marketed, licensed, sold or distributed, whether indoors or outdoors, which is not a tobacco product but which bears the brand of a tobacco product, a trademark of a tobacco product or a trade name associated exclusively with a tobacco product, alone or in conjunction with any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with those used for any brand of a tobacco product, or (ii) any gift or item other than a tobacco product offered or caused to be offered to any person purchasing a tobacco product in consideration of the purchase thereof, or to any person in consideration of furnishing evidence, such as credits, proofs-of-purchase, or coupons, of such purchase; provided, however, that a tobacco product promotion shall not include any gift or item provided through the exchange or redemption through the mail of any such credits, proofs-of-purchase, coupons or other evidence of the purchase of a tobacco product.

o. "Youth center" means any building or structure or portion thereof, lawfully occupied by any person for the primary purpose of operating a trade school (including those conducting after-school, vocational, remedial, tutorial, educational assistance programs) or an indoor recreational center (including recreational, cultural, physical fitness, or sports programs) for persons under the age of eighteen years, and which has been certified as such to the department in accordance with the procedure to be set by

the department. Such certification shall be accepted by the department but nothing in this subdivision shall prevent the commissioner from removing a certified youth center from consideration as a youth center if she or he determines it does not meet the criteria of a youth center.

**§ 27-508.3 Tobacco product advertisement restriction. -**

a. It shall be unlawful for any person to place, cause to be placed, to maintain or to cause to be maintained, a tobacco product advertisement within one thousand feet, in any direction, of any school building, playground, child day care center, amusement arcade or youth center, in any outdoor area including, but not limited to, billboards, roofs and sides of buildings, rolling shutters or gates, any enclosures into which rolling shutters or gates retract, water tanks and towers and free-standing signboards; provided, however, that any tobacco product advertisement on an awning projecting from the outside of a premises as of July 1, 1997 where tobacco products are sold or offered for sale may be retained until two years from the effective date of this law.

b. It shall be unlawful for any person to place, cause to be placed, to maintain, or cause to be maintained, a tobacco product advertisement in the interior of a building or structure which is within one thousand feet, in any direction, of any school building, playground, child day care center, amusement arcade or youth center, when such advertisement is within five feet of any exterior window or any door which is used for entry or egress by the public to the building or structure; provided, however, that tobacco product advertisements may be placed or maintained in the interior of any such premises where such advertisements are (I) parallel to the street and face inward, or (ii) affixed to a wall panel or similar fixture that is perpendicular to the street regardless of whether such advertisements are illuminated or not illuminated.

c. Nothing in this section shall prevent a person from placing, causing to be placed, maintaining, or causing to be maintained, a single sign, poster, placard or label no larger than six square feet and containing only black text, in any language, not exceeding eight inches in height on a white background stating "TOBACCO PRODUCTS SOLD HERE" or such words translated into any language, within ten feet of an entrance to the premises where tobacco products are sold or offered for sale.

d. Nothing in this section shall prevent a tobacco product manufacturer, distributor or retailer from placing, causing to be placed, maintaining, or causing to be maintained, its corporate or other business name on a building or structure, in any location, where such building or structure or a portion thereof is owned, operated or leased by such manufacturer, distributor or retailer and that building or structure is the principal place of business of such manufacturer, distributor or retailer in the city of New York; provided, however, that the corporate or other

business name of such manufacturer, distributor or retailer is registered or filed in the United States or such manufacturer, distributor or retailer is authorized to do business in any state, and the corporate or business name of such manufacturer, distributor or retailer does not include any brand name or trademark of a tobacco product, alone or in conjunction with any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any brand of a tobacco product.

e. This section shall not apply to any tobacco product advertisement on a motor vehicle. Nothing in this subdivision shall be construed to authorize the placement of a tobacco product advertisement in a location where such placement is otherwise prohibited by the rules of the department of transportation or other applicable law.

**§ 27-508.4 Non-compliant advertisements to be removed.-**

The owner, operator or lessee of any location or premises where a tobacco product advertisement is prohibited or restricted pursuant to the requirements of section 27-508.3 of this article shall have thirty days from the effective date of the local law that added this section to remove any non-compliant tobacco product advertisements.

**§ 27-508.5 Sponsorship of and at events. -**

Nothing in this article shall prevent a tobacco products manufacturer, distributor, or retailer who sponsors, in whole or in part, any athletic, musical, artistic, or cultural event, or team or entry in a competition or exhibition in any location from displaying or causing to be displayed the corporate or other business name of such sponsor; provided, however, that the corporate or other business name of such sponsor is registered or filed in the United States or such sponsor is authorized to do business in any state, and the corporate or other business name of such sponsor does not include any brand name or trademark of a tobacco product, alone or in conjunction with any written word, picture, logo, symbol, motto, selling message, poster, placard, sign, photograph, device, graphic display or visual image of any kind, recognizable color or pattern of colors, or any other indicia of product identification identical or similar to, or identifiable with, those used for any brand of a tobacco product.

*\*Local Law 3-1998.*

**\*\*\*§27-508.6 Injunctive relief. -**

Whenever any person has engaged in any act or practice which constitutes a violation of any provision of this article or of chapter thirteen of title eleven of this code, or of subchapter one of chapter two of title twenty of this code, or of any rule promulgated thereunder, the

city may make application to a court of competent jurisdiction for an order enjoining such act or practice.

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

**\*\*§27-508.7 Penalties. -**

Notwithstanding the provisions of sections 26-122, 26-125 and 26-248 of this code, a violation of this article shall not subject any person to liability for a criminal offense.

*\*\*Local Law 10 -1998.*

**ARTICLE 18 FENCES**

**§[C26-717.1] 27-509 Permitted heights. -**

In other than residence districts as established by the zoning resolution, fences may be erected throughout the city to a maximum height of ten feet. In residence districts, no fences, whether of masonry, steel, wood, or any other materials shall be erected to a height of more than six feet above the ground, except that fences used in conjunction with nonresidence buildings and public playgrounds, excluding buildings accessory to dwellings, may be erected to a height of fifteen feet. Higher fences may be permitted by the commissioner where required for the enclosure of public playgrounds, school yards, parks, and similar public facilities.

**ARTICLE 19 TENTS AND AIR-SUPPORTED STRUCTURES**

**§[C26-718.1] 27-510 Location and height. -**

Tents or air-supported structures may be erected inside or outside of the fire districts provided they are not more than one story high above the ground, or above a roof that meets the requirements of subchapter five of this chapter for fire divisions.

**§[C26-718.2] 27-511 Separation. -**

No tent or air-supported structure shall be erected closer than twenty feet to any interior lot line nor closer than thirty feet in any direction to an unprotected opening, required exterior stairway or corridor, or required exit door, on the same level or above the level of the tent or air-supported structure. A tent or air-supported structure may abut another building on the same lot if there are no unprotected openings or exits above or within thirty feet as above stipulated, if there is no door between them that is a required exit, and if the exterior wall separating them meets the requirements of subchapter five of this chapter for fire divisions.

**Exceptions. -** Requirements for separation from other buildings on the site shall be waived where a tent or air-supported structure is used for on-site temporary shelter for construction work, or incidental fabrication of construction elements to be used on the site of construction.

**§[C26-718.3] 27-512 Fire protection. -**

The ground enclosed by a tent or air-supported structure, and the ground for a distance of at least ten feet outside of same, shall be cleared and maintained clear of all combustible material or vegetation. No open flame of any kind shall be employed within the structure, or closer than twenty feet to any part of the enclosure fabric. Fire extinguishing facilities shall be provided in accordance with the requirements of chapter four of this title.

**§[C26-718.4] 27-513 Exits. -**

Notwithstanding any other requirements of subchapters six and eight of this chapter, travel distance to an exit from any point within a tent or air-supported structure shall not exceed seventy-five feet. Exit doors in air-supported structures shall close automatically against normal operational pressures. Opening force at the edge of such doors shall not exceed fifteen pounds, with the structure at operational pressure. Exit doors shall be located in frames so constructed that they will remain operative and support the weight of the structure in a state of total collapse.

**§[C26-718.5] 27-514 Structural requirements. -**

**(a) Tents. -** Tents shall be guyed, supported, and braced to withstand a wind pressure of ten pounds per square foot of projected area of the tent. The poles and their supporting guys, stays, stakes, fastenings, etc. shall be of sufficient strength and attached so as to resist wind pressure of twenty psf of projected area of the tent.

**(b) Air-supported structures. -**

(1) Air-supported structures shall be anchored to the ground or supporting structure by either ballast distributed, and adequate to resist the inflation lift load, the aerodynamic lift load, and the drag (shear) load due to wind impact. The latter factors shall be based on a wind velocity of at least seventy miles per hour, and an estimated stagnation of not less than  $0.5q$  for structures on grade whose height is equal to, or less than, the width of the structure. For greater heights, or for elevated structures, increased anchorage shall be provided, justified by analytical and/or experimental data.

(2) The skin of the structure shall be of such strength, and the joints so constructed, as to provide a minimum dead load strip tensile strength at seventy degrees F of four times the seventy mph design load (inflation and aerodynamic loading). The joints shall provide a dead load strip tensile strength of one hundred sixty degrees F of twice the seventy mph design load (i.e., a factor of safety of four and two respectively). In addition, the material shall provide a trapezoidal tear strength of at least fifteen percent of the maximum design tensile load. Material and joint strengths shall be so certified by the manufacturer, justified by analytical and/or experimental data.

**§[C26-718.6] 27-515 Flame resistance. -**

**(a) Tents. -** All materials used for tents shall be

treated to be flameproofed and shall remain flameproofed in accordance with chapter four of this title.

**(b) Air-supported structures. -** All fabrics that have a base fabric weight of 6.4 oz. per square yard or less or that are used to enclose spaces classified in occupancy group C, E, F, G, H or J shall have an extinction time of not more than two seconds when tested under the small scale test method of reference standard RS 7-3. All other fabrics shall have a flame extinction time of not over one minute and/or a flame spread of not over one inch per minute when tested in accordance with the provisions of reference standard RS 7-4.

**§[C26-718.7] 27-516 Pressurization system. -**

Air-supported structures shall be inflated and shall remain inflated during all periods of occupancy to a minimum differential pressure of 0.88 in. and a maximum differential pressure of 1.50 in. of water. Ventilation flow per occupant, either through vents or anticipated leakage, shall comply with the requirements of subchapter twelve of this chapter.

**Occupied spaces. -** Where the net floor area per occupant is one hundred fifty square feet or less, the structure shall be provided with at least two blowers, each of which shall have adequate capacity to maintain the required inflation pressure. In addition, an auxiliary engine-generator set capable of powering one blower, or a supplementary blower powered by an internal combustion engine, either of which shall have the capacity to run continuously for four hours, shall be located outside the structure, shall be weather protected, and shall be arranged to automatically operate the blower within twenty seconds upon failure of the normal source. Heat shall be provided from a source outside the structure so arranged as to prevent the spread of fire to the structure. The temperature within the air-supported structure shall be maintained at the temperature required by subchapter twelve of this chapter, but not less than fifty degrees Fahrenheit during periods of snowfall.

**§[C26-718.8] 27-517 Certificate of occupancy. -**

Certificates of occupancy for tents or air-supported structures shall be issued for a period not exceeding one year, and such certificates may be renewed for one year periods thereafter if the tent or air-supported structure complies with all laws, rules and regulations in effect at the time of request for renewal.

**ARTICLE 20 OCCUPANCIES INVOLVING STORAGE OF NITRIC ACID**

**§[C26-719.1] 27-518 Application. -** This article shall apply to the construction, alteration and use of buildings or spaces wherein nitric acid is stored.

**§[C26-719.2] 27-519 Location. -**

Carboys containing nitric acid shall be stored in storage vaults.



**§[C26-719.3] 27-520 Construction requirements. -**

(a) Vaults shall be constructed of incombustible acid-resistant material with a fire resistance of at least one hour.

(b) Doors opening into such storage vaults shall be self-closing, noncombustible fire doors with a fire-protection rating of at least three-quarters of an hour.

(c) Vault floors shall be constructed of acid-resistant brick, concrete treated with sodium silicate or other acid-proof material and shall incorporate a dike constructed of the same material, whose height shall be adequate to contain the acid plus the neutralizing substance that would be necessary to neutralize said acid plus six inches.

(d) The floor shall be provided with a valved drain, which shall be connected to the drainage system in accordance with the requirements of subchapter sixteen of this chapter.

**§[C26-719.4] 27-521 Ventilation. -**

Mechanical ventilation systems for storage vaults shall be adequate to effect ten complete air changes per hr. Exhaust shall be taken from within twelve inches above the level of the top of the dike. The exhaust system shall be independent of exhaust systems serving other parts of the building and the openings to the outdoors shall be located in accordance with the provisions of subchapter thirteen of this chapter for system conveying vapors.

**ARTICLE 21 ATRIUMS**

**§[C26-720.1] 27-521.1 Applicability. -**

This article shall apply to the construction, alteration and use of atriums.

**§[C26-720.2] 27-521.2 Classification.-** An atrium shall be classified in occupancy group F-3.

**§[C26-720.3] 27-521.3 Construction. -**

(a) Atriums may be constructed only in buildings in noncombustible construction groups 1-A, 1-B and 1-C.

(b) An atrium shall be fully enclosed except that openings of any size into the two lowest levels of an atrium shall be permitted if such openings are provided with opening protectives having a fire-resistance rating of at least one and one-half hours or are provided with sprinklers no more than six feet apart.

(c) The minimum horizontal clear dimension of an atrium shall be forty feet, provided, however that this dimension can be reduced to twenty feet where sprinkler spacing on the occupied side adjacent to glass panels authorized by subdivision (d) of this section is no more than four feet or the minimum atrium area is twelve hundred square feet.

(d) Atrium enclosing walls shall be of at least two hour fire-resistant construction or of glass that is wired, laminated, or tempered and is provided with sprinklers on the occupied side spaced no more than six feet apart, except

as otherwise permitted by subdivision (c) of this section.

**§[C26-720.4] 27-521.4 Fire protection equipment. -**

(a) Smoke detectors. - In all spaces opening onto an atrium, a smoke detecting system shall be installed in accordance with the requirements of reference standard RS 17-5E.

(b) Standpipes. - At least one standpipe outlet in addition to a riser or risers within required stairways, shall be installed in every atrium.

(c) Sprinklers. -

(1) Every story or mezzanine within an atrium that overhangs another story or mezzanine within fifty feet shall have the overhang sprinklered in accordance with section 27-956 of article four of subchapter seventeen of this chapter, except that atrium ceilings less than fifty feet above the atrium floor but more than thirty feet above the floor may alternatively be provided with smoke detectors, which shall be of the central supervisory type connected to an approved central station. Every room or space opening onto the atrium shall be sprinklered, no matter where located.

(2) Except as otherwise permitted by subdivision (c) of section 27-521.3 of this article, at glass panels permitted by subdivision (d) of such section, sprinklers on the occupied side at all levels shall be spaced six feet apart parallel to the glass and that distance away from the glass panels so as to insure complete glass wetting upon activation. No obstructions to such wetting capability shall be permitted.

(3) Every sprinkler system for an atrium shall be provided with sources of water supply in accordance with article four of subchapter seventeen of this chapter.

**§[C26-720.5] 27-521.5 Means of egress. -**

(a) No vertical exits shall discharge into an atrium at any level.

(b) Atrium corridors shall have a width equal to or greater than one hundred fifty per cent of that required by either table 6-1 of subchapter six or table 8-1 of subchapter eight, as applicable.

(c) An unenclosed path of travel to a required exit shall be permitted, except that access to one of the required vertical exits shall be only through an enclosed passageway or corridor conforming to the requirements for exits of subchapter six.

**§[C26-720.6] 27-521.6 Fire alarm and communication system. -**

An interior fire alarm and communication system shall be installed in accordance with the requirements of reference standard RS 17-3.

**§[C26-720.7] 27-521.7 Signs. -**

Atriums shall be provided with all signs required by articles seven and nine of subchapter six of this chapter, regardless of the occupant load of the atrium.

**§[C26-720.8] 27-521.8 Smoke control. -**

(a) In all atriums there shall be provided a system of mechanical ventilation of sufficient capacity to exhaust at least six air changes per hour of the combined volumes of the atrium and all spaces with an open connection to the atrium, or 1 cfm/sq. ft. from all such spaces, whichever is greater, using either dedicated fan equipment or the building ventilation system arranged to shut down automatically, with manual override capability. Make-up air shall be supplied at the lowest level of an atrium at a rate equal to seventy-five percent of exhaust.

(b) All atriums shall have a gravity ventilation system equipped with remote manual controls to remove smoke if the mechanical exhaust system fails.

(c) A ventilation system serving an atrium shall not be interconnected with any other system serving another space.

(d) Ventilation systems supplying occupied spaces shall not be interconnected with the general atrium supply.

**§[C26-720.9] 27-521.9 Emergency power. -**

All atriums shall be provided with an emergency power system meeting the requirements of article eleven of subchapter six of this chapter.

**ARTICLE 22 MALLS**

**§[C26-721.1] 27-521.10 Applicability. -** This article shall apply to the construction, alteration and use of malls.

**§[C26-721.2] 27-521.11 Classification. -**

A mall shall be classified in occupancy group C.

**§[C26-721.3] 27-521.12 Construction; General. -**

(a) A mall may be constructed only in buildings in noncombustible construction groups I-A, I-B and I-C.

(b) The minimum horizontal clear dimension at any level in a mall shall be twenty feet.

(c) Where different tenancies have openings to a mall the tenancies shall be separated in accordance with section 27-341 of article five of subchapter five of this chapter.

(d) All openings between a mall and other spaces shall be provided with a noncombustible draft curtain that shall extend downward a minimum of twenty-four inches below the lowest ceiling adjacent to such draft curtain or shall meet the requirements of clause three of subparagraph d of paragraph three of subdivision (h) of section 27-370 of article five of subchapter six of this chapter relating to show windows.

**§[C26-721.4] 27-521.13 Fire protection equipment. -**

(a) Smoke detectors. - Smoke detectors meeting the specifications of section 27-981 of article six of subchapter seventeen shall be located at the ceiling and adjacent to each return air intake.

(b) Standpipes. - At least one standpipe outlet shall be installed in every mall.

(c) Sprinklers. - An automatic wet sprinkler system shall be installed in every mall.

(1) All spaces with openings between such spaces and a mall shall be fully sprinklered in accordance with subchapter seventeen of this chapter and reference standard RS 17-2 regardless of floor area or occupancy classification.

**§[C26-721.5] 27-521.14 Egress. -** The exits for a mall shall be of sufficient capacity to accommodate the aggregate occupant load of the mall and all spaces opening onto the mall.

**§[C26-721.6] 27-521.15 Smoke control. -**

(a) In all malls there shall be provided a system of mechanical ventilation of sufficient capacity to exhaust at least six air changes per hour of the combined volumes of the mall and all spaces with an open connection to the mall, or 1 cfm/sq. ft. from all such spaces, whichever is greater, using either dedicated fan equipment or the building ventilation system arranged to shut down automatically, with manual override capability. Make-up air shall be supplied at the lowest level of a mall at a rate equal to seventy-five per cent of exhaust.

(b) All malls shall have a gravity ventilation system equipped with remote manual controls to remove smoke if the mechanical exhaust system fails.

(c) A ventilation system serving a mall shall not be interconnected with any other system serving another space.

(d) Ventilation systems supplying occupied spaces shall not be interconnected with the general mall supply.

**§[C26-721.7] 27-521.16 Signs. -**

Malls shall be provided with all signs required by articles seven and nine of subchapter six of this chapter, regardless of occupant load of the mall.

**SUBCHAPTER 8  
PLACES OF ASSEMBLY**

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8-1 Determination of Exit and Access Requirements

**ARTICLE 1 GENERAL**

**\*\*\*§[C26-800.1] 27-522 Scope. -**

The provisions of this subchapter shall control the design and construction of places of assembly as defined in subchapter two of this chapter. For specific classifications of assembly occupancies, see article eight of subchapter three of this chapter. For place of assembly permit requirements, see section 27-525.1 of article two of this subchapter.

\*\*\**Local Law 23-1990.*

**§[C26-800.2] 27-523 Definitions. -**

For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

**§[C26-800.3] 27-524 Tents and air supported structures.-**

Places of assembly enclosed by tents or air supported structures shall comply with the provisions of this subchapter regulating indoor places of assembly, and with the provisions of article nineteen of subchapter seven of this chapter.

**ARTICLE 2 BASIC REQUIREMENTS**

**§[C26-801.1] 27-525 General. -**

The provisions of this article shall apply to all places of assembly, in addition to the specific requirements of articles three through five of this subchapter for the several categories of places of assembly.

**\*\*§27-525.1 Place of assembly permit. -**

a. It shall be unlawful to use or occupy any building or premises or part thereof as a place of assembly unless and until a permit therefor shall have been issued by the department. The permit shall be for a term of one year.

b. The application for such permit and such permit shall be in a form prescribed by the commissioner.

c. The annual fee for a permit issued pursuant to this section shall be the amount provided for in paragraph seven of subdivision a of section 26-214 of the code. An application for such permit or renewal thereof shall be accompanied by the annual fee, except as otherwise provided in section 26-210 of the code.

d. The permit issued pursuant to this section shall be posted in a conspicuous place in the place of assembly, which is covered by such permit.

\*\**Local Law 23-1990.*

**§[C26-801.2] 27-526 Location. -**

No place of assembly shall be located within two hundred fifty feet of any occupancy containing explosive contents.

**§[C26-801.3] 27-527 Posted capacity. -**

Signs shall be posted in all assembly spaces, indicating the number of persons who may legally occupy the space. Signs shall not be required where seating is fixed in place in accordance with an approved seating plan and no provision is made for standee spaces. Such signs, where required, shall read as follows:

OCCUPANCY BY MORE THAN \_\_\_\_\_ PERSONS  
IS DANGEROUS AND UNLAWFUL

Public Assembly License No \_\_\_\_\_ Commissioner,  
(where applicable) Dept. of Buildings, City of New

When a space is occupied for multiple purposes involving different occupant loads the sign shall read as follows:

OCCUPANCY BY MORE THAN  
(number) \_\_\_\_\_ PERSONS AS \_\_\_\_\_ (type of occupancy) \_\_\_\_\_  
OR BY  
(number) \_\_\_\_\_ PERSONS AS \_\_\_\_\_ (type of occupancy) \_\_\_\_\_  
OR BY  
(number) \_\_\_\_\_ PERSONS AS \_\_\_\_\_ (type of occupancy) \_\_\_\_\_  
IS DANGEROUS AND UNLAWFUL

Public Assembly License No \_\_\_\_\_ Commissioner,  
(where applicable) Dept. of Buildings, City of New York

Signs shall be at least twelve inches wide and sixteen inches high. The lettering shall be red on a white background. The letters shall be at least one inch high and the numerals at least one and one-quarter inches high. Signs shall be framed under a transparent protective cover, and permanently mounted in a location that is conspicuously visible to a person entering the space. Signs shall be lighted by artificial illumination at all times during occupancy to maintain at least five foot candles on the surface of the sign.

**§[C26-801.4] 27-528 Approved seating plans. -**

In every place of assembly providing seating, copies of approved seating plans and approved alternate seating plans shall be kept on the premises. The plans shall be readily available for inspection, and shall provide the following information:

**(a) For assembly spaces:**

- (1) The location of each seat of each tier of seating, along with the number of occupants of each seating section.
- (2) The location and number of standees for each standee area.
- (3) The total number of occupants of each tier and of the assembly space.
- (4) The location and classification of all exits.

**(b) For safe areas:**

(1) The furniture and equipment arrangement and location.

(2) The number of occupants to be accommodated.

**(c) For stage areas:**

(1) The maximum number of occupants, including audience seating on the stage.

(2) Any conditions limiting the use of the stage area.

(3) The location of all exits.

These plans shall not be smaller in size than required for one-eighth inch scale plans.

**§[C26-801.5] 27-529 Enclosure and interior finish. -**

Places of assembly shall be separated from adjoining occupancies by construction meeting the requirements of table 5-1 or table 5-2, whichever may apply. The interior finish of places of assembly shall meet the requirements of table 5-4.

**§[C26-801.6] 27-530 Means of egress. -**

Places of assembly shall be provided with exit facilities meeting all of the requirements of this subchapter and all of the requirements of subchapter six of this chapter. A place of assembly located in a building classified in another occupancy group shall comply with the exit requirements of this subchapter, but may use the exit facilities of the building of which it is a part as a means of egress from the building.

**§[C26-801.7] 27-531 Seating in assembly spaces. -** All seating in assembly spaces shall conform to the following:

**(a) Seating arrangements.-** Except as otherwise provided in this subchapter, all seating shall be arranged in rows to provide for orderly egress.

(1) CHAIR SEATING. - Seating patterns employing individual chairs shall comply with the following:

a. Assembly spaces in which the net floor area, exclusive of stage area, is less than eight square feet per person shall be provided with chairs that are rigidly anchored to the construction or fixed in place by devices that prevent movement in any direction, except that not more than twelve movable chairs may be provided in a box or loge if such box or loge is separated from the main seating pattern by railings or other permanent construction and has an area of at least five square feet per chair.

b. In assembly spaces where the net floor area, exclusive of stage area, is between eight and twelve square feet per person, movable chairs may be used provided all chairs in a row between aisles are fastened or ganged together to preserve the integrity of the row. Not more than twelve chairs shall be used in any row between aisles.

c. In assembly spaces where net floor area, exclusive of stage area, is more than twelve square feet per person, individual movable chairs may be used.

Not more than twelve chairs shall be used in any row between aisles.

d. All chairs placed on stepped platforms less than four feet wide shall be anchored or fixed in place.

e. The minimum distance between centerlines of chairs in the same row shall be nineteen inches.

f. The spacing between the back of one chair in any row and any part of the chair in the row behind it, including arm blocks, when the seat is in the lift-up position for automatic operation or in the horizontal position for nonlift-up or nonautomatic operation, when measured horizontally between plumb lines, shall be at least twelve inches, and this spacing shall be increased for any of the following reasons:

1. Where a difference in floor level occurs between any two rows, the spacing shall be increased as follows:

Difference in Level (in.)	Increase in Space (in)
6-10, plus any fraction of an inch..	1
11-16, plus any fraction of an inch	2
17-22, plus any fraction of an inch	3
23 and over.....	4

2. Where it is necessary from any location to pass more than seven chairs to reach the nearest aisle, spacing shall be increased one-quarter of an inch for each chair in excess of seven.

g. Not more than eight chairs shall be provided in any row of seating having access to only one aisle except as provided below for bleacher and platform seating.

\*h. Performance viewing positions shall be provided for persons who use wheelchairs in accordance with the following schedule.

\* *Local Law 58-1987.*

Capacity of Assembly Space	Number of Viewing Positions
75 to 100.....	.....minimum 4
101 to 150.....	.....minimum 5
151 to 200.....	.....minimum 6
201 to 300.....	.....7
301 to 400.....	.....8
401 to 500.....	.....9
501 to 1000.....	2 percent of total
Over 1000.....	20 plus 1 for each 100 over 1000

These positions shall be located so as not to interfere with egress from any row of seats and shall be reachable by means of ramps and/or elevators. Steps shall not be allowed in line of travel from the main approach entry to the designated locations. Size and placement of wheelchair locations, surfaces, access to

performing area and listening systems where required, shall comply with the provisions of reference standard RS 4-6. These positions may be utilized by persons who do not use wheelchairs provided that the positions are delineated on the approved seating plans, the seating is readily removable and the positions are unsold one full working day before the performance.

(2) BLEACHER SEATING. - Fixed or folding bleachers shall comply with the following:

a. For the purpose of determining occupant load, individual seat space width shall be assumed to be eighteen inches. There shall be a space of at least fourteen and one-half inches between the back edge of each seat and the front edge of the seat immediately behind it when measured between plumb lines.

b. The width of footboards and seat boards shall be at least nine and one-half inches. Where wider seat boards are provided, the space between seats may be reduced by an amount equivalent to the increase in width.

c. Sections having not more than ten consecutive rows of seating shall not require aisles. Where there are more than ten consecutive rows, aisles shall be provided at the ends of seat rows, the minimum spacing between seat rows shall be increased to sixteen inches and the required space between seat rows shall be increased by one-quarter of an inch for each seat in excess of seven that it is necessary to pass to reach an aisle. Cross aisles shall be provided at the bottom of each section of seating.

d. Bleacher seating shall be constructed to comply with the requirements of subchapters nine and ten of this chapter

(3) PLATFORM SEATING. - Stepped platforms used for seating without chairs shall comply with the following:

a. For the purpose of determining occupant load, individual seat space width shall be assumed to be eighteen inches.

b. Platforms shall be at least twenty-eight inches deep from front to back.

c. Platform depth shall be increased one-quarter of an inch for each seat in excess of seven that it is necessary to pass to reach an aisle.

d. Aisles complying with section 27-532 of this article shall be provided when the height between levels of platform seating exceeds eight inches

(4) BENCH SEATING. - Bench or pew seating, with or without backs, may be used when complying with the applicable requirements for chair seating in [sic] paragraph one of this subdivision. For the purpose of determining occupant load, individual seat space width shall be assumed to be eighteen inches.

(5) TABLE AND CHAIR SEATING. - Tables and chairs shall be so arranged that the distance from any chair at any table by way of a path between tables and chairs is not greater than eighteen feet to an aisle

leading to an exit. The width of the path shall be at least eighteen inches, except that it may be reduced by one inch for each one foot that the distance to the aisle is less than eighteen feet but may not be reduced to less than twelve inches. Chairs, when placed with the front edge of the seat on a line with the edge of the table, shall not protrude into the path. Booths containing up to eight seats may be used, provided they open directly on an aisle.

(6) COUNTER SEATING. - Counters at which food or beverages are consumed shall be attached to the floor. Fixed or movable chairs or stools may be provided. The number of occupants shall be determined on the basis of one occupant for each eighteen inches of counter length. The width of aisles bordering counters shall be measured excluding a depth of eighteen inches for chair or stool spaces.

(7) STANDEE AREAS. - Standee areas may be permitted within assembly spaces provided each standee space has a minimum width of twenty-two inches and a minimum depth of twenty-one inches. Standee areas shall not encroach on the required exit facilities and shall be separated from the space to be left clear for passage by tape, ribbon or other easily broken material, supported by lightweight posts fixed in stationary sockets, so constructed and placed as to not constitute an obstruction in case of panic or emergency.

(8) PROTECTIVE GUARDS. - Protective guards shall be provided for seating and standee areas as follows:

a. A protective guard at least thirty inches high above the floor shall be provided along the fascia of all balconies, loges, and boxes, except that the guard shall be at least thirty-six inches high at the bottom of stepped aisles. When rails or other parts of such guards are designed with ledges more than two and one-half inches wide, the top surface of the ledges shall slope down toward the seating area at an angle of at least thirty degrees from the horizontal. The guards shall provide an unperforated curb or toeguard at least twelve inches high above the level of the floor of the balcony, loge, or box.

b. A protective guard at least thirty inches high above the floor shall be provided at cross aisles where fixed seat backs of any adjacent lower level do not project at least twenty-four inches above the cross aisle level.

c. A protective guard at least eighteen inches high above the floor shall be provided along the front edge of any stepped platform where fixed seat backs of the adjacent lower level do not project at least eighteen inches above the stepped platform level.

d. A protective guard at least twenty-six inches high above seat level shall be provided at the open ends of bleacher seating, extending from the front of the third row of seats to the back of the

highest row of seats, and continuously along the rear of the seating, except where the seating is adjacent to a wall.

e. Guards shall be designed to meet the load requirements for railings in subchapter nine of this chapter.

**§[C26-801.8] 27-532 Aisles and cross aisles. -**

Assembly spaces shall be served by aisles, cross aisles, or other unobstructed floor areas providing access to exits, except as permitted for bleacher seating in paragraph two of subdivision (a) of section 27-531 of this article.

(a) The capacity of aisles and cross aisles shall be adequate to serve all persons for whom they provide a primary path of travel to an exit. (See section 27-533 of this article.)

(1) CAPACITY. - The capacity of aisles and cross aisles shall be as listed in table 8-1. The unit of exit width shall be twenty-two inches. Seats or other facilities shall not project into an aisle or cross aisle so as to reduce the width of the aisle or cross aisle more than one inch per unit of exit width.

(2) MINIMUM WIDTH. - Aisles and cross aisles shall have a minimum width of forty-four inches except that the width may be at least thirty-six inches under any one or more of the following conditions:

a. In any assembly space having a total of not more than three hundred occupants.

b. When not more than the number of persons permitted for one unit of exit width is served.

c. At the narrowest point when a tapered aisle is permitted under paragraph three of this subdivision.

d. When an aisle parallels and is alongside an enclosure wall or partition that is provided with exit doors spaced not more than sixteen feet on centers, provided such aisle serves only the rows of seats adjacent to it

(3) TAPERED AISLES. - Tapered aisles shall be used where egress is provided only at one end of the aisle, except that uniform aisles may be used when their width for the entire length will accommodate eighty percent of the total occupant load served by the aisle. Tapered aisles shall be widened gradually so that their width at the point of discharge provides for the entire occupant load of the aisle.

(4) UNIFORM AISLES. - Aisles of uniform width shall be used where egress is provided at both ends of an aisle by either cross aisles or exit doors. The width of uniform aisles shall not be less than required for sixty percent of the total occupant load served by the aisles.

(5) AISLE WIDTH AT OPENINGS. - When an aisle or cross aisle discharges directly into exit openings, a space shall be provided in front of such openings that is at least as wide as such openings and at least as deep as the width of the aisle or cross aisle.

(6) CROSS AISLES. - Cross aisles, at any point shall not be closer than twelve feet to a stage area

using scenery or scenic elements. Steppings shall not be permitted in cross aisles.

(7) AISLE GRADIENTS AND STEPPINGS. - The floors of aisles shall have a gradient of not more than one in eight. Where differences in levels require a greater gradient, steps shall be used, complying with the following:

a. When one riser only is used between levels of platforms, its height shall not exceed eight inches, and where more than one riser is used, none shall exceed seven and three-quarter inches.

b. No riser shall be less than four inches high.

c. No riser shall vary from the height of the riser immediately above or below except that risers that are separated by a tread of seventeen inches or more may vary up to one-quarter inch.

d. The width of treads of intermediate steps between platform levels shall be at least nine and one-half inches, but not more than ten and one-half inches, exclusive of nosings.

e. Treads at the level of platforms and seventeen inches or more in width may slope not more than one-quarter inch in twelve inches.

f. No steps shall be used to enter a row of seats from an aisle unless an unobstructed floor space of at least seven square feet is provided at the level of the aisle, between the aisle and the steps.

g. Each step in an aisle shall be marked along its nosing with a permanent contrasting color stripe, and shall be provided with a step light.

h. The line of risers of aisle steppings shall deviate no more than twenty degrees from a line perpendicular to the centerline of the aisle.

(8) STEPPED AISLE LANDINGS. - Stepped aisles shall

be provided with landings at exit openings, and shall have a length equal to at least the width of the aisle and a slope of not more than one in twelve.

(9) LIGHTING. - Aisles and cross aisles shall be provided at all times with at least one-half foot candle of artificial illumination by electrical means.

(10) VOMITORIES. - Vomitories within assembly spaces shall comply with all of the requirements for aisles, and shall have a clear ceiling height of at least seven feet.

**§[C26-801.9] 27-533 Travel distance. -**

At least one exit opening shall be available from every attached seat or standee space in an assembly space, or from the most remote point in the space when movable seats are provided or, when no seats are provided, within the primary travel distance limitation listed in table 8-1. In addition, an alternate exit opening shall be available from every attached seat or standee space, or from the most remote point when attached seats are not provided within the secondary travel distance limitation listed in

table 8-1. Such alternate exit openings may serve to satisfy the requirements for primary travel distance for other seats or locations. Exit openings satisfying the primary and secondary travel distance requirements for any one seat or location shall be separated from each other by a distance of at least twenty-five feet.

(a) Travel distance shall be the measured distance along centerlines of paths of travel to the centerline of the exit opening, as adjusted by penalties for multi-directional or stepped travel as provided below.

(1) No path of travel shall be permitted through rows of seating other than the first leg of travel from a seat to an aisle.

(2) The first thirty-five feet of a primary path of travel and a secondary path of travel may be common to each other except that this distance may be increased to fifty feet in F-2 places of assembly.

(3) Not more than three changes in direction of travel shall be permitted in the path of travel to an exit opening. A change in direction shall be deemed to occur when it is necessary to change direction by a forty-five degrees or greater angle, measured from the preceding line of travel, except that it shall not be considered as a change in direction when it is necessary in an aisle or cross aisle to travel in another direction not more than seven feet.

(4) Travel distance shall be the sum of the distances of all segments of travel to the exit, computed as follows:

Segment	Length
First leg of travel	Measured distance
Second leg of travel after first change in direction	Measured distance
Third leg of travel after second change in direction	1.25 times measured distance
Fourth leg of travel after third change in direction	1.40 times measured distance
Any leg of travel with four or more steps	1.25 times length of segment as computed above

**§[C26-801.10] 27-534 Exit openings. -**

Exit openings from assembly spaces shall comply with the following:

(a) **Capacity.** - The capacity of exit openings shall be listed as in table 8-1, based on the number of occupants for whom the opening satisfies the primary travel distance requirement.

(b) **Width.** - Exit openings shall be at least thirty-six inches wide for single doors and at least sixty-six inches but not more than eighty-eight inches wide for doors swinging in pairs, except that in assembly spaces having an occupant load of over three hundred persons, single door openings shall be at least forty-four inches wide.

**TABLE 8-1 DETERMINATION OF EXIT AND ACCESS REQUIREMENTS**

Occupancy Group Classification	Maximum Travel Distance Within Assembly Space (ft.) <sup>a</sup>		Capacity (number of persons per unit of width)				Ramps, Corridors, Safe Areas, Exit Passageways
	Primary	Secondary	Aisle and Cross Aisle <sup>e</sup>	Doors or Openings		Stairs and Escalators	
				From Assembly Space	From Safe Area		
F-1a <sup>b</sup>	85	125	80	50	100	60	80
F-1b <sup>c</sup>	100	125	90	80	125	80	100
F2	175	250	400	400	500	320	425
F3	100 <sup>d</sup>	125 <sup>d</sup>	90	80	125	80	100
F4	85 <sup>d</sup>	125 <sup>d</sup>	80	50	100	60	80

**Notes:**

- <sup>a</sup> See section 27-533. When an exit opening from an assembly space discharges into corridor that does not meet the requirements of this code for a safe area, the travel distance shall include the distance within the corridor to an exit.
- <sup>b</sup> See paragraph four of subdivision (b) of section 27-546 for stages.
- <sup>c</sup> See paragraph three of subdivision (b) of section 27-547 for stages.
- <sup>d</sup> In place of assembly completely equipped with automatic sprinklers, this distance may be increased fifty percent.
- <sup>e</sup> See section 27-532.

\* *Bracket not enacted but probably intended.*

**(c) Classification.** - Exit openings from assembly spaces shall be classified as follows:

Class 1.- Exit openings that are used for normal entry to the assembly space, and that open directly to a safe area or to an open exterior space.

Class 2.-Exit openings that are not used for normal entry to the assembly space, and that open directly to a safe area or to an open exterior space.

Class 3.-Exit openings that open from the assembly space into corridors, exit passageways, or vertical exits.

**(d) Distribution of classes.** - The required exit capacity from F-2 places of assembly, and from all other assembly spaces in which the net floor area, exclusive of stage area, is twelve square feet or more per person may be provided by exit openings of any class. The required exit capacity from assembly spaces in which the net floor area, exclusive of stage area, is less than twelve square feet per person shall be distributed so that exit openings of each class are provided to comply with the following requirements:

1. For assembly spaces in which the mean floor level is not more than fifteen feet above or below the adjoining grade elevation, the exit capacity shall be distributed as follows:

- Class 1- not less than forty percent
- Class 2- not more than sixty percent
- Class 3- not more than forty percent

2. For assembly spaces in which the mean floor level is more than fifteen feet, but not more than thirty feet, above or below the adjoining grade elevation, the exit capacity shall be distributed as follows:

- Class 1 - not less than sixty percent
- Class 3 - not more than forty percent

3. For assembly spaces in which the mean floor level is more than thirty feet above or below the adjoining grade elevation, the exit capacity shall be distributed as follows:

- Class 1- not less than one hundred percent

**(e) Location.** - No exit opening shall be closer than twelve feet to any part of a stage using scenery or scenic elements. All exit openings shall be clearly identifiable and shall not be disguised as part of a wall or covered in any way to obscure them from view. Where, because of the configuration of the assembly space enclosure, an exit opening is not visible from all seats using it as a means of egress, directional exit signs shall be placed on the enclosure alongside the exit opening to indicate its location. These signs shall be in addition to those required over the exit opening.

**(f) Locking.** - No exit door shall be locked so as to prevent egress from an assembly space while it is occupied.



**§[C26-801.11] 27-535 Safe areas. –**

Safe areas shall comply with the following:

(a) When provided to serve class one or class two exit openings safe areas shall be separated from assembly spaces by noncombustible construction having a two hour fire-resistance rating, and shall serve as transition areas in the line and direction of exit travel. They shall serve for normal entry to the assembly space and may be used as corridors, lobbies, or lounges. No room or space classified in occupancy group A, B-1, D-1, or D-2 shall open upon a safe area. Safe areas shall be at a level not more than six feet above or below the level at which egress is made from the assembly space, except that a separate safe area shall not be required for any assembly space having an occupant load of less than one hundred fifty persons and which is served by a safe area of another assembly space, when such safe area is in the direction of egress. Ventilating systems for safe areas shall not be connected to systems serving any other spaces, unless separated from such systems by fire dampers actuated by smoke detectors meeting the construction requirements of subchapter thirteen of this chapter.

**(1) COLLECTING SAFE AREAS. -**

Places of assembly having more than one assembly space may have a collecting safe area that receives the occupant load discharged into it by other safe areas. Collecting safe areas shall be located within six feet above or below the assembly space nearest to grade.

**(2) OCCUPANT LOAD. -** The occupant load of a safe area shall be the aggregate occupant load of all exit openings discharging directly into it. The occupant load of a collecting safe area shall be the aggregate occupant load of all exit openings discharging directly into it, plus fifty percent of the occupant load of other safe areas discharging into it.

**(3) DIMENSIONS.-** Except as provided in subdivision four of this section, the clear unobstructed floor area of each safe area shall be sufficient to accommodate the total occupant load of the safe area on the basis of two square feet per person, not including space occupied by furniture or equipment. The minimum dimension of such unobstructed space shall be eight feet. The width of the unobstructed space shall be measured at right angles to the direction of travel to an exit and shall not be less than required for the occupant load, on the basis of the exit capacity listed in table 8-1. The height of safe areas shall be at least eight feet at all points.

**(4) SAFE AREAS NEAR GRADE. -** When a safe area provides egress to an open exterior space, either directly or through a vestibule, the safe area need not provide the floor area required by subdivision three of this section when the level of discharge from the safe area to the open exterior space is not more than four feet above or below the grade of the open exterior space.

**(5) RAMPS AND STEPS. -** Ramps in safe areas shall have a gradient of not more than one in twelve, except that when not exceeding six feet in length, the gradient may be not greater than one in ten. Steps in safe areas shall comply with the following requirements:

a. No riser shall be less than six inches nor more than seven and one-half inches high.

b. No riser shall vary in height from the riser immediately above or below it.

c. Treads in flights of steps shall be at least ten and one-half inches wide exclusive of nosing, and, except as provided in paragraph d of this subdivision, the sum of two risers plus the width of one tread shall be at least twenty-four inches but not more than twenty-five and one-half inches.

d. No change in levels shall have less than three risers, except that where the intervening tread is between twenty-eight inches and thirty-six inches, two risers may be used when the edge of each tread is marked by a contrasting color stripe.

e. Where exit openings from an assembly space are above or below the level of the safe area, a platform shall be provided at the same level as that of the exit opening. The platform shall be at least one foot wider on each side than the exit opening, and shall extend a minimum of six feet in the direction of exit travel. The sides of such platforms, and of steps or ramps leading from them, shall be protected by guards at least three feet high.

**(6) EXITS FROM SAFE AREAS. -** The capacity of exits from safe areas shall be as listed in table 8-1.

Exit openings from safe areas shall discharge into exit types as provided in subchapter six of this chapter.

**(7) DOOR HARDWARE. -** Doors from safe areas or from exits from safe areas opening directly to the outdoors and furnished with locks shall be equipped with fire exit bolts complying with the requirements of paragraph two of subdivision (k) of section 27-371 of subchapter six of this chapter.

**§[C26-801.12] 27-536 Corridors. -**

Corridors shall comply with all of the requirements of subchapter six of this chapter, except as modified below:

**(a) Capacity. -** The capacity of corridors shall be as listed in table 8-1.

**(b) Changes in level. -** Changes in level requiring less than three risers in a corridor shall be by a ramp having a slope not greater than one in ten.

**§[C26-801.13] 27-537 Exit passageways. –**

Exit passageways shall comply with all of the requirements of subchapter six of this chapter, except as modified below:

**(a) Capacity. -** The capacity of exit passageways shall be as listed in table 8-1.

**(b) Changes in level. -** Changes in level requiring less than three risers in an exit passageway shall be by a ramp having a slope not greater than one in ten.

**§[C26-801.14] 27-538 Vertical exits. –**

Stairs, escalators and ramps shall comply with all of the requirements of subchapter six of this chapter, except as modified below:

**(a) Capacity.** - The capacity of stairs, escalators or ramps shall be as listed in table 8-1.

**(b) Width.** - The minimum width of stairs shall be at least forty-four inches, except that where the total occupant load is not more than permitted for one unit of exit width, the minimum width may be thirty-six inches.

**(c) Unenclosed vertical exits.** - Vertical exits leading directly from one safe area to another, or leading from a safe area directly to an open exterior space, need not be enclosed.

**(d) Ramp slope.** - Ramps serving as vertical exits shall not have a slope greater than one in ten.

**§[C26-801.15] 27-539 Open exterior spaces.** -

**(a) Capacity.** - Open exterior spaces shall be adequate in width and area to accommodate the accumulated occupant load of all exits discharging into them on the basis of two square feet per person.

**(b) Minimum dimensions.** - The minimum dimensions of open exterior spaces shall be twenty feet, except that when the principal entrance to the place of assembly is from an open exterior space, the minimum dimension of this space shall be thirty feet. No open exterior space shall have less than four hundred square feet of floor area, and floor area shall be measured exclusive of the following:

1. The area immediately outside any exit door from the place of assembly for a distance perpendicular to the exit doors of ten feet for the full width of the exit opening.

2. The area of steps, platforms, stairs, or ramps within or leading to or from the space.

3. The area of obstructions such as shrubs, trees, fixed furniture, signs, sculptures, pools, and similar obstructions to occupancy or exit travel.

**(c) Above or below grade.** - When an open exterior space is more than fifteen feet above or below the grade of the street or public space to which it discharges, its required area shall be increased by one-third.

**(d) Egress from open exterior spaces.** - Exterior exit passageways, ramps, or steps leading from open exterior spaces shall be not less in width than required for the occupant load of all exits discharging into the open exterior space. The width of such exit passageways shall be based on the capacities listed in table 8-1, but in no case less than ten feet. Ramps and steps shall comply with the requirements of paragraph (e) of subdivision five of section 27-535 of this article.

**§[C26-801.16] 27-540 Exit lighting.** - In addition to the requirements of subchapter six of this chapter, lighting shall be provided in the following areas:

**(a) Safe areas.** - Safe areas shall be artificially

lighted by electrical means at all times during occupancy of a place of assembly so as to provide illumination of at least five foot candles at the level of the floor and on the surface of all stairs, steps, ramps, and escalators within the safe area.

**(b) Open exterior spaces.** - Yards or courts which serve as open exterior spaces shall be artificially lighted by electrical means at all times between sunset and sunrise during occupancy of a place of assembly so as to provide illumination of at least five foot candles at the level of the floor over at least the required area.

**§[C26-801.17] 27-541 Exit signs.** -

Signs meeting the requirements of subchapter six of this chapter and subdivision (e) of section 27-534 of this article shall be provided in all assembly spaces to indicate the location of exits and, where necessary, the direction to the exits. All exit or directional signs shall be placed so that they are clearly visible from all parts of the assembly spaces, and the bottom of all signs shall be at least seven feet above floor level. Signs shall be of the internally lighted type in all assembly spaces where the general illumination is reduced to less than five foot candles during a performance or during occupancy. Signs shall be lighted at all times during occupancy.

**§[C26-801.18] 27-542 Emergency lighting.** -

All assembly spaces shall be provided with emergency lighting facilities sufficient to provide at least five foot candles of illumination at the floor level. Such lighting shall be on circuits that are separate from the general lighting and power circuits, either taken off ahead of the main switch or connected to a separate emergency lighting power source, and be arranged to operate automatically in the event of failure of the normal lighting system. The provisions of this section shall apply retroactively to all existing places of assembly that are or would be classified in occupancy groups F-3 and F-4 or are changed to such classification under this code, in accordance with the following schedule and specifications:

1. Cabarets, dance halls, night clubs, and taverns having an occupant load exceeding one hundred fifty persons shall complete the installation required by this section on or before April twelfth, nineteen hundred seventy-nine.

2. Cabarets, dance halls, night clubs, and taverns having an occupant load of one hundred fifty persons or less shall complete such installation on or before July twelfth, nineteen hundred seventy-nine.

3. Spaces occupied exclusively as restaurants shall complete such installation on or before October twelfth, nineteen hundred seventy-nine.

4. All other spaces in occupancy groups F-3 and F-4 shall complete such installation on or before January twelfth, nineteen hundred eighty.

5. The wiring shall conform with the electrical code of the city of New York, and have the same protection as specified for wiring in reference standard RS 17-3, RS 17-3A or 17-3B.

6. Storage battery equipment may be used as the sole source of energy provided it conforms with the provisions of section four of reference standard RS 17-3 or consists of two battery packs listed by an acceptable testing laboratory or conforms with nationally accepted standards for such source of emergency energy.

**§[C26-801.19] 27-543 Light projection sources. –**

Motion picture projection and other light projection sources shall comply with the following:

**(a) Film. –** The projection, use or storage of film having a nitrocellulose base (commonly known as nitrate film) shall not be permitted except under conditions specified in special permits when issued by the fire department. Safety film meeting the specifications and test standards of reference standard RS 8-1 may be projected, used or stored.

**(b) Projection machines. –** Projection machines shall meet the requirements of the electrical code of the city of New York. The lamp housing of projection machines using carbon-arc or other light sources that emit gaseous discharge shall be equipped with, or connected to a mechanical ventilation system of adequate capacity to exhaust the products of combustion through ducts directly to the outdoors. Such duct systems shall comply with the requirements of subchapter thirteen of this chapter. When more than one projection machine or other facility employing a carbon-arc or similar light source is used, all may be vented by the same duct system if the capacity is adequate for all facilities so connected.

**(c) Other light source facilities. –** All devices, such as spotlights, that employ a carbon-arc or other light source that emits gaseous discharge shall be vented directly as required in subdivision (b) of this section, unless the space in which such devices are located is mechanically ventilated and provides at least two thousand cubic feet of room volume for each device.

**(d) Light or projection rooms or booths. –** When enclosed, rooms or booths used for the projection of motion picture film or the manipulating of lights shall be built of noncombustible materials, and shall provide a clear working space of at least two feet around the projection apparatus. Such rooms or booths shall be provided with vents opening to a mechanically ventilated area or the outdoors, adequate in size to supply the make-up air required. The rooms or booths shall be provided with at least one noncombustible or metal clad door at least two feet by

six feet opening in the direction of exit travel, and no point within the room, booth, or gallery shall be more than fifty feet from a door opening into a corridor or space that provides access to an exit at a distance not greater than seventy-five feet.

**§[C26-801.20] 27-544 Motion picture screens. –**

Motion picture screens shall be noncombustible, or have a flame spread rating not over twenty-five, or be of materials that have been rendered flameproof in accordance with the provisions of chapter four of this title. The construction supporting screens shall be noncombustible, and shall comply with the stage rigging requirements of subchapter nine and with the provisions of subchapter ten of this chapter.

**ARTICLE 3 F-1 PLACES OF ASSEMBLY**

**§[C26-802.1] 27-545 General. –**

The provisions of this section shall apply to all places of assembly classified in occupancy group F-1 under the provisions of subchapter three of this chapter.

**§[C26-802.2] 27-546 F-1a places of assembly. –**

F-1a places of assembly shall comply with all of the requirements of article two of subchapter eight of this chapter, and with the following:

**(a) Construction in seating areas. –**

(1) Scenery or scenic elements may be placed in seating sections of F-1a assembly spaces if such elements:

a. Are noncombustible, or of materials that have been rendered flameproof in accordance with the provisions of chapter four of this title, or have a flame spread rating of twenty-five or less.

b. Are adequately braced or secured.

c. Do not obstruct the required visibility of, or paths of travel to, exit openings.

(2) Platforms or runways for performances, to accommodate the operation of cameras, electronic equipment, or motion picture projection machines not using carbon-arc or other light source that emits a gaseous discharge may be constructed in seating sections, provided such platforms or runways comply with the requirements of paragraph one of subdivision (a) of this section.

**(b) Stage requirements. –**

**(1) DEFINITION. –**

For the purposes of this section the stage in an F-1a place of assembly shall include the performing area and all other nonaudience areas that are used in the presentation of a performance and that are open to the performing area. The performing area shall be that area between the outer edge of the stage apron and the furthestmost up-stage acting boundary, the width being the maximum stage opening to the audience.

**(2) STAGE FLOOR CONSTRUCTION. -**

The floor construction of stages shall provide fire-resistance ratings complying with the requirements of section 27-240 of article two of subchapter three of this chapter and table 3-4 except as follows:

a. Any portion of the stage floor used for passing scenery and scenic elements to a lower level may consist of heavy timber construction supporting tight fitting traps of at least three inch nominal solid wood or of equivalent materials in terms of fire-resistance, strength, and stiffness properties.

b. Stage lifts shall comply with the provisions of subchapter eighteen of this chapter. Any portion of the stage floor that is equipped with stage lifts shall be of noncombustible construction. Joints between lift platforms and adjacent floors shall be tightly fitted.

c. Finish flooring shall comply with the provisions of section 27-351 of article five of subchapter five of this chapter.

**(3) AREAS BELOW THE STAGE. -**

When the stage floor is equipped with traps or stage lifts, the room or space below the stage into which the traps or lifts open shall be completely enclosed by construction having at least the fire-resistance rating required for the stage floor, and such room or space shall not be used as a workshop or storage area. Storage shall not be deemed to include the location in this area of scenery or scenic elements used during a performance. However, no combustible material that has a flamespread rating greater than twenty-five or that has not been rendered flameproof in accordance with chapter four of this title may be stored in this location at any time. Under-stage areas shall comply with the requirements of paragraph eleven of this subdivision.

**(4) EXITS FROM THE STAGE. -**

At least two exits, remote from each other, shall be available from every point on a stage, each within a travel distance limitation of one hundred twenty-five feet. The occupant load of the stage shall be based upon one person per fifteen square feet for the performing area and on one person per fifty square feet for the remaining area. When any portion of a stage is used for audience seating at any time, exits of adequate capacity shall be provided for that portion, within the travel distance limitations for assembly space seating. Exit openings serving a stage directly shall have a capacity of seventy-five persons per unit of exit width.

**(5) SCENERY AND SCENIC ELEMENTS. -** All scenery or scenic elements shall be of noncombustible materials, or of materials having a flame-spread rating not exceeding twenty-five, or of materials that have been rendered flameproof in compliance with the provisions of chapter four of this title. Scenery and scenic elements not complying with the above requirements may be used only when expressly permitted by the fire department.

**(6) RIGGING LOFTS, FLY GALLERIES, AND GRIDIRONS. -** Girders, beams, or slats of galleries or gridirons over the stage floor or in the rigging loft need not be fire protected but shall be of noncombustible materials designed in accordance with the provisions of subchapters nine and ten of this chapter.

**(7) AUTOMATIC SPRINKLER PROTECTION. -** Stages in F-1a places of assembly shall be provided with automatic sprinkler protection complying with the construction provisions of subchapter seventeen of this chapter, as follows:

a. Automatic sprinklers shall be placed above all rigging lofts; and above all stage areas, other than those portions of stage areas specifically designated on approved plans as performing areas which do not have rigging lofts above and that are not at any time used for storage purposes. Sprinklers above rigging lofts shall be located so that no gridiron or other obstruction intervenes between the sprinkler heads and the scenery or scenic elements.

b. When any part of a stage is sprinklered in accordance with the provisions of subparagraph a of this paragraph, or when rigging lofts are provided, such stage areas and rigging lofts shall be completely separated from audience areas by a deluge sprinkler system designed to form a vertical water curtain, with heads spaced to provide a water density of at least three gpm per linear foot. The water curtain system shall be controlled by a deluge valve actuated by a "rate of rise system" and "fixed temperature system." The heat actuating devices shall be located on not more than ten foot centers around the perimeter of the sprinklered area or as otherwise required for the type of device used to assure operation of the system. In addition to the automatic controls, manual operating devices shall be located at the emergency control station as required by paragraph ten of this subdivision, and adjacent to at least one exit from the stage. Such exit shall be remote from the emergency control panel.

c. When openings are provided in the stage floor for stage lifts, trap doors or stairs, sprinklers spaced five feet on centers shall be provided around the opening at the ceiling below the stage, and baffles at least twelve inches in depth shall be installed around the perimeter of the opening.

d. All valves controlling sprinkler supplies shall be provided with tamper switches wired to an annunciator panel located at the emergency control panel.

e. The operation of any section of the sprinkler system and the deluge system shall activate the emergency ventilating equipment required in paragraph eight of this subdivision.

f. The water flow alarm, tamper switches and deluge system equipment shall be provided with central station supervision in addition to the required local alarm.

g. Existing premises shall be required to

conform with this requirement on or before January twelfth, nineteen hundred eighty. However, existing sprinkler systems, which have been previously accepted by the department or by the fire department, shall be deemed in compliance with this requirement.

(8) EMERGENCY VENTILATION. - Emergency ventilation shall be provided for all stages in F-1a places of assembly to provide a means of removing smoke and combustion gases to the outdoors in the event of a fire, as follows:

a. A mechanical exhaust system shall be provided of sufficient capacity to exhaust an amount of air at least equal to the sum of the following:

(1) two cfm per square foot of the performing area.

(2) four cfm per square foot of that portion of stage area that is not designated as performing area.

(3) four cfm per square foot of rigging loft area.

b. The exhaust system shall be designated to be activated both manually and automatically, manual operation shall be by means of a manually operated switch located at the emergency control panel as required by paragraph ten of this subdivision and adjacent to at least one exit from the stage. Such exit shall be remote from the emergency control panel. Automatic activation shall be by means of the sensing devices that start the operation of the sprinklers. Exhaust air openings of ducts shall be located so as to provide the most effective removal of smoke and combustion gases.

c. The exhaust system shall be provided with an automatic emergency by-pass damper in the exhaust duct on the suction side of the fan. Such damper shall close to\* the fan in the event of a power failure to the fan motor and shall open directly to the outdoors if the fan is located outside the building, or shall open to a duct leading directly to the outdoors if the fan is located inside the building. When located inside the building, the fan shall be insulated with a minimum of one inch magnesia block or the equivalent in insulating and fire-resistive qualities. Exhaust fans shall have drive and bearings located outside of the fan impeller housing. The exhaust system shall not be connected to exhaust openings in any space other than the stage and rigging loft, and shall be constructed to comply with the provisions of subchapter thirteen of this chapter. All\*\* switches shall be clearly labelled "emergency stage ventilation" and shall be painted red.

\*As enacted but "to" probably intended to be omitted.

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

d. The emergency ventilation system shall be connected to both the normal and emergency light and power circuits.

(9) CURTAINS. - No curtain shall be located between the audience area and the stage unless it is designated to permit the air movement required for emergency ventilation in paragraph eight of this subdivision to bypass or pass through the curtain without excessive billowing, and be

made of noncombustible fabrics, as specified in the appendix of reference standard RS 7-3.

(10) EMERGENCY CONTROL PANEL. - An emergency control panel shall be provided, as follows:

a. It shall be located on or adjoining the stage, except that where the stage is surrounded by seating, it shall be located so as to permit a view of the audience and stage areas. It shall be manned in accordance with the requirements of the fire department at all times during the presentation of a performance to an audience.

b. It shall be equipped with tell-tale lights to indicate when feeders and subfeeders of emergency light and power circuits are in operation in assembly spaces and all exits, including safe areas.

c. It shall, when a deluge type sprinkler system is provided, be equipped with manual operating devices to activate the sprinkler system. It shall also be provided with a signal system to show when any portion of the sprinkler system has been deactivated.

d. It shall be provided with switches to provide for operation of the emergency ventilating system. Controls for the ventilating system shall be electrically supervised. The supervisory circuit shall be provided with a trouble bell and light, both of which shall be activated in the event of a failure in the ventilation system. A silencing switch may be provided, and where provided, shall have either an automatic reset or shall ring again when the trouble is corrected.

e. It shall be equipped with a public address system serving loudspeakers in the assembly space. The public address system shall be connected to both the normal and emergency light and power circuits.

f. It shall be equipped with an alarm system and intercom connected to the manager's office, the dressing rooms, and to a supervisory central fire station.

(11) AUXILIARY STAGE SPACES. -

Auxiliary stage spaces such as understage areas, dressing rooms, green rooms, storage rooms, work shops, and similar spaces associated with the use of the stage shall comply with the following:

a. No point within any auxiliary stage space shall be more than fifty feet from a door providing access to an exit.

b. There shall be at least two exits available from every auxiliary space, one of which shall be available within a travel distance of seventy-five feet. A common path of travel of twenty feet to the two exits shall be permitted.

c. The occupant load of dressing rooms shall be based on one person per fifty square feet of area.

d. Auxiliary stage spaces shall be equipped with automatic sprinklers when required by the provisions of subchapter seventeen of this chapter.

e. No workshop involving the use of combustible or inflammable paint, liquids, or gases or their storage

shall open directly upon a stage.

f. The interior finish of auxiliary stage spaces shall comply with the requirements of table 5-4.

(12) STAGE LIGHTING. - No stage lights shall be placed so that they will develop temperatures on the surface of any material that will cause that material to ignite, or smoke, or cause its flameproofing to deteriorate.

**§[C26-802.3] 27-547 F-1b Places of assembly. -**

F-1b places of assembly shall comply with all of the requirements of article two of this subchapter, and with the following:

**(a) Certificate of occupancy. -**

The certificate of occupancy for F-1b places of assembly shall specifically note the prohibition against the use or placement of scenery or scenic elements on or above the stage.

**(b) Stage requirements. -**

(1) DEFINITION. - For the purposes of this section, the stage in an F-1b place of assembly shall be the area where the principal activity viewed by the audience takes place.

(2) CONSTRUCTION. - Raised platforms may be built as stages in F-1b places of assembly when they are supported on floors having the fire-resistance ratings required by table 3-4, in accordance with the following:

a. The area below the platform shall be enclosed on all sides with solid construction.

b. The horizontal area of stage construction shall not exceed the following:

Wood frame: maximum area-four hundred square feet.  
Fire retardant treated wood: maximum area-twelve hundred square feet.

Noncombustible frame: maximum area-unlimited.

c. The floor of the stage, when wood is used, shall be a least one inch nominal thickness, and shall be laid on a solid, noncombustible backing, or all spaces between supporting members shall be fire-stopped with noncombustible material.

d. In all F-1b places of assembly providing live entertainment, at anytime, the stage, dressing rooms and property rooms shall be provided with automatic sprinkler and fire alarm protection in conformance with the provisions of subchapter seventeen of this chapter. Existing premises shall be required to conform with this requirement on or before January twelfth, nineteen hundred eighty. However, existing sprinkler systems, which have been previously accepted by the department or by the fire department, shall be deemed in compliance with this requirement.

**(3) EXITS FROM THE STAGE. -**

At least two exits, remote from each other, shall be available from every point on a stage, each within a travel distance limitation of one hundred fifty feet.

The occupant load of the stage shall be based upon one person per twenty-five square feet of area. When any portion of a stage is used for audience seating at any time, exits of adequate capacity shall be provided for that portion, within the travel distance limitations for assembly space seating. Exit openings serving a stage directly shall have a capacity of one hundred persons per unit of exit width.

(4) EMERGENCY CONTROL PANEL. - In F-1b places of assembly having an occupant load over six hundred persons, an emergency control panel shall be provided, as follows:

a. It shall be located so as to have a view of the audience and stage areas, and shall be manned during the presentation of a performance to an audience, by a competent person instructed in its use.

b. It shall be equipped with tell-tale lights to indicate when feeders and subfeeders of emergency light and power circuits are in operation in assembly spaces and all exits, including safe areas.

c. It shall be equipped with a public address system serving loudspeakers in the assembly space. The public address system shall be connected to both the normal and emergency light and power circuits.

**ARTICLE 4 F-2 PLACES OF ASSEMBLY**

**§[C26-803.1] 27-548 General. -** The provisions of this section shall apply to all places of assembly classified in occupancy group F-2 under the provisions of subchapter three. F-2 places of assembly shall comply with all of the requirements of article two of this subchapter, and with the following:

**(a) Enclosure. -** To qualify as an F-2 outdoor place of assembly, a place of assembly shall have at least forty percent of the combined surface area of all exterior wall and roof planes open to the outdoors. When a portion of an outdoor place of assembly is enclosed to a greater extent, that portion shall comply with all of the requirements of this code applicable to indoor places of assembly.

**(b) Grandstands. -** Grandstands shall comply with the following:

(1) CONSTRUCTION.- Grandstands shall be designed in accordance with the requirements of subchapters nine and ten of this chapter.

(2) HEIGHT AND AREA.- Grandstands, when built entirely of noncombustible materials, may be of unlimited height and area, and when built of combustible materials, shall be subject to the following limitations:

a. No section of seating shall exceed twenty feet in height, or exceed ten thousand square feet in area.

b. When more than one section of seating is provided, and the separation between them is less than fifty feet, each section shall be separated from the other by construction having a fire-resistance rating of

a least two hours and rising to a height of at least two feet six inches above the levels of seating at each row.

c. No outdoor grandstand of combustible materials shall be erected within less than two-thirds of its height, but in no case less than ten feet, of a building or an interior lot line unless separated therefrom by noncombustible construction having a one hour fire-resistance rating.

**(3) SPACES UNDER SEATS. -**

Spaces under grandstand seats shall be kept free of all combustible materials and shall not be occupied or used for other than egress, unless such spaces are completely enclosed by noncombustible construction having a two hour fire-resistance rating.

(4) PARKING. - Motor vehicle parking spaces shall not be closer than twenty feet to any grandstand unless separated therefrom by noncombustible construction having a one hour fire-resistance rating.

**(c) Stage requirements. -**

(1) DEFINITION. - For the purposes of this section the stage in an F-2 place of assembly shall be the area where the principal activity viewed by the audience takes place.

(2) CONSTRUCTION. - The horizontal area of stage construction shall not exceed the following:

Wood frame: maximum area-five thousand square feet.

Fire retardant treated wood: maximum area-ten thousand square feet. Noncombustible frame: maximum area-unlimited.

**(3) EXITS FROM THE STAGE. -**

At least two exits, remote from each other, shall be available from every point on a stage, each within a travel distance limitation of three hundred feet. The occupant load of the stage shall be based upon one person per fifty square feet of area. When any portion of a stage is used for audience seating at any time, exits of adequate capacity shall be provided for that portion, within the travel distance limitations for assembly space seating. Exit openings serving a stage directly shall have a capacity of four hundred persons per unit of exit width.

**(4) EMERGENCY CONTROL PANEL. -**

In F-2 places of assembly having an occupant load over one thousand persons, an emergency control panel shall be provided as follows:

a. It shall be located so as to have a view of the audience and stage areas, and shall be readily accessible at all times during the presentation of a performance to an audience, to a competent person instructed in its use.

b. It shall be equipped with tell-tale lights to indicate when feeders and subfeeders of emergency light and power circuits are in operation in assembly spaces and all exits.

c. It shall be equipped with a public address system serving loudspeakers in the assembly space. The public address system shall be connected to both the normal and emergency light and power circuits.

**(d) Drive-in-theaters-**

Drive-in theaters shall comply with the following:

(1) Projection booths and projection machines shall comply with the requirements of section 27-543 of article two of this subchapter. Motor vehicle parking spaces shall not be closer than twenty feet to any projection booth or machine.

(2) Projection screens and supporting structures shall comply with the requirements of section 27-544 of article two of this subchapter and shall be designed in accordance with the requirements of subchapters nine and ten of this chapter as applied to signs. Motor vehicle parking spaces shall not be closer than twenty feet to any projection screen.

**(e) Amusement parks. -** Buildings and structures within amusement parks shall be constructed to conform with all of the requirements of this code governing the specific use and occupancy. Amusement devices shall not be placed in operation until they have been made to comply with the provisions of subchapter eighteen of this chapter.

**ARTICLE 5 F-3 AND F-4 PLACES OF ASSEMBLY**

**§[C26-804.1] 27-549 General. -**

The provisions of this section shall apply to all places of assembly classified in occupancy group F-3 or F-4 under the provisions of subchapter three of this chapter. F-3 or F-4 places of assembly shall comply with all the requirements of article two of this subchapter and the following:

**(a) Stage requirements. -**

(1) With scenery and scenic elements. - Where an F-3 or F-4 place of assembly provides a stage using scenery and scenic elements, the space shall comply with all of the requirements of this code applicable to F-1a places of assembly.

(2) Without scenery and scenic elements. - Where an F-3 or F-4 place of assembly provides a stage not using scenery or scenic elements, the space shall comply with all of the requirements of this code applicable to F-1b places of assembly.

(3) Cabarets. - In all F-4 places of assembly used as a cabaret, the stage dressing rooms and property rooms shall be provided with automatic sprinkler and fire alarm protection in compliance with the provisions of subchapter seventeen of this chapter. Existing premises shall be required to conform with this requirement on or before January twelfth, nineteen hundred eighty.

**(b) Retroactive provisions.-** On or before January twelfth, nineteen hundred eighty, all places of assembly providing entertainment or used as a cabaret within F-3 or F-4 occupancies shall be provided with automatic sprinkler and fire alarm protection to comply with the provisions of subchapter seventeen of this chapter.

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**SUBCHAPTER 9  
LOADS**

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

\*\* "27" omitted from section numbers in this column.

**ARTICLE 1 GENERAL**

**§[C26-900.1] 27-550 Scope. -**

Buildings and parts thereof, shall be capable of resisting all levels\*\*\* actually imposed thereon without exceeding the allowable stresses prescribed in subchapters ten and eleven of this chapter. In no cases shall the assumed loads be less than the minimum values described herein. In addition, within special flood hazard areas, and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, applicable load requirements of reference standard RS 4-5 shall be applied.

\*\*\* *As enacted but "loads" probably intended.*

**§[C26-900.2] 27-551 Standards. -**

The provisions of reference standard RS-9 shall be a part of this subchapter.

**§[C26-900.3] 27-552 Definitions. -**

For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

**ARTICLE 2 DEAD LOADS**

**§[C26-901.1] 27-553 Construction materials and assembled elements of construction. -**

Except as provided in section 27-555 of this article, the dead load shall be the actual weight of the building materials or construction assemblies to be supported, computed from the unit weights given in reference standard RS 9-1. Where unit weights are not established in reference standard RS 9-1, the actual weights may be determined by analysis or from data in manufacturers' drawings or catalogs. Unit weights less than those given in reference standard RS 9-1 may be used only with approval of the commissioner.

**§[C26-901.2] 27-554 Service equipment. -**

Provision shall be made for the weights of all building service equipment including plumbing stacks, piping, heating and air conditioning equipment, electrical equipment, elevators, elevator machinery, flues, and similar fixed equipment. The weights of such equipment (or the allowances therefor) shall be included in the dead load. The weight of equipment that is part of the occupancy of a given area shall be considered as live load. See also paragraph two of subdivision (b) and subdivision (d) of section 27-557 of article three of this subchapter.

**§[C26-901.3] 27-555 Partition loads. -** Weights of all partitions shall be considered, using either actual weights at locations shown on the plans or the equivalent uniform load given in subdivision (b) of this section.

**(a) Actual loads. -** Where actual partition weights are

used, the uniform design live load may be omitted from the strip of floor area under each partition.

**(b) Equivalent uniform load.** - The equivalent uniform partition loads in reference standard RS 9-1 may be used in lieu of actual partition weights except for bearing partitions or partitions in toilet room areas (other than in one- and two-family dwellings), at stairs and elevators, and similar areas where partitions are concentrated. In such cases, actual partition weights shall be used in design. Except as otherwise exempted, equivalent uniform loads shall be used in areas where partitions are not definitely located on the plans, or in areas where partitions are subject to rearrangement or location.\*

*\*As enacted but "relocation" probably intended.*

### ARTICLE 3 LIVE LOADS

#### §[C26-902.1] 27-556 General. -

In addition to the applicable dead, wind, and other loads, the building shall be designed for uniform live loads, for concentrated live loads, or for concurrent combinations of uniform and concentrated live loads, whichever produce the greatest stress.

#### §[C26-902.2] 27-557 Floor live loads. -

**(a) Uniformly distributed live loads.** - The minimum design values established in reference standard RS 9-2 for various occupancies or uses shall be used subject to the provisions of subdivision (d) of this section. Where the occupancy or use of a space does not conform to any of those listed, the design load shall be determined by the architect or engineer subject to approval by the commissioner.

#### **(b) Concentrated live loads.** -

(1) The building framing shall be capable of supporting the concentrated live loads established in reference standard RS 9-2, placed so as to produce maximum stress.

(2) Floors that support any items of machinery, electrical or mechanical equipment, or other concentrated live load in excess of one thousand pounds (including the weights of pads or bases) shall be designed to support such weight as a concentrated load or group of concentrated loads.

#### **(c) Nonconcurrency.** -

(1) When a concentrated live load is present, the uniformly distributed load may be considered to be omitted in the area occupied by the concentrated load.

(2) Where reference standard RS 9-2 indicates that the concentrated live load is nonconcurrent with the uniform live load, it may be assumed that the total concentrated load is to be omitted when the uniform load is present and that the total uniform load is to be omitted when the concentrated load is present.

**(d) Conformance.** - For purposes of determining that the magnitude of the actual live load conforms to or is less than the minimum design live load established in this section, the actual uniform live load shall be approximated by averaging the total load actually applied over a rectangular area of one hundred fifty

square feet having no side less than eight feet.

#### §[C26-902.3] 27-558 Live loads for sidewalks, driveways, and railings. -

##### **(a) Sidewalks and driveways.** -

(1) When supported on grade, all sidewalks for new buildings and alterations shall be subject to inspection and acceptance by the commissioner. Portions of such sidewalks that are located between the curb line and the street line shall be constructed in compliance with the specifications for concrete sidewalks of the department of transportation.

(2) All sidewalks and driveways or portions thereof that are structurally supported shall be designed for a live load of one hundred psf uniformly distributed and in accordance with the provisions of subchapter ten of this chapter. Where subject to intentionally or accidentally imposed wheel loads of vehicles, such portions of sidewalks and driveways shall be designed for a uniformly distributed load of six hundred psf or for the maximum vehicular wheel load that could be imposed thereon, whichever develops the greater stresses.

(3) Appurtenant components of sidewalks and driveways, including manholes, manhole covers, vault covers, gratings, etc., shall be designed for the loads prescribed in paragraph two of this subdivision, or shall conform to the standards of the city agency having jurisdiction.

##### **(b) Railings and parapets.** -

(1) Railings and parapets around stairwells, balconies, areaways, and roofs, and other railings in similar locations other than those for places of assembly, shall be designed to resist the simultaneous application of a lateral force of forty plf and a vertical load of fifty plf, both applied to the top of the railing. For railings and parapets at the front of theater balconies and in similar locations in places of assembly, the lateral force shall be increased to fifty plf and the vertical load to one hundred plf. An exception is made for railings in one- and two-family dwellings, which shall be designed for a lateral force of twenty plf plus a vertical load of twenty plf, both applied at the top of the railing. The total lateral force and total vertical load shall be at least two hundred pounds each.

(2) Intermediate and bottom rails, if provided, shall be designed for the simultaneous application of forty plf applied horizontally and fifty plf applied vertically; however, lateral and vertical design loads on intermediate and bottom rails need not be considered in the design of posts and anchorages. For railings having solid panels, the panels shall be designed for a uniform lateral load of twenty psf.

(3) Where railings or parapets support fixtures, allowance shall be made for the additional loads imposed thereby.

(4) Railings, bumpers, or similar devices used in parking areas to resist the impact of moving vehicles shall be designed to resist a lateral load of three hundred plf applied at least twenty-one inches above

the roadway; but in no case shall the load be less than twenty-five hundred pounds per vehicle.

**§[C26-902.4] 27-559 Columns in parking areas. -**

Unless specially protected, columns in parking areas subject to impact of moving vehicles shall be designed to resist the lateral load due to impact and this load shall be considered a load of infrequent occurrence. For passenger vehicles, this lateral load shall be taken as a minimum of twenty-five hundred pounds applied at least twenty-one inches above the roadway and acting simultaneously with other design loads.

**§[C26-902.5] 27-560 Stage areas using scenery or scenic elements. -**

Scenery battens and suspension systems shall be designed for a load of thirty pounds per linear foot of batten length. Loft block and head block beams shall be designed to support vertical and horizontal loads corresponding to a four inch spacing of battens for the entire depth of the gridiron. Direction and magnitude of total forces shall be determined from the geometry of the rigging system including load concentrations from spot line rigging. Locking rails shall be designed for a uniform uplift of five hundred psf with a one thousand pound concentration. Impact factor for batten design shall be seventy-five percent and for loft and head block beams shall be twenty-five per cent. A plan drawn to a scale not less than one-quarter inch equals one foot shall be displayed in the stage area indicating the framing plan of the rigging loft and the design loads for all members used to support scenery or rigging. Gridirons over stages shall be designed to support a uniformly distributed live load of fifty psf in addition to the rigging loads indicated.

**§[C26-902.6] 27-561 Roof loads. -**

Roofs and marquees shall be designed for wind, live, and other loads as prescribed in subdivisions (a) through (d) of this section. It may be assumed that maximum wind load occurs with zero live load and that maximum live load occurs with zero wind load. For dwellings an exception is made for awnings, canopies, and patio covers, which may be designed for a live load of twenty psf of horizontal projection.

**(a) Live load. -** Minimum design live loads shall be as follows:

(1) For roofs with slopes up to and including twenty degrees from the horizontal, thirty psf of horizontal projection.

(2) For roofs with slopes greater than twenty degrees from the horizontal, thirty psf of horizontal projection, reduced by one psf for each degree of slope in excess of twenty degrees.

(3) For valleys, live loadings shall be increased to provide for accumulations of snow. The loading intensity shall be assumed to vary from forty-five psf at the low point to fifteen psf at the ridge.

(4) For roofs having curved or pyramidal shapes, the

proposed live load shall be established by the architect or engineer, subject to approval by the commissioner.

**(b) Wind load. -** The provisions of section 27-569 of article five of this subchapter shall apply.

**(c) Concentrated loads. -**

The provisions of subdivision (b) of section 27-557 of this article shall apply.

**(d) Special loads. -**

(1) When used for purposes such as promenades, assembly areas, or roof gardens, design shall be made for live loads corresponding to the particular usage, as indicated in reference standard RS 9-2. Such loads shall be considered as nonconcurrent with the wind load or with the live load specified in subdivision (a) of this section. The design live and wind loads for roofs, as specified elsewhere in this subchapter, shall be deemed to provide for incidental use of the roof of a building by the occupants thereof.

(2) Where roofs are intended for the ponding of water, the roof shall be designed for the maximum possible depth of water which may be ponded thereon as determined by the relative levels of roof deck and overflow weirs or scuppers. Such load need not be considered as occurring simultaneously with wind or live load.

(3) Girders and roof trusses (other than joists) over garage areas regularly utilized for the repair of vehicles and over manufacturing floors or storage floors used for commercial purposes shall be capable of supporting, in addition to the specified live and wind loads, a concentrated live load of two thousand pounds applied at any lower chord panel point for trusses, and at any point of the lower flange for girders.

(4) Where roofs are landscaped, the uniform design live load on the landscaped portions shall be thirty psf. The weight of the landscaping materials shall be considered as dead load and shall be computed on the basis of saturation of the earth. The areas adjacent to the landscaped portions shall be considered as assembly areas, unless specific provision is made to prevent such use.

(5) Where equipment is placed on roofs, the design shall provide for the support of such equipment.

**§[C26-902.7] 27-562 Moving loads. -**

Where applicable to the use or occupancy of the building, the design shall consider the moving loads described below.

**(a) General. -**The loads established in subdivisions (a) and (b) of section 27-557 of this article shall be assumed to include allowance for ordinary impact conditions.

**(b) Passenger vehicles. -** Areas used for, and restricted by physical limitations of clearance to, the transit or parking of passenger vehicles shall be designed for the uniformly distributed and concentrated loads for parking areas for such vehicles as provided in reference standard RS 9-2, applied without impact. An exception is made for members or constructions which,

because of physical limitations, cannot be subjected to direct load from the vehicle or from a jack or hoist used to shall be designed for the loads corresponding raise or suspend the vehicle. Such members or constructions to the actual usage.

**(c) Truck loads.** -Minimum loads (including vertical, lateral, and longitudinal) and the distribution thereof shall meet the applicable requirements or reference standard RS 9-3, except that impact shall be taken as ten percent of the vertical reaction.

**(d) Railroad equipment.** - Minimum loads (including vertical, lateral, longitudinal, and impact) and the distribution thereof shall meet the applicable requirements of reference standard RS 9-4.

**(e) Crane runways and supports. -**

(1) VERTICAL LOADS. - Actual maximum wheel loads occurring when the crane is lifting its capacity load shall be used. To allow for impact, the lifted load shall be increased twenty-five percent or the wheel loads increased fifteen percent whichever produces greater stress condition.

(2) HORIZONTAL LOADS. -

a. Lateral load (due to crane trolley travel) shall be twenty percent of the sum of the capacity load and the trolley weight, applied one-half at the top of each rail and acting in either direction normal to the runway rail.

b. Longitudinal load (due to crane travel) shall be twenty percent of the maximum total reaction (not including impact) on the rail being considered, applied at the top of the rail and acting parallel to the runway.

**(f) Monorail beams and supports. -**

(1) Vertical loads shall be the sum of the capacity load and trolley weight. To allow for impact, the lifted load shall be increased ten percent for hand-operated and twenty-five percent electrically-operated trolleys.

(2) Longitudinal loads shall be twenty percent of the sum of the capacity load and the weight of the trolley.

(3) Lateral loads shall be twenty percent of the sum of the capacity load and the weight of the trolley.

(4) Centrifugal forces shall be considered for curved tracks.

**(g) Loads on supports for elevators, dumbwaiters, and escalators.** - The provisions of subchapter eighteen of this chapter shall apply.

**(h) Loads on machinery supports. -**

Unless machinery is isolated from the support framing, the reactions of reciprocating or heavy power-driven units shall be increased at least fifty percent and reactions of light shaft - or motor-driven [*sic*] units shall be increased at least twenty-five percent to provide for impact.

**(i) Assembly structures. -**

Seating areas in grandstands, stadiums, and similar assembly structures shall be designed to resist the simultaneous application of a horizontal swaying load of at least twenty-four plf of seats applied in a direction parallel to the row of the seats, and of at least ten plf of

seats in a direction perpendicular to the row of the seats. When this load is used in combination with wind for outdoor structures, the wind load shall be one-half of the design wind load, and the provisions of subchapter ten of this chapter relating to infrequent stress conditions shall apply to this loading condition.

**(j) Heliports and helistops. -**

(1) CONCENTRATED LOADS. -

a. Landing area. - Helicopter landing areas shall be designed for either of the following vertical loads acting at any location:

1. A single concentrated load equal to three quarters of the gross weight of the helicopter and acting on an area of one square foot.

2. Concentrated loads representing the gross wheel reactions of the helicopter acting simultaneously and increased one-third for impact.

b. Taxiing area. - Helicopter taxiing areas shall be designed for concentrated loads in accordance with clause two of this subparagraph.

(2) UNIFORM LIVE LOAD. -

The landing and taxiing areas shall be capable of supporting a uniformly distributed live load of forty psf acting nonconcurrently with the concentrated loads.

**§[C26-902.8] 27-563 Partial loading conditions. -**

**(a) Uniformly distributed loads. -**

In continuous framing and cantilever construction, the design shall consider live load on all spans and arrangements of partial live load that will produce maximum stresses in the supporting members. The simplifications given in paragraphs one through three of this subdivision are permissible.

(1) FLOOR AND ROOF FRAMING. -

a. For vertical live load applied to the level under consideration, the far ends of the columns above and below that level may be assured\* as fixed.

b. Combinations of live load may be limited to the following:

1. Live load placed on two adjacent spans.

2. Live load placed on alternate spans. The effects of live load on spans more than two spans away from the span under consideration may be neglected.

(2) ARCHES AND GABLED FRAMES. -

a. Live load placed on 1/2 span adjacent to one support.

b. Live load placed on the center 1/4 span.

c. Live load placed on 3/8 the span adjacent to each support.

(3) COLUMNS. - Moments due to vertical loads may be calculated from the live load on the largest single adjacent span of the floor under consideration. This moment shall be assumed to act concurrently with live load on all other floors.

**(b) Moving concentrated loads. -**

Structural members supporting moving concentrated loads shall be designed for only those loads that can physically occur simultaneously and are arranged to produce maximum stresses.

*\*As enacted but "assumed" probably intended.*

**§[C26-902.9] 27-564 Floor loads to be posted. -**

**(a) Posting required. -**

Posting requirements shall conform to the requirements of section 27-225 of article twenty-three of subchapter one of this chapter.

**(b) Data required. -** The following floor load data shall be shown:

(1) The uniformly distributed design live load for each floor or part thereof.

(2) The weight of any piece of machinery or equipment weighing more than one thousand pounds, and its identifying description and location.

(3) The maximum design wheel load and total maximum weight of any vehicle that may be brought into the building.

(4) The equivalent uniform partition loads or, in lieu of this, a statement to the effect that the design was predicated on actual partition loads.

**ARTICLE 4 LIVE LOAD REDUCTION**

**§[C26-903.1] 27-565 Roof loads. -**

No reduction shall be permitted.

**§[C26-903.2] 27-566 Floor live loads. -**

The uniform live load to be used for design shall be the basic value established in reference standard RS 9-2 multiplied by the percentages given in subdivisions (a) through (d) of this section.

(a) Except as provided in subdivisions (b), (c), and (d) the percentages in table 9-1 shall apply. Contributory areas shall be computed in accordance with section 27-567 of this article.

(b) No live load reduction shall be permitted for the following: members and connections (other than columns, piers, and walls) supporting floor areas used for storage (including warehouses, library stacks, and record storage); areas used for parking of vehicles; and areas used as place of assembly, for manufacturing, and for retail or wholesale sales. For columns, piers, and walls supporting such floor areas the maximum live load reduction shall be twenty percent.

(c) No live load reduction shall be permitted for calculating shear stresses at the heads of columns [sic] in flat slab or flat plate construction.

(d) In lieu of the percentages given in table 9-1, the live load reductions for columns, piers and walls may be taken as fifteen percent of the live load on the top floor, increased successively at the rate of five percent on each successive lower floor, with a maximum reduction of fifty percent; and for girders supporting two hundred square feet or more of floor area, the live load reduction may be taken at fifteen percent. The limitations of subdivisions (b), (c) and (d) of this section shall apply.

**TABLE 9-1 PERCENTAGE OF LIVE LOAD\***

Contributory Area (sq. ft.) [sic]	Ratio of Live Load to Dead Load*		
	0.625 or less	1	2 or more
149 or less.....	100	100	100
150-299.....	80	85	85
300-449.....	60	70	75
450-599.....	50	60	70
600 or more.....	40	55	65

**Note for Table 9-1:**

\*For intermediate values of live load/dead load, the applicable percentages of live load may be interpolated.

**§[C26-903.3] 27-567 Contributory floor areas. -**

For purposes of computing live load reduction, contributory floor areas shall be determined as follows:

(a) For the design of one-way and two-way slabs: the product of the shorter span length and a width equal to one-half the shorter span length. Ribbed slabs shall be considered as though the slabs were solid.

(b) For the design of slabs in flat plate or flat slab construction: one-half the area of the panel.

(c) For the design of columns and girders or trusses framing into columns: the loaded area directly supported by the column, girder, or truss. For columns supporting more than one floor, the loaded area shall be the cumulative total area of all of the floors that are supported.

(d) For the design of joists and similar multiple members framing into girders or trusses, or minor framing around openings: twice the loaded area directly supported but not more than the area of the panel in which the framing occurs.

**§[C26-903.4] 27-568 Foundations and column supports.-**

The live load to be supported by the foundation or by trusses or girders that support columns shall be the total column reaction reduced as provided in section 27-566 and section 27-567 of this article.

**ARTICLE 5**

**\*WIND LOADS AND EARTHQUAKE LOADS**

**\*§[C26-904.0] 27-569 Wind loads and earthquake loads.-**

**(a) Wind loads.-**

The structural frame and exterior components of all buildings, tanks, and other exposed constructions shall be designed to resist the pressures due to wind as prescribed in reference standard RS 9-5. Wind shall be assumed to act from any direction. For continuous framing, the effects of partial loading conditions shall be considered.

**(b) Earthquake loads.**

Every building, structure and portion thereof shall, at a minimum, be designed and constructed to resist the effects of seismic ground motions as prescribed in reference standard RS 9-6.

\*Local Law 17-1995.

## ARTICLE 6 OTHER LOADS

§[C26-905.1] 27-570 **Earth pressures and foundation loads.** - The provisions of article three of subchapter eleven of this chapter shall apply.

§[C26-905.2] 27-571 **Bins and bunkers-**

Loads on component parts of bins and bunkers may be reduced for friction on sidewalls, provided that sidewalls and supports are proportioned for the increased vertical loads. Where stresses would be increased in any component by arching of the fill, the effect of such arching shall be considered.

§[C26-905.3] 27-572 **Prestressing forces.** -

Prestressing forces shall be considered in the design of prestressed concrete structures, cable structures, guyed structures, and multiple intersecting truss webs utilizing tension members.

§[C26-905.4] 27-573 **Construction loads.** -

The provisions of subchapter nineteen of this chapter shall apply.

§[C26-905.5] 27-574 **Fluid pressures.** -

The design of building components shall consider pressures, both positive and negative, of confined fluids and gases.

§[C26-905.6] 27-575 **Ice.** -

The weight of a one-half inch radial thickness of ice on all surfaces shall be considered as part of the live load in the design of open framed or guyed towers.

§[C26-905.7] 27-576 **Thermal forces.** -

The design of enclosed buildings more than two hundred fifty feet in plan dimension shall provide for the forces and/or movements resulting from an assumed expansion corresponding to a change in temperature of forty degrees F. For exterior exposed frames, arches, or shells regardless of plan dimensions, the design shall provide for the forces and/or movements resulting from an assumed expansion and contraction corresponding to an increase or decrease in temperature of forty degrees F for concrete or masonry construction and sixty degrees F for metal construction. For determining required anchorage for piping, the forces shall be determined on the basis of temperature variations for the specific service conditions. Friction forces in expansion bearings shall be considered.

§[C26-905.8] 27-577 **Shrinkage.** -

The design of reinforced concrete components shall provide for the forces and/or movements resulting from shrinkage of the concrete in the amount of 0.0002 times the length between contraction joints for standard weight concrete, and 0.0003 times the length between contraction joints for lightweight concrete. The design of arches and similar structures shall provide for effects of shrinkage, plus rib-shortening, plus plastic flow.

## ARTICLE 7 DISTRIBUTION OF LOADS

§[C26-906.1] 27-578 **Distribution of vertical loads.-**

Distribution of vertical loads to supporting members shall be determined on the basis of a recognized method of elastic analysis or system of coefficients of approximation. Elastic or inelastic displacements of supports shall be considered and, for the distribution of dead loads, the modulus of elasticity of concrete or composition sections shall be reduced to consider plastic flow. Secondary effects, due to warping of the floors shall be considered.

§[C26-906.2] 27-579 **Distribution of horizontal loads.** -

The following provisions shall apply to superstructure framing only, and shall not apply to structures wherein horizontal loads are transmitted to the foundation by stay-cables, arches, non-rectangular frames, or by frames, trusses, or shear walls not oriented in vertical planes.

**(a) Distribution of horizontal loads to vertical frames, trusses and shear walls.** -

Horizontal loads on the superstructure shall be assumed to be distributed to vertical frames, trusses, and shear walls by floor and roof systems acting as horizontal diaphragms. The proportion of the total horizontal load to be resisted by any given vertical frame, truss, or shear wall shall be determined on the basis of relative rigidity, considering the eccentricity of the applied load with respect to the center of resistance of the frames, trusses, or shear walls. For vertical trusses, web deformations shall be considered in evaluating the rigidity.

**(b) Distribution of horizontal loads within rigid frames of tier buildings.** -

(1) ASSUMPTIONS. - The distribution of horizontal loads within rigid frames of tier buildings may be determined on the basis of a recognized method of elastic analysis or, subject to limitations in paragraph two of this subdivision, may be predicated on one or more of the following simplifying assumptions:

a. Points of inflection in beams or columns are at their midspan and midheight, respectively. The story shear is distributed to the columns in proportion to their stiffnesses.

b. The change in length of columns due to axial effects of the horizontal loads may be neglected.

c. Vertical column loads due to horizontal forces are taken by the exterior columns only, or are resisted by the columns in proportion to the column distances from the neutral axis of the bent.

(2) LIMITATIONS. -

a. For buildings over three hundred feet in height, the change in length of the columns, due to the effects of the horizontal loads, shall be evaluated or the framing proportioned to produce regular movements of the successive joints at each floor so that warping of the floor system may be neglected.

b. Simplifying assumptions used in design shall be subject to approval by the commissioner for any of the following conditions or circumstances:

1. For buildings over three hundred feet in height or for buildings with a height-width ratio greater than five.
2. At two-story entrances or intermediate floors.
3. Where offsets in the building occur.
4. Where transfer columns occur.
5. In any similar circumstances of irregularities or discontinuities in the framing.

**(c) Distribution of load in self-relieving construction.-** the framing of self-relieving construction may be proportioned on the assumption that connections are fully rigid in resisting moments due to lateral load and that any larger moments due to the gravity loads or due to a combination of gravity and lateral loads will be relieved by deformation of the connection material, provided that:

(1) The fasteners shall be capable of developing the full moment capacity of the connection at the allowable unit stress established in subchapter ten of this chapter.

(2) The connection shall be capable of resisting the moment due to lateral load, and the shear due to lateral load plus vertical load, all at the allowable unit stresses established in subchapter ten of this chapter.

(3) The framing and the building are within the limitations established in subparagraph (b) of paragraph two of subdivision (b) of this section.

(4) The connections shall be detailed to permit the required deformations without fracture, and their capacity to so function shall be verified by test or other means.

**(d) Structural walls and partitions. -**

Walls and partitions, if specifically designed to resist the applied forces, may be considered as contributing to the resistance or rigidity of the structure with regard to horizontal loads.

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**SUBCHAPTER 10  
STRUCTURAL WORK**

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### ARTICLE 1 SCOPE AND GENERAL REQUIREMENTS

**§[C26-1000.1] 27-580 Scope.** -The provisions of this subchapter, supplemented by the additional requirements of subchapter eleven of this chapter, shall establish minimum requirements for materials, designs, and construction to be used for all structural elements in buildings. In addition, within special flood hazard areas and below the regulatory flood datum, as described in article ten of subchapter four of this chapter, materials, designs and construction required for structural elements by reference standard RS 4-5 shall be applicable.

**§[C26-1000.2] 27-581 Standards.** -The provisions of reference standard RS-10 shall be a part of this subchapter.

**§[C26-1000.3] 27-582 Definitions.** -For definitions to be used in the interpretation of this subchapter, see subchapter two of this chapter.

**§[C26-1000.4] 27-583 Plans.** -For the requirements governing the filing of plans and the work to be shown on the plans, see subchapter one of this chapter.

**§[C26-1000.5] 27-584 Permits.** - For the requirements governing equipment work permits and equipment use permits, see subchapter one of this chapter.

#### **§[C26-1000.6] 27-585 General requirements.** -

For purposes of this code, the structural elements of a building shall normally include all floor, roof, and wall framing members and slabs (but not including slabs-on-grade); all piers, walls, footings, piles, and similar elements of the foundation; and all other elements of both foundation and superstructure which, in engineering practice, are proportioned on the basis of calculated stress. Where doubt exists as to the structural nature of an element, the provisions of this subchapter, and of subchapter eleven of this chapter, shall be deemed to apply only to an element in which the materials are stressed in excess of thirty-three and one-third percent of the allowable stress values (without increase for infrequent stress conditions) for such material in its proposed use, or to an element wherein public safety would be involved in the event of excessive distortion under the applied loads.

#### **§[C26-1000.7] 27-586 Materials and methods of construction.** -

Materials and methods of construction used in the manufacture and/or placement of structural elements in a building shall be subject to the requirements of article seven of subchapter one of this chapter, the inspection provisions established in tables 10-1 and 10-2 and the detailed requirements of articles four through twelve of this subchapter and article thirteen of subchapter eleven of this chapter.

#### **§[C26-1000.8] 27-587 Fire protection requirements to apply.**-Where a material or method of construction in a specific use is required to provide fire protection as well as structural adequacy, the material or method of construction shall meet both specified requirements.

#### **§[C26-1000.9] 27-588 Use of used and unidentified materials.**-

The utilization of used materials and unidentified or ungraded materials shall be limited to non-structural elements, except:

(a) Such materials (or elements) may be reused, or continued in use, at stress levels to which the materials or elements were subjected in the previous construction, or at load capacity as demonstrated by load test procedures as described in subdivision (a) of section 27-599 of article three of this subchapter.

(b) Unidentified materials may be graded by the recovery and test of representative samples, or by other means satisfactory to the commissioner.

(c) Used materials shall be considered to be graded where the grade is clearly indicated on the approved plans for the existing construction and may be used at the allowable stress levels for that grade of like material as established in the building code in force at the time the plans for the existing construction were approved.

**§[C26-1000.10] 27-589 Equivalent systems of design.**

Nothing in this subchapter shall be construed to prohibit the use of any system of design, alternate to those indicated, provided that it can be demonstrated to the satisfaction of the commissioner that such system of design will provide a factor of safety against structural failure consistent with the requirements of articles four through twelve of this subchapter, fire safety in consonance with the requirements of subchapters three through eight of this chapter, and such other characteristics pertinent to the safety of life, health, and property as prescribed in this subchapter or as may be required by the commissioner.

(a) Alternate or equivalent materials or methods of construction shall be subject to the provisions of section 27-133 of article seven of subchapter one of this chapter.

**§[C26-1000.11] 27-590 Deferred detailing.** -

Where structural elements are normally detailed on shop or working drawings, the application for the permit shall so state, and issuance of the permit shall be conditioned upon

future submission of such shop or working drawings showing the approval of an architect or engineer with regard to such elements, or of a signed statement by an architect or engineer to the effect that such drawings were prepared to his or her satisfaction. In cases where the detailing of structural elements has been made on the basis of fire-resistance ratings, load tables, or similar data as given in manufacturer's catalogues, the application for approval of the plans shall so state and issuance of such acceptance shall be conditional upon submission of a statement by the manufacturer, or of other supporting documentary evidence of accreditation furnished by the manufacturer, attesting to the accuracy of the data and stating that such data were derived in conformance with the provisions of this code. Where the detailing of structural elements has been made on the basis of data published in technical documents of recognized authority issued by, or accredited by the agency or association promulgating the applicable reference standard cited in this code, such statements will not be required.

**TABLE 10-1 INSPECTION OF MATERIALS AND ASSEMBLIES**

Materials	Elements That Shall be Subject to Controlled Inspection <sup>a,b,d</sup>	Elements That Are Not Subject to Controlled Inspection <sup>a,c,d</sup>
Steel	None	All structural elements and connections.
Concrete	Materials for all structural elements proportioned on the basis of calculated stresses seventy per cent or greater, of basic allowable values. See article five for specific requirements relating to "quality control of materials and batching."	(1) All materials for structural elements proportioned on the basis of calculated stresses less than seventy percent of basic allowable values. (2) Concrete materials for: (a) Short span floor and roof construction proportioned as per section 27-610. (b) Walls and footings for buildings in occupancy group J-3. (3) Metal reinforcement.
Aluminum	None	All structural elements and connections.
Wood	None	All structural elements and connections.
Reinforced gypsum concrete	None	All structural elements.
Masonry	None	All structural elements.
Other	Requirements as may be established in other subchapters of this code or by the commissioner.	

**Notes for Table 10-1:**

<sup>a</sup> For general provisions relating to inspection see section 27-132.

<sup>b</sup> All structural materials and assemblies subject to controlled inspection shall be tested and/or inspected at their place of manufacture and evidence of compliance with the provisions of this subchapter shall be provided as stipulated in articles four through twelve.

<sup>c</sup> Mill, manufacturer's and supplier's inspection and test reports will be accepted as evidence of compliance with the provisions of this code for all structural materials and assemblies not subject to controlled inspection.

<sup>d</sup> Basic allowable stress values as referenced herein shall denote allowable stress value without increase for infrequent stress conditions as established in this code or in the applicable reference standard for the material or element in its proposed use.

## GENERAL REQUIREMENTS

§[C26-1001.1] 27-591 **Stability.** -Except as provided in article twelve of subchapter eleven of this chapter with regard to foundation elements, a building, or any element thereof shall be proportioned to provide a minimum factor of safety of 1.50 against failure by sliding or overturning. The required stability shall be provided solely by the dead load plus any permanent anchorages, which may be provided.

§[C26-1001.2] 27-592 **Bracing.** -Unless otherwise specified in the reference standards, members used to brace compression members shall be proportioned to resist an axial load of at least two percent of the total compressive design stress in the member braced, plus any transverse shear therein.

§[C26-1001.3] 27-593 **Secondary stresses.** - Secondary stresses in trusses shall be considered and where of significant magnitude, their effects shall be provided for in the design.

\*\*§[C26-1001.4] 27-594 **Combination of loads.** - Dead loads, live loads (including impact) and reduced live loads, where applicable, shall be considered as basic loads. Wind, earthquake, thermal forces, shrinkage, and unreduced live loads (where live load reduction is permitted by subchapter nine of this chapter) shall be considered as loads of infrequent occurrence. Members shall have adequate capacity to resist all applicable combinations of the loads listed in subchapter nine of this chapter, in accordance with the following:

\*\**Local Law 17-1995.*

(a) Where design is based on allowable working stresses, the loads as described in subchapter nine of this chapter shall be multiplied by the following factors and the design shall be based on the resulting load values:

(1) For combinations of basic loads, only, the factor shall be 1.0, except that for the design of temporary structures (defined as a structure, which will be in place six months or less) the factor shall be 0.75.

(2) For any combination of one or more basic loads with any one load of infrequent occurrence, the factor shall be 0.75, except that for the design of temporary structures the factor shall be 0.67.

(3) For any combination of one or more basic loads with two or more loads of infrequent occurrence, the factor shall be 0.67.

Exception.—The provisions of reference standards RS 10-8 and RS 10-9 relating to increases of allowable unit stresses for short-time loading shall apply.

(b) Where design is based on ultimate strength criteria (including plastic design of steel structures and proportioning of suspended structures), the loads, as described in subchapter nine of this chapter shall be multiplied by the factors indicated in subdivision (e) of

section 27-639 of article eleven of this subchapter and in the applicable reference standards. The design shall be based on the resulting load values.

Exceptions.—1. Where combinations of load for which factors are given in the reference standard include the load of wind (or earthquake) the design additionally shall consider combinations of load wherein each other of the loads of frequent\* occurrence as listed in this paragraph are substituted for the load of wind.

2. The design also shall consider combinations of load wherein two most critical of the loads of infrequent occurrence are combined with the basic loads. For such combination, however, the factors indicated in the reference standards and in subdivision (e) of section 27-639 of article eleven of this subchapter for suspended structures, for the combination of basic loads plus one load of infrequent occurrence may be reduced fifteen percent.

\**As enacted but "infrequent" probably intended.*

§[C26-1001.5] 27-595 **Deflection limitations.** -

The applicable provisions of the several reference standards cited in this subchapter shall apply. In addition, the total of the dead plus live load vertical deflections (including effects of creep and shrinkage) of members, supporting walls, veneered walls, or partitions constructed of or containing panels of masonry, glass, or other frangible materials shall not exceed 1/360 of the span.

## ARTICLE 3 ADEQUACY OF THE STRUCTURAL DESIGN

§[C26-1002.1] 27-596 **General.** - The structural design of a member or assembly shall be deemed to be adequate if the design computations demonstrate conformance with the applicable standards noted in articles four through twelve of this subchapter. Where, because of practical difficulties, such computations cannot be executed, the structural design may be deemed adequate if the member or assembly is subjected to, and satisfactorily performs under, load tests in accordance with the provisions of subdivision (a) of section 27-599 of this article. Where there is a question as to the adequacy of a completed or partly completed construction, the provisions of section 27-597, 27-598 and subdivision (b) of section 27-599 of this article shall apply.

§[C26-1002.2] 27-597 **Questionable construction.** -

If, upon inspection, it is found that a construction or any part thereof, as built, shows open cracks, spallings, or other signs of distress; or should inspection records show more\*\* significant deficiency of construction; or should laboratory tests on concrete or other materials that have been incorporated into the work indicate deficiency of strength; or should there be a reasonable doubt as to the strength, stability, or adequacy of the construction or any part thereof, such construction may

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be checked to verify the adequacy thereof either by computation, or by core or load tests conducted in accordance with the provisions of section 27-598 or subdivision (b) of section 27-599 of this article or by any combination of these means. Should the adequacy of construction not be verified within a reasonable time, such construction shall be rejected and shall be

demolished or reinforced or rebuilt to be made safe in conformance with the requirements of this code. In the event of a disagreement, the final decision as to the acceptance of the work shall be made by the commissioner. All such tests shall be made without expense to the city.

*\*\*As enacted but "some" probably intended.*

TABLE 10-2 INSPECTION OF METHODS OF CONSTRUCTION

Materials	Operations on Structural Elements That Shall be Subject to Controlled Inspection <sup>a,b,d</sup>	Operations on Structural Elements That Are Not Subject to Controlled Inspection <sup>a,c,d</sup>
Steel	(1) Welding operations and the tensioning of high strength bolts in connections where the calculated stresses in the welds or bolts are fifty percent or more of basic allowable values. (2) Connection of fittings to wire cables for suspended structures, except where cables together with their attached fittings are proof-loaded to not less than fifty-five percent of ultimate capacity.	(1) Welding operations and the tensioning of high strength bolts in connections where the calculated stresses in the welds or bolts are less than fifty percent of basic allowable values. (2) All other fabrication and erection operations not designated for controlled inspection.
Concrete	Except for those operations specifically designated in this table are*** not subject to controlled inspection, for all concrete, the operations described in subdivision (a) of section 27-607 shall be subject to controlled inspection.	(1) All operations relating to the construction of members and assemblies (other than prestressed members) which involve the placement of a total of less than fifty cubic yards of concrete and wherein said concrete is used at levels of calculated stress seventy percent or less of basic allowable values. (2) Placing and curing of concrete for all: (a) Short span floor and roof construction as per section 27-610. (b) Walls and footings for buildings in occupancy group J-3. (3) Size and location of reinforcement for walls and footings for buildings in occupancy group J-3. (4) All other operations not described in subdivision (a) of section 27-607.
Aluminum	Welding operations in connections where the calculated stresses in the welds are fifty percent or more of the basic allowable values.	(1) Welding operations in connections where the calculated stresses in the welds are less than fifty percent of basic allowable values. (2) All other fabrication and erection operations not designated for controlled inspection.
Wood	Fabrication of glued - laminated assemblies and of plywood components.	All other operations not designated for controlled inspection.
Reinforced Gypsum Concrete	None	All operations incident to the fabrication and placement of structural elements.
**Reinforced Masonry	(1) Fabrication of prefabricated units. (2) Placement and bedding of units, sizes of members, including thickness of walls and wythes; sizes of columns; the size and position of reinforcement, in place, and provisions for curing and protection against freezing for all reinforced masonry construction unless such operations are specifically not designated for controlled inspection.	**(1) All masonry work for buildings in occupancy group J-3. **(2) All mixing of mortar. **(3) All other operations not designated for controlled inspection.
**Un-Reinforced Masonry	Placement and bedding of units and sizes of members including thickness of walls and wythes; sizes of columns; and provisions for curing and protection against freezing for all masonry construction proportioned on the basis of structural analysis as described in section four of reference standard RS 10-1A*, unless such operations are specifically not designated for controlled inspection.	**(1) All masonry work for buildings in occupancy group J-3. **(2) All mixing of mortar. **(3) All other operations not designated for controlled inspection.
Piling	See provisions of subchapter eleven.	

Other	Requirments as may be established in other subchapters on this code.
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**Notes for Table 10-2:**

- <sup>a</sup> For general provisions relating to inspection see section 27-132.
  - <sup>b</sup> All construction operations designated for controlled inspection shall be inspected by the architect or engineer designated for controlled inspection during the performance of such operation.
  - <sup>c</sup> Certification by the fabricator or erector, as applicable, will be accepted as evidence of compliance with the provisions of this code for all construction operations not subject to controlled inspection.
  - <sup>d</sup> Basic allowable stress values as referenced herein shall denote allowable stress value without increase for infrequent stress conditions as established in this code or in the applicable reference standard for the material or element in its proposed use.
- \* *“A” not enacted but probably intended*  
 \*\* *Local Law 17-1995.*  
 \*\*\* *“are”emacted “is” probably intended.*

**§[C26-1002.3] 27-598 Core tests of concrete construction.-**

The adequacy of the concrete in a building may be ascertained by the recovery and testing of cores. Cores shall be taken and tested in accordance with the procedure described in reference standard RS 10-16. In lieu thereof, cores cast-in-place and originally cured with the parent concrete, or other device acceptable to the architect or engineer designated for controlled inspection and which will produce test specimens simulating the condition of the concrete in place including the size and proportions specified for core specimens may be utilized to demonstrate the adequacy of the concrete in place. The compressive strength so determined shall meet the requirements for strength tests as described in reference standard RS 10-3.

**§[C26-1002.4] 27-599 Load tests. -**

**(a) Prequalifying load tests.-** The provisions of this section shall apply only to load tests made for the purpose of establishing the structural adequacy of members or assemblies before such members or assemblies are incorporated into the work. Load tests for the purpose of establishing the strength of an element or assembly, in place, after construction, shall conform to the requirements of subdivision (b) of this section.

(1) TEST SPECIMENS. -The test specimens shall be a true representation of the units or assemblies to be used in the work and, unless sufficient tests are conducted on differing specimens to interpolate the performance of members of varying characteristics, test specimens shall be substantially identical with the units or assemblies to be used in service. Particular attention shall be given to matching the type and grade of material and, in the case of concrete, the mix, age, curing, and other pertinent variables.

(2) SUPPORT CONDITIONS AND INTERACTION.- Load tests shall be performed in such a manner that the supports for the members or assemblies being tested will simulate the conditions of support in the building, except that conditions of partial fixity may be approximated by condition of full or zero restraint, whichever produces a more severe stress condition in the member being tested. The test conditions shall be such as to obviate all interaction of fills, finishes, partitions, supports, or members whose interaction normally would be neglected in design. Where continuous, multiple, intersecting, or

connected members are used in the test, all interacting members shall be simultaneously and fully loaded and additional tests shall be performed under the partial loading conditions specified in subchapter nine of this chapter. Test specimens shall not be unloaded and reloaded or subjected to cyclical loading, except as specifically required by the provisions of this code and except that the adding of increments of additional load to a member already under load and the application of the test load as described in subparagraph (b) of paragraph three of this subdivision following removal of the test load described in subparagraph (a) of paragraph three of this subdivision will be permitted.

(3) STRENGTH REQUIREMENTS. -The member or assembly, supported as described in paragraph two of this subdivision, shall be capable of supporting:

- a. Without visible damage (other than hairline cracks) its own weight plus a test load equal to one hundred fifty percent of the design live load plus one hundred fifty percent of any dead load that will be added at the site; and
- b. Without collapse, its own weight plus a test load equal to fifty percent of its own weight plus two hundred fifty percent of the design live load plus two hundred fifty percent of any dead load that will be added at the site. The latter loading shall remain in place for a minimum period of one week. All loading conditions described in subchapter nine of this chapter shall be considered. The design live load shall be the nominal value reduced for contributory area as described in subchapter nine. Except as permitted under paragraph five of this subdivision, units to be tested shall be full size. Load bearing wall and partition assemblies shall be tested both with and without window and door framing where such framing will be included in the final assemblies.

Exception: If the load tests are conducted and the results promulgated in a manner that will permit clear differentiation between the dead and live load components added at the site, then the capacity of the member or assembly without visible damage other than hairline cracks as determined under load test condition in subparagraph a of paragraph three of this subdivision, may be reduced to the weight of the member, plus any dead load that will be added at the site, plus one hundred fifty percent of the design live load; and the capacity of the member or assembly to resist collapse as determined under load test condition in subparagraph b

of paragraph three of this subdivision may be reduced to one hundred fifty percent of the weight of the member, plus one hundred fifty percent of any dead load that will be added at the site, plus two hundred fifty percent of the design live load.

(4) DEFLECTION REQUIREMENT. -With the member or assembly supported as described in paragraph two of this subdivision, and after loading as required by the provisions of subparagraph a of paragraph three of this subdivision and the removal of said load, the percentage of recovery of the deflection caused by the superimposed load shall be at least seventy-five percent. The deflection under the design live load shall not exceed that permitted in this subchapter.

(5) MODEL TESTS. -Tests on models less than full size may be used to determine the relative intensity, direction, and distribution of stresses and applied loads, but shall not be considered as a proper method for evaluating stresses in, nor the strength of, individual members unless approved by the commissioner for this purpose. Where model analysis is proposed as a means of establishing the structural design, the following conditions shall be met:

a. Analysis shall be made by a firm or a corporation satisfactory to the commissioner.

b. The similitude, scaling, and validity of the analysis shall be attested to by an officer or principal of the firm or corporation making the analysis.

c. A report on the analysis shall be submitted showing test set-ups, equipment, and readings.

**(b) Load tests of completed construction.**- The provisions of this subdivision shall apply to any type of construction where the appropriate reference standard does not provide for load test of completed construction and the construction is questionable. When the appropriate reference standard provides for such load testing, the provisions of reference standard shall be used.

(1) STRENGTH. -The construction shall be loaded in two stages:

(a) With all dead load to which it will be subjected in service plus a superimposed load equal to the design live load reduced as described in subchapter nine of this chapter; and

(b) With a total load, including its own weight, equal to one hundred fifty percent of the total dead load to be supported in service plus one hundred eighty percent of the design live load, reduced for contributory area as described in subchapter nine of this chapter, which load shall remain in place for a minimum period of twenty-four hours.

(2) DEFLECTION REQUIREMENT. -Under the first stage loading, the deflection shall not exceed that permitted in the applicable reference standard. The residual deflection after removal of the second stage loading shall not exceed twenty-five percent of the calculated elastic deflection under the superimposed test load. The structure, after recovery of the deflection shall not show any evidence of serious distress.

(3) INTERACTION.- The load area shall extend to include the loading of all framing and elements that

contribute to the strength of the element or elements under test, by way of interaction.

(4) LATERAL LOADS.- Where the elements in question must resist lateral loads in service, such loads shall be simulated in the tests. In such case, the magnitude of the applied live load and lateral load components of the test load may be adjusted as described in section 27-594 of article two of this subchapter, provided that the stress condition under the load increments described in paragraph one of this subdivision is not more critical.

(5) RELOADING. -Unloading and reloading or cyclical loading of test areas will not be permitted, except for the addition of increments of additional load to a member already under load.

[(6) LIMITATION ON USE OF LOAD TESTS OF CONCRETE STRUCTURES. -Where the strength tests of the concrete (as defined in reference standard RS 10-3) that initiate the requirement for load tests show strengths less than 2/3 of the strength required by the design of the specific element, the use of load tests to show the adequacy of the structure will not be permitted.]\*

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

#### ARTICLE 4 MASONRY

§[C26-1003.1] 27-600 General requirements. -

**(a) Unreinforced masonry.** - Materials, design, and construction of unreinforced masonry shall meet the requirements of reference standard RS 10-1.

**(b) Reinforced masonry.** - Materials, design, and construction of reinforced masonry shall meet the requirements of reference standard RS 10-2.

§[C26-1003.2] 27-601 Identification. -

**(a) Masonry units.** -Masonry units shall be clearly identified to show the grade of the unit and the compressive strength where called for on the plans.

**(b) Metal reinforcement.**- Reinforcing bars shall be rolled so as to identify the grade of steel and the size. Bundles and rolls of cold-drawn steel wire or welded wire fabric shall be tagged so as to identify the type and grade of steel and the size.

§[C26-1003.3] 27-602 Inspection. -The inspection of masonry and masonry construction shall conform to the requirements of tables 10-1 and 10-2.

#### ARTICLE 5 CONCRETE

\*§[C26-1004.1] 27-603 General requirements. -

Concrete materials, design, construction, quality, inspection and testing shall meet the requirements of reference standard RS 10-3. Precast concrete construction utilizing a thin skin or slab stiffened or supported by a system of ribs shall conform to the requirements of reference standard RS 10-4.

*\*Local Law 65-1990.*

§[C26-1004.2] 27-604 Identification of metal-reinforcement.- Reinforcing bars shall be rolled so as to



identify type and grade of steel, and size. Bundles and rolls of wire, strands, or welded wire fabric shall be tagged so as to identify the type and grade of steel and the size.

**\*§[C26-1004.3] 27-605 Mixes.**- Concrete may be proportioned, batched, and mixed by any of the following methods:

*\*Local Law 65-1990.*

**(a) Method I. -Mixes with Minimum Cement Content. -**

(1) **MINIMUM CEMENT CONTENT.** -The cement content used in the work shall not be less than the content given in table 10-3 for the corresponding strength of concrete.

(2) **WATER-CEMENT OR STRENGTH-CEMENT RATIO.**-Normal weight concrete proportioned on the basis of preliminary tests shall be produced by using a water-cement ratio corresponding to a point on a strength-cement or water-cement ratio curve. Proportioning of lightweight and heavyweight concrete, and concrete using an aggregate other than natural sand, gravel or stone shall be by using a strength-cement content curve. The point on the respective curves shall represent a strength of concrete at the slump and age called for on the plans at least twenty-five percent higher than the specified strength,  $f_c$ . The cement content shall not be less than the content shown in table 10-3.

(3) **PRELIMINARY TESTS.** -Preliminary tests of concrete shall be made in advance of any concreting operation by a licensed concrete testing laboratory acceptable to the architect or engineer of record. Preliminary tests shall consist of compression strength tests of molded concrete cylinders made in accordance with reference standards RS 10-17 and RS 10-21. A curve representing the relation between the average strength of the concrete at twenty-eight days, or at any other specified age filed with the department, and the strength-cement ratio or the water-cement ratio shall be established for the range of strength values at the slump required for the work. The tests shall include at least four mixes with different strength-cement ratios or four mixes with different water-cement ratios and at least four cylinder specimens for each mix. The cylinder strength tests shall be supplemented by tests to confirm that the cement and aggregates conform to the provisions of reference standard RS 10-3.

(4) **PREVIOUSLY ACCEPTED MIXES.** -In lieu of the requirements of paragraph three of this subdivision, the architect or engineer designated for controlled inspection may permit the use of mix proportions of aggregates having the same specific gravity, size and gradation; cements of the same type and batch weight; admixtures of the same type and quantity; and other ingredients the same as or equal to those that have been previously submitted with applicable preliminary tests which complied with paragraphs one and two of this subdivision, and which have been accepted by the commissioner within the past year. If any of the mix proportions or ingredients are changed, a separate submission for acceptance shall be required.

(5) **QUALITY CONTROL AND INSPECTION OF MATERIALS AND OF BATCHING.** -Where concrete materials are used for structural elements defined in section 27-585 of article one of this subchapter, quality control and inspection shall be provided at the batch plant by a licensed concrete testing laboratory under the supervision of the architect or engineer designated for controlled inspection, in accordance with the requirements of table 10-1 and in sufficient scope to:

a. Determine and record the actual batched weights of the ingredients and the volume of water charged into the mixer;

b. Verify that such weights conform to the weights and proportions required by the preliminary test mix, adjusted for moisture content, fineness modulus and gradation of aggregates;

c. Verify conformance of the quality and condition of the materials to reference standard RS 10-3;

d. Verify that the aggregates have the same specific gravity, size and gradation; the cement is the same type and batch weight, the admixtures are the same type and quantity; and that any other ingredients are the same as or equal to those used for the preparation of the preliminary test mixes;

e. For all concrete, whether or not designated for controlled inspection, attestation of the results of quality control and inspection at the batch plant shall appear on a ticket accompanying each load of concrete. The attestation for subparagraphs a, b, c and d of this paragraph shall be executed by the licensed concrete testing laboratory.

f. The licensed concrete testing laboratory shall also attest that the slump entrained air content and unit weight of the fresh concrete, as discharged from the mixer at the job site, were tested in accordance with reference standards RS 10-49, RS 10-51, RS 10-52, RS 10-61, RS 10-62, RS 10-63 and RS 10-64, and that all were in compliance with the accepted mix design.

**(b) Method II. -Proportioning on the basis of field experience. -**

(1) **PROPORTIONING.** -For the computation of the standard deviation in accordance with reference standard RS 10-14, mixes with test data from previous projects, similarly proportioned in accordance with the provisions of subdivision (a) of this section, and having materials of similar density and admixtures and having a slump equal to or greater than that at which the concrete is to be placed shall be used. Such mixes may be accepted subject to the approval of the architect or engineer designated for controlled inspection.

(2) **STRENGTH.** -The required average strength,  $f'_c$  [sic], to be used as the basis for the selection of mix proportions, shall in no case be less than fifteen percent higher than the specified strength called for on the plans.

(3) **BATCHING.** -The concrete shall be produced either in the concrete production facility used to produce the concrete from which the tests were made to develop the field experience data referred to in paragraph one of this subdivision or, subject to the approval of the architect or engineer designated for controlled inspection, in any concrete production facility that has data showing a record of standard deviation equal to or less than that of the original facility.

All concrete proportioned according to field experience shall be produced in a plant with automatic recording equipment for all ingredients.

(4) **QUALITY CONTROL AND INSPECTION OF MATERIALS AND OF BATCHING.** - When the concrete is batched in a plant where automatic recording equipment documents the batched weights or volumes of cement, aggregates, admixtures and water, no inspection of the materials or of the batching, nor any attestation by a licensed concrete testing laboratory responsible to the architect or engineer designated for controlled inspection, shall be required. A concrete producer shall:

a. Verify that such weights conform to the required weights and proportions, and to the strength-cement ratio or water-cement ratio required by the proportioning established pursuant to paragraph one of this subdivision, adjusted for moisture content, fineness modules and gradation of aggregates.

b. Verify conformance of the quality and condition of the materials to reference standard RS 10-3.

c. Attest, on a ticket accompanying each load, to the specified strength of the concrete, the actual weights or volume of the ingredients, and the weight or volume of water charged into the mixer at the batch plant or to be added at the job site. A statement that subparagraph b of this paragraph has been complied with shall also be included.

d. If at any time the automatic recording equipment becomes inoperative, the concrete production facility may be permitted, but only with the approval of the architect or engineer designated for controlled inspection, to batch and mix concrete for a period not to exceed three consecutive working days. During such a period, the concrete production facility shall engage a concrete batch plant inspector from a licensed concrete testing laboratory to observe and record the actual weights of the cement, aggregates, admixtures and other ingredients, and the weight or volume of water charged into the mixers. If the automatic recording equipment is inoperative for a period longer than three consecutive working days the concrete production facility shall not batch or mix concrete and the architect or engineer designated for controlled inspection shall notify the commissioner in writing that such equipment is inoperative.

**\*TABLE 10-3 MINIMUM CEMENT CONTENT**

Specified Compressive Strength in 28 Days (f'c)-psi	Minimum Pounds of Cement Per Cubic Yard of Concrete (all aggregates)
3,000	540
3,500	610
4,000	660
5,000	800
Over 5,000	Permitted only by reference standard RS 10-3
6,000 and over	Permitted only by reference standard RS 10-3 "Special Requirements for High Strength Concrete."

**NOTE:** Minimum pounds of cement may be reduced up to 8 percent by the addition of an accepted admixture.

*\*Local Law 65-1990.*

**(c) Method III. -Average concrete. -**

(1) in lieu of making preliminary tests, average concrete limited to the concrete strengths shown in table 10-3A below may be used, and the cement content shall not be less than the value given in table 10-3A for the corresponding specified compressive strengths, nor shall the total volume of water (moisture plus added water) exceed that specified therein, provided that the total yardage placed does not exceed fifty cubic yards and the levels of calculated stress do not exceed seventy percent of the basic allowable stresses.

**\*TABLE 10-3A**

Specified compressive strength in twenty-eight days (f'c) pounds per square inch	Minimum pounds of cement per cubic yard of concrete	Maximum permissible total volume of water, U.S. gallons per cubic yard of concrete
2000	520	40
2500	560	41
3000	610	42

*\*Local Law 65-1990.*

(2) Each load of concrete shall be certified by the producer to the owner, whether produced at a ready mixed plant or site mixed, as to the total quantity of concrete, concrete strength and actual quantities per cubic yard of each material, including water, contained therein. A copy of such certificate shall be available to the department during the progress of the work and for two years thereafter.

**\*§[C26-1004.4] 27-606 Documentation.-** All mix proportions and supporting data shall be submitted for acceptance to the commissioner or to the architect or engineer designated for controlled inspection, as required, prior to the start of any work. All required attestations shall become a part of the documentation to be filed with the commissioner, and shall be subject to verification by strength tests, as hereinafter described, by check sampling of ingredients, or by such other inspections as the commissioner or the architect or engineer designated for controlled inspection may elect. Copies of all documentation filed with the commissioner, all the licensed concrete testing laboratory test data and required attestations, together with the tapes recording the batch weight where automatic recording equipment is used shall be available for inspection for a period of two years after the completion of the project. Such records shall be maintained by the architect or engineer designated for controlled inspection.

*\*Local Law 65-1990.*

**\*§[C26-1004.5] 27-607 Inspections.** - Inspection of concrete and concrete construction shall conform to the requirements of tables 10-1 and 10-2 and the provisions of this subchapter.

**(a) Controlled inspection.** - Controlled inspection of concrete construction shall include:

(1) **STRENGTH TESTS.** - Strength tests shall be performed on all structural concrete. The provisions of reference standard RS 10-3 shall apply. A licensed concrete testing laboratory shall, in compliance with reference standards RS 10-17, RS 10-51 and RS 10-52, sample the concrete, make and cure the test specimens at the job site, transport the specimens to the laboratory and test the specimens for compressive strength. Written reports of the results shall be furnished to the architect or engineer designated for controlled inspection and to the concrete producer immediately, but not more than five days following the conclusion of the compression strength tests. Test specimens shall be stored on the job site in an insulated curing box of sufficient size and strength to contain all the specimens made in any four consecutive working days and to protect the specimens from falling over, being jarred or otherwise disturbed during the period of initial curing. The box shall be erected, furnished and maintained by the concrete contractor. Such box shall be equipped to provide the moisture and to regulate the temperature necessary to maintain the proper curing conditions required by reference standard RS 10-52. Such box shall be located in an area free from vibration such as pile driving and traffic of all kinds. No concrete requiring inspection shall be delivered to the site until such storage curing box has been provided. Specimens shall remain undisturbed in the curing box until ready for delivery to the testing laboratory but not less than sixteen hours. Specimens delivered to the laboratory prior to an age of forty-eight hours shall not be demolded prior to delivery. All specimens shall be carefully removed from the box and transported to the laboratory by the licensed concrete testing laboratory in accordance with the provisions of reference standard RS 10-52. All specimens shall be delivered to the laboratory before the laboratory closes at the end of the second working day following the day the specimens were molded. The date of arrival at the laboratory shall be recorded on the specimen test reports. All concrete failing to meet the specified minimum strength requirements shall be rejected by the architect or engineer designated for controlled inspection pending verification of the adequacy of the construction as described in section 27-598 of article three of this subchapter.

(2) **ADDITIONAL TESTS.** -Each sample of fresh concrete made in accordance with reference standard RS 10-51 for the purpose of molding strength test specimens shall be made under the supervision of the architect or engineer designated for controlled inspection.

Each sample shall be tested by the licensed concrete testing laboratory to determine its slump in accordance with reference standard RS 10-49, its entrained air content in accordance with reference standards RS 10-61 and RS 10-62, its unit weight in accordance with reference standards RS 10-63 and RS 10-64 and its temperature. If any of the tests fail to meet the specified requirements, the concrete shall be sampled again and the particular test that failed shall be repeated. If the second test fails to meet the specified requirements, then, with the approval of the architect or engineer designated for controlled inspection, adjustments shall be made to the concrete in the mixer to correct the deficiency. Test specimens shall not be molded from any sample that did not meet the specified requirements nor shall the concrete from which the sample was taken be placed in the structure, provided, however, that such concrete may be used elsewhere in the work where it meets or exceeds the specified requirements, but only with the approval of the architect or engineer designated for controlled inspection. In such case, test specimens shall be molded by the licensed concrete testing laboratory, which shall also record the precise location where the concrete was placed in the structure.

(3) **CONTROLLED INSPECTION LOG BOOK.** - A controlled inspection log book, limited solely to the concrete construction work, readily available to inspectors and representatives of the department, concrete suppliers and the architect and/or engineer of record, shall be maintained at the job site by the architect or engineer designated for controlled inspection, who shall make therein daily entries pertaining to the progress of the work. The entries shall describe, but not be limited to, the location, size and dimensions of the concrete members for which forms were constructed that day; the reinforcement installed in, and the specific locations and time spans of, every concrete placement; the air temperature, wind velocity and direction and other weather conditions during the twenty-four hours after concrete has been placed, specifically at 8 a.m., noon and four p.m., the protections taken against excessive temperatures and adverse weather conditions at each placement made that day; the method used, to cure the concrete and the period during which such methods were maintained; the actual hour when forms were stripped and shores were reinstalled and tensioning was applied to all prestressed members. The log shall become a part of the documentation to be filed with the commissioner as provided in section 27-606 and shall include the attestation of the architect or engineer designated for controlled inspection that the concrete construction work complies with the approved plans and the provisions of this code.

**(b) Other required inspection.** -Quality control or inspection shall be provided with respect to all operations of mixing and placing concrete and reinforcement that are not designated for controlled inspection. In the case of sidewalks, curbs, paving, slabs-on-grade and any work

designated in table 10-1 under the caption "Elements That Are Not Subject To Controlled Inspection" or in table 10-2 under the caption "Operations on Structural Elements That Are Not Subject to Controlled Inspection," all inspections shall be subject to and in accordance with the requirements of subdivision (b) of section 27-132. If any test to determine the quality or compressive strength of the concrete is required, the fresh concrete shall be sampled and tested for slump, entrained air content, unit weight and temperature. Compression strength test specimens shall be molded only by a licensed concrete testing laboratory or by a person certified by the American Concrete Institute as qualified to perform such function. Attestation shall be executed by the person superintending the use of the material in accordance with the requirements of subdivision (b) of section 27-132 of article seven of subchapter one of this chapter.

*\*Local Law 65-1990.*

**\*§[C26-1004.6] 27-608 Admixtures.** -Admixtures may be used in the concrete only where included in the preliminary test mixes made in accordance with paragraph three of subdivision (a) of section 27-605 or mixes proportioned in accordance with the provisions of reference standard RS 10-3. In the case of mixes proportioned in accordance with subdivision (c) of section 27-605, there shall be no reduction of the cement content called for in table 10-3A because admixtures are used in the mix. Where admixtures are used, the provisions of reference standards RS 10-3 and RS 10-44 shall apply. In addition, no anti-freeze agents shall be used. Admixtures shall be added in measured quantities in conformance with the accepted mix design.

*\*Local Law 65-1990.*

**\*§[C26-1004.7] 27-609 Licensed concrete testing laboratories.**

All strength tests of concrete and testing of concrete materials required by the provisions of this section shall be performed by concrete testing laboratories licensed in accordance with the requirements of article nine of subchapter two of chapter one of title twenty-six of the administrative code and rules promulgated by the commissioner. The licensed concrete testing laboratory shall, among other things, analyze, evaluate and test concrete materials; determine whether the materials comply with specifications and pertinent referenced national standards in reference standard RS 10-3; select mix proportions for preliminary tests; recommend the mix proportions to be used on the project for which the tests were made; analyze data from previous projects and compute the standard deviation; and recommend the mix proportions to be used based on such field experience data. At the batch plant or at the job site, the licensed concrete testing laboratory shall, among other things, sample concrete and test for slump, entrained air content, unit weight and temperature, mold

compression test specimens; store and cure such specimens on the job site; remove, transport and deliver such specimens to the laboratory; demold, store, cure, cap and test such specimens at the laboratory and furnish written reports of the results of all tests of the materials and concrete to the architect or engineer designated for controlled inspection and to the concrete producer. When tests of the hardened concrete are required, they shall be made by the licensed concrete testing laboratory in accordance with reference standard RS 10-3 and the national standards for making tests for penetration resistance, rebound number, pullout strength and of drilled cores. The architect or engineer designated for controlled inspection is authorized either to dismiss or to employ a particular licensed concrete testing laboratory at any time during the progress of the work.

*\*Local Law 65-1990.*

**§[C26-1004.8] 27-610 Short-span concrete floor and roof construction supported on steel beams.**

-In lieu of analysis, the following empirical procedures may be used for the design of short-span concrete floor and roof slabs containing draped reinforcement and supported on steel beams. The empirical equations described in subdivisions (c) and (d) of this section shall apply only where the steel beams are placed, or are encased, in a manner that will provide section for the transfer of shear from slabs to beams equivalent to, or in excess of, the slab thickness required by said equations.

**(a) Concrete.** -The concrete shall have a minimum compressive strength at twenty-eight days of seven hundred psi.

**(b) Reinforcement.** -Reinforcement shall consist of steel fabric, rods, or other suitable shapes that shall be continuous or successively lapped to function as a continuous sheet. The main reinforcement shall be at least 0.15% of the gross cross section where continuous steel fabric is used and at least 0.25% of the gross cross section where other forms of steel reinforcement are used. All reinforcing shall be draped, with the center of the reinforcement at the center of the span one inch above the bottom of the slab and the center of reinforcement over the support one inch below the top of the slab.

**(c) Minimum slab thickness.** -The minimum total thickness of concrete floor and roof construction shall be determined by the following formula, but shall not be less than four inches:

$$t = \frac{L}{2} + \frac{w - 75}{200}$$

Where: t = total thickness (in.)

L = clear span between steel flanges (ft.)

W = gross uniform load (dead load plus reduced live load) (psf)

**(d) Allowable load.** -The allowable load shall be determined by the following formula:

$$w = \frac{3CAs}{L^2}$$

Where:  $w$  = gross uniform load (psf)

$A_s$  = cross sectional area of main reinforcement (sq. in. per ft. of slab width)

$L$  = clear span between steel flanges in feet. (L shall not exceed ten feet in any case, and when the gross floor load exceeds two hundred psi shall not exceed eight feet)

$C$  = the following coefficient for steel having an ultimate strength of at least fifty-five thousand psi;

1. For lightweight aggregate concrete:
    - a. twenty thousand when reinforcement is continuous.
    - b. fourteen thousand when reinforcement is hooked or attached to one or both supports.
  2. For stone concrete:
    - a. twenty-three thousand when reinforcement is continuous.
    - b. fifteen thousand when reinforcement is hooked or attached to one or both supports.
- (1) When the above formula is used the reinforcement shall be hooked or attached to one or both supports or be continuous.
- (2) If steel of an ultimate strength in excess of fifty-five thousand psi is used, the above coefficient may be increased in the ratio of the ultimate strength to fifty-five thousand but at most by thirty percent.

**(e) Openings in floors and roofs.** -Openings more than one foot six inches on a side shall be framed. All areas encompassing multiple openings aggregating more than one foot six inches in any ten foot width or span of floor or roof slab shall be framed.

**§[C26-1004.9] 27-611 Pneumatically placed concrete.**- Construction methods shall conform to the applicable provisions and recommendations of reference standard RS 10-15.

**\*§27-611.1 Conveying concrete by pumping methods.**- All classes and strengths of concrete may be conveyed by pumping methods. All materials and methods used shall conform to the rules promulgated by the commissioner for conveying concrete by pumping methods.  
*\*Local Law 65-1990.*

**\*§[C26-1004.10] 27-612 Formwork, slip form construction, lift method construction, precast and prestressed construction.**- The provisions of subchapter nineteen of this chapter shall apply.  
*\*Local Law 65-1990.*

**§[C26-1004.11] 27-613 Concrete utilizing preplaced aggregate.** -The use of concrete formed by the injection of grout into a mass of preplaced coarse aggregate will be permitted where it can be demonstrated by successful prototype installation that the proposed mix, materials, and method of placement will produce a concrete of the specified strength and free of areas or inclusions of uncemented aggregate.

**(a) Prototypes.** -At least two prototypes, from either previous work or samples prepared for the proposed project shall be prepared. The forms shall be stripped, and a minimum of six cores recovered and tested to demonstrate the strength of the concrete produced by the proposed materials and methods of installation. In addition, the homogeneity of the prototypes shall be demonstrated by demolishing the prototypes.

**(b) In-place concrete.** -The concrete, as finally placed in the work, shall be prepared using the same materials, mix, equipment, and procedures utilized to prepare the successful prototype installations.

**\*(c) Inspection.** -All preparation and placement of structural concrete utilizing preplaced aggregates shall be subject to controlled inspection. Compression test specimens shall be prepared and tested as required for premixed concrete, except that the specimens shall be prepared under conditions that will simulate the conditions under which the concrete in the work is installed.

*\*Local Law 65-1990.*

**\*§27-613.1 Precast and prestressed concrete.** - The provisions of reference standard RS 10-3 shall apply.  
*\*Local Law 65-1990.*

**\*§27-613.2 Thin-section precast concrete construction.**- The provisions of reference standard RS 10-4 shall apply.  
*\*Local Law 65-1990.*

## ARTICLE 6 STEEL

**§[C26-1005.1] 27-614 General requirements.** - Materials, design, and construction methods shall meet the requirements of the following reference standards:

**(a) Structural steel.** -Reference standard RS 10-5.

**(b) Light gage *[sic]* cold formed steel.** - Reference standard RS 10-6.

**(c) Open web steel joists.** -Reference standard RS 10-7.

**§[C26-1005.2] 27-615 Identification.** -Structural steel that is required to have a minimum yield point greater than thirty-six thousand psi shall at all times in the fabricator's plant, be marked, segregated, or otherwise handled so that the separate alloys and tempers are positively identified, and after completion of fabrication, shall be marked to identify the alloy and temper. Such markings shall be affixed to completed members and assemblies or to

boxed or bundled shipments of multiple units prior to shipment from the fabricator's plant. Open web steel joists shall have identification affixed to each bundle or lift showing size and type.

**§[C26-1005.3] 27-616 Quality control. -**

**(a) Reference.** -The provisions of tables 10-1 and 10-2 shall apply.

**(b) Welding operations. -**

(1) Welding work shall be performed only by persons who have obtained a license from the commissioner.

(2) Where manual welding work is not performed in the city of New York, welds shall be made by welders qualified under the provisions of appendix D, parts II and III, of the AWS code for welding in building construction. Qualification with any of the steels permitted by the AWS code shall be considered as qualification to weld any of the other steels permitted by the code.

(3) Tack welds, which are later incorporated into finished welds carrying calculated stress, shall not be considered as structural welds.

(4) The inspection of welding operations stipulated in table 10-2 shall include a check to ascertain that the welders employed on the work have the required license or who are qualified in accordance with paragraph two of this subdivision.

**ARTICLE 7 WOOD**

**§[C26-1006.1] 27-617 General Requirements. -**

Materials (other than non-stress grade lumber), design, and construction methods shall meet the requirements of the following reference standards:

**(a) Lumber and timber.** -Reference standard RS 10-8.

**(b) Plywood.** -Reference standard RS 10-9.

**(c) Structural glued-laminated lumber.** -Reference standard RS 10-18.

**§[C26-1006.2] 27-618 Identification.-**

Except as provided for in subdivisions (a) and (c) of this section, all wood used for structural elements shall be identified as to grade and shall bear an identifying mark of an approved bureau or agency performing the grading, or the official grade mark and trade mark of the bureau or association under whose rules the wood was graded, in accordance with the following:

**(a) Lumber and timber.** -All lumber and timber, including non-stress grade lumber, shall be identified by the grade mark of a lumber grading or inspection bureau or agency approved by the commissioner, except that pre-cut material and rough-sawn lumber may be covered by a certificate of inspection issued by a lumber grading or inspection agency approved by the commissioner in lieu of grade marking.

**(b) Plywood.** -Plywood used structurally shall bear identification as to grade, type, and species group, or

identification index. Such identification shall be affixed by and identified by the trademarks of a testing and grading agency approved by the commissioner.

**(c) Glued-laminated.**- Glued-laminated structural members shall bear identification and/or shall be accompanied by certification in accordance with the provisions of reference standard RS 10-18.

**(d) Resawn lumber.** -Resawn (or reused) lumber shall be marked in accordance with its regraded status.

**§[C26-1006.3] 27-619 Use of non-stress grade wood.-**

The use of non-stress grade wood in structural elements shall be limited to the following conditions:

(a) Studs, joists, and rafters proportioned on the basis of the empirical provisions of section 27-622 of this article.

(b) The architect or engineer responsible for the design may assign an allowable stress value for the proposed material based on the provisions of reference standard RS 10-8 relating to "other species and grade." Under such condition, the required species and grade of wood, together with the assigned stress value, shall be conspicuously indicated on the plans.

**§[C26-1006.4] 27-620 Quality control. -**

Inspection of the fabrication of glued-laminated assemblies, as stipulated in table 10-2, shall include a check of sizes of members, of fit, and of gluing operations.

**§[C26-1006.5] 27-621 General construction requirements.-**

The provisions of this section shall be considered as supplemental to the provisions of the applicable reference standards.

**(a) Firecutting.** -The ends of wood beams, joists, and rafters resting on masonry or concrete walls shall be firecut to a bevel of three inches in their depth.

**(b) Protection of members. -**

(1) Positive drainage shall be provided for all areas under the building not occupied by basements or cellars.

(2) All loose wood and debris and all wood forms shall be removed from spaces under the building. All stumps and roots shall be grubbed to a minimum depth of twelve inches.

(3) Wood members embedded in the ground and used for the support of buildings shall be treated.

(4) Wood joists or wood structural floors closer than eighteen inches, wood girders closer than twelve inches, or sills closer than eight inches to an exposed ground surface within or without the building shall be treated or shall be of an equivalent resistant species.

(5) Sleepers, sills, columns, and posts supported on concrete or masonry piers shall be treated or shall be of an equivalent resistant species unless isolated from the ground as specified in paragraph four of this subdivision or by a concrete slab. Where the isolation consists of a concrete slab-on-grade, the sleepers, sills,

columns, or posts shall be raised at least three inches above the top of such slab.

(6) Ends of wood girders entering masonry or concrete walls shall be provided with a minimum one-half inch air space on top, sides, and at the end, unless the girder is treated or is of an equivalent resistant species.

(7) Wood or plywood used as siding or a combination of siding and sheathing shall be isolated from exposed ground by at least six inches.

(8) Crawl spaces shall be ventilated as required in subchapter twelve of this chapter.

(9) Where treated timber is required, the preservative treatment shall comply with reference standards RS 10-20 and RS 10-22. Treatment of wood poles shall comply with reference standard RS 10-28. All treated wood shall be handled in accordance with the provisions of reference standard RS 10-29.

**§[C26-1006.6] 27-622 Empirical provisions in lieu of design.** -The provisions of this section may be used in lieu of structural analysis only for those buildings in occupancy group J-3 where the specific occupancies correspond to a live load requirement of forty psf, or less, and to constructions wherein the supporting framing consists of multiple, closely spaced members, such as joists, studs, platform or balloon frames. All wood structural members in other classes of construction shall be proportioned on the basis of the analysis of stresses. All requirements established in this section may be reduced when an analysis of stresses, executed in accordance with reference standard RS 10-8, indicates such reduction is feasible. Sizes of wood members stated in this section are nominal sizes.

**(a) Stud walls and partitions. -**

(1) Studs shall be of equivalent or better grade than the minimum grades for the various species as established in reference standard RS 10-13.

(2) Corner posts shall be 3-stud members or members of equivalent strength.

(3) Load bearing studs shall be set with the larger cross section dimension perpendicular to the wall or partition. Studs in exterior walls of one story buildings of construction class II-D and II-E shall be at least two inches by three inches spaced not more than sixteen inches on center, or where studs are two inches by four inches, spaced not more than twenty-four inches on center. Studs for other classes of construction shall be at least two inches by four inches spaced not more than sixteen inches on center.

(4) Stud walls resting on concrete or masonry shall have sills at least two inches in nominal thickness. Where such sills bear on concrete, they shall be fastened with minimum one-half inch bolts embedded at least six inches. Each sill piece shall have at least two anchor bolts, with one bolt located at least one inch from each end of the plate, and with intermediate spacing not more than eight feet. Where such sills bear on masonry,

they shall be anchored in accordance with the applicable provisions of reference standard RS 10-1.

(5) Stud partitions that rest directly over each other and are not parallel to floor joists or beams may extend down between the joists and rest on the top plate of the partition, partition girder, or foundation below, or may be constructed on sill plates running on top of the beams or joists.

(6) All load bearing stud partitions shall be supported on walls, other partitions, double joists or beams, solid bridging, or on beams at least as wide as the studs. Joists supporting a partition parallel to the joists wherein the joists are spaced apart to permit the passage of piping or duct work shall be provided with solid blocking at intervals of not more than sixteen inches.

(7) Load bearing partitions perpendicular to joists shall not be offset from supporting girders, walls, or partitions by more than the depth of the joists unless the joists are proportioned on the basis of analysis of stress.

(8) In interior walls and in bearing partitions, double studs shall be provided at the sides of openings that are greater than three feet six inches up to six feet in width, and triple-studs shall be provided at the sides of openings of greater width.

(9) Headers shall be provided over each opening in exterior walls and bearing partitions. Where the opening does not exceed three feet, each end of the header shall be supported on a stud or framing anchor. Where the opening exceeds three feet in width each end of the header shall be supported on one stud and where the opening exceeds six feet each end shall be supported on two studs.

(10) All studs in exterior walls and in bearing partitions shall be capped with double top plates installed to provide overlapping at corners and at intersections with other walls and bearing partitions. End joists in double top plates shall be offset at least twenty-four inches. In lieu of double top plates, a continuous header of similar dimensions may be used. For platform frame construction, studs shall rest on a single bottom plate.

**(b) Bracing of exterior walls.** -Exterior stud walls shall be braced by one inch by four inch continuous diagonal strips let into the face of the studs and into the top and bottom plates at each corner of the building. Bracing may also be provided by one of the following means:

(1) Wood board sheathing of one inch nominal thickness, applied diagonally.

(2) For one and two-story dwellings, plywood sheathing at least four feet by eight feet (except where cut to fit around openings and for similar purposes) and at least five-sixteenths of an inch thick on studs spaced sixteen inches or less on centers and at least three-eighths of an inch thick on studs spaced more than

sixteen inches but not exceeding twenty-four inches on centers.

(3) For one story dwellings and for the upper story of two story dwellings, fiberboard sheathing applied vertically in panels at least four feet by eight feet (except where cut to fit around openings and for similar purposes). Fiberboard sheathing shall be at least one-half inch thick and shall conform to the provisions of reference standard RS 10-27.

(4) For one story dwellings and for the upper story of two story dwellings, gypsum board sheathing applied horizontally in panels at least two feet by eight feet (except where cut to fit around openings and for similar purposes). Gypsum boards shall be at least one-half inch thick and shall conform to the provisions of reference standard RS 10-19.

**(c) Floor and roof framing. -**

(1) SPAN TABLES. -Joists and rafters may be used in accordance with reference standard RS 10-13.

(2) BRIDGING. -In all floor and roof and roof framing, there shall be at least one line of bridging for each eight feet of span. The bridging shall consist of at least one inch by three inch lumber or equivalent metal bracing. A line of bridging or solid blocking shall also be required at supports unless lateral support is provided by nailing to a beam, header, or to the studs. Midspan bridging is not required for floor or roof framing in one- and two-family dwellings where joist depth does not exceed twelve inches. Bridging shall bear securely against and be anchored to the members to be braced.

(3) NOTCHES. -Notches in the ends of joists and rafters shall not exceed one-fourth the depth unless adequate reinforcement is provided or analysis of stresses indicates that larger openings are feasible without the necessity for reinforcement. Notches in joists or rafters, located in the span shall not exceed one-sixth the depth and shall not be located in the middle third of the span. Bored holes shall not be within two inches of the top or bottom of the joists or rafter and the diameter of any such hole shall not exceed one-third the depth. For stair stringers, the minimum effective depth of the wood at any notch shall be three and one-half inches unless the stringer is continuously supported on a wall or partition.

(4) SUPPORT. -

a. Floor or roof framing may be supported on stud partitions.

b. Tail beams over twelve feet long and all header and trimmer beams over six feet long shall be hung in metal stirrups having anchors, or by other methods providing adequate support. Trimmers and headers shall be doubled where the header is four feet or more in length.

c. Except where supported on a one inch by four inch ribbon strip and nailed to the adjoining stud, the ends of floor joists shall have at least one and one-half inches of bearing on wood or metal, nor less than four inches on masonry.

d. Joists framing from opposite sides of and supported on a beam, girder, or partition shall be lapped at least four inches and fastened, butted end-to-end and tied by metal straps or dogs, or otherwise tied together in a manner providing adequate support.

e. Joists framing into the side of a wood girder shall be supported by framing anchors, on ledger strips at least two inches by two inches, or by equivalent methods.

f. Wood joists and rafters bearing on masonry walls shall be anchored to such walls in accordance with the applicable provisions of reference standard RS 10-1.

(5) RAFTERS AND CEILING JOISTS. -

a. Where rafters meet to form a ridge, they shall be placed directly opposite each other and nailed to a ridge board at least one inch thick, and not less than the cut end of the rafters in depth.

b. Provisions shall be made to resist the thrust from inclined rafters by connection of collar beams at least one inch by six inches, by connection to joists, or by equivalent means.

c. Where ceiling joists are not parallel to rafters, subflooring or metal straps attached to the ends of the rafters shall be installed in a manner to provide a continuous tie across the building.

d. Ceiling joists shall be continuous, or where they meet over interior partitions, shall be securely joined to provide a continuous tie across the building.

e. Valley rafters shall be double members. Hip rafters may be single members. Valley and hip rafters shall be two inches deeper than jack rafters.

f. Trussed rafters shall be designed in accordance with the provisions of reference standard RS 10-8.

(6) Built-up members shall be securely spiked or bolted together and provision shall be made to resist the horizontal shear between laminations.

**(d) Nailing schedule. -**The size and number of nails for connections shall be in accordance with table 10-4.

**§[C26-1006.7] 27-623 Heavy timber construction (construction class II-A). -**

**(a) Minimum sizes of members. -**To conform to the fire resistance rating requirements for heavy timber construction (construction class II-A), members shall be solid sawn or solid glue-laminated and of the following minimum dimensions: (Sizes of wood members indicated in this section are nominal sizes).

(1) COLUMNS, FRAMES AND ARCHES. -

a. Columns shall be at least eight inches in all dimensions when supporting floor loads, and at least six inches wide and eight inches deep when supporting roof and ceiling loads only.

b. Beams and girders shall be at least six inches wide and ten inches deep.

c. Frames or arches that spring from grade or the floor line and support floor loads shall be at least eight inches in all dimensions.



d. Timber trusses supporting floor loads shall have members at least eight inches in all dimensions.

e. Frames or arches for roof construction that spring from grade or the floor line and do not support floor loads shall have members at least six inches wide and eight inches deep for the lower half of the height, and at least six inches deep for the upper half.

f. Frames or arches for roof construction that spring from the top of walls or wall abutments, framed timber trusses, and other roof framing, which do not support floor loads, shall have members at least four inches

wide and six inches deep. Spaced members may be composed of two or more pieces at least three inches thick when blocked solidly through their intervening spaces or when such spaces are tightly closed by a continuous wood cover plate at least two inches thick secured to the underside of the members. Splice plates shall be at least three inches thick. When protected by approved automatic sprinklers under the roof deck, framing members shall be at least three inches wide.

TABLE 10-4 NAILING SCHEDULE

Building Element	Nail Type	Number and Distribution
Stud to sole plate	Common-toe-nail	4—8d
Stud to cap plate	Common-end-nail	2—16d
Double Studs	Common-direct	10d 12 in. o.c. or 16d 30in. in o.c.
Corner Studs	Common-direct	16d 30 in. o.c.
Sole plate to joist or blocking	Common	16d 16 in. o.c
Double cap plate	Common-direct	16d 24 in. o.c
Cap plate laps	Common-direct	3—16d
Ribbon strip, 6 in. or less	Common-direct	2—10d each bearing
Ribbon strip, over 6 in.	Common-direct	3—10d each bearing
Roof rafter to plate	Common-toe-nail	3—16d
Roof rafter to ridge	Common-toe-nail	2—16d
Jack rafter to hip	Common-toe-nail	3—10d
Floor joists to studs (no ceiling joists)	Common-direct	5—10d or 3—16d
Floor joists to studs (with ceiling joists)	Common-direct	2—10d
Floor joists to sill or girder	Common-toe-nail	2—16d
Double-joist to joist	Common-direct	10d—staggered at 16 in.
Ledger strip	Common-direct	3—16d at each joist
Ceiling joists to plate	Common-toe-nail	2—16d
Ceiling joists to every rafter	Common-direct	(see table following)
Ceiling joists (laps over partitions)	Common-direct	3—16d
Collar beam	Common-direct	4—10d
Bridging to joists and rafters	Common-direct	2—8d each end
Bridging to studs	Common-direct or toe	2—10d each end
Diagonal brace (to stud and plate)	Common-direct	2—8d each bearing
Tail beams to headers (when nailing permitted)	Common-end	1—20d each 4 sq. ft. floor area
Header beams to trimmers (when nailing permitted)	Common-end	1—20d each 8 sq. ft. floor area
1 in. Subflooring (6 in. or less in width)	Common-direct	2—8d each joist
1 in. Subflooring (over 6 in. in width)	Common-direct	3—8d each joist
2 in. Subflooring	Common-direct	2—20d each joist
1 in. Wall Sheathing (8 in. or less in width)	Common-direct	2—8d each stud
1 in. Wall sheathing (over 8 in. in width)	Common-direct	2—8d each stud
Plywood sheathing and subflooring <sup>a</sup>	Common-direct	
1 in. Roof sheathing (6 in. or less in width)		2—8d each rafter
1 in. Roof sheathing (over 6 in. in width)	Corrosion -direct	3—8d each rafter
Shingles, wood	Corrosion-resistive	2—No.15 B&S each bearing
Weather boarding	Common-resistive	2—8d each bearing
1/2 in. Fiberboard sheathing	1 1/2 in. galvanized roofing nail 6d common nail 16 ga. galvanized staples, 1 1/8 in. long, 7/16 in. crown	} 3 in c.c. on all edges and 6 in. c.c. at other bearings
25/32 in. Fiberboard sheathing	1 3/4 in. galvanized roofing nail 8d common nail 16 ga. galvanized staples, 1 1/2 in. long, 7/16 [in.] * crown	
1/2 in. Gypsumboard sheathing	1 1/2 in. galvanized roofing nail 11 ga. 3/8 in. to 7/16 in. head 16 ga. galvanized staples, 1 1/2 in. long, 7/16 [in.] * crown	

Notes for Table 10-4:

<sup>a</sup>For nailing of plywood, see reference standard RS 10-9.

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

**CEILING JOIST NAILING TO EVERY RAFTER**

Slope of Roof	(Number of 16d nails)											
	4/12		5/12		6/12		7/12		9/12		12/12	
Rafter Spacing, o.c. (in.)	16	24	16	24	16	24	16	24	16	24	16	24
Width of building —												
Up to 24 ft.....	5	8	4	7	3	5	3	4	3	3	3	3
24 to 30 ft.....	7	11	6	9	4	7	3	6	3	4	3	3

**(2) FLOORS. -**

a. Planks shall be splined or tongue-and-groove, not less than three inches thick, covered with one inch tongue-and-groove flooring, laid crosswise or diagonally to the plank, or other surface having equivalent fire resistance; or shall be,

b. At least four inches wide, set on edge close together and well spiked, and covered the same as for three inch thick plank. The planks shall be laid so that there is no continuous line of end joints except at points of support. Floors shall not extend closer than one-half inch to walls to provide an expansion joint, but the joint shall be covered at top or bottom to avoid flue action.

**(3) ROOF DECKS. -**Roof decks shall be splined or tongue-and-groove planks at least two inches thick; or tongue-and-groove plywood panels (bonded with exterior glue) at least one and one-eighth inch thick, with face grain perpendicular to supports that shall be spaced not more than forty-eight inches on center; or of planks at least three inches wide set on edge close together and laid as required for floors.

**(b) Construction details. -**Self releasing type wall plate boxes or approved hangers shall be provided where beams and girders enter masonry.

**§[C26-1006.8] 27-624 Construction methods. -**

**(a) Fabrication. -**All timber shall be accurately cut and framed to a close fit in such a manner that the joints will have even bearing over the contact surfaces. Mortises shall be true to size for their full depth and tenons shall fit snugly. No shimming in joints, or open joints, shall be permitted.

**(b) Erection. -**

(1) **ASSEMBLY. -**Joints shall have a tight fit. Fasteners shall be installed in a manner that will not damage the wood. End compression joints shall be brought to full bearing. All framework shall be carried up true and plumb.

(2) **TEMPORARY CONNECTIONS. -**As erection progresses, the work shall be bolted, or nailed as necessary, to resist all dead load, wind, and erection stresses.

(3) **ALIGNMENT. -**The structure shall be properly aligned before final tightening of the connections.

**ARTICLE 8 ALUMINUM**

**§[C26-1007.1] 27-625 General requirements. -**

Materials, design, and construction methods shall meet the requirements of reference standards RS 10-10 and RS 10-11.

**§[C26-1007.2] 27-626 Identification. -**Aluminum for structural elements shall at all times in the fabricator's plant, be marked, segregated, or otherwise handled so that the separate alloys and tempers are positively identified, and after completion of fabrication shall be marked to identify the alloy and temper. Such markings shall be affixed to completed members and assemblies or to boxed or bundled shipments of multiple units prior to shipment from the fabricator's plant.

**§[C26-1007.3] 27-627 Quality control. -**

**(a) Reference. -**The provisions of tables 10-1 and 10-2 shall apply.

**(b) Welding operations. -**

(1) Welding work shall be performed only by persons who have obtained a license from the commissioner.

(2) Where manual welding work is not performed in the city of New York, welds shall be made by welders qualified under the applicable provisions of reference standard RS 10-25.

(3) Tack welds that are not later incorporated into finished welds carrying calculated stress shall not be considered as structural welds.

(4) The inspection of welding operations stipulated in table 10-2 shall include a check to ascertain that the welders employed on the work have the required license or are qualified in accordance with paragraph two of this subdivision.

**§[C26-1007.4] 27-628 Erection. -**

**(a) Bracing. -**All framework shall be carried up true and plumb. Temporary bracing shall be provided to support all loads imposed upon the framework during construction that are in excess of those for which the framework was designed.

**(b) Temporary connections. -**As erection progresses, the work shall be securely bolted, or welded, to resist all dead loads, wind, and erection stresses.

**(c) Alignment. -**The structure shall be properly aligned before riveting, permanent bolting, or welding is performed.

**ARTICLE 9 REINFORCED GYPSUM CONCRETE**

**§[C26-1008.1] 27-629 General requirements. -**

Materials, design, and construction methods shall meet the requirements of reference standard RS 10-12.

**§[C26-1008.2] 27-630 Identification of metal reinforcement. -**

Bundles or rolls of welded wire fabric shall be securely tagged so as to identify the type and grade of steel, and the size.

**§[C26-1008.3] 27-631 Limitations of use. -**  
Reinforced gypsum concrete shall not be used where exposed directly to the weather or where subject to frequent or continuous wetting. Precast units shall be protected by coverings or coatings from the weather and from contact with moisture during shipment and during storage at the work site.

**ARTICLE 10 THIN SHELL AND FOLDED-PLATE CONSTRUCTION**

**§[C26-1009.1] 27-632 General requirements. -**Thin shell and folded-plate construction may be used for buildings or portions of buildings, as required in this section and subject to the provisions of this subchapter. The applicable provisions of the several reference standards relating to allowable stresses and the use of structural materials shall apply except as modified in this section.

**§[C26-1009.2] 27-633 Analysis. -**  
(1) Unless otherwise permitted by the commissioner, stresses, displacements, and stability of thin shell and folded-plate structures shall be determined on the basis of the assumption of elastic behavior. The shell or plate may be assumed to be homogeneous and isotropic.  
(2) The analysis for stability shall consider large deflections, creep effects and the deviation between the actual and theoretical shell surface.

**§[C26-1009.3] 27-634 Thin concrete shells. -**  
The provisions of section 403, 404 and 405 of reference standard RS 10-45 shall apply with the following modifications. The remaining sections of reference standard RS 10-45 shall not apply.  
(1) The advisory provisions of this standard shall be considered as mandatory.  
(2) The minimum ultimate strength of concrete for thin shells shall be three thousand psi.  
(3) Change all references to "the building code (ACI 318-63)" to "reference standard RS 10-4."

**ARTICLE 11 SUSPENDED STRUCTURES**

**§[C26-1010.1] 27-635 General requirements. -**

The materials, design, and construction of suspended structures shall meet the applicable requirements of the code and the requirements of this article.

**§[C26-1010.2] 27-636 Suspenders. -**  
**(a) Bridge Wire Cable. -**Bridge wire cables used for suspenders shall be either bridge strand or bridge rope fabricated from galvanized bridge wire.

(1) WIRE. -Wire shall be produced from rods rolled from high carbon steel, the composition of which shall be controlled to provide internal soundness, uniformity of chemical composition and physical properties, freedom from injurious surface imperfections, and shall meet the following requirements.

a. The minimum ultimate tensile strength of zinc-coated wire shall be as follows:

- Class A coating .....two hundred twenty thousand psi
- Class B coating .....two hundred ten thousand psi
- Class C coating .....two hundred thousand psi

b. Yield strength shall be one hundred fifty thousand psi minimum for zinc-coated wire with class A or Class B coating, one hundred forty thousand psi minimum for zinc-coated wire with class C coating, based on the cross-sectional area of the coated wire when loaded to 0.7% elongation in a ten inch gage length. In determining the yield strength, an initial stress equivalent to forty-two thousand psi, based on cross-sectional area of the coated wire, shall be applied to the wire sample. At this loading, the entensometer shall be attached and an initial dial reading set at the equivalent of 0.15% elongation.

c. Elongation shall be four percent minimum in a ten inch gage length, determined as the permanent increase in length after failure of a marked section of the wire originally ten inches [*sic*] in length except that a value of two percent will be permitted for wires 0.110 in. or less in diameter having a class A zinc coating.

d. The zinc-coated wire must withstand wrapping at a rate not exceeding fifteen turns per minute twice around a mandrel equal to three times the wire diameter without fracture of the steel.

e. The wire used in bridge strand or bridge rope shall be zinc-coated (galvanized) in accordance with the requirements of table 10-5. Weight of coating shall be determined in accordance with the provisions of reference standard RS 10-24.

**TABLE 10-5-MINIMUM WEIGHTS OF COATING-BRIDGE WIRE, ZINC-COATED, FOR BRIDGE STRAND AND BRIDGE ROPE CONSTRUCTIONS**

Diameter of coated Wire (in.)	Minimum Weight of Coating (Ounces per Sq. Ft. of Uncoated Wire Surface)		
	Class A	Class B	Class C
0.041 to 0.061 incl.....	0.40	0.80	1.20
Over 0.061 to 0.079 incl.....	0.50	1.00	1.50
Over 0.079 to 0.092 incl.....	0.60	1.20	1.80
Over 0.092 to 0.103	0.70	1.40	2.10

incl.....			
Over 0.103 to 0.119	0.80	1.60	2.40
incl.....			
Over 0.119 to 0.142	0.85	1.70	2.55
incl.....			
Over 0.142 to 0.187	0.90	1.80	2.70
incl.....			
Over 0.187.....	1.00	2.00	3.00

(2) BRIDGE STRAND. -Bridge strands shall be made from wires complying with subparagraphs a through e of paragraph one of this subdivision, and shall meet the following requirements:

- a. The wires shall be made in such lengths that the strands can be manufactured with no splices in the outside wires. Splicing of inner wires during the stranding operation is permissible. When joints are necessary in any wires, they shall be electrically butt welded and shall be recoated in a workmanlike manner. Joints in the wires of strand shall be made and dispersed in a manner that will maintain the minimum specified breaking strength of the strand.
- b. The minimum breaking strength shall be based on tests to destruction and shall be certified by the manufacturer.
- c. Bridge strand shall be prestretched to produce a stable modulus of elasticity of at least the following values for strand wires having class A coating:  
 one-half inch to two and  
 nine-sixteenths inches dia.....twenty-four million psi  
 two and five-eighths inches and larger..twenty-three million psi

For bridge strands that have classes B and C zinc-coating on the outside wires, the modulus of elasticity shall not be more than one million psi less than the corresponding values for bridge strand with a class A coating. The pre-stretching load shall not exceed fifty-five percent of the breaking strength of the strand.

(3) BRIDGE ROPE. -Bridge rope shall be made from wires complying with subparagraphs a through e of paragraph one of this subdivision, and shall meet the following requirements:

- a. Joints are permissible in inner and outer wires and shall be electrically butt welded and shall be recoated in a workmanlike manner. Joints in the wires of strand shall be made and dispersed in a manner that will maintain the minimum specified breaking strength of the rope.
- b. The minimum breaking strength shall be based on tests to destruction and shall be certified by the manufacturer.
- c. Bridge rope shall be prestretched to produce a stable modulus of elasticity of at least twenty million psi for rope wires having a class A coating. For bridge rope that has class B and C zinc-coatings on the outside wires, the modulus of elasticity shall not be more than one million psi less than the corresponding value for bridge rope with a class A coating. The prestretching

load shall not exceed fifty-five percent of the breaking strength of the rope.

(b) **Other materials.** -Any structural material permitted for use under the provisions of other sections of this subchapter may be used for support of a suspended structure including, but not limited to, types of steel permitted for use under the provisions of reference standard RS 10-5; reinforcing steel and wire, prestressing wire and strand, and high strength alloy steel bars conforming to the requirements of reference standard RS 10-3; and steel conforming to the requirements of reference standards RS 10-66 and RS 10-69. Prestressing wire and strand may be used for suspenders without the application of prestressing force. All such suspenders shall be protected as described in section 27-642 of this article.

§[C26-1010.3] 27-637 **Tests of materials for bridge wire suspenders.** -The following minimum quantities of bridge wire for suspenders shall be tested:

- (1) Tensile strength tests of the wires shall be made of a specimen cut from each coil of zinc coated wire.
- (2) Tests for elongation and for yield strength shall be made on samples from approximately ten percent of the coils of any one size finished wire. If any of these tests fail to meet the specified requirements, all the coils in that lot of finished wire shall be tested and only coils that satisfactorily pass the test shall be used.
- (3) Tests of the zinc coating shall be made of approximately five percent of the coils of any one size of finished wire. If any of these tests fail to meet the specified requirements, all the coils in that lot of finished wire shall be tested and only coils that satisfactorily pass the test shall be used.

§[C26-1010.4] 27-638 **Tests of materials for other types of suspenders.**- The applicable provisions of reference standards RS 10-3 and RS 10-5 shall apply.

§[C26-1010.5] 27-639 **Design.**- The following design requirements shall supplement the applicable provisions of this subchapter.

- (a) **Flexibility.**- Suspenders, unless encased, may be considered as perfectly flexible.
- (b) **Elastic stretch.**- The elastic stretch of the suspenders shall be considered.

**(c) Displacement.**- Displacement resulting from changes in magnitude and position of load and its effects [*sic*] on stress shall be considered.

**(d) Other considerations.**- Consideration shall be given to the effects of temperature variations, partial and reversible wind loadings, and vibration.

**(e) Allowable working load.**-The allowable working load in suspenders formed from bridge wire cable shall be computed on the basis of factors equal to one and one-half times dead load plus two and one-half times live load or one and two-tenths times dead load plus two times live load plus two times wind load, applied to the specified, minimum, ultimate strength of the suspender. The allowable working load in suspenders conforming to the materials specifications or\* several reference standards of this code shall be the allowable working stresses for tension members as prescribed in the applicable reference standard or, for those materials where allowable stresses for tension members are not prescribed, on factors of one and one-half times dead load plus two times live load or one and two-tenths times dead load plus one and one-half times live load, plus one and one-half times wind load, also applied to the specified minimum, ultimate strength of the suspender. In no case, however, shall the factor, applied to the yield strength of the material or to the prestretching or prestressing force, exceed one and one-tenth times dead load plus one and one-quarter times live load.

*\*As enacted but "of" probably intended.*

**§[C26-1010.6] 27-640 Fittings for wire cable suspenders.**- Fittings for wire cable suspenders shall be capable of developing the specified minimum ultimate strength of the attached cable or strand without developing stresses in the fitting equal to, or in excess of, the yield strength of the material in the fitting. One end fitting, of each type and size to be used, shall be tested to insure the adequacy of the fitting to develop the ultimate strength of the cable or strand to which it is to be attached.

**§[C26-1010.7] 27-641 Construction.** -

**(a) General.** -The general provisions of reference standard RS 10-5 relating to erection of steel shall apply.

**(b) Fitting for wire cable suspenders.** -

- (1) Only fittings designed for use with the specific wire cable shall be used.
- (2) All fittings shall be galvanized in accordance with reference standard RS 10-23.
- (3) Zinc used for attaching all speltered fittings shall be at least equal to the grade designated as "high grade" in reference standard RS 10-26.

**§[C26-1010.8] 27-642 Protection of suspenders.** -

**(a) Protected locations.** -All wires in bridge strands, bridge ropes, or other wire rope or strand suspenders placed on the interior of structures or concealed from exposure by interior finish shall have at least a class A

coating of zinc. Rods, bars, plates, or shapes used for suspenders shall be given a protective coating as specified for the protection of like material in the applicable reference standard.

**(b) Exposed locations.** -The outside wires of bridge strand or bridge rope suspenders placed in locations exposed to the weather shall have at least a class B coating of zinc and the inside wires shall have at least a class A coating. Rods, bars, plates, or shapes used for suspenders shall be given a protective coating as specified for the protection of like material in the applicable reference standard.

## ARTICLE 12 GLASS PANELS

**§[C26-1011.1] 27-643 Scope.**- The provisions of sections 27-644 through 27-648 of this article shall apply to the use of glass in the exterior wall of a building and shall be limited to exterior application wherein the glass would not be subjected to any loads normal to the face of glass other than those due to wind. For applications involving human impact, the provisions of section 27-651 of this article shall apply. For other cases, the strength and mode of installation of glass shall conform to accepted industry standards.

**§[C26-1011.2] 27-644 Support for glass panels.** -

Glass shall be firmly held in place. The supports shall be of adequate strength to resist the applicable design wind loads as prescribed in subchapter nine of this chapter.

**§[C26-1011.3] 27-645 Glass requirements.**- Glass shall meet the requirements of reference standard RS 10-68 for the applicable type, size, thickness and quality.

**§[C26-1011.4] 27-646 Thickness of glass.** -

Thicknesses of glass panels shall be chosen either on the basis of statistical probability of breakage (subdivision (a) of this section) or on the basis of table 10-7, at the designer's option.

**(a) Statistical probability.** -Thickness of glass panels shall be chosen so that the statistical probability of breakage when the glass is initially subjected to the design wind load specified in table RS 9-5-1 does not exceed the values indicated in table 10-6. Probability or load factors used for design shall be derived by test. The sufficiency and validity of such test data shall be subject to approval by the commissioner.

**(b) Alternate requirements.**- Alternative to the requirements of paragraph (a) above, the thickness of glass panels may be chosen from table 10-7. For glass with assured minimum thickness greater than required by reference standard RS 10-68, the maximum areas in table 10-7 may be increased in proportion to the assured minimum thickness.

**[C26-1011.5] 27-647 Special glasses.**- For types of glass other than single annealed sheet and plate glass, allowable maximum areas may be determined by

multiplying values in table 10-7 by the appropriate multiplying factor listed in table 10-8.

**§[C26-1011.6] 27-648 Installation of glass panels. -**  
Glass panels shall be handled and installed so that their strength is not impaired by chipping or scratching, shall be fully and firmly embedded [*sic*] in their supports, and shall be mounted in a manner that will accommodate differential movements due to thermal and loading conditions.

**§[C26-1011.7] 27-649 Protection of glass panels. -**

Glass panels installed in areas where they will be subject to unusual conditions of construction damage, such as spatter from welds or locations near materials hoists, shall be protected by a hardboard covering or its equivalent during the period that such work is in progress.

**§[C26-1011.8] 27-650 Deflection of support.-**  
The deflection of members supporting glass panels under the design wind load (measured perpendicular to the plane of the panel) shall not exceed L/175, where L is the span of the supporting member. In no case shall such deflection exceed three-quarters of an inch.

**TABLE 10-6 PROBABILITY OF BREAKAGE FOR GLASS PANELS  
(BASED ON COEFFICIENT OF VARIATION OF 25%)**

Elevation Above Grad of Midpoint of Glass	Area of Panel — Sq. Ft.				
	0-60	60-80	80-100	100-120	120+
—					
Ft.....					
0-	1.0%	1.0%	1.0%	1.0%	1.0%
50.....					
50 or more.....	1.0%	0.8%	0.6%	0.4%	0.2%

**TABLE 10-7 MAXIMUM AREA OF GLASS — SQ. FT.**

Nominal Thickness of Glass- Inches	Elevation Above Grade of Mid-point of Glass-Ft.			
	0-50	50-300	300-600	600+
Sheet Glass				
Single	9	9	8	7
strength.....				
Double strength.....	13	13	11	10
3/16".....	25	25	21	19
7/32".....	32	32	27	24
Plate and Float Glass				
13/64".....	25	25	21	19
1/4".....	37	37	32	28
5/16".....	54	54	46	40
.....	78	74	63	58
3/8".....				
1/2".....	114	100	86	75
5/8".....	152	120	103	90
.....	210	137	118	103
3/4".....				
7/8".....	241	158	135	118
1".....	312	204	175	153

**TABLE 10-8 MULTIPLYING FACTORS FOR VARIOUS TYPES OF GLASS**

Glass Type	Multiplying Factor
Full tempered.....	4.0
Heat strengthened.....	2.0
Factory-fabricated double glazing...	1.5*
Laminated.....	0.6
Wired.....	0.5
Sandblasted or etched.....	0.4

\*For asymmetrical units base strength on thinner lite.

**§[C26-1011.9] 27-651 Panels subject to human impact loads.**

Glass in prime and storm doors, interior doors, fixed glass panels that may be mistaken for means of egress or ingress, shower doors and tub enclosures, or in similar installations wherein one or more of the following criteria apply, shall meet the requirements set forth in table 10-9, or by comparative tests shall be proven to produce equivalent performance:

- (a) openings are located in regularly occupied spaces.
- (b) lowest point of panel is less than eighteen inches above finished floor.
- (c) minimum dimension of panel is larger than eighteen inches.

**TABLE 10-9 REQUIREMENTS FOR GLASS PANELS SUBJECT TO IMPACT LOADS<sup>a,b</sup>**

*3. Glass Type	Individual Opening Area	Requirements
Regular plate, sheet or rolled (annealed)	Over 6 sq. ft.	Not less than 3/16 in. thick. Must be protected by a push-bar or protective grille firmly attached on each exposed side <sup>c</sup> , if not divided by a muntin.
Regular plate, sheet or rolled (annealed), surface sandblasted, etched, or otherwise depreciated	Over 6 sq. ft.	Not less than 7/32 in. thick. Must be protected by a push-bar or protective grille firmly attached on each exposed side <sup>c</sup> .
Regular plate, sheet or rolled (annealed), obscure	Over 6 sq. ft.	Not less than 3/16 in. thick. Must be protected by a push-bar or grille firmly attached on each exposed side <sup>c</sup> .
Laminated	Over 6 sq. ft.	Not less than 1/4 in. thick. Shall pass impact test requirements of reference standard RS 10-67.
Fully-tempered	Over 6 sq. ft.	Shall pass impact test requirements of reference standard RS 10-67.
Wired	Over 6 sq. ft.	Not less than 7/32 in. thick. Shall pass impact test requirements of reference standard RS 10-67.
All unframed glass doors (swinging)		Shall be fully-tempered glass and pass impact test requirements of reference standard RS 10-67.

**Notes for Table 10-9:**

<sup>a</sup>Glass less than single strength (SS) in thickness shall not be used.

<sup>b</sup>If short dimension is larger than 24 in., glass must be double strength (DS) or thicker.

<sup>c</sup>Building owners and tenants shall maintain push-bars or protective grilles in safe condition at all times.

\*"3." *Enacted but probably not intended.*