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SUBCHAPTER 1. GENERAL PROVISIONS

**5:23-1.1 Title; division into subchapters**

(a) These regulations shall be known as the “Regulations for the New Jersey Uniform Construction Code” and are referred to herein as “the regulations”.

(b) The chapter consists of the following subchapters:

1. “General provisions” which may be cited throughout the regulations as N.J.A.C. 5:23-1 and when referred to in subchapter 1 of this chapter may be cited as this subchapter.

2. “Administration and enforcement; process” which may be cited throughout the regulations as N.J.A.C. 5:23-2

tuted "shall" for "will" preceding "be permitted under" in viii and substituted "maintenance" for "repairs" in 3i.

Amended by R.2004 d.467, effective December 20, 2004.

See: 36 N.J.R. 2122(a), 36 N.J.R. 5709(b).

In (b), substituted "Ordinary" for "Such" preceding "maintenance" in the introductory paragraph and rewrote 6iii; in (c), rewrote 3iii.

Amended by R.2007 d.39, effective February 5, 2007 (operative July 1, 2007).

See: 38 N.J.R. 3706(a), 39 N.J.R. 370(a).

In (c)3i, substituted "including" for "Replacement of" and deleted "in the electrical subcode, shall not be considered ordinary electrical maintenance" following "required".

Amended by R.2008 d.369, effective December 15, 2008.

See: 40 N.J.R. 4651(a), 40 N.J.R. 6958(a).

In (c)6ii(2), deleted the last sentence; in (c)6vi, substituted "suspension means" for "hoist ropes"; in (c)6vii(1), deleted "or replacement of governors with like equipment" following "governors"; and in (c)6xi(3), substituted "sills" for "saddles".

#### Case Notes

Municipal order under zoning ordinance to remove sleeping trailers and disconnect utilities used by a refinery repair crew proper exercise of police power; action not preempted by Occupational Safety and Health Act. *Twp. of Greenwich v. Mobil Oil Corp.*, 504 F.Supp. 1275 (D.N.J.1981).

#### 5:23-2.8 Installation of equipment

(a) When the installation, extension or alteration of mechanical equipment, refrigeration, air conditioning or ventilating apparatus, plumbing, gas piping, electric wiring, heating system or other equipment is specifically controlled by the provisions of this chapter, it shall be unlawful to use such equipment until a certificate of occupancy or certificate of approval, as the case may be, has been issued therefor by the construction official having jurisdiction. Use of elevator devices shall be subject to N.J.A.C. 5:23-12.9.

(b) The Department shall have exclusive authority to approve systems for indirect apportionment of heating costs in multiple dwellings.

Amended by R.1991 d.509, effective October 7, 1991.

See: 23 N.J.R. 2236(a), 23 N.J.R. 3001(a).

Stylistic changes.

Amended by R.1996 d.323, effective July 15, 1996, (operative January 1, 1997).

See: 28 N.J.R. 2112(a), 28 N.J.R. 3549(a).

Amended by R.2003 d.384, effective October 6, 2003.

See: 35 N.J.R. 2422(a), 35 N.J.R. 4712(a).

Designated the existing paragraph as (a) and added (b).

#### 5:23-2.9 Variations and exceptions

(a) No variations or exceptions from the requirements of any subcode of these regulations may be made, except upon the following findings:

1. That strict compliance with any specific subcode provision, if required, would result in practical difficulty to such owner; and

2. That the exception, if granted, will not jeopardize the health, safety and welfare of intended occupants and the public generally.

(b) Except as may be otherwise specified in this chapter, no variations shall be granted from any of the requirements of N.J.A.C. 5:23-2, 4 or 5.

Amended by R.1996 d.236, effective May 20, 1996 (operative January 1, 1997).

See: 27 N.J.R. 4050(a), 28 N.J.R. 2586(a).

Added (b).

#### 5:23-2.10 Applications for variations

(a) An application for a variation pursuant to this section shall be filed in writing with the construction official and shall state specifically:

1. A statement of the requirements of the subcode from which a variation is sought;

2. A statement of the manner by which strict compliance with said provisions would result in practical difficulties;

3. A statement of the nature and extent of such practical difficulties; and

4. A statement of feasible alternatives to the requirements of the subcode which would adequately protect the health, safety and welfare of the occupants or intended occupants and the public generally.

Administrative Correction to (a): Changed "set" to "state".

See: 22 N.J.R. 2503(b).

#### 5:23-2.11 Review of variation applications

Within 20 business days next succeeding the receipt by the construction official of the application, it shall be denied or granted by written order stating the reasons therefor. The application shall be deemed denied for purposes of appeal if no decision is forthcoming within such 20-day period. Records of all applications for variation, and actions taken thereon shall be available for public inspection at the enforcing agency during normal business hours.

#### 5:23-2.12 Final decision on variations

The appropriate subcode official(s) shall make the final determination with respect to matters within their jurisdiction. The construction official shall notify the applicant of that determination. Whenever an application for a variation shall result in contradictory or inconsistent determinations by different subcode officials having jurisdiction pursuant to N.J.A.C. 5:23-3, the construction official shall rule as to which subcode official's determination shall be final, and shall notify the applicant of that ruling. Whenever the construction official shall be certified in a particular subcode, he may modify the determination of the subcode official.

#### 5:23-2.13 Authority to grant variations

The enforcing agency with plan review responsibility shall have the sole authority to grant variations.

**5:23-2.14 Construction permits—when required**

(a) It shall be unlawful to construct, enlarge, repair, renovate, alter, reconstruct or demolish a structure, or change the use of a building or structure, or portion thereof, or to install or alter any equipment for which provision is made or the installation of which is regulated by this chapter, or to undertake a project involving lead abatement in accordance with N.J.A.C. 5:17, without first filing an application with the construction official, or the appropriate subcode official where the construction involves only one subcode, in writing and obtaining the required permit therefor.

1. Notwithstanding any provision of (b) below to the contrary, a permit shall be required for any work to abate violations cited in a Notice of Violation and Order to Terminate (F213) issued after a certificate of occupancy has been issued.

(b) The following are exceptions from (a) above:

1. Ordinary maintenance as defined in N.J.A.C. 5:23-2.7 shall not require a permit or notice to the enforcing agency;

2. Minor work as defined by N.J.A.C. 5:23-2.17A shall require a permit. However, work may proceed, upon notice to the enforcing agency, before the permit is issued;

3. Emergency work not involving lead abatement, except that a permit shall be applied for or notice given as soon thereafter as is practicable, but not later than 72 hours thereafter.

4. Exceptions to permit requirements for temporary structures, tents, tensioned membrane structures, canopies, and greenhouses are as follows:

i. Temporary structures: A construction permit is not required for the erection, operation or maintenance of any temporary structures (excluding tents, tensioned membrane structures, canopies, and greenhouses) covering an area less than 120 square feet, including all connecting areas or spaces with a common means of egress or entrance and which remain in place for less than 180 days;

ii. Tents, tensioned membrane structures, and canopies: A construction permit is not required for tents, tensioned membrane structures, and canopies that meet all of the criteria in (b)4ii(1) through (5) below. Tents, tensioned membrane structures, and canopies meeting the following criteria shall be subject to the permitting requirements of the Uniform Fire Code (N.J.A.C. 5:70-2.7).

(1) The tent, tensioned membrane structure, or canopy is 140 feet or less in any dimension and 16,800 square feet or less in area whether it is one unit or is composed of multiple units;

(2) The tent, tensioned membrane structure, or canopy remains in place or will remain in place for fewer than 180 days;

(3) The tent, tensioned membrane structure, or canopy is used or occupied only between April 1 and November 30;

(4) The tent, tensioned membrane structure, or canopy does not have a permanent anchoring system or foundation; and

(5) The tent, tensioned membrane structure, or canopy does not contain platforms or bleachers greater than 11 feet in height.

iii. A temporary greenhouse, also called a “hoop-house” or “polyhouse,” meeting the criteria stated in N.J.A.C. 5:23-3.2(d), shall not require a permit.

iv. Regardless of whether the tent, tensioned membrane structure, canopy, or greenhouse requires a permit, a permit shall be required for any electrical equipment, electrical wiring or mechanical equipment that would otherwise require a permit.

5. Gas utility company shall not be required to obtain a permit or give notice to the enforcing agency for replacement of interior gas utility company-owned metering (meter and related appurtenances) by exterior gas utility company owned-metering if the work is performed by qualified employees of the gas utility company.

6. A permit shall not be required for a sign that meets all of the following conditions; provided, however, that the construction official shall have authority to require the removal of any sign that creates an unsafe condition or otherwise to require correction of any such condition:

i. It is supported by uprights or braces in or upon the ground surface;

ii. It is not served by an electrical circuit directly connected to the sign;

iii. It is not greater than 25 square feet in surface area (one side); and

iv. It is not more than six feet above the ground (mounted height).

7. Lead abatement work performed on a steel structure or other superstructure or in a commercial building.

8. A permit shall not be required for garden-type utility sheds and similar structures that are 100 square feet or less in area, 10 feet or less in height, and accessory to buildings of Group R-2, R-3, R-4, or R-5. Such garden-type utility sheds and similar structures are required to comply with the requirements at N.J.A.C. 5:23-9.9.

Amended by R.1996 d.297, effective July 1, 1996 (operative October 1, 1996).

See: 28 N.J.R. 1586(b), 28 N.J.R. 3301(a).

In (b) added exception for signs.

Amended by R.1997 d.302, effective July 21, 1997 (operative September 24, 1997).

See: 29 N.J.R. 2202(a), 29 N.J.R. 3242(b).

Added (b)7.

Amended by R.1998 d.28, effective January 5, 1998.

See: 29 N.J.R. 3603(a), 30 N.J.R. 129(a).

Rewrote (a); added (a)1 stating exception; amended (e)4 and (e)12iii.

Administrative change.

See: 31 N.J.R. 135(b).

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (a)1 and (b)1, substituted references to ordinary maintenance for references to ordinary repairs.

Amended by R.2000 d.166, effective April 17, 2000.

See: 31 N.J.R. 4151(a), 32 N.J.R. 1376(a).

In (b), added 8 and 9.

Administrative correction.

See: 34 N.J.R. 2965(a).

Amended by R.2003 d.187, effective May 5, 2003.

See: 34 N.J.R. 4248(a), 35 N.J.R. 1939(c).

In (b), rewrote 4.

Amended by R.2004 d.67, effective February 17, 2004.

See: 35 N.J.R. 4627(a), 36 N.J.R. 949(b).

In (b)8, substituted "that" for "which" preceding "are 100 square feet or less in area", substituted "Group R-2, R-3, R-4 or R-5" for "Use Groups R-2, R-3 or R-4", and inserted "the requirements at" preceding "N.J.A.C. 5:23-9.9".

Amended by R.2005 d.228, effective July 18, 2005.

See: 37 N.J.R. 163(a), 37 N.J.R. 2673(b).

Added (g).

Amended by R.2006 d.157, effective May 1, 2006.

See: 37 N.J.R. 3108(a), 38 N.J.R. 1824(a).

Deleted (a)1; and in (b), rewrote 4 and added (b)10.

Amended by R.2006 d.355, effective October 2, 2006.

See: 38 N.J.R. 1789(a), 38 N.J.R. 4175(a).

Rewrote (a)1.

Administrative correction.

See: 38 N.J.R. 5355(b).

### 5:23-2.15 Construction permits—application

(a) The application for a permit shall be submitted on the standard Construction Permit Application form prescribed by

the Commissioner at N.J.A.C. 5:23-4.5(b)2 and shall be accompanied by the required fee, as provided for in this subchapter and N.J.A.C. 5:23-4. The application shall contain a general description of the proposed work, its location, the use and occupancy of all parts of the building or structure and all portions of the site or lot not covered by the building or structure, and such additional information as may be required by the construction official, which shall include, but not be limited to, the following:

1. The name and address of the owner: Where the owner is not a resident of the State, he shall designate a resident as agent for the purpose of service of any notices or orders which may be necessary. Such address shall not be limited to a post office box, but shall specify a physical location where such owner or agent may be found during normal business hours. Where the owner is a corporation, partnership or other business entity, the application shall indicate the names and addresses of the officers, or other responsible persons upon whom service may be made;

2. The street address and lot and block number of the property upon which the building or structure is proposed to be erected;

3. A description of the proposed work, including the use group classification, proposed construction type, lot ground coverage in square feet, total floor area in square feet, total building or structure volume in cubic feet, the total number of plumbing fixtures, the total number of electrical fixtures, outlets and major appliances, a description of the type of heating system, the source of water supply, the mode of sanitary waste disposal and a listing of any special, unusual or hazardous facilities proposed for inclusion in the building or structure;

ii. Foundations and all walls up to grade level prior to covering or back filling;

(1) For new construction, a foundation location survey showing all building corners of the foundation and the elevation of the top of the foundation wall shall be submitted to the construction official as soon as possible after the installation of the foundation wall. It is not necessary for work to cease for the preparation and submission of this survey. A land surveyor licensed in the State of New Jersey shall prepare the survey. The proposed foundation location and elevation as shown on the original plot plan shall also be shown on the foundation location survey.

(A) Exception: A foundation location survey shall not be required for additions, decks, swimming pools, sheds as described in N.J.A.C. 5:23-9.9 or similar structures.

(2) For new construction and additions, the foundation location survey for a building that is located in a flood plain shall include flood hazard certificates as required by section 1612.5 of the building subcode or section R301.2.4 of the one-and two-family dwelling subcode.

iii. Utility services, including septic;

iv. Mid-point inspections shall include the following:

(1) Building Subcode: All structural framing, connections, wall and roof sheathing, and insulation.

(A) The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and/or air conditioning duct system.

(B) For buildings containing roof or other truss systems, a truss system and permanent truss bracing inspection shall be performed prior to the installation of any interior roof truss covering material. Where the truss design utilizes the interior finish as bracing for the bottom cord, that portion of the bracing shall be part of the final inspection and shall be in addition to the components of the final inspection in (d) below.

(C) The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.

(D) Prior to inspection, the responsible person in charge of work shall provide to the building inspector a signed framing checklist (Form F390) to be verified and initialed by the inspector and then made part of the permit file for buildings of Type V construction.

(2) Electrical Subcode: Rough wiring, panel and service installation.

(3) Plumbing Subcode: Rough piping.

2. Inspections for all subcodes of construction, other than one- and two-family dwellings, shall be limited to those required for one- and two-family dwellings and the following: fire suppression systems; heat producing devices; any special inspections required by any subcode of the regulations;

i. The mid-point inspection shall include a review for compliance with N.J.A.C. 5:23-7, the Barrier Free Subcode, for buildings required by N.J.A.C. 5:23-7.1 to be accessible.

ii. The requirement for a framing checklist, established at (b)1iv(D) above, shall apply to buildings of Type V construction of Groups R-2, R-3 and R-4 only.

3. Any additional inspections, as permitted by this chapter and as may be required by the municipality, shall be of the type and nature that construction may continue without interruption;

4. Additional inspection schedule: Where buildings proposed for construction exceed two stories in height or by their nature pose complex or unusual inspection problems, the construction official or appropriate subcode official may specify additional inspections to the applicant in writing prior to the issuance of a permit and during construction in the case of unforeseeable circumstances.

(c) Notice for inspection:

1. The owner or other responsible person in charge of work shall notify the enforcing agency when the work is ready for any required inspection specified herein or required by the construction official or appropriate subcode official. This notice shall be given at least 24 hours prior to the time the inspection is desired. This notice shall represent an attestation on the part of the owner, other than single-family owner-occupants performing their own work, or other responsible person in charge of work, that the work has been completed in conformance with the code and is ready for inspection.

2. Inspections shall be performed within three business days of the time for which it was requested. The work shall not proceed in a manner which will preclude the inspection until it has been made.

(d) Final inspection: Upon completion of the building or structure, and before the issuance of a certificate of use and occupancy required herein, a final inspection shall be made, and any violations of the code shall be noted and the holder of the permit shall be notified of any discrepancies by the construction official. The final inspection shall include:

1. Building and Fire Subcode: Installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and any other required equipment.

2. Electrical Subcode: Wiring, devices and fixtures.

3. Plumbing Subcode: Piping, trim and fixtures.

4. Tests required by any provision of the adopted subcodes.

5. A review for compliance with N.J.A.C. 5:23-7, the Barrier Free Subcode, for all buildings required by N.J.A.C. 5:23-7.1 to be accessible.

6. Verification of compliance with N.J.A.C. 5:23-3.5, Posting structures.

(e) Inspections records: The enforcing agency shall make a written record of all inspections, including any discrepancies or violations noted and shall maintain those reports as a public record which shall be available for public inspection during normal business hours.

(f) Department inspections: At the request of an enforcing agency, the Department may assist the enforcing agency in the inspection of any construction, provided that the enforcing agency has submitted the plans and specifications for such construction to the Department.

(g) The construction official shall serve as an agent of the Bureau of Housing Inspection of the Department of Community Affairs for the purpose of inspecting newly constructed and altered hotels and multiple dwellings in order to enforce the provisions of the regulations for the maintenance of hotels and multiple dwellings (N.J.A.C. 5:10). Responsibility for inspection may be delegated to the appropriate subcode official(s).

(h) Periodic inspections: The building subcode official or fire protection subcode official may periodically inspect all existing buildings and structures, except one and two family dwellings, for compliance with the rules with respect to posting. Such inspection shall specify any violation of the rules with respect to the posting of floor load, occupancy load and use group of the building.

Amended by R.1981 d.182, effective June 4, 1981.

See: 13 N.J.R. 187(b), 13 N.J.R. 333(b).

Amended by R.1992 d.244, effective June 15, 1992.

See: 24 N.J.R. 1147(a), 24 N.J.R. 2243(a).

Class I inspections added to (b)Iiv.

Amended by R.1996 d.323, effective July 15, 1996 (operative January 1, 1997).

See: 28 N.J.R. 2112(a), 28 N.J.R. 3549(a).

Amended by R.1997 d.304, effective July 21, 1997.

See: 29 N.J.R. 2204(a), 29 N.J.R. 3248(a).

Added (b)Iii(1) and (d)1.

Amended by R.2000 d.166, effective April 17, 2000.

See: 31 N.J.R. 4151(a), 32 N.J.R. 1376(a).

In (d), added 2; and added (h).

Amended by R.2003 d.187, effective May 5, 2003.

See: 34 N.J.R. 4248(a), 35 N.J.R. 1939(c).

In (b), rewrote Iiv.

Amended by R.2003 d.216, effective May 19, 2003.

See: 35 N.J.R. 16(a), 35 N.J.R. 2203(a).

Rewrote the section.

Administrative correction.

See: 35 N.J.R. 3298(a).

Amended by R.2006 d.75, effective February 21, 2006.

See: 37 N.J.R. 3110(a), 38 N.J.R. 1183(a).

Added (b)Iiv(1)(E).

Amended by R.2007 d.46, effective February 5, 2007.

See: 38 N.J.R. 872(a), 39 N.J.R. 370(b).

In (c)1, added new third sentence, and recodified former third sentence as new (c)2.

Administrative correction.

See: 39 N.J.R. 3914(a).

Amended by R.2008 d.192, effective July 21, 2008.

See: 39 N.J.R. 4985(a), 40 N.J.R. 4314(b).

In the introductory paragraph of (b)1, substituted "one- and" for "one-and"; and in the introductory paragraph of (b)Iii(1), inserted "and the elevation of the top of the foundation wall", "or professional engineer" and "and elevation", and inserted the second sentence.

Administrative correction.

See: 40 N.J.R. 5579(a).

Amended by R.2009 d.48, effective February 2, 2009.

See: 40 N.J.R. 5319(a), 41 N.J.R. 733(b).

Deleted former (b)Iiv(1)(D); recodified former (b)Iiv(1)(E) as (b)Iiv(1)(D); in (b)Iiv(1)(D), inserted "(Form F390)" and "for buildings of Type V construction"; and added (b)2ii.

#### Case Notes

Initial Decision (2007 N.J. AGEN LEXIS 561) adopted, which ordered a 60-day suspension of petitioner's Building Subcode Official and Building Inspector H.H.S. licenses for violations of N.J.A.C. 5:23-2.18(b) and 5:23-2.24(a); petitioner approved framing inspections and issued a certificate of occupancy on the subject project that did not meet the conditions of the approved plans and specification, approved alternate material in lieu of the architect's specified material resulting in an overspanning of the joists, and overlooked a required flush girder beam creating an excessive deflection, which caused the second and third floors of the home to sag. *Anstiss v. Office of Regulatory Affairs*, OAL Dkt. No. CAF 11448-06, 2007 N.J. AGEN LEXIS 547, Final Decision (August 17, 2007).

Initial Decision (2007 N.J. AGEN LEXIS 561) adopted, which ordered revocation of petitioner's Construction Official license where petitioner failed to make sure that the proper reports and inspections were in the file prior to the issuance of temporary certificates of occupancy and petitioner previously had been cited for violations concerning the same project; petitioner's responsibility toward the properties did not cease because a subordinate signed the certificates, and petitioner failed to provide the necessary documentation even after it was requested by the Department investigator. *Anstiss v. Office of Regulatory Affairs*, OAL Dkt. No. CAF 11448-06, 2007 N.J. AGEN LEXIS 547, Final Decision (August 17, 2007).

#### 5:23-2.18A Utility load management device installation programs

(a) Whenever a public utility proposes to undertake a program of installing load management devices at the properties of a substantial number of service customers within a limited period of time, it may apply to the Department for permission to utilize the procedure set forth in this section.

(b) A utility with a program to install load management devices shall submit detailed information to the Department on the design of the device.

(c) The utility shall provide an educational program acceptable to the Department to acquaint any interested Department personnel and municipal subcode officials with the device and with installation and operating procedures.

iv. The covering of the structure is of a material that conforms to NFPA 701.

v. If a temporary greenhouse contains any device subject to the electrical subcode or any mechanical equipment subject to the mechanical subcode, a permit shall be required for the device, system or fixture only. If the temporary greenhouse is connected to a potable water system, a permit shall be required for the backflow prevention devices only.

5. The type and amount of materials or supplies stored in a commercial farm building, including hay, straw, and livestock bedding materials, shall not be subject to limitation. However, other hazardous materials within spaces of commercial farm buildings occupied by more than 10 persons shall not exceed the allowable exempt amounts shown in Tables 307.1(1) and 307.1(2) of the building subcode unless separated from the occupied area by appropriate fire resistance rated construction as prescribed in the building subcode.

6. A commercial farm building may be used as a place of public assembly for not more than 15 days in a calendar year. For the purposes of enforcing this requirement, a public assembly shall be a gathering of 50 or more people. A permit shall be obtained from the local fire official pursuant to the Uniform Fire Safety Act, N.J.S.A. 52:27D-192 et seq., and the fee for issuing the permit shall not exceed \$75.00 per event.

i. A commercial farm building that is used as a place of public assembly for not more than 15 days in a calendar year and that is provided with electricity shall comply with section 1006 of the building subcode.

ii. The use of a commercial farm building as a "special amusement building," as defined in the building subcode, shall be permitted only if a permit specific to special amusement buildings is issued by the local fire official pursuant to the Uniform Fire Safety Act, N.J.S.A. 52:27D-192 et seq. or if the building or portion thereof complies with N.J.A.C. 5:23-6.31(a)5vii.

7. Buildings containing any of the following uses are not included in the definition of a commercial farm building:

i. Residential structures;

ii. High hazard facilities, such as grain elevators or grain storage silos used to store products which are neither used nor produced on the farm itself;

iii. Processing facilities that include specialized machinery to perform functions other than the washing, cleaning, hydrocooling, vacuum cooling, grading, sizing and packing of agricultural or horticultural products, unless the exempted functions are only the first step in a sequence of processing to be performed on the farm;

iv. Mercantile structures, such as farm retail markets or nursery greenhouse retail sales areas;

v. Offices with either 11 or more occupants, or floor area of greater than 1,200 square feet; and

vi. Buildings that contain any use not included in the definition of commercial farm building, except incidental offices as provided in (d)10vii below.

8. A commercial farm building may include a use that does not meet the definition of a "commercial farm building," provided that the space that does not meet the commercial farm building definition is separate from the remainder of the building with the required fire separation assemblies and meets all applicable requirements of the building subcode.

9. Construction type, height and allowable area requirements for commercial farm buildings and structures shall be as specified in the building subcode and shall not exceed the area or height limitations of Table 503 for the type of construction used, except as follows:

i. The height and area of a one-story commercial farm building of any type of construction shall not be limited if the building has a fire separation distance of 50 feet. In that case, a sprinkler system shall not be required.

ii. The height and area of a two-story commercial farm building of any type of construction shall not be limited if the building is provided with an approved automatic fire suppression system throughout, conforming to the Uniform Construction Code and has a fire separation distance of 50 feet.

iii. Two or more commercial farm buildings exempted under (d)9i and ii above may be constructed on the same lot, or on an owner's contiguous lots without meeting the fire separation distance of 50 feet. However, the fire separation distance specified in Table 602 of the building subcode must be maintained between a commercial farm building and any building not eligible for the commercial farm building exemption.

10. Commercial farm buildings exempted under (d)9i above shall meet the following requirements in lieu of those requirements specified in the subsections of Chapter 10, Means of Egress, of the building subcode:

i. In lieu of the requirements of Section 1016, the maximum distance of travel from any point in the building to an exit shall not exceed 150 feet;

ii. In lieu of the requirements of Sections 1019.1 and 1019.2, one exit is required for each 15,000 square feet of floor area and fraction thereof;

iii. In lieu of the requirements of Section 1011, exit signs must be posted. Exit signs are not required to be illuminated;

iv. The provisions of Section 1006 shall apply in commercial farm buildings where the owner has determined to provide electricity. Where electricity is provided, any electric light provided in the commercial farm building shall be deemed to meet the means of egress lighting requirements and a back up power source shall not be required unless the commercial farm building will be used as a place of public assembly in accordance with (d)6 above.

v. In lieu of the requirements of Section 1004, occupancy is limited to 30 people;

vi. Lightning protection of the type required for the structure by NFPA 780, fire extinguishers and "no smoking" signs shall be provided;

vii. Offices with 10 or fewer occupants and a floor area not in excess of 1,200 square feet shall be considered incidental to the structure, if direct exit to the exterior is provided.

11. Site plans signed and sealed by a registered architect or a licensed engineer, pursuant to N.J.A.C. 5:23-2.15(f)ix, shall not be required, provided that a sketch plan of the site is submitted to the construction official.

Amended by R.1981 d.132, effective May 7, 1981.

See: 13 N.J.R. 121(a), 13 N.J.R. 258(d).

Amended by R.1986 d.448, effective November 3, 1986.

See: 18 N.J.R. 757(a), 18 N.J.R. 2194(a).

Deleted (b)1 and 4; recodified (b)2 and 3 to (b)1 and 2.

Amended by R.1987 d.374, effective September 21, 1987.

See: 19 N.J.R. 1024(a), 19 N.J.R. 1720(b).

(b)1: model subcode revisions.

Amended by R.1988 d.144, effective April 4, 1988.

See: 19 N.J.R. 1778(a), 20 N.J.R. 783(a).

Changed (b)2 to (c) and (d).

Amended by R.1993 d.662, effective December 20, 1993.

See: 25 N.J.R. 3891(a), 25 N.J.R. 5918(a).

Amended by R.1995 d.603, effective November 20, 1995 (operative March 20, 1996).

See: 27 N.J.R. 2655(a), 27 N.J.R. 4699(a).

Amended by R.1997 d.269, effective July 7, 1997.

See: 29 N.J.R. 968(a), 29 N.J.R. 2817(a).

Inserted (d)5i; in (d)6vi, amended N.J.A.C. reference; in (d)8, inserted reference to construction type and inserted "except as follows:"; deleted (d)8i; recodified former (d)8i(1) through (3) as (d)8i through iii; inserted new (d)9iv; recodified former (d)9iv through vi as (d)9v through vii; and recodified former (e) as (d)10.

Amended by R.1997 d.417, effective October 6, 1997.

See: 29 N.J.R. 3387(a), 29 N.J.R. 4285(a).

Substantially amended (b)1.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (a)1, substituted a reference to rehabilitation for a reference to alteration, and changed guideline reference.

Administrative correction.

See: 33 N.J.R. 3735(a).

Amended by R.2003 d.157, effective April 21, 2003.

See: 34 N.J.R. 4247(a), 35 N.J.R. 1663(b).

In (d)5, added ii.

Administrative correction.

See: 35 N.J.R. 5062(a).

Amended by R.2003 d.425, effective November 3, 2003.

See: 35 N.J.R. 2424(a), 35 N.J.R. 5062(b).

Rewrote (d).

Amended by R.2004 d.131, effective April 5, 2004.

See: 35 N.J.R. 5336(a), 36 N.J.R. 1755(a).

In (d)3, inserted the first sentence.

Amended by R.2004 d.423, effective November 15, 2004.

See: 36 N.J.R. 3004(a), 36 N.J.R. 5090(a).

In (d)5, rewrote ii.

Amended by R.2006 d.157, effective May 1, 2006.

See: 37 N.J.R. 3108(a), 38 N.J.R. 1824(a).

In (d)3, deleted "A temporary greenhouse shall not require a construction permit if it meets the criteria stated in N.J.A.C. 5:23-3.14, the building subcode"; added new (d)4; recodified (d)4 through (d)10 as (d)5 through (d)11; in (d)7.iv, substituted "10vii" for "9vii".

Administrative correction.

See: 39 N.J.R. 3509(a).

Administrative correction.

See: 39 N.J.R. 4571(a).

Amended by R.2009 d.51, effective February 2, 2009.

See: 40 N.J.R. 5325(a), 41 N.J.R. 738(a).

In the introductory paragraph of (d)4, substituted "(d)4i" for "(d)3i"; in (d)5, substituted "307.1(1) and 307.1(2)" for "307.7(1) and 307.7(2)"; in (d)6i, substituted "1006" for "1003.2.11"; in (d)6ii, updated the N.J.A.C. reference; in (d)9i, substituted "one-story" for "one story"; in (d)9i and (d)9ii, deleted "meets the exterior wall fire resistance rating as specified in section 507.2 of the building subcode," following "if the building"; in (d)9ii, substituted "two-story" for "two story"; in (d)10i, substituted "1016" for "1004.2.4"; in (d)10ii, substituted "1019.1 and 1019.2" for "1005.2.1 and 1005.2.2"; in (d)10iii, substituted "1011" for "1003.2.10"; in (d)10iv, substituted "1006" for "1003.2.11" and "(d)6" for "(d)5"; and in (d)10v, substituted "1004" for "1003.2".

### 5:23-3.3 Enforcement

(a) In accordance with the delineation of responsibility for enforcement specified herein, subject to specific reservations by the Department to itself, the appropriate official(s) shall enforce the subcode and shall act on any question relative to the mode or manner of construction, and the materials to be used in the erection, addition to, repair, renovation, alteration, reconstruction, removal, demolition, installation of service equipment, and the location, use and occupancy of all buildings and structures, except as may be otherwise specifically provided for in the regulations, including, but not limited to:

1. Applications, certificates and permits: Such official(s) shall review applications for permits for the erection, repair (other than ordinary maintenance), renovation, alteration and reconstruction of buildings and structures; indicate approval or denial to the construction official; and inspect the premises for which such permits have been issued and enforce compliance with the provisions of the regulations.

2. Notices and orders: Such official(s) shall issue all necessary notices or orders to remove illegal or unsafe conditions; to require the necessary safeguards during construction; and to insure compliance with all requirements for the safety, health and general welfare of the public.

3. Inspections: Such official(s) shall make all the required inspections, and all reports of such inspections shall be in writing and certified by them or they may engage such expert opinion as he may deem necessary to report upon unusual technical issues that may arise, subject to the approval of the construction official and appointing authority.

4. Enforcing agency records: Such official(s) shall assist in the keeping of official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued as may be required by the construction official.

Amended by R.1998 d.28, effective January 5, 1998.  
See: 29 N.J.R. 3603(a), 30 N.J.R. 129(a).  
Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (a), deleted a reference to other State agencies in the introductory paragraph, and substituted a reference to ordinary maintenance for a reference to ordinary repairs in 1.

#### 5:23-3.4 Responsibilities

(a) The enforcement responsibilities of the adopted subcodes are as follows:

1. Building Subcode:

ix. Section 1613.3, Existing building, shall be deleted in its entirety.

17. Chapter 17, Structural Tests and Special Inspections, shall be amended as follows:

i. In Section 1701.1, Scope, “shall apply to Class I buildings and” shall be inserted after “chapter.”

ii. Section 1702.1, General, shall be amended as follows: In the title, “Special Inspector” shall be inserted after “Agency.” In the first sentence, “or design professional acting as the approved agency” shall be inserted after “agency.” At the end of the definition, add the sentence, “Special inspectors shall be certified in accordance with the administrative provisions of the Uniform Construction Code.”

iii. Section 1703.1, Approved agency, shall be amended as follows: In the first sentence, “Upon the request of the construction official” shall be inserted before “An.” In the same sentence, “building official” shall be deleted and “construction official” shall be inserted and “applicable” shall be deleted and “following” shall be inserted.

iv. Add new section 1703.1.4 as follows: “1703.1.4 Certification. An approved agency shall employ personnel certified in accordance with the administrative provisions of the Uniform Construction Code, to conduct, supervise and evaluate tests or inspections.”

v. In Section 1703.7, Evaluation and follow-up inspection, “in accordance with N.J.A.C. 5:23-4.26” shall be inserted after the second “assembly.”

vi. Section 1704.1, General, shall be amended as follows: In the first sentence, “of Class 1 buildings only” shall be inserted after “construction.” In the second sentence, “the registered design professional” shall be deleted and “person” shall be inserted.

vii. Section 1704.1.2, Report requirement, shall be amended as follows: In the second sentence, “building official” shall be deleted and “construction official” shall be inserted and “registered design professional” shall be deleted and “person” shall be inserted. In the same sentence, “in accordance with N.J.A.C. 5:23-2.21(c)” shall be inserted after “charge.”

viii. In Section 1704.3, Steel construction, “the on-site erection of” shall be inserted after “for.”

ix. In Table 1704.3, Required Verification and Inspection of Steel Construction, Items 1, 3, and 4 shall be deleted.

x. In Section 1704.5, Masonry construction, “in Seismic Design Category D” shall be inserted after the second “construction.” In the same section, in Exception 2, the reference to “Table 1805.5(1)” shall be deleted.

xi. Section 1704.6, Wood construction, shall be deleted in its entirety.

xii. Section 1704.9, Pier foundations, shall be deleted in its entirety.

xiii. Table 1704.9, Required Verification and Inspection of Pier Foundations, shall be deleted in its entirety.

xiv. In Sections 1705.1, General, and 1705.3, Seismic resistance, “for Seismic Design Category D buildings” shall be inserted after “inspections.”

xv. Sections 1705.4, Wind resistance; 1705.4.1, Wind requirements in the statement of special inspections; and 1705.4.2, Detailed requirements, shall be deleted in their entirety.

xvi. In Section 1706.1, Contractor responsibility, in the first sentence, “wind or” shall be deleted. In addition, in the same sentence, “or a wind-” shall be deleted.

xvii. In Section 1707.1, Special Inspections for Seismic Resistance, in items 1 and 3, “C,” shall be deleted in reference to seismic design categories.

xviii. In Section 1707.5, Pier Foundations, in the first sentence, “C,” shall be deleted in reference to seismic design categories.

xix. In Section 1707.8, Mechanical and Electrical Components, in items 1, 3, 4 and 5, “C,” shall be deleted in reference to seismic design categories.

xx. Sections 1708.1, Masonry, 1708.1.1, Empirically designed masonry and glass unit masonry in Occupancy Category I, II, or III, 1708.1.2, Empirically designed masonry and glass unit masonry in Occupancy Category IV, 1708.1.3, Engineered masonry in Occupancy Category I, II, or III, 1708.1.4, Engineered masonry in Occupancy Category IV, 1708.3, Reinforcing and pre-stressing steel, and 1708.4, Structural steel, shall be deleted in their entirety.

xxi. In Section 1708.2, Testing for Seismic Resistance, in items 1 and 3, “C,” shall be deleted in reference to seismic design categories.

xxii. Section 1709, Structural Observations, shall be deleted in its entirety.

18. Chapter 18, Soils and Foundations, shall be amended as follows:

i. In the title of Section 1802.2.6, “Seismic Design Category C” shall be deleted and “Seismic Design Category D” shall be inserted. In the first sentence, the reference to “Seismic Design Category C” shall be deleted and “Seismic Design Category D” shall be inserted.

ii. New Section 1802.2.8 from Section 1802.1 of the 1996 BOCA National Building Code shall be inserted as follows: “Building Height: For all buildings that are

more than three stories or 40 feet (12,192 mm) in height above the grade plane, the building official shall request soil tests.

iii. Section 1802.4.1, Exploratory boring, shall be amended as follows: After the first sentence, the following sentence from Section 1802.1 of the 1996 BOCA National Building Code shall be inserted: "There shall be at least one exploratory boring to rock or to an adequate depth below the load-bearing strata for every 2,500 square feet (232.5 mm) of built-over area, and such additional tests as the code official requires."

iv. In Section 1802.6, Reports, "soil borings are required" shall be inserted after "Where" in the second sentence.

v. In Section 1807.4.3, Drainage discharge, shall be "International Plumbing Code" deleted and "plumbing subcode (N.J.A.C. 5:23-3.15)" shall be inserted.

vi. New Section 1807.5 from Section 1813.8 of the 1996 BOCA National Building Code shall be inserted as follows: "1807.5 Erosion protection: Where water impacts the ground from the edge of the roof, downspout, scupper or other rain water collection or diversion device, provisions shall be made to prevent soil erosion and direct the water away from the foundation."

vii. In Section 1808.2.1, Design, in Item 1, "and U" shall be deleted.

viii. Section 1808.2.2, General, Item 2, shall be deleted in its entirety and Section 1816.9 of the 1996 BOCA National Building Code shall be inserted as follows: "1808.2.2.1 Spacing: The minimum center-to-center spacing of piles shall not be less than twice the average diameter of a round pile, nor less than 1 3/4 times the diagonal dimension of a rectangular pile. Where driven to or penetrating into rock, the spacing shall not be less than 24 inches (610 mm). Where receiving principal support at the end from materials other than rock, or through friction resistance, the spacing shall not be less than 30 inches (762 mm) except that for piles having enlarged bases formed either by compacting concrete or driving a pre-cast base, the minimum center-to-center spacing shall be 4 1/2 feet (1,372 mm). The spacing of piles shall be such that the average load on the supporting strata will not exceed the safe load-bearing value of those strata as determined by test borings or other approved methods."

ix. In Section 1808.2.8.3.1, Load test evaluation, Item 4 shall be deleted in its entirety.

x. In Section 1808.2.23.1, Seismic Design Category C, in the exception, "subject to approval of the building official" shall be deleted.

xi. In Section 1808.2.23.2, Seismic Design Category D, E, or F, the reference to "Seismic Design Categories

E and F" shall be deleted. In addition, in Exception 1, "or U" shall be deleted.

xii. Section 1809.2.2.1, Materials, shall be deleted in its entirety and Section 1821.2.2 of the 1996 BOCA National Building Code shall be inserted as follows: "All concrete shall have a 28-day specified compressive strength ( $f'$ ) of not less than 4,000 psi (27579 kPa)."

19. Chapter 23, Wood, shall be amended as follows:

i. In Section 2303.4.1.2, Truss design drawings, the last paragraph beginning with "Where required by one of the following" shall be deleted in its entirety.

ii. In Section 2303.4.1.3, Truss placement diagram, the exception shall be deleted in its entirety.

iii. New Section 2303.4.1.8, entitled "Truss Identification," shall be inserted as follows: "Each truss shall be labeled or otherwise indelibly marked at the factory with the individual truss number as assigned in the truss layout plan. The indelible marking or label shall be located on the bottom chord of the truss, inside the bearing points. When indelible markings are used, each digit shall be not less than one inch high. When labels are used, the label shall be a minimum of five inches by three inches and shall be affixed to the truss by a truss plate. Labels shall remain affixed to the truss."

iv. In Table 2306.3.2, Allowable shear for wood structural panel blocked diaphragms utilizing multiple rows of fasteners with framing of Douglas fir larch or southern pine for wind or seismic loading, Note g shall be deleted.

v. In Section 2308.1, General, the last sentence shall be deleted.

20. Chapters 27, Electrical; 28, Mechanical Systems; and 29, Plumbing, shall be deleted in their entirety.

21. Chapter 30, Elevators and Conveyor Systems, shall be amended as follows:

i. In Section 3001.1, Scope, "and, where applicable, N.J.A.C. 5:23-12 shall" shall be inserted after "chapter." In addition, "governs" shall be deleted and "govern" shall be inserted.

ii. In Section 3001.2, Referenced standards, "with the exception of Sections 7.4 through 7.7, Sections 7.9 through 7.11, and Section 8.6.1.6.5," shall be inserted after "ASME A17.1" and "ASME A18.1," shall be inserted after "ASME A90.1."

iii. In Section 3001.3, Accessibility, "Chapter 11" shall be deleted and "the barrier free subcode (N.J.A.C. 5:23-7)" shall be inserted.

iv. New Section 3002.4.1, Elevators in newly constructed multiple dwellings, shall be inserted as follows: "When an elevator is installed in any newly

constructed multiple dwelling regardless of height, the elevator shall meet the dimensional requirements above.”

v. New Section 3003.3, Standardized fire service keys, shall be inserted as follows: “All new elevators shall be equipped to operate with a standardized fire service key.”

vi. In Section 3004.3, Area of vents, in the last sentence, “annealed glass” shall be deleted and “plain glass” shall be inserted.

vii. In Section 3004.4, Plumbing and mechanical systems, in the exception, “without an oil-water separator” shall be inserted at the end of the sentence. In addition, the following sentence shall be inserted: “The discharge shall not be directly or indirectly connected to the sanitary drainage system.”

22. Chapter 31, Special Construction, shall be amended as follows:

i. New Section 3102.3.2, which shall be the text of Section 3104.6 of the 1996 BOCA National Building Code, shall be inserted as follows: “Certification: An affidavit or affirmation shall be submitted to the code official and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit or affirmation shall attest to the following information relative to the flame-resistance of the fabric:

1. Names and addresses of the owners of the tent or air-supported structure.
2. Date the fabric was last treated with flame-resistant solution.
3. Trade name or kind of chemical used in treatment.
4. Name of person or firm treating the material.

5. Name of testing agency and test standard by which the fabric was tested.”

ii. Section 3103.1.1 shall be deleted in its entirety and the following shall be inserted:

“Temporary structures, tents, tensioned membrane structures, and canopies meeting the criteria in N.J.A.C. 5:23-2.14 shall not require a permit. Greenhouses meeting the criteria in N.J.A.C. 5:23-3.2(d) shall not require a permit.”

iii. In Section 3104.2, Separate structures, Exception 2 shall be deleted.

iv. Section 3109.4.1.8, Dwelling wall as barrier, shall be deleted in its entirety.

v. In Section 3109.4.1.9, Pool structure as barrier, “either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps” shall be deleted. In addition, the last sentence shall be deleted.

vi. Section 3109.5, Entrapment avoidance, shall be deleted in its entirety.

vii. Add new Section 3110.0, “Swimming pools and spas” as follows:

3110.0 Swimming pools and spas. Swimming pools and spas shall be constructed in accordance with section 3110.1 through 3110.

3110.1 Public swimming pools. Public swimming pools shall be designed and constructed in conformance with ANSI/NSPI-1 as listed in Chapter 35.

3110.2 Public spas. Public spa shall be designed and constructed in conformance with ANSI/NSPI-2 as listed in Chapter 35.

3110.3 Permanently installed residential spas. Permanently installed residential spas shall be designed and

Added new (b)3i and (b)3ii; and recodified former (b)3i through (b)3vii as (b)3iii through (b)3ix.

Amended by R.2008 d.39, effective March 3, 2008.

See: 39 N.J.R. 2175(a), 40 N.J.R. 1084(a).

Added new (b)24iii; and recodified former (b)24iii as (b)24iv.

Administrative correction.

See: 40 N.J.R. 1829(a).

Amended by R.2008 d.184, effective July 7, 2008.

See: 39 N.J.R. 2176(a), 40 N.J.R. 3990(a).

Deleted former (b)9vii; and recodified former (b)9viii through (b)9xlii as (b)9vii through (b)9xli.

Amended by R.2009 d.48, effective February 2, 2009.

See: 40 N.J.R. 5319(a), 41 N.J.R. 733(b).

In (b)3iii, inserted "(not including food or drink consumption)"; added new (b)5ii; recodified former (b)5ii as (b)5iii; added new (b)5iv and (b)5v; recodified former (b)5iii through (b)5ix as (b)5vi through (b)5xii; in (b)7i, deleted "at" preceding and ", 'and group U when used as an

accessory to Group R3" following "Note b"; added new (b)8iii; recodified former (b)8iii through (b)8v as (b)8iv through (b)8vi; in (b)8v, substituted "Exceptions 4 and 6" for "Exception 4" and "their" for "its"; in the second paragraph of (b)9ii, deleted ".1" following "903.1.2"; in (b)9v1, deleted "that conforms to the requirements of Section 1005.3.6," following "stairway" and substituted "1023" for "1003.3.4"; in the introductory paragraph of (b)9vi, substituted "903.2.14" for "903.2.16"; in (b)9xii3, substituted "903.3.1.1" for "906.2.1"; rewrote (b)9xiii through (b)9xli; added (b)9xlii; rewrote (b)10, (b)17xiv through (b)17xxii; added new (b)18v; recodified former (b)18v through (b)18xi as (b)18vi through (b)18xii; rewrote (b)21; and in (b)22iv, deleted "In" preceding "Section" and "Item 3" preceding "shall".

#### Case Notes

Set back provisions of borough zoning ordinance controlled conflicting state building code provisions. *Pfeuffer v. Sculco*, 242 N.J.Super. 181, 576 A.2d 309 (A.D.1990).

iv. Section R301.2.2, Seismic provisions, shall be deleted in its entirety and the following shall be inserted: "Detached one- and two-family dwellings and attached single-family townhouses are exempt from the seismic requirements of this code." In addition, the exception shall be deleted in its entirety.

v. Section R303.6, Stairway illumination, and Section R303.6.1, Light activation, shall be deleted in their entirety.

vi. Section R303.8, Required heating, shall be deleted in its entirety.

vii. In Section R307.1, Space required, "Figure R307.1" shall be deleted and "Figure 7.3.2 of the plumbing subcode, entitled "Minimum Fixture Clearances" shall be inserted. In addition, Figure R307.1 shall be deleted in its entirety.

viii. Section R309.2, Separation required, shall be deleted and the following shall be inserted: "Private garages located beneath rooms shall have walls, partitions, floors and ceilings separating the garage from the adjacent interior spaces constructed with not less than a one-hour fire resistance rating (see N.J.U.C.C. FTO-13). Attached private garages shall be completely separated from the adjacent interior spaces and the attic area by means of ½-inch gypsum board or equivalent applied to the garage side."

ix. In Section R310.1, Emergency escape and rescue required, "Basements and" shall be deleted. The sentence shall start with "Every." In addition, in the third sentence, "but shall not be required in adjoining areas of the basement" shall be deleted. Finally, the exception shall be deleted in its entirety.

x. In Section R311.4.3, Landings at doors, in Exception 2 and Exception 3, "7 ¾ inches (196 mm)" shall be deleted and "8 ¼ inches (210 mm)" shall be inserted.

xi. In Section R311.5.3.1, Riser height, in the first sentence, "7 ¾ inches (196 mm)" shall be deleted and "8 ¼ inches (210 mm)" shall be inserted.

xii. In Section 311.5.3.2, Tread depth, in the first sentence, "10 inches (254 mm)" shall be deleted and "9 inches ( 229 mm)" shall be inserted. In addition, in the fourth sentence, "10 inches (254 mm)" shall be deleted and "9 inches ( 229 mm)" shall be inserted.

xiii. In Section R311.5.6.1, Height, "34 inches (864 mm)" shall be deleted and "30 inches (762 mm)" shall be inserted.

xiv. In Section 311.5.6.3, Handrail grip size, Item 1 shall be deleted in its entirety and Section R315.2 of the 2000 edition of the International Residential Code shall be inserted as follows:

"Type 1. The handgrip portion of Type 1 handrails shall have a circular cross section of 1¼ inches (32 mm) minimum to 2 5/8 inches (67 mm) maximum. Other handrail shapes that provide an equivalent grasping surface are permissible. Edges shall have a minimum radius of 1/8 inch (3.2 mm)."

xv. Section R311.5.7, Illumination, shall be deleted in its entirety.

xvi. Section R313.2.1, Alterations, repairs and additions, shall be deleted in its entirety.

xvii. In Section R313.3, Power source, "Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or in buildings that undergo alterations, repairs, or additions regulated by Section R313.1.1" shall be deleted.

xviii. In Section R311.6.3.1, Height, "34 inches (864 mm)" shall be deleted and "30 inches (762 mm)" shall be inserted.

xix. In Section R317.1, Dwelling unit separation, in Exception 1, "13R, or 13D" shall be inserted after "NFPA 13."

xx. In Section R317.2, Townhouses, in the second sentence of the exception, "Chapters 33 through 42" shall be deleted and " the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

xxi. In Section R318.1, Moisture control, in Exception 3, "in climate zones 1 through 4 in Table N1101.2" shall be deleted and "HDD 4500-4999 and HDD 5000-5499 in accordance with the energy subcode (N.J.A.C. 5:23-3.18) shall be inserted.

xxii. Section R321.1, Site address, shall be deleted in its entirety.

xxiii. Section R322, Accessibility, shall be deleted in its entirety.

xxiv. Section R323, Elevators and platform lifts, shall be deleted in its entirety.

xxv. In Section R324.1, General, "as established by Table R301.2(1)" shall be deleted. Additionally, in the exception "as established by Table R301.2(1)" shall be deleted.

xxvi. In Section R324.1.5, Protection of mechanical and electrical systems, the second sentence shall be deleted in its entirety.

xxvii. In Section R324.1.6, Protection of water supply and sanitary sewage systems, in the first and second sentences, "and replacement" shall be deleted. Also, in the second sentence, "the plumbing provisions of this code and Chapter 3 of the International Private Sewage Disposal Code" shall be deleted and "the plumbing subcode (N.J.A.C. 5:23-3.15)" shall be inserted.

xxviii. In Section R324.1.8, Manufactured housing, in the first sentence, "or replacement" and "and the anchor and tie-down requirements of Section AE604 and AE605 of Appendix E shall apply" shall be deleted.

xxix. Section R324.3.6, Construction Documents, shall be deleted in its entirety.

xxx. New Section R325 entitled, "Carbon Monoxide Alarms," shall be inserted as follows:

"R325 Carbon monoxide alarms. Single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any dwelling unit if the dwelling unit contains a fuel-burning appliance or has an attached garage. An "open parking structure," as defined in the building subcode, shall not be deemed to be an attached garage.

Carbon monoxide alarms shall be manufactured, listed and labeled in accordance with UL 2034 and shall be installed in accordance with the requirements of this section and NFPA 720. Carbon monoxide alarms shall be battery operated, hard-wired or of the plug-in type."

4. Chapter 4, Foundations, shall be amended as follows:

i. In Table R401.4.1, Presumptive Load Bearing Values of Foundation Materials, "12,000; 4,000; 3,000; 2,000; and 1,500" shall be deleted and "12,000; 6,000; 5,000; 3,000; and 2,000" shall be inserted.

ii. In Section 403.1.4.1, Frost protection, the exception shall be deleted and the following shall be inserted in its place:

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

1. Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to, agricultural buildings, temporary buildings and minor storage facilities.

2. Area of 600 square feet (56 m<sup>2</sup>) or less for light framed construction, or 400 square feet (37 m<sup>2</sup>) or less for other than light-framed construction; and

3. Eave height of 10 feet (3048 mm) or less.

iii. In Section R403.3.3, Drainage, "Table R405.1" shall be deleted and "Table R406.1" shall be inserted.

iv. In Section R404.1, Concrete and masonry foundation walls, the second sentence shall be deleted. Also, the second paragraph shall be deleted in its entirety. Tables R404.1(1), Top Reactions and Prescriptive Support for Foundation Walls, R404.1(2), Maximum Plate Anchor-Bolt Spacing for Supporting Foundation Walls,

and R404.1(3), Maximum Aspect Ratio, L/W for Unbalanced Foundations, shall be deleted in their entirety.

v. In Section R404.4, Insulating concrete form foundation walls, the second sentence shall be deleted.

vi. In Table R404.1.1(1), Note B; Table R404.1.1(2), Note D; Table R404.1.1(3), Note D; Table R404.1.1(4), Note D; Table R404.1.1(5), Note A; Table R404.4(1), Note F; Table R404.4(2), Note G; Table R404.4(3), Note G; Table R404.4(4), Note H; and Table R404.4(5), Note H, "Table R405.1" shall be deleted and "Table R406.1" shall be inserted.

vii. Sections R405, Foundation Drainage with the exception of Table R405.1, and R406, Foundation Waterproofing and Dampproofing, shall be deleted and the text of Section 1807, Dampproofing and Waterproofing from the International Building Code (IBC)/2006 shall be inserted as follows:

"R406.1 Where required. Walls or portions thereof that retain earth and enclose interior spaces and floors below grade shall be waterproofed and dampproofed in accordance with this section, with the exception of those spaces containing groups other than residential and institutional where such omission is not detrimental to the building or occupancy.

R406.1.1 Story above grade. Where a basement is considered a story above grade and the finished ground level adjacent to the basement wall is below the basement floor elevation for 25 percent or more of the perimeter, the floor and walls shall be dampproofed in accordance with Section R406.2 and a foundation drain shall be installed in accordance with Section R406.4.1. The foundation drain shall be installed around the portion of the perimeter where the basement floor is below ground level. The provisions of Sections R406.3 and R406.4.1 shall not apply in this case.

R406.1.2 Underfloor space. The finished ground level of an underfloor space such as a crawl space shall not be located below the bottom of the footings. Where there is evidence that the ground water table rises to within six inches (152 mm) of the ground level at the outside building perimeter or where there is evidence that the surface water does not readily drain from the building site, the ground level of the underfloor space shall be as high as the outside finished ground level, unless an approved drainage system is provided. The provisions of Sections R406.2, R406.3 and R406.4 shall not apply in this case.

R406.1.2.1 Floor hazard areas. For buildings and structures in flood hazard areas as established in Section R327, the finished ground level of an underfloor space such as a crawl space shall be equal to or higher than the outside finished ground level.

Exception: Under-floor spaces that meet the requirements of FEMA/FIA-TB-11.

R406.1.3 Groundwater control. Where the groundwater table is lowered and maintained at an elevation not less than 6 inches (152 mm) below the bottom of the lowest floor, the floor and walls shall be dampproofed in accordance with Section R406.2. The design of the system to lower the groundwater table shall be based on accepted principles of engineering that shall consider, but not necessarily be limited to, permeability of the soil, rate at which water enters the drainage system, rated capacity of pumps, head against which pumps are to pump; and the rated capacity of the disposal area of the system.

R406.2 Dampproofing required. Where hydrostatic pressure will not occur, floors and walls for other than wood foundation systems shall be dampproofed in accordance with this section. Wood foundation systems shall be constructed in accordance with AFPA TR7.

R406.2.1 Floors. Dampproofing materials for floors shall be installed between the floor and the base course required by Section R406.4.1, except where a separate floor is provided above a concrete slab.

Where installed beneath the slab, dampproofing shall consist of not less than six-mil (0.006 inch; 0.152 mm) polyethylene with joints lapped not less than six inches (152 mm), or other approved methods or materials. Where permitted to be installed on top of the slab, dampproofing shall consist of mopped-on bitumen, not less than four-mil (0.004 inch; 0.102 mm) polyethylene, or other approved methods or materials. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.2.2 Walls. Dampproofing materials for walls shall be installed on the exterior surface of the wall, and shall extend from the top of the footing to above ground level.

Dampproofing shall consist of a bituminous material, three pounds per square yard (16N/m<sup>2</sup>) of acrylic modified cement, ¼-inch (3.2 mm) coat of surface-bonding mortar complying with ASTM C 887, any of the materials permitted for waterproofing by Section R406.3.2, or other approved methods or materials.

R406.2.2.1 Surface preparation of walls. Prior to application of dampproofing materials on concrete walls, holes and recesses resulting from the removal of form ties shall be sealed with a bituminous material or other approved methods or materials. Unit masonry walls shall be parged on the exterior surface below ground level with not less than ⅜ inch (9.5 mm) of Portland cement mortar. The parging shall be coved at the footing.

Exception: Parging of unit masonry walls is not required where a material is approved for direct application to the masonry.

R406.3 Waterproofing required. Where the groundwater investigation indicates that a hydrostatic pressure condition exists, and the design does not include a groundwater con-

trol system as described in Section R406.1.3, walls and floors shall be waterproofed in accordance with this section.

R406.3.1 Floors. Floors required to be waterproofed shall be of concrete, designed and constructed to withstand the hydrostatic pressures to which the floors will be subjected.

Waterproofing shall be accomplished by placing a membrane of rubberized asphalt, butyl rubber, or not less than six-mil polyvinyl chloride with joints lapped not less than six inches (152 mm) or other approved materials under the slab. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.3.2 Walls. Walls required to be waterproofed shall be of concrete or masonry and shall be designed and constructed to withstand the hydrostatic pressures and other lateral loads to which the walls will be subjected.

Waterproofing shall be applied from the bottom of the wall to not less than 12 inches (305 mm) above the maximum elevation of the ground water table. The remainder of the wall shall be dampproofed in accordance with Section R406.2.2. Waterproofing shall consist of two-ply hot-mopped felts, not less than six-mil (0.006 inch; 0.152 mm) polyvinyl chloride, 40-mil (0.040 inch; 1.02 mm) polymer-modified asphalt, six-mil (0.006 inch; 0.152 mm) polyethylene or other approved methods or materials capable of bridging nonstructural cracks. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instructions.

R406.3.2.1 Surface preparation of walls. Prior to the application of waterproofing materials on concrete or masonry walls, the walls shall be prepared in accordance with Section R406.2.2.1.

R406.3.3 Joints and penetrations. Joints in walls and floors, joints between the wall and floor, and penetrations of the wall and floor shall be made watertight utilizing approved methods and materials.

R406.4 Subsoil drainage system. Where a hydrostatic pressure condition does not exist, dampproofing shall be provided and a base shall be installed under the floor and a drain installed around the foundation perimeter. A subsoil drainage system designed and constructed in accordance with Section R406.1.3 shall be deemed adequate for lowering the groundwater table.

R406.4.1 Floor base course. Floors of basements, except as provided for in Section R406.1.1, shall be placed over a floor base course not less than four inches (102 mm) in thickness that consists of gravel or crushed stone containing not more than 10 percent of material that passes through a No. 4 (4.75 mm) sieve.

Exception: Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required.

R406.4.2 Foundation drain. A drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 (4.75 mm) sieve. The drain shall extend a minimum of 12 inches (305 mm) beyond the outside edge of the footing. The thickness shall be such that the bottom of the drain is not higher than the bottom of the base under the floor, and that the top of the drain is not less than six inches (152 mm) above the top of the footing. The top of the drain shall be covered with an approved filter membrane material. Where a drain tile or perforated pipe is used, the invert of the pipe or tile shall not be higher than the floor elevation. The top of joints or the top of perforations shall be protected with an approved filter membrane material. The pipe or tile shall be placed on not less than two inches (51 mm) of gravel or crushed stone complying with Section R406.4 and shall be covered with not less than six inches (152 mm) of the same material.

R406.4.3 Drainage discharge. The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the plumbing subcode.

Exception: Where a site is located in well-drained gravel or sand/gravel mixture soils, a dedicated drainage system is not required."

viii. At Section R407.3, Structural requirements, in the exception, delete the phrase "In Seismic Design Categories A, B, and C" at the beginning of the sentence.

ix. In Section R408.3, Unvented crawl space, in Condition 2.1 and Condition 2.2, "Section N1102.2.8" shall be deleted and "the energy subcode (N.J.A.C. 5:23-3.18)" shall be inserted.

5. Chapter 5, Floors, shall be amended as follows:

i. In Section R502.11.4, entitled "Truss Design Drawings," the second sentence shall be amended to insert "and truss layout drawings" after "Truss design drawings."

ii. New Section R502.11.5, entitled "Truss Identification," shall be inserted as follows: "Each truss shall be labeled or otherwise indelibly marked at the factory with the individual truss number as assigned in the truss layout plan. The indelible marking or label shall be located on the bottom chord of the truss, inside the bearing points. When indelible markings are used, each digit shall be not less than one inch high. When labels are used, the label shall be a minimum of five inches by three inches and shall be affixed to the truss by a truss plate. Labels shall remain affixed to the truss."

iii. In Section R506.2.2, Base, in the exception, "Table R405.1" shall be deleted and "Table R406.1" shall be inserted.

6. Chapter 6, Wall Construction, shall be amended as follows:

i. In Figure R602.6.1, Notching and Bored Hole Limitations for Exterior Walls and Bearing Walls, "eight-16 penny nails" shall be deleted and "three-8d nails" shall be inserted.

ii. In Section R602.6.1, Drilling and notching of top plate, "eight-16d nails" shall be deleted and "three-8d" nails shall be inserted.

iii. Section R606.1.1, Professional registration not required, shall be deleted in its entirety.

iv. In Section R611.1, General, the second sentence shall be deleted.

7. Chapter 8, Roof-Ceiling Construction, shall be amended as follows:

i. In Section R802.10.1, entitled "Truss Design Drawings," the third sentence shall be amended to insert "and truss layout drawings" after "Truss design drawings."

ii. New Section 802.10.6, entitled "Truss Identification," shall be inserted as follows: "Each truss shall be labeled or otherwise indelibly marked at the factory with the individual truss number as assigned in the truss layout plan. The indelible marking or label shall be located on the bottom chord of the truss, inside the bearing points. When indelible markings are used, each digit shall be not less than one inch high. When labels are used, the label shall be a minimum of five inches by three inches and shall be affixed to the truss by a truss plate. Labels shall remain affixed to the truss."

iii. In Section R806.4, Condition attic assemblies, in Condition 2, the exception shall be deleted. In addition, Condition 3 shall be deleted. Finally, in Condition 4, "In Zones 3 through 8 as defined in Section N1101.2" shall be deleted and Condition 4 shall be renumbered as Condition 3.

iv. In Section R808.1, Combustible insulation, in the second paragraph, "Section N1102.4.3" shall be deleted and "the energy subcode, N.J.A.C. 5:23-3.18" shall be inserted.

8. Chapter 9, Roof Assemblies, shall be amended as follows:

i. In Section 903.4.1, Overflow drains and scuppers, in the last sentence, "International Plumbing Code" shall be deleted and "plumbing subcode (N.J.A.C. 5:23-3.15)" shall be inserted in its place.

Occupancies Up To and Including Four Stories in Height” shall be inserted.

23. The Appendices shall be amended as follows:

i. Appendix A, Sizing and Capacities of Gas Piping; Appendix B, Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances, and Appliances Listed for Use with Type B Vents; and Appendix C, Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems are informative and are not part of the one- and two-family dwelling subcode.

ii. Appendix D, Recommended Procedure for Safety Inspection of an Existing Appliance Installation; Appendix E, Manufactured Housing Used as Dwellings; and Appendix F, Radon Control Methods, are deleted in their entirety.

iii. In Appendix G, Section AG105.1, Application, “subject to this code” shall be inserted at the end of the first sentence.

iv. Appendix G, Swimming pools, Spas and hot tubs, shall be adopted as part of this subcode and Section AG105.2, Outdoor swimming pool, Provision 9 shall be deleted in its entirety. In the same section, under Provision 10, Item 10.1 shall be deleted. In addition, Item 10.2 shall be renumbered as 10.1 and the last sentence shall be deleted. Also, Section AG105.3, Indoor swimming pool, “Item 9” shall be deleted and “Items 1 through 7” shall be inserted. Lastly, Section AG106, Entrapment protection for swimming pool and spa suction outlets, shall be deleted and “See N.J.A.C. 5:23-3.15, plumbing subcode.” shall be inserted under the title.

v. Appendix H, Patio Covers, and Appendix K, Sound Transmission, shall be adopted as part of this subcode.

vi. Appendix I, Private Sewage Disposal; Appendix J, Existing Buildings and Structures; Appendix L, Permit Fees; Appendix M, Home Day Care – R-3 Occupancy; Appendix N, Venting Methods; Appendix O, Gray Water Recycling Systems; Appendix P, Sprinkling; and Appendix Q, ICC International Residential Code Electrical Provisions/National Electrical Code Cross-Reference shall be deleted in their entirety.

New Rule, R.1985 d.324, effective July 1, 1985.

See: 17 N.J.R. 861(c), 17 N.J.R. 1646(a).

Amended by R.1987 d.374, effective September 21, 1987.

See: 19 N.J.R. 1024(a), 19 N.J.R. 1720(b).

Model subcode revisions.

Amended by R.1988 d.388, effective August 1, 1988.

See: 20 N.J.R. 1130(a), 20 N.J.R. 2073(b).

Added (c).

Amended by R.1990 d.253, effective May 21, 1990.

See: 22 N.J.R. 909(b), 22 N.J.R. 1554(a).

References to 1989 Supplement added; (b)1ii(5), 2, 4, 8 and 9 amended; (b)5, 6 and 7 added; (c) deleted; Table R-201.2 added.

Amended by R.1991 d.571, effective November 18, 1991.

See: 23 N.J.R. 2619(a), 23 N.J.R. 3444(b).

Added new (c).

Amended by R.1992 d.208, effective May 18, 1992.

See: 24 N.J.R. 680(a), 24 N.J.R. 1879(a).

Code provisions applicable to flood hazard zones clarified.

Amended by R.1993 d.662, effective December 20, 1993.

See: 25 N.J.R. 3891(a), 25 N.J.R. 5918(a).

Amended by R.1998 d.332, effective July 6, 1998.

See: 30 N.J.R. 1377(a), 30 N.J.R. 2421(b).

Rewrote the section.

Amended by R.2000 d.166, effective April 17, 2000.

See: 31 N.J.R. 4151(a), 32 N.J.R. 1376(a).

In (c)4, substituted “more pressure than would be exerted by backfill” for “lateral pressure from soils” following “subject to” in ii, and substituted “drainage” for “designated disposal” preceding “system” and added “according to the Unified Soil Classification System, Group I Soils” at the end of iii; and inserted (c)9iv.

Amended by R.2001 d.369, effective October 15, 2001.

See: 33 N.J.R. 2365(a), 33 N.J.R. 3674(a).

In (b), inserted “that are” following “type 5B construction”, “no more” preceding “than 4,800 square feet”, and substituted “seven feet” for “7 1/3 feet (2,235 mm.)”.

Amended by R.2003 d.187, effective May 5, 2003.

See: 34 N.J.R. 4248(a), 35 N.J.R. 1939(c).

Rewrote the section.

Amended by R.2003 d.420, effective November 3, 2003.

See: 34 N.J.R. 4248(a), 35 N.J.R. 5073(a).

Rewrote (c).

Amended by R.2005 d.403, effective November 21, 2005.

See: 37 N.J.R. 2753(a), 37 N.J.R. 4399(b).

Rewrote (c).

Amended by R.2006 d.28, effective January 17, 2006.

See: 37 N.J.R. 2750(a), 38 N.J.R. 485(b).

Rewrote (c)15.

Administrative correction.

See: 38 N.J.R. 926(a).

Amended by R.2006 d.75, effective February 21, 2006.

See: 37 N.J.R. 3110(a), 38 N.J.R. 1183(a).

Added (c)10; recodified former (c)10-15 as (c)11-16.

Administrative correction.

See: 38 N.J.R. 1827(b).

Amended by R.2007 d.65, effective February 20, 2007.

See: 38 N.J.R. 3348(a), 39 N.J.R. 633(a).

Rewrote (a) and (c).

Amended by R.2007, d.384, effective December 17, 2007.

See: 39 N.J.R. 2684(a), 39 N.J.R. 5211(a).

Added new (c)17; and recodified existing (c)17 through (c)22 as (c)18 through (c)23.

Amended by R.2008 d.84, effective April 7, 2008.

See: 39 N.J.R. 5144(a), 40 N.J.R. 1827(a).

Deleted former (c)3xxviii; recodified former (c)3xix through (c)3xxxii as (c)3xviii through (c)3xxx; in the introductory paragraph of (c)4, inserted a comma following “Foundations”; and in (c)4iii, added the second sentence.

Administrative correction.

See: 40 N.J.R. 1829(a).

Amended by R.2009 d.48, effective February 2, 2009.

See: 40 N.J.R. 5319(a), 41 N.J.R. 733(b).

In (c)3xxvii, inserted the final sentence; recodified the former second occurrence of (c)3xxiii as (c)3xxviii; added new (c)4iii; recodified former (c)4iii and (c)4iv as (c)4iv and (c)4v; added new (c)4vi; recodified former (c)4v through (c)4vii as (c)4vii through (c)4ix; added (c)5iii; in (c)8i, inserted “(N.J.A.C. 5:23-3.15)”;

in (c)9iii, deleted “Figure R1003.11 and” following “In”; added new (c)19ix; recodified former (c)19ix through (c)19xiii as (c)19x through (c)19xiv; and rewrote (c)23iv.

### 5:23-3.22 Fuel gas subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c. 217, the Commissioner hereby adopts the model code of the Interna-

tional Code Council, Inc., known as the International Fuel Gas Code/2006. This code is hereby adopted by reference as the fuel gas subcode for the State of New Jersey subject to the modifications in (b) below.

i. Copies of this code may be obtained from the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795.

ii. The International Fuel Gas Code/2006 may be known and cited as the "fuel gas subcode."

2. Any references to the International Plumbing Code, ICC Electrical Code, International Energy Conservation Code or the International Existing Building Code listed in Chapter 8 shall be considered a reference to the appropriate adopted plumbing, electrical, or energy subcode in N.J.A.C. 5:23-3 or rehabilitation subcode in N.J.A.C. 5:23-6.

3. Anywhere the term "code" appears, shall be a reference to "subcode" as defined in N.J.A.C. 5:23-1.4 for any of the adopted national model codes as appropriate.

(b) The following chapters, sections or pages of the International Fuel Gas Code/2006 shall be amended as follows:

1. Chapter 1 of the fuel gas subcode, entitled "Administration" is deleted in its entirety.

2. Chapter 2 of the fuel gas subcode, entitled "Definitions," is amended as follows:

i. In Section 201.3 delete "ICC Electrical Code, and International Plumbing Code," and insert "electrical subcode and plumbing subcode."

ii. The definition of the term "alteration" is deleted and the definition found in N.J.A.C. 5:23-1.4 is substituted;

iii. The definition of the term "approved" is deleted;

iv. The definition of the term "code" is deleted;

v. The definition of the term "code official" is deleted, and the following language is substituted: "For the purpose of the fuel gas subcode, the term "code official" shall mean the appropriate subcode official as designated in N.J.A.C. 5:23-3.4."

vi. The definition of the term "unlisted boiler" is deleted.

3. Chapter 3 of the fuel gas subcode, entitled "General Regulations," shall be amended as follows:

i. Section 301.1 is amended to delete the words "in accordance with Section 101.2."

ii. In Section 301.3, Listed and labeled, "in accordance with Section 105," shall be deleted. In addition, the second sentence shall be deleted in its entirety.

iii. Section 301.9 is deleted.

iv. Section 305.1. Delete the second paragraph in its entirety.

v. Section 307.2, Fuel-burning appliances, shall be amended to insert "drywell, sump pump, floor drain, or drainage system below floor" after "fixture."

vi. Section 307.3, Drain pipe materials and sizes, shall be deleted.

4. Chapter 4 of the fuel gas subcode, entitled "Gas Piping Installation," shall be amended as follows:

i. Section 401.2, Liquefied petroleum gas storage, shall be amended to add the following: Notwithstanding the provisions contained in NFPA 58, the installation of LP-Gas containers on roofs of buildings shall be strictly prohibited.

ii. Add new Section 401.9 as follows:

401.9 Protection from vehicle impact. Gas meters, related regulators and piping that are installed indoors or outdoors and are subject to vehicle impact shall be protected by barriers meeting the requirements of Section 312 of the International Fire Code. For the purpose of applying this provision, "subject to vehicle impact" shall mean located within three feet of any garage door opening, driveway or designated parking area and not separated by a building wall from the space where a vehicle may be operated.

(1) Exception: If verification of the installation of an excess flow valve is provided by the gas utility, vehicle impact barriers shall not be required.

iii. Section 403.3 is deleted.

5. Chapter 5 of the fuel gas code, entitled "Chimneys and vents," shall be amended as follows:

i. In Section 501.15.2, Flue passageways, in the first sentence, "free of obstructions and combustible deposits" shall be deleted and "inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d)" shall be inserted.

ii. In Section 503.5.6, Inspection of chimneys, "examined to ascertain that it is clear and free of obstructions" shall be deleted and "inspected in accordance with the chimney certification program as provided for in N.J.A.C. 5:23-2.20(d)" shall be inserted.

iii. In Section 503.5.6.1, Chimney lining, the exception shall be deleted in its entirety.

6. Chapter 6 of the fuel gas code, entitled "Specific Appliances," shall be amended as follows:

i. Section 627.10, Switches in electrical supply line, shall be deleted.

7. Chapter 8 of the fuel gas code, entitled "Referenced Standards," shall be amended as follows:

## SUBCHAPTER 6. REHABILITATION SUBCODE

**5:23-6.1 Introduction; using this subcode**

(a) This section is a guide to the use of the rehabilitation subcode. It should not be interpreted as containing substantive requirements and it is not intended to be cited for enforcement purposes.

1. The provisions of the other subcodes of the Uniform Construction Code do not apply to work in existing buildings, changing the use of an existing building or work in an existing building related to an addition unless the provisions of this subcode specifically reference them and make them applicable.

2. Traditionally, the New Jersey Uniform Construction Code has made the requirements that are applicable to new buildings also apply to buildings whose use is changed; applicable to buildings undergoing rehabilitation with the extent of the requirements depending on the amount of money being spent on the building; and to some extent applicable to existing buildings that have an addition constructed. Buildings whose use was changed and buildings receiving rehabilitation costing more than 50 percent of the replacement cost of the building were required to comply with all the provisions of the Uniform Construction Code for new buildings.

3. This subcode takes a new approach. The requirements that apply to a project are based upon the type of work being done rather than on the extent of the work. There is only one exception to this rule. In the case of reconstruction work, as the term reconstruction is defined in this subcode, there are some requirements which must be met when the project is a large one in floor area.

4. In this subcode, work is classified into six categories. Each category has a separate section which describes the requirements for that category of work. The categories are repair, renovation, alteration, reconstruction, change of use and additions. These terms are defined in N.J.A.C. 5:23-6.3. The definitions are critical to understand the distinctions between these six categories of work. Where a project contains more than one category of work, each applicable category must be consulted for the requirements for that category of work.

(b) Repair Work: The requirements that apply to repair work are in N.J.A.C. 5:23-6.4. The requirements for repairs are brief due to the limited nature of the work. There is a short list of materials that may not be used for repair work due to their inherently hazardous nature and another list of materials which must be used in connection with repair work where applicable. These lists should be used when planning the repair components of any project.

1. This subcode does not establish when a permit is required for a project. Those requirements are in N.J.A.C. 5:23-2. Although it is generally true that repair work undertaken by itself does not require a construction permit, it is important to understand that any repair work undertaken in connection with a project that involves other categories of work is required to meet only the provisions for the repair category established by this subcode. There is no limit to the amount of repair work which may be undertaken. The decision to renovate rather than repair is made only by the owner.

(c) Renovation Work: The requirements that apply to renovation work are in N.J.A.C. 5:23-6.5. Renovation is defined in N.J.A.C. 5:23-6.3.

1. There are short lists of materials that may not be used and materials or practices which must be used, where applicable, when renovation work is undertaken. These lists should be used when planning a project which involves renovation work.

2. The installation of smoke detectors is required in any building of Group R-3 and R-5 which undergoes a renovation.

3. Renovation work must comply with N.J.A.C. 5:23-6.8, Materials and methods. All materials used for the renovation work must meet the standards for those materials established by N.J.A.C. 5:23-6.8 and methods of installation must comply with that section. N.J.A.C. 5:23-6.8, Materials and methods, references and makes applicable to renovation work certain specified subsections of the other subcodes of the Uniform Construction Code. Only those subsections specifically referenced in N.J.A.C. 5:23-6.8 apply to renovation work. All materials and methods used in renovation work must comply with the requirements of that section.

4. This subcode never requires renovation. Any existing work may be repaired. The requirements for renovation apply only where the owner decides to renovate.

(d) Alteration Work: The requirements that apply to alteration work are in N.J.A.C. 5:23-6.6. Alteration is defined in N.J.A.C. 5:23-6.3.

1. N.J.A.C. 5:23-6.6, Alteration work, contains short lists of materials that may not be used and materials or practices which must be used, where applicable, when alteration work is undertaken. These lists should be used when planning a project which includes alteration work.

2. The installation of smoke detectors is required in any building of Groups R-3 and R-5 which undergoes an alteration.

3. Alteration work must also comply with materials and methods that are set forth in N.J.A.C. 5:23-6.8.

4. In alteration work, the configuration of the building is changed in some manner. The definition of "alteration" in N.J.A.C. 5:23-6.3 provides the information needed to fully understand this term. Because improper alteration work could create a safety hazard in the building, this subcode contains specific requirements which define these hazards. These are the basic requirements of the subcode which can be found in N.J.A.C. 5:23-6.10 through 6.30.

5. The subcode includes basic requirements, listed by group, with the exception of egress capacity, interior finish requirements, commercial cooking operations, and windowless stories which apply to all groups. Reference should be made to the list of basic requirements applicable to the particular group in which the building being altered falls. Care should be taken to ensure that the alteration will not create a non-conformity with any of the basic requirements which did not exist before the alteration was undertaken.

6. Certain alterations create what are defined to be new building elements. There is a specific listing of those items which are to be treated as newly-created building elements which can be found in N.J.A.C. 5:23-6.9. The elements on that list are required to conform to certain specific sections of the other subcodes of the Uniform Construction Code. The sections with which each newly-constructed element must comply are listed in N.J.A.C. 5:23-6.9. Any alteration which creates one of the elements listed in that section must comply with the specific requirements listed in N.J.A.C. 5:23-6.9.

7. Improvements to the accessibility of buildings may be required when alteration work is undertaken. Those requirements are specified in N.J.A.C. 5:23-6.6(e) and (j).

(e) Reconstruction Work: The requirements that apply to reconstruction work are in N.J.A.C. 5:23-6.7. Reconstruction is defined in N.J.A.C. 5:23-6.3. Unlike repair, renovation, and alteration, reconstruction is not a kind of work. A

reconstruction may, as the definition of the term makes clear, include a combination of repair, renovation, and alteration work. It is the extent and nature of the work which makes a project a reconstruction. There are no quantitative criteria which determine whether a project is a reconstruction. A project becomes a reconstruction when the area where the project is taking place cannot be occupied while the work is in progress and when a new certificate of occupancy is required before the area can be re-occupied. Both criteria must be met.

1. This subcode requires that a reconstruction project have a delineated work area. This area is established by the permit applicant. The term "work area" is defined in N.J.A.C. 5:23-6.3. A reconstruction project must always involve an entire use, primary function space, or tenancy as those three terms are defined in N.J.A.C. 5:23-6.3. Projects which do not involve an entire use, primary function space, or tenancy are not reconstruction projects.

2. Although a reconstruction project is comprised of repair, renovation and alteration work, all of the requirements that apply are found in N.J.A.C. 5:23-6.7. For ease of use, this section has been written to include all of the requirements applicable to reconstruction. The entire work area must conform to the basic requirements in N.J.A.C. 5:23-6.10 through 6.30. These sections must be carefully reviewed when a reconstruction project is being planned.

3. The basic requirements are organized by individual groups in N.J.A.C. 5:23-6.12 through 6.28. Only the sections relevant to the building's group must be consulted. Where a project involves mixed uses, then the special provisions of N.J.A.C. 5:23-6.29 should also be consulted. Basic requirements that apply to all groups are in N.J.A.C. 5:23-6.11 and 6.30. Therefore, N.J.A.C. 5:23-6.11, 6.30, and the specific group section between 6.12 and 6.28 must be consulted for the basic requirements which apply to a project.

4. In addition to meeting the basic requirements, certain reconstruction projects must meet the supplemental requirements found in N.J.A.C. 5:23-6.10 through 6.30. There is a specific section for each group as is the case with the basic requirements. Supplemental requirements that apply to all groups are in N.J.A.C. 5:23-6.11A and 6.30. The supplemental requirements apply only when the work area for a reconstruction project exceeds a certain size. Each supplemental requirement has its own threshold of applicability.

5. The owner of a building in which a reconstruction project is planned must review the supplemental requirements applicable to the use of the project to determine if any of those requirements applies to the project. In addition to the specific group section between N.J.A.C. 5:23-6.12A and 6.28A, N.J.A.C. 5:23-6.11A and 6.30 should be consulted for the supplemental requirements that apply to a project.

(f) Applying the Subcode to a Project: The requirements of this subcode applicable to a project can be found as follows:

1. Separate the project into its component parts of repair, renovation, and alteration;

2. Where a portion of the work is repair, consult the repair section of this subcode (N.J.A.C. 5:23-6.4) to ensure that prohibited materials are not being used and that any applicable required materials or practices are being used;

3. Where a portion of the work is renovation:

i. Consult the renovation sections of this subcode (N.J.A.C. 5:23-6.5);

ii. Ensure that the renovation work does not use any prohibited materials and that any applicable required materials or practices are being used; and

iii. Ensure that renovation materials and the methods of their installation conform to the Materials and Methods section of this subcode (N.J.A.C. 5:23-6.8).

4. Where a portion of the work is alteration work:

i. Consult the alteration section of this subcode (N.J.A.C. 5:23-6.6);

ii. Ensure that the alteration work does not use any prohibited materials and that any applicable required materials or practices are being used;

iii. Ensure that any materials and methods used for the alterations conform to the requirements of the materials and methods section of this subcode (N.J.A.C. 5:23-6.8);

iv. Ensure that alteration which creates a new building element listed in N.J.A.C. 5:23-6.9 conforms to the requirements for new building elements that are specified in N.J.A.C. 5:23-6.9; and

v. Ensure that none of the alteration work creates a new condition which would create a violation of any of the basic requirements applicable to the groups that are specified in N.J.A.C. 5:23-6.10 through 6.30.

5. Determine whether the project is a reconstruction project according to the definitions in N.J.A.C. 5:23-6.3. When the project is a reconstruction project:

i. Establish the work area of the project and show it on the plans and/or permit application;

ii. Ensure that the requirements applicable to the repair, renovation, and alteration portions of the project are followed;

iii. Ensure that the basic requirements for the particular uses that are specified in the relevant section of this subcode between N.J.A.C. 5:23-6.11 and 6.28 are followed. Where the project work area includes more than one group, then N.J.A.C. 5:23-6.29 should be consulted; and

iv. Review the size of the work area against the relevant provisions of the supplemental requirements in N.J.A.C. 5:23-6.11A through 6.28A. Where compliance with a supplemental requirement is necessary, then ensure that the plans and/or the permit application reflect compliance with the required section. Some supplemental requirements will require work outside the work area.

(g) Changes of Use: The Uniform Construction Code divides all buildings into categories called uses. The Rehabilitation Subcode uses these same classifications.

1. The different uses represent different hazards and different needs. Specific requirements apply to each use. Each of the other technical subcodes of the Uniform Construction Code: Building, Fire, Plumbing, Electrical, and Mechanical, defines these uses, each for its own purpose. Traditionally, the Uniform Construction Code required any building or portion of a building where the use was changed to conform to the requirements of the code for a new building of that use. This subcode takes a different approach.

2. A change of use in a building often, but not always, involves some construction work. Changes of use, in which the owner does not need any construction work to effect the new use, do happen. The different uses defined by the code reflect different levels of hazard and different safety requirements. Depending upon the specific change, a new use may not affect the hazard; it could pose a lesser hazard; or it might pose a greater hazard or necessitate additional safety measures.

3. This subcode allows changes of use where the new use is similar to or less demanding in terms of hazard or safety requirements than the present use. No modifications to the building are required by this subcode where such a change of use is planned.

4. This subcode uses the concept of hazard indexes in order to specify the requirements for a change of use. Separate hazard indexes are established for different aspects of building, health, and safety:

i. Basic Requirements: Changes of use specified in N.J.A.C. 5:23-6.31(b) must comply with the basic requirements set forth in N.J.A.C. 5:23-6.10 through 6.30 before the building can be occupied for the new use.

ii. Means of Egress: Certain changes of use specified in N.J.A.C. 5:23-6.31(c) must comply with additional requirements for egress which are set forth in N.J.A.C. 5:23-6.31(c) before the building can be occupied for the new use.

iii. Vertical Openings: Stairways and other vertical openings located in a building or portion of a building where there is a change of use are required to meet certain enclosure requirements for the new use which are specified in N.J.A.C. 5:23-6.12 through 6.28. These requirements must be met before the building may be occupied for the new use.

iv. Height and Area Limits: Changes of use are not allowed if the building will exceed the height and area limits specified in N.J.A.C. 5:23-6.31(e) for its type of construction. The types of construction are defined in N.J.A.C. 5:23-3.14, the Building Subcode.

v. Exterior Walls: Changes of use as specified in N.J.A.C. 5:23-6.31(f) of this subcode must have the fire resistance of exterior walls and any openings therein improved as specified in N.J.A.C. 5:23-6.31(f) before the building can be occupied for the new use.

vi. Automatic Sprinkler System: Changes of use as specified in N.J.A.C. 5:23-6.31(g) must have an automatic sprinkler system installed in accordance with the requirements of N.J.A.C. 5:23-6.31(g) before the building can be occupied for the new use.

vii. Fire Alarms and Fire Detection Systems: Changes of use as specified in N.J.A.C. 5:23-6.31(h) and (i) must have fire alarms or fire detection installed in accordance with the requirements of N.J.A.C. 5:23-

6.31(h) and (i) before the building can be occupied for the new use.

viii. Structural, Plumbing, Electrical, and Mechanical: Some changes of use may necessitate changes to the structural, plumbing, electrical, or mechanical systems of a building. These requirements are set forth in N.J.A.C. 5:23-6.31(k), (l), (m) and (n) of this subcode. Only those requirements necessitated by the change and needed for health or safety in the new use as specified must be met.

ix. Accessibility Requirements: Changes of use must conform to the accessibility requirements specified in N.J.A.C. 5:23-6.31(o) before the building can be occupied for the new use.

5. Where the owner of a building undergoing a change of use decides to undertake work not required by N.J.A.C. 5:23-6.31, then that work must comply with the requirements for repair, renovation, alteration, and reconstruction, as the case may be, which are established by N.J.A.C. 5:23-6.4, 6.5, 6.6 and 6.7.

6. Where the use of a building or portion of a building is changed, a new certificate of occupancy is required for the new use by the provisions of N.J.A.C. 5:23-2. This does not mean that all changes of use are required to meet the requirements for reconstruction. Only a project which meets the definition of reconstruction set forth in N.J.A.C. 5:23-6.3 need comply with the provisions of N.J.A.C. 5:23-6.7, Reconstruction.

(h) Additions: Additions are required to comply with the provision of the other technical subcodes of the Uniform Construction Code. Work in the existing building which is related to the addition must conform with the requirements of N.J.A.C. 5:23-6.32. Additionally, such work undertaken in the existing building must comply with the requirements for repair, renovation, alteration, and reconstruction as set forth in N.J.A.C. 5:23-6.4, 6.5, 6.6 and 6.7.

(i) Historical Buildings: N.J.A.C. 5:23-6.33 defines those buildings which are to be treated as historic and sets forth certain special requirements applicable to historic buildings which modify the provisions of this subcode when a building is historic. N.J.A.C. 5:23-6.33 should be reviewed to determine if a building is to be treated as historic under this subcode and for the special provisions applicable to the various types of historical buildings.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (a)3, deleted the last sentence; and in (d)7, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (c)2 and (d)2, substituted "R-3 and R-5" for "R-3/R-4"; in (f)5iii, (g)4ii, and (g)4vii, updated N.J.A.C. references.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted references to use preceding references to group throughout; in (g)4vi, substituted references to automatic sprinkler system for fire suppression throughout.

## 5:23-6.2 Applicability and compliance

(a) This subchapter, adopted pursuant to authority of the State Uniform Construction Code Act (P.L. 1975, c.217), and entitled "Rehabilitation Subcode," shall be known and may be cited throughout the regulations as N.J.A.C. 5:23-6, and when referred to in subchapter 6 of this chapter, may be cited as "this subchapter" or "this subcode." Unless otherwise specifically provided, all references to article or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such article, section or provision of this subchapter.

(b) Scope: Except as otherwise specified, this subchapter shall control all matters concerning the repair, renovation, alteration, reconstruction, change of use, and addition to all buildings and structures and their service equipment as defined herein and shall apply to all existing buildings and structures in the State of New Jersey.

1. This subchapter shall not be applied to any building or portion thereof that has never been occupied. In such buildings or spaces, the requirements of the other subcodes of the Uniform Construction Code for new construction shall apply.

2. All work shall be classified by the construction official, in consultation with the appropriate subcode official(s), as one or more of six categories: repair, renovation, alteration, reconstruction, change of use, and additions. Specific requirements are established for each work category.

i. If a structure is demolished except for a de minimis amount, the construction official shall designate the replacement structure as a new structure and apply the requirements of the Uniform Construction Code applicable to new construction.

3. Work of more than one category may be part of a single work project.

i. Where a project includes repair, renovation or alteration work, then the work in each such category shall comply with the requirements for that category of work.

ii. Where a project is a reconstruction project which includes repair, renovation or alteration work, then the work in each such category shall comply with the requirements for that category of work.

iii. Where an alteration project results in a new building element, then each such new element shall comply with the requirements for new building elements.

- ii. Clear PB (polybutylene) piping;
- iii. Flexible traps and tailpieces;
- iv. Sheet and tubular copper and brass trap and tail-piece fittings less than B&S (Brown & Sharpe) 17 gauge (.045 inch); and
- v. Solder having more than 0.2 percent lead shall not be used in the repair of potable water systems. (Plumbing)

5. The following practices shall not be used on painted surfaces in all buildings of Group R that were constructed before 1978, Group E and Group I-4 buildings used as child-care facilities unless the painted surface has been tested and found to be free of lead-based paint:

- i. Open flame burning or the use of high temperature (in excess of 1100 degrees Fahrenheit) heat guns;
- ii. Power sanding or sandblasting, unless a special HEPA (high efficiency particulate air) filter equipped vacuum attachment is used to contain dust;
- iii. Uncontained water blasting or power washing; or
- iv. Dry scraping or sanding more than two square feet per room (interior) or 10 square feet or more per building (exterior).

6. A mirror shall not be placed in or adjacent to any means of egress so as to confuse the direction of egress or give the appearance of a doorway, exit, or passageway. Draperies or similar hangings shall not obscure an exit.

- i. Exception: Within dwelling units of Groups R-2, R-3, R-4 and R-5.

(e) The following products and practices shall be required, when applicable:

1. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Specific Hazardous Locations" as specified by Section 2406.3 of the building subcode. (Building)

2. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following: (Electrical)

- i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(D) of the electrical subcode;
- ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;
- iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding type receptacle out-

let shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;

iv. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles; and

v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

3. When door hardware is replaced in buildings required by the barrier free subcode to be accessible, replacement hardware shall comply with ICC/ANSI A117.1-2003, Section 404.2.6. (Building)

4. Replacement handrails and guardrails shall comply with Sections 1009.10, 1010.8, 1012 and 1013.1 of the building subcode, respectively. Where 50 percent or more of a handrail or guardrail on a flight or on a level is replaced, then this shall be considered a complete replacement and shall comply with the referenced sections of the building subcode. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

5. When the refrigerant in existing equipment is replaced with a different refrigerant, the requirements of the mechanical subcode applicable to the new refrigerant, if any, shall be met. (Plumbing)

6. Existing roof covering shall be removed before installing new roof covering when any of the following conditions occur:

- i. The existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing;
- ii. The existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile; or
- iii. The existing roof has two or more applications of any type of roof covering.

7. When the work being performed exposes wood framing of any wall, floor, ceiling, or roof, fireblocking shall be provided as required by section 717.2 of the building subcode or section R602.8 of the one- and two-family dwelling subcode, as applicable. The fireblocking material shall comply with section 717.2.1 or 717.2.1.1 of the building subcode or section R602.8.1 of the one- and two-family dwelling subcode, as applicable.

8. When the work being performed exposes the entire framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned

space) and there is no insulation in the cavities, insulation meeting a minimum R-value shall be installed that fills the cavities of the framed assembly.

i. If only a de minimis amount of interior finish remains on the framed assembly, the above requirement for the installation of insulation shall apply; or

ii. If high efficiency equipment is installed as per the energy subcode, the above requirement for installation of insulation shall not apply to the basement.

9. When window assemblies are replaced, the U-factor (thermal transmittance) shall not exceed 0.5 or the U-factor of the window assembly being replaced, whichever is lower.

(f) In buildings of Groups R-3, R-4 and R-5 and in dwelling units of Group R-2, smoke detectors shall be installed and maintained on each level of the structure, outside each separate sleeping area in the immediate vicinity of the bedrooms, and located on or near the ceiling. Battery-operated units shall be permitted. (Fire)

(g) In buildings of Groups I-1, R-1, R-2, R-3, R-4 or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with the mechanical subcode. (Fire)

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Inserted (e)5; and rewrote (f).  
Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c), rewrote 2; in (d), added 5; in (e)2, rewrote iii and substituted "Section 250-140" for "Section 250-60" in v; and inserted (e)6.

Amended by R.2002 d.5, effective January 7, 2002.  
See: 33 N.J.R. 3392(a), 34 N.J.R. 267(a).

In (d), added new 6; in (e), added new 7.  
Amended by R.2003 d.137, effective April 7, 2003.  
See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Added (g).  
Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Rewrote the section.  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

In (c)2, substituted "automatic sprinkler" for "fire suppression"; deleted references to use preceding references to group throughout.

Amended by R.2007 d.122, effective May 7, 2007.  
See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (e)1, substituted "2406.3" for "2406.2"; in (e)3, substituted "2003" for "1998" and "404.2.6" for "404.2.7"; rewrote (e)4 and (e)7; added (e)8 and (e)9; and in (f), deleted "outside each separate sleeping area in the immediate vicinity of the bedrooms," following "bedrooms,".

Administrative correction.  
See: 39 N.J.R. 3296(a).

### 5:23-6.5 Renovations

(a) Renovations, as defined in N.J.A.C. 5:23-6.3, shall comply with the requirements of this section.

(b) All work shall be done in a workmanlike manner.

(c) The work shall not cause any diminution of existing structural strength, system capacity or mechanical ventilation

below that which exists at the time of application for a permit or that which is required by the applicable subcodes of the Uniform Construction Code, whichever is lower. The replacement of fixtures, equipment or appliances shall not increase loads on these systems unless the system is upgraded in accordance with the applicable subcode of the UCC to accommodate the increased load.

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1607.1 of the building subcode and shall not create deflection that exceeds the standards set forth below. As used in this section, fixed loads shall mean uniform or concentrated loads and shall include, but not be limited to, equipment, files, library stacks, or similar loading conditions. (Building)

i. For wood frame construction, deflection shall not exceed L/180 for roofs with a slope of 3 in 12 or less or L/120 for roofs with a slope of greater than 3 in 12 and for floors.

ii. For steel frame construction, deflection shall not exceed L/240 for roofs with a slope of 3 in 12 or less or L/180 for roofs with a slope of greater than 3 in 12 and for floors.

iii. For concrete construction, deflection shall not exceed L/180 for roofs or L/240 for floors.

2. Existing fire alarm, automatic sprinkler, standpipe, smoke control and emergency power systems shall not be removed without replacement and shall be maintained in operating condition. (Fire)

3. No work shall be undertaken that diminishes accessibility below that which is required by the Barrier Free Subcode of the Uniform Construction Code, N.J.A.C. 5:23-7. (Building)

(d) The following products and practices shall not be used:

1. Wood paneling being used as an interior finish not in conformance with Table 2 of N.J.A.C. 5:23-6.11 of this subcode; (Building)

2. Carpet used for floor covering that fails to meet the DOC FF-1 "Pill Test" (Consumer Product Safety Commission 16 C.F.R. 1630);

3. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electrical Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories, Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/ NRTL), etc.; and (Electrical)

4. Plumbing materials and supplies:

i. All purpose solvent cement;

- ii. Clear PB (polybutylene) piping;
  - iii. Flexible traps and tailpieces;
  - iv. Sheet and tubular copper and brass trap and tailpiece fittings less than B&S (Brown & Sharpe) 17 gauge (.045 inch); and
  - v. Solder having more than 0.2 percent lead shall not be used in the repair of potable water systems. (Plumbing)
5. Bars, grilles and screens shall not be placed over emergency escape windows or doors in Groups R or I-1 unless they are releasable or removable from the inside without the use of a key, tool or force greater than that which is required for the normal operation of the window or door. (Building)
6. The following practices shall not be used on painted surfaces in all buildings of Group R that were constructed before 1978, Group E and Group I-4 buildings used as child-care facilities unless the painted surface has been tested and found to be free of lead-based paint:
- i. Open flame burning or the use of high temperature (in excess of 1100 degrees Fahrenheit) heat guns;
  - ii. Power sanding or sandblasting, unless a special HEPA (high efficiency particulate air) filter equipped vacuum attachment is used to contain dust;
  - iii. Uncontained water blasting or power washing; or
  - iv. Dry scraping or sanding more than two square feet per room (interior) or 10 square feet or more per building (exterior).
7. A mirror shall not be placed in or adjacent to any means of egress so as to confuse the direction of egress or give the appearance of a doorway exit, or passageway. Draperies or similar hangings shall not obscure an exit.
- i. Exception: Within dwelling units of Groups R-2, R-3, R-4 and R-5.
- (e) The following products and practices shall be required, when applicable:
- 1. When any water closet is replaced, the replacement water closet shall require not more than 1.6 gallons of water per flush as required by the plumbing subcode. (Plumbing)
  - 2. In buildings required by the barrier free subcode to be accessible, when bathrooms or toilet rooms are renovated, the following requirements for providing accessibility shall apply unless the requirements of the barrier free subcode have been met:
    - i. When toilet partitions are moved or installed, but existing fixtures are not being moved, an accessible stall complying with ICC/ANSI A117.1-2003, Section 604.8

shall be created provided that this can be accomplished without moving fixtures. (Building)

- ii. When bathroom fixtures or hardware are replaced, the replacement fixtures or hardware shall comply with ICC/ANSI A117.1-2003, Sections 603 through 608, as applicable, for nonresidential buildings or ICC/ANSI A117.1-2003, Chapter 10 for residential buildings required by the barrier free subcode to be accessible. (Plumbing)

- iii. Where full compliance is technically infeasible, compliance shall be achieved to the maximum extent feasible. (Building)

3. Replacement doors shall comply with the following: (Building)

- i. When replacement doors are installed in buildings required by the barrier free subcode to be accessible, replacement hardware shall comply with ICC/ANSI A117.1-2003, Section 404.2.6.

- ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Groups I-1, R-1 or R-2 shall be 1 $\frac{1}{4}$  inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wire glass in metal frames.

- (1) 1 $\frac{1}{4}$  inch solid core replacement doors shall be accepted if the existing frame is not being replaced and will accommodate only a 1 $\frac{3}{8}$  inch door.

4. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Specific Hazardous Locations" as specified by Section 2406.3 of the building subcode. (Building)

5. Where a fireproofing material is removed that is integral to the rating of an existing fire-rated assembly, the material shall be replaced so that the rating is preserved. (Building)

6. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following: (Electrical)

- i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(D) of the electrical subcode;

- ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;

- iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding type receptacle outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;

iv. Non-“hospital grade” receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with “hospital grade” receptacles; and

v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

7. When a new refrigerant is introduced, the requirements of the mechanical subcode applicable to that refrigerant, if any, shall be met. This shall apply to the replacement of existing equipment with equipment using a different refrigerant or the replacement of the refrigerant in existing equipment with a different refrigerant. (Plumbing)

8. When the work being performed exposes wood framing of any wall, floor, ceiling, or roof, fireblocking shall be provided as required by section 717.2 of the building subcode or section R602.8 of the one- and two-family dwelling subcode, as applicable. The fireblocking material shall comply with section 717.2.1 or 717.2.1.1 of the building subcode or section R602.8.1 of the one- and two-family dwelling subcode, as applicable.

9. When the work being performed exposes the entire framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space) and there is no insulation in the cavities, insulation meeting a minimum R-value shall be installed that fills the cavities of the framed assembly.

i. If only a de minimis amount of interior finish remains on the framed assembly, the above requirement for the installation of insulation shall apply; or

ii. If high efficiency equipment is installed as per the energy subcode, the above requirement for installation of insulation shall not apply to the basement.

10. When window assemblies are replaced, the U-factor (thermal transmittance) shall not exceed 0.5 or the U-factor of the window assembly being replaced, whichever is lower.

11. Where work, other than ordinary maintenance or minor work, is being performed on an elevator, the elevator shall be equipped to operate with a standardized fire service key.

(f) In buildings of Groups R-3, R-4 and R-5 and in dwelling units of Group R-2, smoke detectors shall be installed and maintained on each level of the structure, outside each separate sleeping area in the immediate vicinity of the bedrooms, and located on or near the ceiling. Battery-operated units shall be permitted.

(g) In buildings of Groups I-1, R-1, R-2, R-3, R-4 or R-5 containing a fuel burning appliance or having an attached

garage, carbon monoxide alarms shall be installed in accordance with the mechanical subcode. (Fire)

(h) All materials and methods used shall comply with the building, plumbing, fire protection, mechanical, electrical and barrier free subcodes as specified in N.J.A.C. 5:23-6.8, Materials and methods.

1. Exception: Windows may be replaced with windows like those existing without meeting the size requirements of the building subcode.

i. In sleeping rooms below the fourth story in occupancies of Groups R or I-1, where the size of window openings is being changed, at least one window shall:

(1) Be operable;

(2) Have a sill height of not more than 44 inches;

(3) Have a width of at least 20 inches, a height of at least 24 inches and a minimum of total area of 5.7 square feet measured from head to sill and from side to side.

(4) New window openings in sleeping rooms shall not be required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system.

ii. Basement windows in buildings of Group R-2 shall comply with the requirements of N.J.A.C. 5:23-6.26(b)3 where the window serves as the second means of egress from the dwelling unit.

2. Replacement handrails and guardrails shall comply with Sections 1009.10, 1010.8, 1012, and 1013.1 of the building subcode, respectively. Where 50 percent or more of a handrail or guardrail on a flight or on a level is replaced, then this shall be considered a complete replacement and shall comply with the referenced sections of the building subcode. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Inserted (d)5; in (e), changed N.J.A.C. reference in 1, deleted “In all use groups other than H,” at the beginning of 3ii(1), and added 7; and rewrote (f).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c), rewrote 2; in (d), added 6; in (e)6, deleted “listed,” preceding “like material”, rewrote 6iii and substituted “Section 250-140” for “Section 250-60” in 6v.

Amended by R.2002 d.5, effective January 7, 2002.

See: 33 N.J.R. 3392(a), 34 N.J.R. 267(a).

In (d), added new 7; in (e) added new 8 and 9.

Amended by R.2003 d.137, effective April 7, 2003.

See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted (e)9; added a new (g); recodified former (g) as (h).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Rewrote the section.  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted references to use preceding references to group throughout and substituted "automatic sprinkler" for "fire suppression" throughout; in (h)lii, amended the N.J.A.C. reference.

Amended by R.2005 d.4, effective January 3, 2005.  
See: 36 N.J.R. 4049(a), 37 N.J.R. 47(a).

Added (e)9.  
Amended by R.2006 d.120, effective April 3, 2006.  
See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (e)1, deleted the N.J.A.C. reference and added "by the plumbing subcode"; in (e)8, added "or section R602.8 of the one- and two-family dwelling subcode, as applicable" and "or section R602.8.1 of the one- and two-family dwelling subcode, as applicable".

Amended by R.2007 d.122, effective May 7, 2007.  
See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (e)2i, (e)2ii and (e)3i, substituted "2003" for "1998" throughout; in (e)3i, substituted "404.2.6" for "404.2.7"; in (e)4, substituted "2406.3" for "2406.2"; rewrote (e)8; added new (e)9 and (e)10; recodified former (e)9 as (e)11; in (h)2, substituted "1009.10, 1010.8, 1012," for "1003.3.3.11, 1003.3.4.7" and "1013.1" for "1003.2.12".

### 5:23-6.6 Alterations

(a) Alterations, as defined in N.J.A.C. 5:23-6.3, shall comply with the requirements of this section.

(b) All work shall be done in a workmanlike manner.

(c) The work shall not cause any diminution of existing structural strength, system capacity or mechanical ventilation below that which exists at the time of application for a permit or that which is required by the applicable subcodes of the Uniform Construction Code, whichever is lower. The replacement or addition of fixtures, equipment or appliances shall not increase loads on these systems unless the system is upgraded in accordance with the applicable subcode of the UCC to accommodate the increased load.

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1607.1 of the building subcode and shall not create deflection that exceeds the standards set forth below. As used in this section, fixed loads shall mean uniform or concentrated loads and shall include, but not be limited to, equipment, files, library stacks, or similar loading conditions. (Building)

i. For wood frame construction, deflection shall not exceed L/180 for roofs with a slope of 3 in 12 or less or L/120 for roofs with a slope of greater than 3 in 12 and for floors.

ii. For steel frame construction, deflection shall not exceed L/240 for roofs with a slope of 3 in 12 or less or L/180 for roofs with a slope of greater than 3 in 12 and for floors.

iii. For concrete construction, deflection shall not exceed L/180 for roofs or L/240 for floors.

2. Existing fire alarm, automatic sprinkler, standpipe, smoke control and emergency power systems shall not be

removed without replacement and shall be maintained in operating condition. (Fire)

3. No work shall be undertaken that diminishes accessibility below that which is required by the Barrier Free Subcode of the Uniform Construction Code, N.J.A.C. 5:23-7. (Building)

4. Construction materials used as part of an alteration project shall be consistent with the existing construction type or the allowable construction type, whichever is less restrictive.

(d) The following products and practices shall not be used:

1. Wood paneling being used as an interior finish not in conformance with Table 2 of N.J.A.C. 5:23-6.11 of this subcode; (Building)

2. Carpet used for floor covering that fails to meet the DOC FF-1 "Pill Test" (Consumer Product Safety Commission 16 C.F.R. 1630);

3. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electrical Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories, Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/NRTL), etc.; and (Electrical)

4. Plumbing materials and supplies:

i. All purpose solvent cement;

ii. Clear PB (polybutylene) piping;

iii. Flexible traps and tailpieces;

iv. Sheet and tubular copper and brass trap and tailpiece fittings less than B&S (Brown & Sharpe) 17 gauge (.045 inch); and

v. Solder having more than 0.2 percent lead shall not be used in the repair of potable water systems. (Plumbing)

5. Bars, grilles and screens shall not be placed over emergency escape windows or doors in Groups R or I-1 unless they are releasable or removable from the inside without the use of a key, tool or force greater than that which is required for the normal operation of the window or door. (Building)

6. The following practices shall not be used on painted surfaces in all buildings of Group R that were constructed before 1978, Group E and Group I-4 buildings used as child-care facilities unless the painted surface has been tested and found to be free of lead-based paint:

i. Open flame burning or the use of high temperature (in excess of 1100 degrees Fahrenheit) heat guns;

ii. Power sanding or sandblasting, unless a special HEPA (high efficiency particulate air) filter equipped vacuum attachment is used to contain dust;

iii. Uncontained water blasting or power washing; or

iv. Dry scraping or sanding more than two square feet per room (interior) or 10 square feet or more per building (exterior).

7. A mirror shall not be placed in or adjacent to any means of egress so as to confuse the direction of egress or give the appearance of a doorway, exit, or passageway. Draperies or similar hangings shall not obscure an exit.

i. Exception: Within dwelling units of Groups R-2, R-3, R-4 and R-5.

(e) The following products and practices shall be required, when applicable:

1. When any water closet is replaced, the replacement water closet shall require not more than 1.6 gallons of water per flush as required by the plumbing subcode. (Plumbing)

2. In buildings required by the barrier free subcode to be accessible, when bathrooms or toilet rooms are altered, the following requirements for providing accessibility shall apply unless the requirements of the barrier free subcode have been met:

i. When toilet partitions are moved or installed, but existing fixtures are not being moved, an accessible stall complying with ICC/ANSI A117.1-2003, Section 604.8 shall be created provided that this can be accomplished without moving fixtures. (Building)

ii. When bathroom fixtures or hardware are replaced, the replacement fixtures or hardware shall comply with ICC/ANSI A117.1-2003, Sections 603 through 608, as applicable, for nonresidential buildings or ICC/ANSI A117.1-2003, Chapter 10 for residential buildings required by the barrier free subcode to be accessible. (Plumbing)

iii. When space is reconfigured, the altered space shall comply with the barrier free subcode, N.J.A.C. 5:23-7.

(1) Where full compliance is technically infeasible, compliance shall be achieved to the maximum extent feasible.

(2) Where full compliance is technically infeasible, a single fixture unisex accessible bathroom shall be permitted. This may be accomplished by providing two unisex bathrooms, one of which is accessible. (Building)

(3) Where it is technically infeasible to gain compliance within an altered bathroom, signage to the

closest accessible bathroom (if any) shall be provided at the altered bathroom. (Building)

3. Replacement doors shall comply with the following: (Building)

i. In buildings required by the barrier free subcode to be accessible, when new door openings are created, existing door openings are enlarged or door assemblies are replaced and the required door width can be achieved within the existing opening, the new door shall comply with ICC/ANSI A117.1-2003, Section 404.

(1) If the door being added, enlarged or replaced is a building entrance and at least 50 percent of the entrance doors are accessible, then the door being added, enlarged or replaced is not required to comply with ICC/ANSI A117.1-2003, Section 404.

ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Groups I-1, R-1 or R-2 shall be 1¾ inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wire glass in metal frames.

(1) 1¾ inch solid core replacement doors shall be accepted if the existing frame is not being replaced and will accommodate only a 1¾ inch door.

4. In buildings required by the barrier free subcode to be accessible, when entrance steps are being replaced, an accessible entrance shall be provided if this does not add more than 20 percent to the cost of replacing the steps. (Building)

i. If at least 50 percent of the other building entrances are accessible, then the installation of a ramp shall not be required.

5. When providing vertical access is part of the scope of work, a limited use limited application elevator or platform lift may be installed as permitted by N.J.A.C. 5:23-7.1. (Building)

6. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Specific Hazardous Locations" as specified by Section 2406.3 of the building subcode. (Building)

7. Where a fireproofing material is removed that is integral to the rating of an existing fire-rated assembly, the material shall be replaced so that the rating is preserved. (Building)

8. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following: (Electrical)

i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(d) of the electrical subcode;

ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;

iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding type receptacle outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;

iv. Non-“hospital grade” receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with “hospital grade” receptacles; and

v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

9. In buildings of Group R or I-1, when the work being performed creates a bedroom, the following shall be provided:

i. A hard-wired smoke detector shall be installed within each new bedroom and a second, hard-wired smoke detector shall be installed within the immediate vicinity of the bedroom in accordance with NFPA 72. (Fire)

ii. A bedroom window or exterior door that meets the requirements of N.J.A.C. 5:23-6.9(a)17 shall be provided when the bedroom created is below the fourth floor. (Building)

(1) This requirement shall not apply in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system.

10. In buildings of Use Groups R-3, R-4 and R-5:

i. When the work being performed creates living space over a private garage, the private garage shall comply with Section 406.1.4 of the building subcode or R309.2 of the one- and two-family dwelling subcode, as applicable, for fire resistance rating.

ii. When the work being performed creates an additional dwelling unit within the building, the new dwelling unit shall be separated from the existing dwelling unit(s) with fire partitions or horizontal assemblies having a fire resistance rating of not less than one hour constructed in accordance with Sections 708 and 711 of the building subcode or R317.1 of the one- and two-family dwelling subcode, as applicable.

iii. When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

11. In buildings of Group R-1, in at least one sleeping room or suite of every 25 or fewer that are part of the scope of work, the work being performed shall comply with the applicable provisions of ICC/ANSI A117.1-2003 unless the facility already provides the number of accessible sleeping rooms required by the barrier free subcode. In addition, at least one sleeping room or suite of every 25 or fewer that are part of the scope of work shall be equipped with a visual alarm and notification device for the hearing impaired unless the facility already provides the number required by the barrier free subcode. (Building)

12. In buildings of Groups R-1 and R-2:

i. When habitable space is created in previously unoccupied space, the minimum clear ceiling height shall be seven feet. For rooms with a sloped ceiling, the minimum clear ceiling height shall be seven feet for at least 35 square feet of the floor area of the room. Any portion of the room measuring less than five feet from the finished floor to the finished ceiling shall not be considered usable floor area.

ii. Group R-2 only: When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

13. When a new refrigerant is introduced, the requirements of the mechanical subcode applicable to that refrigerant, if any, shall be met. This shall apply to the installation of new equipment, the replacement of existing equipment with equipment using a different refrigerant, or the replacement of the refrigerant in existing equipment with a different refrigerant. (Plumbing)

14. When the work being performed exposes wood framing of any wall, floor, ceiling, or roof, fireblocking shall be provided as required by section 717.2 of the building subcode or section R602.8 of the one- and two-family dwelling subcode, as applicable. The fireblocking material shall comply with section 717.2.1 or 717.2.1.1 of the building subcode or section R602.8.1 of the one- and two-family dwelling subcode, as applicable.

15. When the work being performed exposes the entire framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space) and there is no insulation in the cavities, insulation meeting a minimum R-value shall be installed that fills the cavities of the framed assembly.

i. If only a de minimis amount of interior finish remains on the framed assembly, the above requirement for the installation of insulation shall apply; or

ii. If high efficiency equipment is installed as per the energy subcode, the above requirement for installation of insulation shall not apply to the basement.

16. When window assemblies are replaced, the U-factor (thermal transmittance) shall not exceed 0.5 or the U-factor of the window assembly being replaced, whichever is lower.

17. When the work being performed results in an indoor or outdoor gas meter, related regulator or piping becoming subject to vehicle impact, which work includes, but is not limited to, new installation, relocation or other construction, the gas meter, related regulator or piping shall be protected by barriers meeting the requirements of Section 312 of the International Fire Code. For the purpose of applying this provision, "subject to vehicle impact" shall mean located within three feet of any garage door opening, driveway or designated parking area and not separated by a building wall from the space where a vehicle may be operated.

i. Exception: If verification of the installation of an excess flow valve is provided by the gas utility, vehicle impact barriers shall not be required.

18. Where work, other than ordinary maintenance or minor work, is being performed on an elevator, the elevator shall be equipped to operate with a standardized fire service key.

(f) In buildings of Groups R-3, R-4 and R-5 and in dwelling units of Group R-2, smoke detectors shall be installed and maintained on each level of the structure, outside each separate sleeping area in the immediate vicinity of the bedrooms, and located on or near the ceiling. Battery-operated units shall be permitted. (Fire)

(g) In buildings of Groups I-1, R-1, R-2, R-3, R-4 or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with the mechanical subcode. (Fire)

(h) The work shall not make the building less conforming with the basic requirements of this subchapter than it was when the alteration was undertaken.

1. Where the building currently exceeds the basic requirements, the extent to which it exceeds shall not be reduced unless the building also exceeds the requirements of the corresponding subcode of the UCC. In this case, the extent of compliance with the basic requirements may be reduced, but not below the requirements of the corresponding subcode of the UCC.

2. Where the scope of work consists of an item for which requirements are established in the basic requirements of this subcode, the work shall comply with the basic requirements.

(i) All materials and methods used shall comply with the requirements specified in N.J.A.C. 5:23-6.8, Materials and methods.

1. Exception: Windows may be replaced with windows like those existing without meeting the size requirements of the building subcode.

i. In sleeping rooms below the fourth story in occupancies of Groups R or I-1, where new window openings are being created or the size of window openings is being changed, at least one window shall:

(1) Be operable;

(2) Have a sill height of not more than 44 inches;

(3) Have a width of at least 20 inches, a height of at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side.

(4) New window openings in sleeping rooms shall not be required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system.

ii. Basement windows in buildings of Group R-2 shall comply with the requirements of N.J.A.C. 5:23-6.26(b)3 where the window serves as the second means of egress from the dwelling unit.

2. Replacement handrails and guardrails shall comply with Sections 1009.10, 1010.8, 1012, and 1013.1 of the building subcode, respectively. Where 50 percent or more of a handrail or guardrail on a flight or on a level is replaced, then this shall be considered a complete replacement and shall comply with the referenced sections of the building subcode. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

(j) All new building elements, as listed in N.J.A.C. 5:23-6.9, shall comply with the requirements of that section.

(k) In a building required by the barrier free subcode to be accessible, where the space altered is a primary function space, an accessible path of travel to the altered space shall be provided up to the point at which the cost of providing accessibility is disproportionate to the cost of the overall alteration project; a cost is disproportionate if it exceeds 20 percent of the cost of the alteration work. (Building)

1. The accessible path of travel shall include, but not be limited to, an accessible parking space, an accessible exterior route, an accessible building entrance, an accessible interior route to the altered area, accessible restrooms, accessible drinking fountains, and accessible telephones serving the altered primary function space. Priority shall be

given to providing an accessible entrance or accessible restrooms where possible.

2. In determining disproportionate cost, the following materials may be deducted from the overall cost of the project:

- i. Windows, hardware, operating controls, electrical outlets and signage;
- ii. Mechanical systems, electrical systems, installations or alterations of fire protection systems or abatement of hazardous materials; or
- iii. The repair or installation of roofing, siding, or other exterior wall facade.

3. Where the work consists solely of the alteration of materials or systems listed in (k)2 above, the path of travel requirements shall not apply.

4. Where the alteration work is for the primary purpose of increasing the accessibility of the building or tenancy, the requirement to further improve the path of travel shall not apply.

5. Where it is technically infeasible to comply with the technical standards in the barrier free subcode, the work must comply to the maximum extent feasible.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Inserted (d)5; in (e), changed N.J.A.C. reference in 1, inserted a second sentence in 2iii(2), deleted "In all use groups other than H," at the beginning of 3ii(1), rewrote 9, inserted a new 10, recodified former 10 and 11 as 11 and 12, and added 13; and rewrote (f).

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c), rewrote 2 and added 4; in (d), added 6; in (e), rewrote 8iii and substituted "Section 250-140" for "Section 250-60" in 8v; in (j)3, amended internal reference.

Amended by R.2002 d.5, effective January 7, 2002.  
See: 33 N.J.R. 3392(a), 34 N.J.R. 267(a).

In (d), added new 7; in (e) added new 14 and 15.  
Amended by R.2003 d.137, effective April 7, 2003.  
See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted (e)15; added a new (g); recodified former (g) through (j) as (h) through (k).

Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Rewrote the section.  
Administrative correction.

See: 35 N.J.R. 4861(a).  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted references to use preceding references to group throughout and substituted references to automatic sprinkler for references to fire suppression throughout; rewrote (e)10; added (h)2; in (i)1ii, amended the N.J.A.C. reference.

Amended by R.2004 d.468, effective December 20, 2004.  
See: 36 N.J.R. 1858(b), 36 N.J.R. 5711(a).

In (e), added 15.  
Amended by R.2005 d.4, effective January 3, 2005.  
See: 36 N.J.R. 4049(a), 37 N.J.R. 47(a).

Added (e)16.  
Amended by R.2006 d.120, effective April 3, 2006.  
See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (c)1, deleted the N.J.A.C. reference and added "by the plumbing subcode"; added (e)10iii and (e)12ii; in (e)14, added "or section R602.8 of the one- and two-family dwelling subcode, as applicable" and "or

section R602.8.1 of the one- and two-family dwelling subcode, as applicable".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Rewrote (e); and in (i)2, substituted "1009.10, 1010.8, 1012," for "1003.3.3.11, 1003.3.4.7" and "1013.1" for "1003.2.12".

## 5:23-6.7 Reconstruction

(a) Reconstruction, as defined in N.J.A.C. 5:23-6.3, shall comply with the requirements of this section.

1. If a project is less than the entire use, primary function space or tenancy by a de minimis amount, the construction official may designate the project a reconstruction project and require that the requirements of this section be met.

2. If work performed or to be performed in phases is so extensive that the project would require a new certificate of occupancy if the work were performed at one time, the construction official may designate the project a reconstruction project and require that the requirements of this section be met.

(b) All work shall be done in a workmanlike manner.

(c) The work shall not cause any diminution of existing structural strength, system capacity or mechanical ventilation below that which exists at the time of application for a permit or that which is required by the applicable subcodes of the Uniform Construction Code, whichever is lower. The replacement or addition of fixtures, equipment or appliances shall not increase loads on these systems unless the system is upgraded in accordance with the applicable subcode of the UCC to accommodate the increased load.

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1607.1 of the building subcode and shall not create deflection that exceeds the standards set forth below. As used in this section, fixed loads shall mean uniform or concentrated loads and shall include, but not be limited to, equipment, files, library stacks, or similar loading conditions. (Building)

i. For wood frame construction, deflection shall not exceed  $L/180$  for roofs with a slope of 3 in 12 or less or  $L/120$  for roofs with a slope of greater than 3 in 12 and for floors.

ii. For steel frame construction, deflection shall not exceed  $L/240$  for roofs with a slope of 3 in 12 or less or  $L/180$  for roofs with a slope of greater than 3 in 12 and for floors.

iii. For concrete construction, deflection shall not exceed  $L/180$  for roofs or  $L/240$  for floors.

2. Existing fire alarm, automatic sprinkler, standpipe, smoke control and emergency power systems shall not be removed without replacement and shall be maintained in operating condition. (Fire)

3. No work shall be undertaken that diminishes accessibility below that which is required by the Barrier Free Subcode of the Uniform Construction Code, N.J.A.C. 5:23-7. (Building)

4. Construction materials used as part of a reconstruction project shall be consistent with the existing construction type or the allowable construction type, whichever is less restrictive.

(d) The following products and practices shall not be used:

1. Carpet used for floor covering that fails to meet the DOC FF-1 "Pill Test" (Consumer Product Safety Commission 16 C.F.R. 1630);

2. Electrical materials/supplies: Unlisted or unapproved electrical products. As stated in the National Electric Code (sections 90.7, 110.2, 110.3, and article 100), only electrical products listed, labeled, approved, and identified are acceptable. Approval is to be based on tests and listings of testing laboratories such as Underwriters Laboratories Inc. (UL), Factory Mutual (FM) or Canadian Standards Association/Nationally Recognized Testing Laboratory (CSA/NRTL), etc.; (Electrical)

3. Plumbing materials and supplies:

- i. All purpose solvent cement;
- ii. Clear PB (polybutylene) piping;
- iii. Flexible traps and tailpieces;

iv. Sheet and tubular copper and brass trap and tailpiece fittings less than B&S (Brown & Sharpe) 17 gauge (.045 inch); and

v. Solder having more than 0.2 percent lead shall not be used in the repair of potable water systems (Plumbing); and

4. Bars, grilles and screens shall not be placed over emergency escape windows or doors in Groups R or I-1 unless they are releasable or removable from the inside without the use of a key, tool or force greater than that which is required for the normal operation of the window or door. (Building)

5. The following practices shall not be used on painted surfaces in all buildings of Group R that were constructed before 1978, Group E and Group I-4 buildings used as child-care facilities unless the painted surface has been tested and found to be free of lead-based paint:

- i. Open flame burning or the use of high temperature (in excess of 1100 degrees Fahrenheit) heat guns;
- ii. Power sanding or sandblasting, unless a special HEPA (high efficiency particulate air) filter equipped vacuum attachment is used to contain dust;
- iii. Uncontained water blasting or power washing; or

iv. Dry scraping or sanding more than two square feet per room (interior) or 10 square feet or more per building (exterior).

6. A mirror shall not be placed in or adjacent to any means of egress so as to confuse the direction of egress or give the appearance of a doorway, exit, or passageway. Draperies or similar hangings shall not obscure an exit.

i. Exception: Within dwelling units of Groups R-2, R-3, R-4 and R-5.

(e) The following products and practices shall be required, when applicable:

1. When any water closet is replaced, the replacement water closet shall require not more than 1.6 gallons of water per flush as required by the plumbing subcode. (Plumbing)

2. In buildings required by the barrier free subcode to be accessible, when bathrooms or toilet rooms are altered the following requirements for providing accessibility shall apply unless the requirements of the barrier free subcode have been met:

i. When toilet partitions are moved or installed, but existing fixtures are not being moved, an accessible stall complying with ICC/ANSI A117.1-2003, Section 604.8 shall be created provided that this can be accomplished without moving fixtures. (Building)

ii. When bathroom fixtures or hardware are replaced, the replacement fixtures or hardware shall comply with ICC/ANSI A117.1-2003, Sections 603 through 608, as applicable, for nonresidential buildings or ICC/ANSI A117.1-2003, Chapter 10 for residential buildings required by the barrier free subcode to be accessible. (Plumbing)

iii. When space is reconfigured, the altered space shall comply with the barrier free subcode, N.J.A.C. 5:23-7.

(1) Where full compliance is technically infeasible, compliance shall be achieved to the maximum extent feasible.

(2) Where full compliance is technically infeasible, a single fixture unisex accessible bathroom shall be permitted. This may be accomplished by providing two unisex bathrooms, one of which is accessible. (Building)

(3) Where it is technically infeasible to gain compliance within a reconstructed bathroom, signage to the closest accessible bathroom (if any) shall be provided at the reconstructed bathroom. (Building)

3. Replacement or new doors shall comply with the following: (Building)

i. In buildings required by the barrier free subcode to be accessible, when new door openings are created, existing door openings are enlarged or door assemblies are replaced and the required door width can be achieved within the existing opening, the new door shall comply with ICC/ANSI A117.1-2003, Section 404.

(1) If the door being added, enlarged or replaced is a building entrance and at least 50 percent of the entrance doors are accessible, then the door being added, enlarged or replaced is not required to comply with ICC/ANSI A117.1-2003, Section 404.

ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Groups I-1, R-1 or R-2 shall be 1¾ inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wire glass in metal frames.

(1) 1¾ inch solid core replacement doors shall be accepted if the existing frame is not being replaced and will accommodate only a 1¾ inch door.

4. In buildings required by the barrier free subcode to be accessible, when entrance steps are being replaced, a ramp shall be installed provided that the installation of a ramp does not add more than 20 percent to the cost of replacing the steps. (Building)

i. If at least 50 percent of the other building entrances are accessible, then the installation of a ramp shall not be required.

5. When providing vertical access is part of the scope of work, a limited use limited application elevator or platform lift may be installed as permitted by N.J.A.C. 5:23-7.

6. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Specific Hazardous Locations" as specified by Section 2406.3 of the building subcode. (Building)

7. Where a fireproofing material is removed that is integral to the rating of an existing fire-rated assembly, the material shall be replaced so that the rating is preserved. (Building)

8. Existing electrical wiring and equipment undergoing repair or replacement shall be allowed to be replaced with like material except for the following: (Electrical)

i. Replacement of electrical receptacles shall comply with the requirements contained in Section 406.3(D) of the electrical subcode;

ii. Plug fuses of the Edison-base type shall be used only for replacements where there is no evidence of over fusing or tampering per Section 240.51(B) of the electrical subcode;

iii. For replacement of nongrounding-type receptacles with grounding-type receptacles, the equipment grounding conductor of a grounding-type receptacle

outlet shall be permitted to be connected, in accordance with Section 250.130(C) of the electrical subcode;

iv. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles; and

v. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances, except for mobile homes and recreational vehicles, shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250.140 of the electrical subcode are met.

9. In buildings of Groups R-1 and R-2, when habitable space is created in previously unoccupied space, the minimum clear ceiling height shall be seven feet. For rooms with a sloped ceiling, the minimum clear ceiling height shall be seven feet for at least 35 square feet of the floor area of the room. Any portion of the room measuring less than five feet from the finished floor to the finished ceiling shall not be considered usable floor area. (Building)

10. When a new refrigerant is introduced, the requirements of the mechanical subcode applicable to that refrigerant, if any, shall be met. This shall apply to the installation of new equipment, the replacement of existing equipment with equipment using a different refrigerant, or the replacement of the refrigerant in existing equipment with a different refrigerant. (Plumbing)

11. When the work being performed exposes the entire framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space) and there is no insulation in the cavities, insulation meeting a minimum R-value shall be installed that fills the cavities of the framed assembly.

i. If only a de minimis amount of interior finish remains on the framed assembly, the above requirement for the installation of insulation shall apply; or

ii. If high efficiency equipment is installed as per the energy subcode, the above requirement for installation of insulation shall not apply to the basement.

12. When window assemblies are replaced, the U-factor (thermal transmittance) shall not exceed 0.5 or the U-factor of the window assembly being replaced, whichever is lower.

13. When the work being performed results in an indoor or outdoor gas meter, related regulator or piping becoming subject to vehicle impact, which work includes, but is not limited to, new installation, relocation or other construction, the gas meter, related regulator or piping shall be protected by barriers meeting the requirements of Section 312 of the International Fire Code. For the purpose of applying this provision, "subject to vehicle impact" shall mean located within three feet of any garage door opening,

driveway or designated parking area and not separated by a building wall from the space where a vehicle may be operated.

i. Exception: If verification of the installation of an excess flow valve is provided by the gas utility, vehicle impact barriers shall not be required.

14. Where work, other than ordinary maintenance or minor work, is being performed on an elevator, the elevator shall be equipped to operate with a standardized fire service key.

(f) In buildings of Groups I-1, R-1, R-2, R-3, R-4 or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with the mechanical subcode. (Fire)

(g) All materials and methods used shall comply with the requirements specified in N.J.A.C. 5:23-6.8, Materials and methods.

1. For repair work undertaken as part of a reconstruction project, materials like those existing may be used. There is no limit to the amount of repair work which may be undertaken.

2. Exception: Windows may be replaced with windows like those existing without meeting the size requirements of the building subcode.

i. In sleeping rooms below the fourth story in occupancies of Groups R or I-1, where new window openings are being created or the size of window openings is being changed, at least one window shall:

(1) Be operable;

(2) Have a sill height of not more than 44 inches;

(3) Have a width of at least 20 inches, a height of at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side.

(4) New window openings in sleeping rooms shall not be required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system.

ii. Basement windows in buildings of Group R-2 shall comply with the requirements of N.J.A.C. 5:23-6.26(b)3 where the window serves as the second means of egress from the dwelling unit.

3. Replacement handrails and guardrails shall comply with Sections 1009.10, 1010.8, 1012 and 1013.1 of the building subcode, respectively. Where 50 percent or more of a handrail or guardrail on a flight or on a level is replaced, then this shall be considered a complete replacement and shall comply with the referenced sections of the

building subcode. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

(h) All new building elements, as listed in N.J.A.C. 5:23-6.9, shall comply with the requirements of that section.

(i) The basic requirements of this subchapter for the applicable group shall be met within the work area(s). Attendant work outside the work area(s) shall not make the building less conforming with the basic requirements than it was when the reconstruction was undertaken.

1. Where the building currently exceeds the basic requirements, the extent to which it exceeds shall not be reduced unless the building also exceeds the requirements of the corresponding subcode of the UCC. In this case, the extent of compliance with the basic requirements may be reduced, but not below the requirements of the corresponding subcode of the UCC. Existing fire alarm, automatic sprinkler and standpipe systems shall not be removed without replacement and shall be maintained in operating condition.

(j) The supplemental requirements of this subchapter for the applicable group shall be met wherever the extent of the work is such that the trigger accompanying each requirement is met or exceeded.

(k) In a building required by the barrier free subcode to be accessible, where the space reconstructed is a primary function space, an accessible path of travel to the space shall be provided up to the point at which the cost of providing accessibility is disproportionate to the cost of the overall project; a cost is disproportionate if it exceeds 20 percent of the cost of the work. (Building)

1. The accessible path of travel shall include, but not be limited to, an accessible parking space, an accessible exterior route, an accessible building entrance, an accessible interior route to the reconstructed area, accessible restrooms, accessible drinking fountains, and accessible telephones serving the reconstructed primary function space. Priority shall be given to providing an accessible entrance or accessible restrooms where possible.

2. In determining disproportionate cost, the following materials may be deducted from the overall cost of the project:

i. Windows, hardware, operating controls, electrical outlets and signage;

ii. Mechanical systems, electrical systems, installations or alterations of fire protection systems or abatement of hazardous materials; or

iii. The repair or installation of roofing, siding, or other exterior wall facade.

3. Where the work consists solely of the reconstruction of materials or systems listed in (k)2 above, the path of travel requirements shall not apply.

4. Where the work is for the primary purpose of increasing the accessibility of the building or tenancy, the requirement to further improve the path of travel shall not apply.

5. Where it is technically infeasible to comply with the technical standards of ICC/ANSI A117.1-2003, the work must comply to the maximum extent feasible.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c), rewrote 2 and added 4; in (d), added 5; in (e), amended the N.J.A.C. reference in 5, rewrote 8iii, and substituted "Section 250-140" for "Section 250-60" in 8v.

Amended by R.2002 d.5, effective January 7, 2002.

See: 33 N.J.R. 3392(a), 34 N.J.R. 267(a).

In (d), added new 6; in (e), added new 11.

Amended by R.2003 d.137, effective April 7, 2003.

See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted (e)11; added a new (f); recodified former (f) through (j) as (g) through (k).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Rewrote the section.

Administrative correction.

See: 35 N.J.R. 4861(a).

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted references to use preceding references to group throughout and substituted references to automatic sprinkler for references to fire suppression throughout; in (g)2ii, amended the N.J.A.C. reference.

Amended by R.2004 d.468, effective December 20, 2004.

See: 36 N.J.R. 1858(b), 36 N.J.R. 5711(a).

In (e), added 11.

Amended by R.2005 d.4, effective January 3, 2005.

See: 36 N.J.R. 4049(a), 37 N.J.R. 47(a).

Added (e)12.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (e)1, deleted the N.J.A.C. reference and added "by the plumbing subcode".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (e) and (k)5, substituted "2003" for "1998" throughout; in (e)2ii, inserted "ICC/ANSI A117.1-2003, Chapter 10"; in (e)6, substituted "2406.3" for "2406.2"; added new (e)11 and (e)12; recodified former (e)11 and (e)12 as (e)13 and (e)14; and in (g)3, substituted "1009.10, 1010.8, 1012" for "1003.3.3.11, 1003.3.4.7" and "1013.1" for "1003.2.12".

### 5:23-6.8 Materials and methods

(a) The following requirements shall be met for materials and installation methods for all items that are part of the applicant's proposed project for all categories of work other than repair as defined in N.J.A.C. 5:23-6.3.

1. Where sections listed below reference other sections not listed below, those sections shall apply within that limited context.

(b) Building and Fire Protection Materials and Methods: The following sections of the building subcode (N.J.A.C. 5:23-3.14) shall constitute the building and fire protection materials and methods requirements for this subchapter:

1. The following sections of Chapter 5 entitled "General Building Height and Areas":

i. Section 505 shall apply to newly constructed "Mezzanines";

2. The following sections of Chapter 7 entitled "Fire-Resistance-Rated Construction":

i. Subsections 703.2, 703.3, 703.4;

ii. Subsection 704.2.1, 704.2.2, 704.2.3, 704.4, 704.13, 704.14;

iii. Subsections 705.3, 705.8, 705.9, 705.10, 705.11;

iv. Section 706.7, 706.8, 706.9, 706.10;

v. Section 707.7, 707.8, 707.9, 707.10, 707.13.2;

vi. Subsections 708.2, 708.6, 708.7, 708.8, 708.9;

vii. Subsections 709.2, 709.5, 709.6, 709.7, 709.8;

viii. Subsections 711.2, 711.5, 711.6, 711.7;

ix. Section 712;

x. Section 713;

xi. Subsections 715.2, 715.4.5, 715.4.6, 715.4.7, 715.4.8, 715.4.9, 715.5.1, 715.5.3, 715.5.4, 715.5.5, 715.5.6, 715.5.7, 715.5.8;

xii. Subsections 716.2, 716.3, 716.4, 716.7;

xiii. Subsections 717.2.1, 717.3.1;

xiv. Subsections 718.2, 718.4, 718.5;

xv. Section 719;

xvi. Section 720; and

xvii. Section 721;

3. All of Chapter 8 entitled "Interior Finishes" except 802;

4. All of Chapter 9 entitled "Fire Protection Systems" except 901, 902, 903.2, 904.2, 905.3, 908.1, 908.2, 910.2, 911;

5. The following sections of Chapter 10 entitled "Means of Egress":

i. Subsection 1011.2, 1011.4, 1011.5, 1011.5.1, 1011.5.3;

ii. Subsections 1013.2, 1013.3;

iii. Subsections 1008.1.3.1, 1008.1.3.2, 1008.1.3.3, 1008.1.3.4, 1008.1.3.5, 1008.1.8; and

iv. Subsections 1012.2, 1012.3, 1012.4, 1012.5, 1012.6, 1012.8;

6. The following sections of Chapter 12 entitled "Interior Environment":

- i. Section 1203.4.2 shall apply to new sources of contaminants; and
  - ii. Section 1210;
7. All of Chapter 14 entitled "Exterior Walls" except 1401, 1402, 1403.2;
  8. All of Chapter 15 entitled "Roof Assemblies and Rooftop Structures" except 1501.1, 1502.0, 1503.4, 1503.5;
  9. All of Chapter 16 entitled "Structural Design," except 1601, 1604, 1608, 1609, 1610, 1611, 1612, 1613, shall apply to new or replaced structural members. The referenced sections of Chapter 16 shall not be used to analyze any existing structural members, except as otherwise provided by this subcode;
  10. All of Chapter 18 entitled "Soil and Foundations" except sections 1801, 1802, 1803, 1804, 1805, 1807;
    - i. Additionally, the following sections of 1807 shall be included as part of Materials and Methods: 1807.2.1, 1807.2.2, 1807.3.1, 1807.3.2, 1807.3.3, 1807.4.1, 1807.4.2, 1807.4.3;
  11. All of Chapter 19 entitled "Concrete" except 1901, 1902;
  12. All of Chapter 20 entitled "Aluminum";
  13. All of Chapter 21 entitled "Masonry";
  14. All of Chapter 22 entitled "Steel";
  15. All of Chapter 23 entitled "Wood";
  16. All of Chapter 24 entitled "Glass and Glazing";
  17. All of Chapter 25 entitled "Gypsum Board and Plaster";
  18. All of Chapter 26 entitled "Plastic"; and
  19. For the applicability of Chapter 30 entitled "Elevators and Conveying Systems," refer to (i) and (j) below.
    - (c) Plumbing Materials and Methods: The following sections of the plumbing subcode (N.J.A.C. 5:23-3.15) shall constitute the plumbing materials and methods requirements for this subchapter:
      1. All of Chapter 2 entitled "General Regulations" except 2.19 and 2.24:
        - i. Section 2.19 for mandatory connections to the public water supply and sewer shall apply when existing septic or water supply facilities are no longer suitable for use as determined by the local health inspector, and public facilities are available within the meaning of 2.19.
      2. All of Chapter 3 entitled "Materials."
      3. All of Chapter 4 entitled "Joints and Connections."
4. All of Chapter 5, entitled "Traps, cleanouts and backwater valves."
  5. Chapter 6, entitled "Interceptors" except sections 6.1.1, 6.3.1 and 6.4.1:
    - i. Section 6.1.1, 6.3.1, 6.4.1 for when interceptors are required shall not apply. However, when new fixtures, or devices are installed that will produce wastes that need to be separated, an interceptor shall be required.
  6. Chapter 7, entitled "Plumbing Fixtures, Fixture Fittings and Plumbing Appliances" except section 7.21 and table 7.21.1.
  7. Chapter 8 entitled "Hangers and Supports."
  8. Chapter 9 entitled "Indirect Wastes Piping and Special Waste."
  9. Chapter 10 entitled "Water Supply and Distribution" except for sections 10.3, 10.6.5, 10.8.1, 10.14 and 10.15.9:
    - i. Water shall be supplied so that fixtures within a building are provided with an adequate supply of water so that they are functional.
    - ii. Section 10.6.5 shall apply to all newly-installed or completely replaced water services.
    - iii. Section 10.8.1 shall apply, where there is not sufficient pressure for proper functioning of fixtures, a water pressure booster system shall be required.
    - iv. Section 10.14 for sizing water distribution systems shall apply when the proposed work will impose additional loads on the system. Where the proposed work does not increase or decreases the load on the existing system, no increase in size shall be required. All new piping associated with the installation of additional fixtures shall comply with the sizing requirements of Chapter 10.
  10. All of Chapter 11, entitled "Sanitary Drainage Systems" except 11.2.2, 11.2.3, 11.5, and 11.6:
    - i. Section 11.2.3 for sizing building sewers shall apply when the proposed work will impose additional loads on the sewer. Where the proposed work does not increase or decreases the load on the existing system, no increase in size shall be required.
    - ii. Section 11.5 for sizing drainage systems shall apply when the proposed work will impose additional loads on the system. Where the proposed work does not increase or decreases the load on the existing system, no increase in size shall be required. All new piping associated with the installation of additional fixtures shall comply with the sizing requirements of 11.5.
    - iii. Section 11.6 for sizing offsets in drainage systems shall apply when the proposed work will impose additional loads on the system. Where the proposed

- i. Section 307.2;
  - ii. Section 308;
  - iii. Section 314;
  - iv. Section 316;
  - v. Section 319; and
  - vi. Section 320;
2. The following sections of Chapter 4 entitled "Foundations":
- i. Section 402; and
  - ii. Section 407;
3. The following sections of Chapter 5 entitled "Floors":
- i. Sections 502.1, 502.8, 502.11, 502.12.1;
  - ii. Sections 503.2.1, 503.2.3, 503.3.1, 503.3.3;
  - iii. Sections 504.1, 504.3; and
  - iv. Sections 505.2.1, 505.2.2, 505.2.3, 505.2.4, 505.3.5, 505.3.6;
4. The following sections of Chapter 6 entitled "Wall Construction":
- i. Sections 602.1, 602.2, 602.6, 602.8.1;
  - ii. Sections 603.2.1, 603.2.2, 603.2.3, 603.2.4, 603.3.4, 603.3.5;
  - iii. Sections 604.1, 604.3;
  - iv. Section 605;
  - v. Section 606.1, 606.15;
  - vi. Section 607.1;
  - vii. Section 608.1;
  - viii. Section 609.1;
  - ix. Sections 610.1, 610.2, 610.3;
  - x. Section 611.1;
  - xi. Section 612.1; and
  - xii. Section 613.1;
5. All of Chapter 7 entitled "Wall Covering";
6. The following sections of Chapter 8, entitled "Roof-Ceiling Construction":
- i. Section 802.1, 802.7, 802.10;
  - ii. Section 803.2.1;
  - iii. Sections 804.2.1, 804.2.2, 804.2.3, 804.2.4, 804.3.5, 804.3.6; and
  - iv. Section 805.1;
7. The following sections of Chapter 9 entitled "Roof Assemblies":
- i. Section 902.1;
  - ii. Section 903.1;
  - iii. Section 904;
  - iv. Section 905;
  - v. Section 906; and
  - vi. Section 907;
8. All of Chapter 10 entitled "Chimneys and Fireplaces";
9. All of Chapter 13, entitled "General Mechanical System Requirements", except M1305;
10. All of Chapter 14, entitled "Heating and Cooling Equipment", except M1401.2;
11. All of Chapter 15, entitled "Exhaust Systems";
12. All of Chapter 16, entitled "Duct Systems";
13. All of Chapter 17, entitled "Combustion Air";
14. All of Chapter 18, entitled "Chimneys and Vents";
15. All of Chapter 19, entitled "Special Fuel-Burning Equipment";
16. All of Chapter 20, entitled "Boilers and Water Heaters";
17. All of Chapter 21, entitled "Hydronic Piping";
18. All of Chapter 22, entitled "Special Piping and Storage Systems";
19. All of Chapter 23, entitled "Solar Systems"; and
20. All of Chapter 24, entitled "Fuel Gas," except G2404.7, G2404.8, G2412.8 and G2413.3.
- (i) Elevator Devices Materials and Methods: The following sections of the elevator subcode (N.J.A.C. 5:23-12) shall constitute the elevator device materials and methods requirements for this subchapter:
- 1. The following sections of ASME A17.1 referenced by the adopted building subcode: Section 8.6.1, General Requirements; 8.6.2. Repairs; 8.6.3, Replacements; 8.7, Alterations including Appendix L; 8.8, Welding; and 8.9, Code Data Plate.
  - 2. The following section of Chapter 30 of the building subcode: Section 3002.1.2—"Hoistway Enclosures, Hardware."
  - 3. The requirements of ASME A17.1 Section 2.8.2.3, as referenced by the adopted building subcode, when an automatic sprinkler system is installed in an elevator hoistway, machine room and/or machinery space.

4. When a controller is replaced, without any change in the type of operation or control, the newly installed controller shall conform to the requirements of ASME A17.1 Sections 2.26.4 and 2.26.9. The installation shall also conform to the requirements of ASME A17.1 Sections 2.25; 2.26.6; 2.26.7; and 2.26.8.

5. When a controller is replaced, with any change in the type of operation or control, the newly installed controller shall conform to the requirements of ASME A17.1 Sections 2.26.4 and 2.26.9. The installation shall also conform to the requirements of ASME A17.1 Sections 2.25; 2.26.6; 2.26.7; 2.26.8; and 2.27.3 through 2.27.9.

(j) Conveying Devices Materials and Methods: The following sections of Chapter 30 of the building subcode (N.J.A.C. 5:23-3.14) shall constitute the conveying device materials and methods requirements for this subchapter:

1. Section 3005.3 – “Conveyors”; Section 3005.4 – “Personnel and material hoists” except for the seismic design provisions; and Section 3001.2 – “ALI ALCTV.”

(k) Manufactured Home Materials and Methods: The following sections of the manufactured home subcode (N.J.A.C. 5:23-3.19) shall constitute the manufactured home materials and methods requirements for this subcode:

1. All of Part 3280 of Title 24 of the Code of Federal Regulations except 3280.1, 3280.5, 3280.6, 3280.7, and 3280.8.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (b), inserted a reference to fire protection materials the introductory paragraph, inserted 4i and 4ii, inserted a new 5iii, and recodified former 5iii and 5iv as 5iv and 5v; and in (c), changed chapter 5 reference in 4, substituted a reference to section 7.21 for a reference to 7.24 in 6, substituted a reference to section 11.2.3 for a reference to 11.2.2 in 10i, changed chapter 14 reference in 13, and changed section 16.1.7 reference in 15.

Administrative correction.

See: 32 N.J.R. 688(a).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (b), rewrote 15 and 21; in (d), rewrote 2 through 4; and added (h).

Amended by R.2002 d.5, effective January 7, 2002.

See: 33 N.J.R. 3392(a), 34 N.J.R. 267(a).

In (b), added new 5vi.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Rewrote the section.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted references to use preceding references to group throughout; in (b), substituted “906.1” for “906” in the introductory paragraph of 4 and inserted “1003.3.1.3.1” in 5iii; in (i), substituted a reference to automatic sprinkler for a reference to fire suppression in 3.

Administrative correction.

See: 36 N.J.R. 2490(b).

Amended by R.2005 d.82, effective March 7, 2005.

See: 36 N.J.R. 4222(a), 37 N.J.R. 771(a).

In (b), substituted “906.2” for “906.1” in the introductory paragraph of 4, and deleted i, substituted “1614” for “1613” in 9; in (c), deleted “and” following “108.1” and inserted “and 10.15.9” following “10.14” in 9.

Administrative change.

See: 37 N.J.R. 1016(a).

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (b)19, a correction is made to a cross reference; in (c)5, deletes reference to section 6.1.7; in (e)1, section 301.16 is replaced with section 301.15; added (f)5 and (h)9 through 20.

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Rewrote (b); in the introductory paragraph of (c), substituted “materials and methods” for “material and method”; added (d)2i; rewrote (d)3; in (d)4, inserted “and materials”; in (d)5, substituted “408.18” for “408.8”; in (f)4, deleted “and” from the end; in (f)5, substituted “; and” for the period at the end; added (f)6; in the introductory paragraph of (g), substituted “2003” for “1998”; and rewrote (h).

Administrative correction.

See: 39 N.J.R. 3296(a).

Amended by R.2008 d.369, effective December 15, 2008.

See: 40 N.J.R. 4651(a), 40 N.J.R. 6958(a).

In (b)19, substituted “and (j) below” for “below, Elevator Devices”; rewrote (i)1; in (i)2, substituted “section” for “sections” and deleted “and Section 3005.3—“Conveying Systems, Conveyors” from the end; in (j)3, substituted “Section 2.8.2.3” for “Rule 102.2(c)4” and “installed” for “provided”; added (i)4, (i)5, and new (j); and recodified former (j) as (k).

### 5:23-6.9 New building elements

(a) When the rehabilitation of an existing building creates or includes any building element of a type listed in this section, then the new element shall comply with the requirements for such an element established by this section.

1. The installation of a floor system which did not previously exist, shall be constructed utilizing the live load requirements as specified in Section 1607 of the building subcode, or with Section R301.5 of the one- and two-family dwelling subcode, as applicable.

2. When the number of stories in a building is increased without increasing the height of the building, the building shall comply with the story requirements of Table 503 of the building subcode.

i. Buildings of group R-5 shall comply with N.J.A.C. 5:23-3.21(c)3i of the one-and two-family dwelling subcode.

3. Newly created floor openings shall comply with the requirements of Section 707 of the building subcode.

4. Newly created atriums shall comply with the requirements of Section 404 of the building subcode.

5. Newly created door openings shall comply with Section 1008.1.1 of the building subcode. Additionally, newly created door openings in walls which are fire-resistance rated shall comply with Section 715 of the building subcode.

i. Newly created exit doors in buildings of Group R-5 shall comply with Section R311.4.2 of the one- and two-family dwelling subcode.

6. Newly created openings in fire resistance rated assemblies shall be protected in accordance with Section 712 of the building subcode, or with Section R317.3 of the one- and two-family dwelling subcode, as applicable.

used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required. Exceptions are as follows:

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire, Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by

N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

Total Occupancy <sup>1</sup>	Water Closets		Lavatories	Drinking	Service Sinks
	Male	Female		Water Facilities	
1-50	1 Unisex		1	1	1
51-100	1	1	1 per sex	1	1
101 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.				

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire, Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall

comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and rewrote 1; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), added the second sentence in the introductory paragraph; and added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (j)2i and in the first sentence of (j)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

In (d)2, substituted "an automatic sprinkler" for "a suppression" preceding "system" and substituted "code" for "subcode" following "with the building"; in (i)3, inserted "UFC" following "30-minute" in the introductory paragraph, and substituted "sprinkler" for "suppression" preceding "system" in ii(1).

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (j)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (a)2; in (j)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

### 5:23-6.12A Supplemental requirements—Group A-1

(a) Automatic Sprinkler System: An automatic sprinkler system shall be installed throughout the fire area containing the A-1 Group and all floors between the A-1 Group and the level of exit discharge when any one of the following conditions exists:

1. The work area exceeds 12,000 square feet (gross enclosed floor area);
2. The work area has an occupant load of 300 or more;
3. The work area is located on a floor other than the level of exit discharge; or
4. The work area contains a multi-theatre complex. (Fire)

(b) Automatic Alarm System: When the work area exceeds 25 percent of the gross enclosed floor area of the building, an automatic fire alarm system that complies with NFPA 72 shall be installed in all storage, workshop, boiler or furnace rooms. (Fire)

(c) Manual Alarm System: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 25 percent of the gross enclosed floor area of the

building, manual fire alarms shall be required throughout the building. (Fire)

(d) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows.

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire. Inspection— Building)

(e) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system,

the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(f) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g) below. (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e)2i, amended the N.J.A.C. reference.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Rewrote (a); in (d)3, inserted "UFC" following "30-minute"; substituted references to sprinkler for references to fire suppression throughout.

### 5:23-6.13 Basic requirements—Group A-2 Nightclubs

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet. (Plan review—Building, Fire. Inspection—Building)

2. Existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. All required exit doors equipped with latching devices in buildings or spaces with an occupant load greater than 100 shall be equipped with approved panic hardware.

3. If there are more than two individual rooms which can be used for separate functions, each with an occupant load of more than 300, the required egress doors from such rooms shall lead directly outside or to an exit passageway. Exit passageways shall be completely enclosed by assemblies having a fire-resistance rating of at least two hours, shall lead directly outside and shall not be used for any

other purpose unless a horizontal exit is provided in accordance with the building subcode. (Plan review—Building, Fire, Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). The main exit and at least one remaining exit shall be placed a distance apart equal to one-half the length of the maximum overall diagonal distance of the area served in buildings not equipped throughout with an automatic fire sprinkler system and one-third the maximum overall diagonal distance of the area served in buildings that are equipped throughout with an automatic fire sprinkler system. (Plan review — Building, Fire, Inspection — Building)

1. Buildings with an occupant load of 100 or more shall have a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load. The remaining exits shall be capable of providing two-thirds of the total required exit capacity.

2. Buildings with an occupant load of more than 300 shall have a main entrance capable of serving as the main exit with an egress capacity for at least two-thirds of the total occupant load. The remaining exits shall also be capable of providing two-thirds of the total required exit capacity.

(d) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length.

Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with a suppression system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. In buildings used for motion pictures or other projections by means of directed light, the illumination of aisles may be reduced during periods of projection to not less than 0.2 foot candle. The switch requirements and

location(s) for controlling egress lighting connected to the emergency electrical system shall be in conformance with the NFPA 70 (NEC). (Plan review—Building, Fire, Electric, Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30 minute fire barrier shall be required. Exceptions are as follows:

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic suppression system; and

(2) The lowest or next to the lowest level is a street floor; and

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants; and

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire, Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

Total Occupancy <sup>1</sup>	Water Closets		Lavatories	Drinking Water Service	
	Male	Female		Facilities	Sinks
1-25	1	Unisex	1	0	0
26 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.				

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire, Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (f), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and rewrote 1; and in (g)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (f), added the second sentence in the introductory paragraph; and added (p).

Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (m)2i and in the first sentence of (m)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (p), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (m)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.51, effective February 5, 2007.

See: 38 N.J.R. 375(a), 39 N.J.R. 371(a).

Deleted former (a); recodified former (b) through (d) as (a) through (c); rewrote new (c); and recodified former (e) through (p) as (d) through (o).

Administrative correction.

See: 39 N.J.R. 1249(a).

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (a)2; in (l)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

### 5:23-6.13A Supplemental requirements—Group A-2 Nightclubs

(a) Automatic Fire Sprinkler System: An automatic fire sprinkler system shall be installed throughout all floors containing the Group A-2 nightclub and all floors between the Group A-2 nightclub and the level of exit discharge when the conditions in (a)1 or 2 below exist. For purposes of applying this section, the level of exit discharge shall be defined as having all exits discharging not more than five feet above nor more than two feet below the adjacent grade.

1. The work area is located on a floor other than the level of exit discharge; or

2. The work area is at the level of exit discharge and has an occupant load of 300 or more or a net occupiable floor area of greater than 5,000 square feet.

3. The automatic fire sprinkler system shall be tied to the performance sound system and to the house lights in such a way that activation of the automatic sprinkler system mutes the performance sound system and restores the intensity of illumination to that required by the building subcode. (Fire)

(b) Automatic Alarm System: When the occupant load of the work area exceeds 100, an automatic fire alarm system that complies with NFPA 72 shall be installed throughout.

1. If the alarm is activated by smoke detectors, it shall be activated by either two cross-zoned smoke detectors within a single protected area or a single smoke detector monitored by an alarm verification zone or an approved equivalent method and the smoke detectors shall be of a

type designed to reduce the possibility of false notifications based on the conditions present in the area protected.

2. The automatic fire alarm system shall be tied to the performance sound system and to the house lights in such a way that activation of the fire detection system mutes the performance sound system and restores the intensity of illumination to that required by Section 1003.2.11.1 of the building subcode. (Fire)

(c) Manual alarm system: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 25 percent of the gross enclosed floor area of the building, or for buildings where the occupant load of the work area exceeds 100, manual fire alarms shall be required throughout the building. (Fire)

(d) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30 minute fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows:

i. When connecting the main floor and mezzanines; or

ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic fire suppression system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that

level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire, Inspection—Building)

(e) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle, shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c; and

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation.

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic fire suppression system or a minimum

of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(f) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e)2i, amended the N.J.A.C. reference.  
Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (a), inserted "Nightclubs" following "A-2" throughout.  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).  
Amended by R.2007 d.51, effective February 5, 2007.  
See: 38 N.J.R. 375(a), 39 N.J.R. 371(a).

Rewrote (a) and (b); and in (c), inserted "or for buildings where the occupant load of the work area exceeds 100,".

#### 5:23-6.14 Basic requirements—Groups A-2 other than Nightclubs, A-3 and A-4

(a) Automatic Sprinkler System: An automatic sprinkler system shall be required in spaces of Group A-3 used as ballrooms, exhibit areas and accessory spaces which exceed 12,000 square feet and are located in buildings of Group R-1 and R-2.

1. Exceptions:

i. An automatic sprinkler system shall not be required if the space is divided into fire areas of not more than 12,000 square feet by a two-hour fire separation with 1½-hour opening protectives or if the space is completely separated from any other uses by a two-hour fire separation with 1½-hour opening protectives. (Fire)

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet. (Plan review—Building, Fire, Inspection—Building)

(c) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. All required exit doors equipped with latching devices in buildings or spaces with an occupant load greater than 100 shall be equipped with approved panic hardware.

3. If there are more than two individual rooms which can be used for separate functions, each with an occupant load of more than 300, the required egress doors from such rooms shall lead directly outside or to an exit passageway. Exit passageways shall be completely enclosed by assemblies having a fire-resistance rating of at least two hours, shall lead directly outside and shall not be used for any other purpose. (Plan review—Building, Fire, Inspection—Building)

(d) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). Additionally, for buildings with an occupant load of 100 or more, a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load is required. The remaining exits shall be capable of providing one-half of the total required exit capacity. This provision shall not apply in buildings with multiple main entrances. (Plan review—Building, Fire, Inspection—Building)

(e) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of

its installation. (Plan review—Building, Fire, Inspection—Building)

(f) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. In buildings used for motion pictures or other projections by means of directed light, the illumination of aisles may be reduced during periods of projection to not less than 0.2 foot candle. The switch requirements and location(s) for controlling egress lighting connected to the emergency electrical system shall be in conformance with the NFPA 70 (NEC). (Plan review—Building, Fire, Electric, Inspection—Building)

(g) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(h) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is

not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(i) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(j) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required. Exceptions are as follows:

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire, Inspection—Building)

(k) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient,

shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(l) Plumbing fixtures: The following apply to plumbing fixtures: (Plumbing)

1. For auditoriums, museums, libraries, and similar facilities, plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section.

Total Occupancy <sup>1,2</sup>	Water Closets		Lavatories	Drinking	Service Sinks
	Male	Female		Water Facilities	
1-50	1 Unisex		1	1	1
51-100	1	1	1 per sex	1	1
101 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.				

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

Note 2. Requirements for employees and customers may be met with a single set of restrooms. The required number of fixtures shall be the greater of the required number for employees or customers.

2. For restaurants, plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section.

Total Occupancy <sup>1,2</sup>	Water Closets		Lavatories	Drinking	Service Sinks
	Male	Female		Water Facilities	
1-25	1 Unisex		1	0	0
26 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.				

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

Note 2. Requirements for employees and customers may be met with a single set of restrooms. The required number of fixtures shall be the greater of the required number for employees or customers.

3. For recreational facilities, passenger terminals, and other buildings of Groups A-2 other than Nightclubs, A-3 and A-4, plumbing fixtures shall be provided as required by Table 7.21.1 of the plumbing subcode. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section.

(m) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(n) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire, Inspection—Building)

(o) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(p) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (f), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and rewrote 1; and in (g)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

Rewrote (a); in (f), added the second sentence in the introductory paragraph; and added (p).

Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (a), introductory paragraph and (l)3, substituted "A-2 other than Nightclubs, A-3 and A-4" for "A-3"; in (m)2i and first sentence of

(m)2ii, substituted "the International Mechanical Code" for "ASHRAE 62-89"; in (p), substituted "Section 716" for "Section 721.0".  
Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Rewrote (a); in (j)3, inserted "UFC" following "30-minute"; in (l), deleted "Use" preceding "Groups" in 3; substituted references to sprinkler for references to fire suppression throughout.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (m)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (b)1ii; in (m)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (p), substituted "717" for "716".

#### 5:23-6.14A Supplemental requirements—Groups A-2 other than Nightclubs, A-3 and A-4

(a) Automatic fire sprinkler system: An automatic fire sprinkler system shall be installed throughout the floors containing the Group A-2 other than nightclubs, Groups A-3 and A-4 and all floors between the Group A-2 other than nightclubs, Groups A-3 and A-4 and the level of exit discharge when any one of the following conditions exists:

1. The work area exceeds 12,000 square feet (gross enclosed floor area);

2. The work area has an occupant load of 300 or more;

3. The work area is located on a floor other than the level of exit discharge.

4. Exception: Sprinklers shall not be required for participant sport areas where the main floor of the participant sport is at the level of exit discharge of the main entrance. (Fire)

(b) Automatic Alarm System: When the work area exceeds 25 percent of the gross enclosed floor area of the building, an automatic fire alarm system that complies with NFPA 72 shall be installed in all storage, workshop, boiler or furnace rooms. (Fire)

(c) Manual Alarm System: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 25 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building. (Fire)

(d) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior

stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows:

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system; and

(2) The lowest or next to the lowest level is a street floor; and

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants; and

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire, Inspection—Building)

(e) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system.) (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

- i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or

below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

- ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c; and

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation.

- iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

- i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

- ii. Hose and hose cabinets shall not be required. (Fire)

(f) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

(g) Amusement Buildings: When any reconstruction project is undertaken in a building or portion thereof designed to disorient the occupant, reduce vision, present barriers or otherwise impede the flow of traffic, the following requirements shall be met throughout the building or portion thereof that constitutes the amusement use:

1. Every such amusement facility shall be equipped throughout with an automatic sprinkler system installed in accordance with the New Jersey Uniform Construction Code.

2. The interior finish of all walls and ceilings shall in no case be less than a Class II material in accordance with this subchapter.

3. Every such amusement facility shall be equipped with exit signs installed in accordance with this subchapter.

4. Every such amusement facility shall be equipped throughout with an approved automatic fire alarm system installed in accordance with the Uniform Construction Code and in accordance with (f)5 through 8 below.

5. The automatic alarm system shall activate a pre-recorded message which can be clearly heard throughout the entire facility instructing the patrons to proceed to the nearest exit. Any alarm signals used in conjunction with the prerecorded message shall produce a signal which is distinctive from all sounds used in the normal operation of the amusement facility.

6. Every such amusement facility shall be equipped with emergency lighting equipment installed in accordance with the New Jersey Uniform Construction Code. The emergency lighting equipment shall automatically activate when:

- i. The automatic sprinkler system is activated;
- ii. The fire alarm system is activated; or
- iii. Loss of the primary power supply occurs.

7. All audio and visual equipment such as horns, bells, flashing, or otherwise distracting stimuli and mechanized displays shall cease operation upon initiation of an alarm by the automatic fire alarm system or activation of the automatic sprinkler system.

8. Activation of the automatic alarm system shall automatically shut down the air distribution system. (Plan review—Building, Fire, Inspection—Building)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

Deleted former (a) and recodified former (b) through (g) as (a) through (f); in (d)2i, amended N.J.A.C. reference; in (f)4, amended internal reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Added a new (a); recodified former (a) through (f) as (b) through (g); in (d)3, inserted "UFC" following "30-minute"; and substituted references to automatic sprinkler for references to fire suppression throughout.

### 5:23-6.15 Basic requirements—Group A-3 Places of Worship

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required

means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet. (Plan review—Building, Fire, Inspection—Building)

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. All required exit doors equipped with latching devices in buildings or spaces with an occupant load greater than 100 shall be equipped with approved panic hardware. (Plan review—Building, Fire, Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). Additionally, for buildings with an occupant load of 100 or more, a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load is required. The remaining exits shall be capable of providing one-half of the total required exit capacity. This provision shall not apply in buildings with multiple main entrances. (Plan review—Building, Fire, Inspection—Building)

(d) Dead end corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. In buildings used for motion pictures or other projections by means of directed light, the illumination of aisles may be reduced during periods of projection to not less than 0.2 foot candle. The switch requirements and location(s) for controlling egress lighting connected to the emergency electrical system shall be in conformance with the NFPA 70 (NEC). (Plan review—Building, Fire, Electric. Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire. Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required. Exceptions are as follows:

i. When connecting the main floor and mezzanines; or

ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire. Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building sub-code. Where structural elements are sound, there is no excess-

sive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

Total Occupancy <sup>1</sup>	Water Closets		Lavatories	Drinking	Service Sinks
	Male	Female		Water Facilities	
1-50	1 Unisex		1	1	1
51-100	1	1	1 per sex	1	1
101 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.				

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

- i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.
- ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire, Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999. See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted “except that continued illumination shall be required to be provided” for “to assure continued illumination” in the last sentence of the introductory paragraph, and rewrote 1; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), added second sentence in the introductory paragraph; and added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (l), substituted “the International Mechanical Code, 2000 edition” for “ASHRAE 62-89” in 2i and the second paragraph of 2ii; in (o), substituted section “716” for “721.0” of the building subcode.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to suppression throughout; in (i)3, inserted “UFC” following “30-minute”.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (l)2i and ii, substituted “mechanical subcode” for “International Mechanical Code, 2000 edition”.

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (a)1ii; in (l)2ii, deleted “unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount” following “ventilation air per person”; and in (o), substituted “717” for “716”.

**5:23-6.15A Supplemental requirements—Group A-3 Places of Worship**

(a) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

- 1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.
- 2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.
- 3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows:

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire, Inspection—Building)

(b) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c; and

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall

be equipped with Phase II Emergency In-Car Operation.

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(c) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (b)2i, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to sprinkler for references to fire suppression throughout; in (a)3, inserted "UFC" following "30-minute".

### 5:23-6.16 Basic requirements—Group A-5

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have

unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet. (Plan review—Building, Fire, Inspection—Building)

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. All required exit doors equipped with latching devices in buildings or spaces with an occupant load greater than 100 shall be equipped with approved panic hardware. (Plan review—Building, Fire, Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). Additionally, for buildings with an occupant load of 100 or more, a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load is required. The remaining exits shall be capable of providing one-half of the total required exit capacity. This provision shall not apply in buildings with multiple main entrances. (Plan review—Building, Fire, Inspection—Building)

(d) Dead End Corridors: Existing dead end corridors shall not exceed 65 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of

the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. In buildings used for motion pictures or other projections by means of directed light, the illumination of aisles may be reduced during periods of projection to not less than 0.2 foot candle. The switch requirements and location(s) for controlling egress lighting connected to the emergency electrical system shall be in conformance with the NFPA 70 (NEC). (Plan review—Building, Fire, Electric, Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in

which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows. Stairways are not required to be enclosed where all portions of the means of egress are essentially open to the outside.

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required. Exceptions are as follows:

i. When connecting the main floor and mezzanines; or

ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level. (Plan review—Building, Fire. Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the

standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as required by Table 7.21.1 of the plumbing subcode. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and rewrote 1; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), added second sentence in the introductory paragraph; and added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (l)2i and in the first sentence of (l)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to suppression throughout; in (i)3, inserted "UFC" following "30-minute".

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (l)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (a)1ii; in (l)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

#### 5:23-6.16A Supplemental requirements—Groups A-5

(a) Automatic fire sprinkler system: An automatic fire sprinkler system shall be installed in all Group A-5 work areas when the work area contains concession stands, retail areas, press boxes or other accessory use areas in excess of 1,000 square feet.

(b) Manual Alarm Systems: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building. (Fire)

(c) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows:

- i. When connecting the main floor and mezzanines; or
- ii. When all of the following conditions are met:

(1) The communicating area has a low hazard occupancy or has a moderate hazard occupancy which is protected throughout by an automatic sprinkler system;

(2) The lowest or next to the lowest level is a street floor;

(3) The entire area is open and unobstructed in a manner such that it may be assumed that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants;

(4) Exit capacity is sufficient to provide egress simultaneously for all the occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity; and

(5) Each floor level, considered separately, has at least one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level.

4. Exception: Stairways are not required to be enclosed where all portions of the means of egress are essentially open to the outside. (Plan review—Building, Fire, Inspection—Building)

(d) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c; and

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation.

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(e) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c)2i, updated N.J.A.C. reference.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Added a new (a); recodified former (a) through (d) as (b) through (e); in (c)3, inserted "UFC" following "30-minute"; and substituted references to sprinkler for references to fire suppression throughout.

### 5:23-6.17 Basic requirements—Group B

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving

an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet.

3. A single exit shall be permitted in buildings of not more than two stories in height, with not more than 3,000 square feet per floor when the exit access travel distance does not exceed 75 feet and a minimum fire resistance rating of one hour is provided for the exit enclosure and the opening protection. (Plan review—Building, Fire. Inspection—Building)

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways. (Plan review—Building, Fire. Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire. Inspection—Building)

(d) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire. Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be

required to be provided for not less than one hour in the case of primary power loss. (Plan review—Building, Fire, Electric. Inspection—Building)

(f) **Illuminated Exit Signs:** Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke 3/4 inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire. Inspection—Building)

(g) **Handrails:** Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(h) **Guards:** Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(i) **Vertical Opening Protection:** Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required, with the following exception:

- i. No vertical opening protection shall be required for vertical openings of up to three stories in buildings not exceeding 3,000 square feet per floor or in buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire. Inspection—Building)

(j) **Structural Elements:** Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) **Plumbing Fixtures:** Plumbing fixtures shall be provided as follows: Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

	Total Occupancy <sup>1,2,3</sup>	Water Closets	Lavatories	Drinking Water Facilities	Service Sinks
Employees	1-15 16 and over	1 Unisex	1	1	1
		Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			
Customers	1-25 26 and over	1 Unisex	1	1	1
		Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

Note 2. Customer and employee facilities may be satisfied with a single unisex toilet facility where the number of employees does not exceed 15 and where the total occupancy does not exceed 25 or where the occupied floor area does not exceed 1,500 square feet.

Note 3. Requirements for employees and customers may be met with a single set of restrooms. The required number of fixtures shall be the greater of the required number for employees or customers.

(l) **Mechanical Requirements:** All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight

percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

- i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.
- ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and inserted a reference to electric plan review in the last sentence of the introductory paragraph; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), added second sentence; and added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (j)2i and in the first sentence of (j)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to sprinkler for references to fire suppression throughout; in (i)3, inserted "UFC" following "30-minute".

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (j)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (j)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

## 5:23-6.17A Supplemental requirements—Group B

(a) Manual Alarm System: When the work area exceeds 50 percent of the gross enclosed floor area of the building, a fire alarm system shall be installed throughout the building.

1. Exception: Manual alarm systems are not required in buildings which do not have occupied floors which are two or more stories above the lowest level of exit discharge or floors two or more stories below the highest level of exit discharge. (Fire)

(b) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories.

i. Exception: No vertical opening protection shall be required for buildings up to 3,000 square feet per floor or for buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire. Inspection—Building)

(c) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase

1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c; and

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation.

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

4. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, central control station and communication systems shall be provided as follows:

i. An approved public address communication system consisting of loudspeakers in each corridor and in each room and tenant space exceeding 1,000 square feet, each elevator and elevator lobby and in each stair enclosure which shall be capable of being operated from the central control station;

ii. A two-way fire department communication system which shall operate between the central control and every elevator, elevator lobby and entry to enclosed exit stairways;

iii. A central control station for fire department operations shall be provided in a location approved by the fire department. It shall contain the public address panel, the fire department communications panel, fire detection and alarm system annunciator panels, status indicators

and controls for air handling systems, sprinkler valve and water flow detector display panels, and status indicators and a telephone for fire department use with controlled access to the public telephone system. (Fire)

5. Automatic Sprinkler System: When the work area is an entire floor, an automatic sprinkler system shall be installed on that floor. When an automatic sprinkler system is provided, the sprinkler riser shall be sized to serve the entire building, even if the system currently being installed serves only a portion of the building. (Fire)

(d) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

(e) Airport Traffic Control Towers: When the work area exceeds 50 percent of the gross enclosed floor area of an airport traffic control tower, the entire structure shall comply with the requirements of Section 412.1 of the building subcode.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c)2i, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (e), substituted "Section 412.1" for "Section 414.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to sprinkler for references to fire suppression throughout; in (b)3, inserted "UFC" following "30-minute".

### 5:23-6.18 Basic requirements—Group E

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet.

i. A single exit shall not be permitted when a building is used as a child care center. (Plan review—Building, Fire. Inspection—Building)

2. Existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. A single means of egress shall be permitted in classrooms having a maximum occupant load of 75 in buildings equipped throughout with an automatic sprinkler system. (Plan review—Building, Fire, Inspection—Building)

3. All required exit doors equipped with latching devices in buildings or spaces with an occupant load greater than 100 shall be equipped with approved panic hardware.

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire, Inspection—Building)

(d) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. In buildings used for motion pictures or other projections by means of directed light, the illumination of

aisles may be reduced during periods of projection to not less than 0.2 foot candle. The switch requirements and location(s) for controlling egress lighting connected to the emergency electrical system shall be in conformance with the NFPA 70 (NEC). (Plan review—Building, Fire, Electric, Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating

of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum one-hour UFC fire barrier shall be required, with the following exception:

i. No vertical opening protection shall be required for vertical openings of up to three stories with an automatic sprinkler system throughout. (Plan review—Building, Fire. Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as required by Table 7.21.1 of the plumbing subcode. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation. All public school buildings shall be provided with mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the

mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment, or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke, or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Administrative correction.

See: 30 N.J.R. 3785(b).

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and rewrote 1; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), added second sentence in the introductory paragraph; and added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (l)2i and in the first sentence of (l)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to sprinkler for references to fire suppression throughout; in (b), added 3; in (i)3, inserted "UFC" following "one-hour".

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (l)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Administrative correction.

See: 38 N.J.R. 5010(d).

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (a)2; in (l)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

### 5:23-6.18A Supplemental requirements—Group E

(a) Automatic Sprinkler System: In buildings three stories or more in height, with greater than 20,000 square feet per floor, when the work area exceeds 50 percent of the gross enclosed floor area of a floor, an automatic sprinkler system shall be installed throughout that floor. (Fire)

(b) Automatic Alarm System: When the work area exceeds 50 percent of the gross enclosed floor area of a building, an automatic fire alarm system shall be installed throughout the building as follows:

1. An approved system of automatic smoke detectors; or
2. An approved automatic sprinkler system equipped with automatic fire alarm devices; or
3. An approved system which combines the following elements shall be acceptable when devices are located as indicated below:

- i. Combination fixed temperature/rate-of-rise detectors in classrooms and ancillary spaces;

- ii. Photoelectric or projected-beam smoke detectors in exit access corridors and at the top of the exit stair enclosures; and

- iii. Fixed temperature detectors in such a system shall be accepted in locations such as boiler rooms, garage areas and other spaces in which conditions render other detectors inappropriate.

4. Existing fire detection systems, installed and maintained in accordance with the manufacturer's recommendations, and meeting the intent of current standards for automatic fire alarms, shall be acceptable, provided:

- i. The existing system is certified as functional by an approved service agency competent in the manufactured system.

- ii. Where a portion of an existing system is not serviceable and cannot be repaired, the existing system shall be replaced in accordance with the above and the provisions of the building subcode. (Fire)

(c) Manual Alarm System: When the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarm boxes shall be provided throughout the building in compliance with Section 907.3 of the building subcode and in accordance with the following:

1. Manual fire alarm boxes shall be provided in the natural path of escape from fire, near each exterior door from the corridor, kitchen, heater room and other exterior exits that are required to serve 50 or more persons. Additional fire alarm boxes shall be located in the main office, stage, at each stairway entrance from a corridor or place of assembly and near one exterior exit in each section of a place of assembly. It shall not be necessary to traverse more than 200 feet of unobstructed horizontal distance on the same floor in order to reach a fire alarm box. (Fire)

(d) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum one-hour UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories.

- i. No vertical opening protection shall be required for buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire, Inspection—Building)

(e) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

- i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

- ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

- (1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

- iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by the fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system at a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(f) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Administrative correction.

See: 30 N.J.R. 3242(a).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e)2i, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (c), substituted "Section 907.3" for "Section 918.5".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to sprinkler for references to fire suppression throughout; in(d)3, inserted "UFC" following "one-hour".

### 5:23-6.19 Basic requirements—Group F

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing

one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet. (Plan review—Building, Fire, Inspection—Building)

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways. (Plan review—Building, Fire, Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire, Inspection—Building)

(d) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. (Plan review—Building, Fire, Electric, Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria: (Plan review—Building, Fire, Inspection—Building)

1. Red or green letters at least six inches high; minimum width of each stroke 3/4 inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum one-hour UFC fire barrier shall be required, with the following exceptions:

i. No vertical opening protection shall be required for vertical openings of up to three stories in special purpose manufacturing occupancies when necessary for manufacturing operations and when direct access is provided to at least one protected stairway; or

ii. In buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire, Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

	Total Occupancy <sup>1</sup>	Water Closets	Lavatories	Drinking Water Facilities	Service Sinks
Light	1-15	1 Unisex	1	1	1
Industrial	16 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			
Heavy Industrial		Fixtures to be provided as per Table 7.21.1 of the plumbing subcode			

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and added a reference to plan review and inspection in the last sentence of the introductory paragraph; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

Added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (f)2i and in the first sentence of (f)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to suppression throughout; in (i)3, inserted "UFC" following "one-hour".

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (f)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (f)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

### 5:23-6.19A Supplemental Requirements—Group F

(a) Automatic sprinkler system: In buildings with a Group F-1 fire area greater than 12,000 square feet or a Group F-1 fire area more than three stories in height, when the work area exceeds 50 percent of the gross enclosed floor area of the building, an automatic sprinkler system shall be provided throughout the entire building.

(b) Manual Alarm System: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building.

1. Exception: Manual alarm systems shall not be required in buildings equipped throughout with an automatic sprinkler system. (Fire)

(c) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum one-hour UFC fire barrier required for interior stairways and other vertical openings not exceeding three stories.

i. Exception: No vertical opening protection shall be required for special purpose occupancies when necessary for manufacturing operations and direct access is provided to at least one protected stairway or for buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire. Inspection—Building)

(d) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall

be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm of 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(e) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c)2i, updated N.J.A.C. reference.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Added a new (a); recodified former (a) through (d) as (b) through (e); in (c)3, inserted "UFC" following "one-hour"; and substituted references to sprinkler for references to fire suppression throughout.

### 5:23-6.20 Basic requirements—Group H

(a) Automatic Sprinkler System: An automatic sprinkler shall be installed throughout the work area. The sprinkler riser shall be sized to serve the entire building, even if the system currently being installed serves only a portion of the building. (Fire)

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants.

1. For buildings of Group H-1, H-2 or H-3, a minimum of two exits shall be required from all mezzanines with an occupant load of greater than three or in which the travel distance exceeds 50 feet. For buildings of Group H-4 or H-5, a minimum of two exits shall be required from all mezzanines with an occupant load of greater than 10 or in which the travel distance exceeds 75 feet.

zanines with an occupant load of greater than 10 or in which the travel distance exceeds 75 feet.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet.

3. For buildings of Group H-1 or H-2, new slidescapes or safety chutes shall be permitted where constructed in accordance with the building subcode. (Plan review—Building, Fire, Inspection—Building)

4. Existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

(c) Egress Doorways: For buildings or spaces of Group H-1, H-2, or H-3, a minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than three or in which the travel distance exceeds 50 feet. For buildings or spaces of Group H-4 or H-5, a minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 10 or in which the travel distance exceeds 75 feet. All egress doors shall swing in the direction of exit travel. (Plan review—Building, Fire, Inspection—Building)

(d) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire, Inspection—Building)

(e) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. (Plan review—Building, Fire, Inspection—Building)

(f) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. Exception: Lighting to illuminate the exit discharge shall not be required. (Plan review—Building, Fire, Electric, Inspection—Building)

(g) **Illuminated Exit Signs:** Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria: (Plan review—Building, Fire. Inspection—Building)

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire. Inspection—Building)

(h) **Handrails:** Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(i) **Guards:** Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(j) **Vertical Opening Protection:** Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating

of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum one-hour UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories, with the following exception:

i. No vertical opening protection shall be required for vertical openings of up to three stories when necessary for manufacturing operations in a building where every floor level has direct access to at least two remote enclosed stairways or other approved exits. (Plan review—Building, Fire. Inspection—Building)

(k) **Structural Elements:** Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(l) **Plumbing Fixtures:** Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

	Total Occupancy <sup>1</sup>	Water Closets	Lavatories	Drinking Water Facilities	Service Sinks
Light Industrial	1-15	1 Unisex	1	1	1
	16 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			
Heavy Industrial		Fixtures to be provided as per Table 7.21.1 of the plumbing subcode			

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(m) **Mechanical Requirements:** All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(n) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(o) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(p) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (f), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and inserted a reference to electric plan review in 1; and in (g)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

Added (p).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (b)1 and (c), inserted "or H-5" following "H-4"; in (m)2i and in the first sentence of (m)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (p), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted "Use" preceding "Group" throughout; rewrote (a); in (j)3, inserted "UFC" following "one-hour".

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (m)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (b)4; in (m)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (p), substituted "717" for "716".

### 5:23-6.20A Supplemental requirements—Group H

(a) Manual Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building or use, a manual fire alarm system shall be installed throughout for buildings or portions thereof of Group H-2, H-3, H-4 or H-5. (Fire)

(b) Automatic Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building or use, an automatic fire alarm system shall be installed throughout in buildings of Group H. (Fire)

(c) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum one-hour UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories.

i. Exception: No vertical opening protection shall be required when the opening is necessary for manufacturing operations in a building where every floor level has direct access to at least two remote enclosed stairways or other approved exits. (Plan review—Building, Fire. Inspection—Building)

(d) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(e) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

(f) Use Group H-5: When the work area exceeds 50 percent of the gross enclosed floor area of a facility of Use Group H-5, the entire building is required to comply with the requirements of Section 415.8 of the Building subcode. (Building)

(g) Hazardous materials: When the work exceeds 25 percent of the gross enclosed floor area of the Group H portion of a building, the entire building is required to comply with the requirements of Sections 414 and 415 of the building subcode. (Building)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e)2i, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (b), substituted “, H-4 or H-5” for “or H-4”; in (g), substituted “Use Group H-5” for “HPFM Facilities”, substituted “a facility of Use Group H-5” for “an HPM facility”, and substituted “Section 415.9” for “Section

416.0”; in (h), substituted “Section 414 and 415” for “Section 417.0 and 418.0”.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted former (a); recodified former (b) through (h) as (a) through (g); in (c)1, inserted “UFC” following “one-hour”; in (d)3i, substituted “sprinkler” for “fire suppression” preceding “system”; deleted “Use” preceding “Group” throughout.

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (f), substituted “415.8” for “415.9”.

### 5:23-6.21 Basic requirements—Group I-1

(a) Automatic Sprinkler System: In buildings greater than two stories in height above grade or having an occupant load greater than 20 persons, excluding staff, an automatic sprinkler system shall be installed throughout the work area. The sprinkler riser shall be sized to serve the entire building, even if the system currently being installed serves only a portion of the building. (Fire)

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. A single exit shall not be permitted.

2. Existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

iii. Window access to fire escapes shall be permitted from individual rooms.

3. Existing slidescapes or safety chutes shall be permitted. (Plan review—Building, Fire. Inspection—Building)

(c) Emergency Egress Windows: When the work being performed creates a bedroom below the fourth floor, at least one sleeping room window or exterior door shall:

1. Be operable;

2. Have a sill height of not more than 44 inches; and

(q) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(r) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Inserted a new (c); recodified former (c) through (p) as (d) through (q); in the new (g), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and inserted a reference to electric plan review in the last sentence; and in the new (h), made an internal reference change in introductory paragraph, and rewrote the second sentence in 2.

Administrative correction.

See: 32 N.J.R. 688(a).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (g), added second sentence; and added (r).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (I)2, substituted "Section 903.3.5.1.1" for "Section 907.0"; in (o)2i and in the first sentence of (o)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (r), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Rewrote (a); in (k)3, inserted "UFC" following "one-hour"; substituted references to automatic sprinkler for references to fire suppression throughout.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (o)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (o)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (r), substituted "717" for "716".

### 5:23-6.21A Supplemental requirements—Group I-1

(a) Automatic Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, a supervised automatic fire alarm system shall be required throughout the building.

1. Exception: Automatic alarm systems shall not be required in buildings, other than boarding homes, with an automatic sprinkler system and a manual fire alarm system and with single station smoke detectors in the vicinity of sleeping areas in accordance with NFPA 72. (Fire)

(b) Manual Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building. (Fire)

(c) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum one-hour UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories.

i. Exception: No vertical opening protection shall be required for either the top or bottom of a stairway connecting not more than two floor levels when such stairway does not serve as a required means of egress and the occupant load does not exceed 12, excluding staff. (Plan review—Building, Fire. Inspection—Building)

(d) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the desig-

nated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(e) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.1999 d.259, effective August 16, 1999.

See: 31 N.J.R. 825(a), 31 N.J.R. 2330(a).

Inserted a new (d); and recodified former (d) through (f) as (e) through (g).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (f)2i, updated N.J.A.C. reference.

Amended by R.2003 d.137, effective April 7, 2003.

See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted former (d); recodified former (e) through (g) as (d) through (f).

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted former (a); recodified former (b) through (f) as (a) through (e); in (c)3, inserted "UFC" following "one-hour"; substituted "sprinkler" for "fire suppression" preceding "system" throughout.

### 5:23-6.22 Basic requirements—Groups I-2 and I-4

(a) Automatic Sprinkler System: An automatic sprinkler system shall be installed throughout the work area.

1. Exception: Automatic sprinklers shall not be required in buildings of Type 1 or Type 2A construction of any height or of Type 2B construction not over one story in height. This exception shall not apply to nursing homes.

2. Exception: Automatic sprinklers shall not be required in day care centers with an occupant load of 100 or less where all the children under 2½ years of age are cared for on the first floor and in which each child care room has an exit door directly to the exterior. (Fire)

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories

with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. A single exit shall not be permitted. (Plan review—Building, Fire. Inspection—Building)

2. Existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

(c) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. A minimum of two egress doorways shall be required for any patient sleeping room or suite of rooms greater than 1,000 square feet. (Plan review—Building, Fire. Inspection—Building)

(d) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire. Inspection—Building)

(e) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire. Inspection—Building)

(f) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. (Plan Review—Building, Fire, Electric. Inspection—Building)

(g) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the criteria contained in (g)1 and 2 below:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs.

3. Exception: When the second means of egress is a fire escape that is accessed directly from the individual sleeping room, illuminated exit signs shall not be required above the means of egress serving the fire escape. (Plan review—Building, Fire. Inspection—Building)

(h) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(i) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the

existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(j) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum one-hour UFC fire barrier shall be required, with the following exception:

i. Exception: Vertical opening protection shall not be required for vertical openings connecting not more than two floor levels which are separated by a one-hour UFC fire barrier equipped with a self-closing or automatically closing 20-minute door at the top or bottom of the stairway when such stairway does not serve as a required means of egress. (Plan review—Building, Fire. Inspection—Building)

(k) Boiler/Furnace Equipment Rooms: Boiler/furnace equipment rooms shall be enclosed by one hour fire-rated wall and ceiling assemblies for day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of  $2\frac{1}{2}$  years.

1. Exception: Enclosure shall not be required for boiler/furnace equipment of low pressure type (operating at pressures of 15 psig or less for steam equipment or 160 psig or less for hot water equipment) when installed in accordance with manufacturer's recommendations or for boiler/furnace equipment of residential, single-family type (200,000 BTU per hour input rating or less.)

2. Exception: Enclosure shall not be required for boiler/furnace equipment rooms equipped with a limited area sprinkler system in accordance with Section 903.3.5.1.1 of the Building subcode.

3. Where oil-burning equipment is used, an emergency shutoff switch shall be required at the top of the stairs leading to the basement for equipment in the basement or outside of the room for equipment located in other enclosed rooms. (Plan review—Building, Fire. Inspection—Building)

(l) Smoke Barriers: On every story used for sleeping purposes for more than 30 occupants and on stories which are usable, but unoccupied, when the work area exceeds 22,500 square feet on a floor, the work area shall be divided into not less than two compartments by smoke barrier walls comply-

ing with the technical requirements of N.J.A.C. 5:23-6.30(e) such that each compartment does not exceed 22,500 square feet and is no more than 150 feet in length and width. (Plan review—Building, Fire. Inspection—Building)

(m) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(n) Plumbing Fixtures: Plumbing fixtures shall be provided as required by Table 7.21.1 of the plumbing subcode. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

(o) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(p) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(q) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(r) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (f), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and inserted a reference to electric plan review in the last sentence; and in (g)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (f), added second sentence; and added (r).  
Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (k)2, substituted "Section 903.3.5.1.1" for "Section 907.0"; in (o)2i and in the first sentence of (o)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (r), substituted "Section 716" for "Section 721.0".  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; in (a), substituted "installed throughout the work area" for "required" following "shall be"; in (j), inserted "UFC" following "one-hour" throughout.

Amended by R.2006 d.120, effective April 3, 2006.  
See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (o)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".  
Amended by R.2007 d.2, effective January 2, 2007.  
See: 38 N.J.R. 3377(a), 39 N.J.R. 28(b).

In (a)1, added last sentence; and in (a)2, substituted "has" for "as".  
Amended by R.2007 d.122, effective May 7, 2007.  
See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (b)2; in (o)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (r), substituted "717" for "716".

#### **5:23-6.22A Supplemental requirements—Groups I-2 and I-4**

(a) Automatic Sprinkler System: When the work area is 50 percent or more of the occupied floor area of the building, an automatic sprinkler system shall be required throughout the floor. The sprinkler riser shall be sized to serve the entire building, even if the system currently being installed serves only a portion of the building.

1. Exception: No automatic sprinkler system shall be required for day care centers with an occupant load of 100 or less where all children below 2½ years of age are cared for on the first floor and in which each child care room has an exit door directly to the exterior. (Fire)

(b) Automatic Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, a supervised automatic fire alarm system shall be required throughout the building.

1. Exception: Automatic alarm systems shall not be required for buildings with an automatic sprinkler system and a manual fire alarm system with single station smoke detectors in the vicinity of sleeping areas in accordance with NFPA 72. (Fire)

(c) Manual Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building. (Fire)

(d) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum one-hour UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories.

i. Exception: No vertical opening protection shall be required for vertical openings connecting not more than two floor levels which are separated by a one-hour UFC fire barrier equipped with a self-closing or automatically closing 20-minute door at the top or bottom of the stairway when such stairway does not serve as a required means of egress. (Plan review—Building, Fire, Inspection—Building)

(e) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(f) Smoke Barriers: When the work area exceeds 50 percent of the occupied enclosed floor area of a story used for sleeping purposes for more than 30 occupants or of a story which is usable, but unoccupied, the story shall be divided into two or more compartments by smoke barrier walls complying with the technical requirements of N.J.A.C. 5:23-6.30(e) such that each compartment does not exceed 22,500 square feet and is no more than 150 feet in length and width. (Plan review—Building, Fire, Inspection—Building)

(g) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).  
In (e)2i, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; in (d), inserted "UFC" following "one-hour" throughout.

### 5:23-6.23 Basic requirements—Group I-3

(a) Automatic Sprinkler System: An automatic sprinkler system shall be installed throughout the work area. As an alternative, buildings shall be in compliance with all applicable provisions of Chapter 15 "Existing Detention and Correctional Occupancies" of the Life Safety Code, NFPA 101, 1985 edition.

1. In buildings not required to be equipped throughout with an automatic sprinkler system, an automatic sprinkler system shall be provided in all padded cells, boiler rooms, storage and workshop rooms 24 square feet or larger, mechanical equipment and similar rooms. (Fire)

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. A single exit shall not be permitted. (Plan review—Building, Fire. Inspection—Building)

2. Existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Ladders shall be prohibited on fire escapes used as a required means of egress.

(c) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. Buildings with remote power unlocking capability on more than 10 doors shall be provided with an emer-

gency power source for such locks. Power shall be arranged to automatically operate upon failure of normal power within 10 seconds and for a duration of not less than one hour. (Plan review—Building, Fire. Inspection—Building)

(d) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire. Inspection—Building)

(e) Dead End Corridors: Existing dead end corridor shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire. Inspection—Building)

(f) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. (Plan review—Building, Fire, Electric. Inspection—Building)

(g) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the criteria contained in (g)1 and 2 below:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit

signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs.

3. Exception: When the second means of egress is a fire escape that is accessed directly from the individual sleeping room, illuminated exit signs shall not be required above the means of egress serving the fire escape. (Plan review—Building, Fire. Inspection—Building)

(h) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(i) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(j) Vertical Opening Protection: Approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required for all vertical openings. The vertical opening protection may be omitted if either of the following conditions is met:

1. The building is in compliance with NFPA 101, Chapter 15, 1985 edition; or

2. The building is equipped throughout with an automatic sprinkler system. (Plan review—Building, Fire. Inspection—Building)

(k) Interior Finishes and Furnishings: Interior furnishings, drapes, curtains, carpeting, decorations, bedding, etc. shall be flame retardant. (Plan review—Building, Fire. Inspection—Building)

(l) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(m) Plumbing Fixtures: Plumbing fixtures shall be provided as required by Table 7.21.1 of the plumbing subcode. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

(n) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(o) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(p) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(q) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (f), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and inserted a reference to electric plan review in the last sentence; and in (g)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (f), added second sentence; and added (q).  
Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (n)2i and in the first sentence of (n)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (q), substituted "Section 716" for "Section 721.0".  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; rewrote (a).  
Amended by R.2006 d.120, effective April 3, 2006.  
See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (n)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".  
Amended by R.2007 d.122, effective May 7, 2007.  
See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Added (b)2; in (n)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (q), substituted "717" for "716".

### 5:23-6.23A Supplemental requirements—Group I-3

(a) Automatic Sprinkler System: When the work area exceeds 50 percent of the gross enclosed floor area of the building, an automatic sprinkler system or compliance with Chapter 15 "Existing Detention and Correctional Occupancies" of the Life Safety Code, NFPA 101, 1985 edition shall be required throughout the building. In buildings without an automatic sprinkler system, padded cells, boiler and mechanical equipment rooms, and storage and workshop rooms 24 square feet or larger must have an automatic sprinkler system. (Fire)

(b) Automatic Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, a supervised automatic fire alarm system shall be required throughout all resident housing areas in the building. Smoke detectors shall be arranged and positioned to prevent damage or tampering, provided that the function and speed of detecting a fire is equivalent to that provided by the spacing and arrangement of requirements of NFPA 72 listed in Chapter 35 of the building subcode.

1. Exception: An automatic fire alarm system shall not be required for buildings with an automatic sprinkler system and a manual fire alarm system and with single station smoke detectors in the vicinity of sleeping areas in accordance with NFPA 72.

2. Exception: Smoke detectors shall not be required in sleeping rooms with four or fewer occupants. (Fire)

(c) Manual Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building. (Fire)

(d) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided between floor levels of residential areas unless the building is equipped throughout with an automatic sprinkler system or the building complies with NFPA 101, Chapter 15, 1985 edition. (Plan review—Building, Fire. Inspection—Building)

(e) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

- ii. Hose and hose cabinets shall not be required.  
(Fire)

(f) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e)2i, updated N.J.A.C. reference.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout.

### 5:23-6.24 Basic requirements—Group M

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

- i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet. (Plan review—Building, Fire, Inspection—Building)

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways. (Plan review—Building, Fire, Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in

accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire, Inspection—Building)

(d) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. (Plan review—Building, Fire, Electric, Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.
2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.
3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required, with the following exceptions:
  - i. No vertical opening protection shall be required for openings connecting only two floor levels, such as between the street floor and mezzanine or second floor; or
  - ii. In buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire. Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or

omissions shall also be permitted under this section. (Plumbing)

	Total Occupancy <sup>1,2,3</sup>	Water Closets	Lavatories	Drinking Water Facilities	Service Sinks
Employees	1-15 16 and over	1 Unisex	1	1	1
		Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			
Customers	1-25 26 and over	1 Unisex	1	1	1
		Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

Note 2. Customer and employee facilities may be satisfied with a single unisex toilet facility where the number of employees does not exceed 15 and where the total occupancy does not exceed 25 or where the occupied floor area does not exceed 1,500 square feet.

Note 3. Requirements for employees and customers may be met with a single set of restrooms. The required number of fixtures shall be the greater of the required number for employees or customers.

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

- i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.
- ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and inserted a reference to electric plan review in the last sentence; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), added second sentence; and added (o).  
Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (l)2i and in the first sentence of (l)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to suppression throughout; in (i)3, inserted "UFC" following "30-minute".

Amended by R.2006 d.120, effective April 3, 2006.  
See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (l)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.  
See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (l)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

### 5:23-6.24A Supplemental requirements—Group M

(a) Automatic Sprinkler System: In buildings with a Group M fire area greater than 12,000 square feet or a Group M fire area more than three stories in height, when the work area exceeds 50 percent of the gross enclosed floor area of the building, an automatic fire sprinkler system shall be provided throughout the entire building. (Fire)

(b) Manual Alarm System: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building.

1. Exception: Manual alarm systems shall not be required in buildings equipped throughout with an automatic sprinkler system. (Fire)

(c) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories.

i. Exception: No vertical opening protection shall be required for openings connecting only two floor levels, such as between the street floor and mezzanine or second floor, or for buildings with an automatic sprinkler system throughout. (Plan review—Building, Fire. Inspection—Building)

(d) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

4. Automatic Sprinkler System: When the work area is an entire floor, an automatic sprinkler system shall be installed on that floor. When an automatic sprinkler system is provided, the sprinkler riser shall be sized to serve the entire building, even if the system currently being installed serves only a portion of the building. (Fire)

(e) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (d)2i, updated N.J.A.C. reference.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; rewrote (a); in (c)3, inserted "UFC" following "30-minute".

Administrative correction.

See: 36 N.J.R. 2490(b).

### 5:23-6.25 Basic requirements—Group R-1

(a) Smoke detectors: Battery-powered, single station smoke detectors or smoke detectors complying with the building subcode shall be required in individual guest rooms. (Fire)

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Window access to fire escapes shall be permitted from individual guestrooms.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet.

3. Multilevel guest units do not require an exit from each level within the unit provided that these conditions are met: The building is Type 1 or Type 2 construction, with travel distance within the dwelling unit not exceeding 75 feet or the building is not more than three stories and all third floor space is part of a dwelling unit located in part on the second floor and no habitable room has a travel distance of greater than 50 feet from the door of the room to the entrance of the dwelling unit.

4. A single exit is permitted from floors that are not more than 16 feet above grade provided that each unit on such floors has an operable window with a sill height of not more than 44 inches.

5. A single exit is permitted in buildings that are not more than two stories in height from floors that are more than 16 feet above grade with not more than four dwelling units per floor and exit access travel distance not exceeding 50 feet and with a minimum fire resistance rating of one hour for the exit enclosure and opening protectives and provided that each dwelling unit on such floors has an operable window with a sill height of not more than 44 inches. (Plan review—Building, Fire. Inspection—Building)

(c) Emergency Egress Windows: When the work being performed creates a bedroom below the fourth floor, at least one sleeping room window or exterior door shall:

1. Be operable;
2. Have a sill height of not more than 44 inches;
3. Have a width of at least 20 inches, a height of at least 24 inches, and have a minimum total area of 5.7 square feet measured from head to sill and side to side.
4. Windows are not required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system.

(d) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(r) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(s) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection.

1. Exception: Specific occupancy areas within and serving a dwelling unit are not required to comply with this section. (Building)

(t) Accessibility of Sleeping Rooms: At least one sleeping room or suite of every 25 or fewer that are part of the scope of work shall be made accessible unless the facility already provides the number of accessible sleeping rooms required by the barrier free subcode. (N.J.A.C. 5:23-7.1(b)7) In addition, at least one sleeping room or suite of every 25 or fewer that are part of the scope of work shall be equipped with a visual alarm and notification device for the hearing impaired unless the facility already provides the number required by the barrier free subcode. (Building)

(u) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Inserted a new (c); recodified former (c) through (s) as (d) through (t); in the new (g), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" and inserted a reference to electric plan review in the last sentence; and in the new (h), made an internal reference change in the introductory paragraph, and rewrote the second sentence in 2.

Administrative change.  
See: 32 N.J.R. 688(a).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (g), added second sentence; and added (u).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (m)2, substituted "Section 903.3.5.1.1" for "Section 907.0"; in (q)2i and in the first sentence of (q)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (u), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; in (k), inserted "UFC" following "one-hour" throughout.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (q)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (q)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (u), substituted "717" for "716".

### 5:23-6.25A Supplemental requirements—Group R-1

(a) Automatic Sprinkler System: In buildings four or more stories in height (excluding basements), when the work area is an entire floor, an automatic sprinkler system shall be installed throughout the work area. (Fire)

(b) Automatic Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, an automatic fire alarm system shall be required throughout the building. System smoke detectors are not required in guestrooms provided that the single-station detectors required by Section 907.2.10.1.1 of the building subcode are connected to the emergency electrical system and are annunciated by guestroom at a constantly attended location from which the fire alarm system is capable of being manually activated.

1. Exception: An automatic fire detection system is not required in buildings that do not have interior corridors serving guestrooms and where all guestrooms have a means of egress door opening directly to an exterior exit access which leads directly to the exits. (Note: Single station smoke detectors are still required in individual guest rooms in such buildings in accordance with N.J.A.C. 5:23-6.25(b) or 6.25A(d), as applicable). (Fire)

(c) Manual Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, a manual fire alarm system shall be required throughout the building.

1. No manual fire alarms shall be required for buildings with less than 25 occupants and less than 10 guestrooms. (Fire)

(d) Smoke Detectors: When the work area exceeds 25 percent of the gross enclosed floor area of the building, smoke detectors within guestrooms that meet the specifications of the building subcode shall be required throughout the building. The smoke detectors shall be installed in the locations indicated in the building subcode and placed within those locations in accordance with NFPA 72. (Fire)

(e) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hours fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum one-hour UFC fire barrier required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows:

i. For buildings with an automatic sprinkler system throughout;

ii. For buildings with not more than 25 guests when the following conditions are met:

(1) Every sleeping room is provided with an approved, operable window having a sill height not greater than 44 inches;

(2) Every sleeping room above the second floor is provided with direct access to a fire escape or other approved secondary exit;

(3) Any exit access corridor exceeding eight feet in length which serves two means of egress, at least one of which is an unprotected vertical opening, shall be separated from the vertical opening by a one-hour UFC fire barrier; and

(4) The building is protected throughout by a supervised, automatic fire alarm system, installed in accordance with the UCC. (Plan review—Building, Fire. Inspection—Building)

(f) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

4. When the work area is one entire floor or more, central control station and communication systems shall be provided as follows:

i. An approved public address communication system consisting of loudspeakers in each corridor and in each room and tenant space exceeding 1,000 square feet, each elevator and elevator lobby and in each stair enclosure which shall be capable of being operated from the central control station;

ii. A two-way fire department communication system which shall operate between the central control and every elevator, elevator lobby and entry to enclosed exit stairways;

iii. A central control station for fire department operations shall be provided in a location approved by the fire department. It shall contain the public address panel, the fire department communications panel, fire detection and alarm system annunciator panels, status indicators and controls for air handling systems, sprinkler valve and water flow detector display panels, and status indicators and a telephone for fire department use with controlled access to the public telephone system. (Fire)

5. Automatic Sprinkler System: When the work area is an entire floor, an automatic sprinkler system shall be installed on that floor. When an automatic sprinkler system is provided, the sprinkler riser shall be sized to serve the

entire building, even if the system currently being installed serves only a portion of the building. (Fire)

(g) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

Amended by R.1999 d.259, effective August 16, 1999.

See: 31 N.J.R. 825(a), 31 N.J.R. 2330(a).

Inserted (e); and recodified existing (e) through (g) as (f) through (h).

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (d), substituted "25 percent" for "50 percent" following "exceeds" in the first sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (e), substituted "detectors" for "alarms" preceding "shall be installed" in the introductory paragraph; and in (g)2i, updated N.J.A.C. reference.

Amended by R.2002 d.15, effective January 22, 2002.

See: 33 N.J.R. 2933(b), 33 N.J.R. 3883(a), 34 N.J.R. 521(a).

In (e), substituted "alarms" for "detectors", inserted "located" preceding "in a building", and added the last sentence in the introductory paragraph, and rewrote 1.

Amended by R.2003 d.137, effective April 7, 2003.

See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted former (e); recodified former (f) through (h) as (e) through (g).

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; in (e), inserted "UFC" following "one-hour" throughout.

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (b), substituted "907.2.10.1.1 of the building subcode" for "920.3.1".

### 5:23-6.26 Basic requirements—Groups R-2 and R-4

(a) Automatic Fire Sprinkler System: In Group R-2 dormitories, an automatic fire sprinkler system shall be installed throughout the work area.

(b) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 50 and with exit travel distance greater than 75 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing

one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

ii. Window access to fire escapes shall be permitted from individual units.

iii. For rooming houses, ladders shall be prohibited on fire escapes used as a required means of egress.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet.

3. Dwelling units in basements (stories below grade) shall have two means of egress unless the building has an automatic sprinkler system. (An operable window with a net clear opening of at least five square feet, a minimum net clear opening of 24 inches in height and 20 inches in width, and a sill height of not more than 44 inches above the finished floor is acceptable as one of the means of egress.)

4. For rooming houses, a single exit shall be prohibited.

5. Multilevel dwelling units do not require an exit from each level within the dwelling unit provided that these conditions are met: The building is Type 1 or Type 2 construction, with travel distance within the dwelling unit not exceeding 75 feet or the building is not more than three stories and all third floor space is part of a dwelling unit located in part on the second floor and no habitable room has a travel distance of greater than 50 feet from the door of the room to the entrance of the dwelling unit.

6. A single exit is permitted from floor(s) are not more than 16 feet above grade provided that each dwelling unit on such floors has an operable window with a sill height of not more than 44 inches. (In community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12.)

7. A single exit is permitted in buildings that are not more than two stories in height from floors that are more than 16 feet above grade with not more than four dwelling units per floor and exit access travel distance not exceeding 50 feet and with a minimum fire resistance rating of one hour for the exit enclosure and opening protectives and provided that each dwelling unit on such floors has an operable window with a sill height of not more than 44 inches. (In community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12.)

8. As used in this subsection, "rooming house" means any building and any part thereof, which contains two or more units of dwelling space which do not provide a private, secure dwelling space arranged for independent living and containing both full bath and kitchen facilities (exclusive of any such unit occupied by an owner or operator), including any residential hotel. The term does not include any hotel, motel or established guest house in

which a minimum of 85 percent of the units of dwelling space are offered on a temporary basis only, for periods lasting no more than 90 days, to guests who either maintain or intend to maintain a primary residence at a location other than the hotel, motel or established guest house. The term also does not include one-family residential dwellings made available for occupancy by not more than five roomers. (Plan review—Building, Fire. Inspection—Building)

(c) Emergency Egress Windows: When the work being performed creates a bedroom below the fourth floor, at least one sleeping room window or exterior door shall:

1. Be operable;
2. Have a sill height of not more than 44 inches; and
3. Have a width of at least 20 inches, a height of at least 24 inches, and have a minimum total area of 5.7 square feet measured from head to sill and side to side.
4. Windows are not required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system. For dwelling units in basements, one of the two remote exits may be as per (b)3 above.

(d) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways.

2. All dwelling unit, guest room or rooming unit corridor doors shall be at least 1 $\frac{3}{8}$  inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wire glass in metal frames. Corridor doors shall not be constructed of hollow core wood, shall not contain louvers and shall not be of panel construction. Doors shall fit both plumb and level in frames, and be reasonably tight fitting. All replacement doors shall be 1 $\frac{3}{4}$  inch solid core wood or approved equal, unless existing frame will accommodate only a 1 $\frac{3}{8}$  inch door. (Note: Existing doors meeting HUD Guidelines or BOCA Existing Structures Code (1984) for a rating of 15 minutes or better shall be accepted.)

3. In buildings with an automatic sprinkler system, doors are required only to provide a smoke barrier, to be free of louvers, to fit plumb and level and to be reasonably tight fitting.

4. All doors opening onto a passageway at grade or onto an exit stair shall be self-closing or automatic closing by listed closing devices.

i. Exception: Group homes with a maximum of 15 occupants and an approved automatic detection system shall not be required to have self-closing doors. (Plan review—Building, Fire. Inspection—Building)

(e) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire. Inspection—Building)

(f) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire. Inspection—Building)

(g) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. Lighting shall also be required to illuminate the exit discharge. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. Means of egress lighting shall be wired on a circuit independent of circuits within any dwelling unit. The disconnecting means and over current protection device shall not be located within a dwelling unit or such that access must be obtained by going through a dwelling unit. (Plan review—Building, Fire, Electric. Inspection—Building)

(h) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the criteria contained in (h)1 and 2 below:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs.

3. Exceptions: Illuminated exit signs shall not be required for buildings with an occupant load, excluding staff, of 20 or less or when the second means of egress is a fire escape that is accessed directly from the individual sleeping room. (Plan review—Building, Fire, Inspection—Building)

(i) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(j) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(k) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required.

3. For vertical openings not exceeding three stories, a minimum 30-minute UFC fire barrier shall be required, with the following exceptions:

i. Buildings with an automatic sprinkler system throughout; or

ii. When the vertical opening connects not more than two floor levels and not more than four dwelling units per floor provided that each dwelling unit has

access to a fire escape or other approved secondary exit; or

iii. Owner-occupied buildings with not more than four dwelling units per floor, and in which the following conditions are met:

(1) Every sleeping room is provided with an operable window having a sill height not greater than 44 inches;

(2) Every dwelling unit or sleeping room above the second floor is provided with direct access to a fire escape or other approved secondary exit; and

(3) The building is protected throughout by a supervised, automatic fire alarm system, installed in accordance with the UCC. (Plan review—Building, Fire, Inspection—Building)

(l) Transoms and Other Interior Openings: All transoms shall be either glazed with ¼ inch wire glass set in metal frames and permanently secured in the closed position or sealed with materials consistent with the corridor construction. Any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air shall be sealed with materials consistent with the corridor construction. (Plan review—Building, Fire, Inspection—Building)

(m) Boiler/Furnace Equipment Rooms: Boiler/furnace equipment rooms shall be enclosed by one hour fire-rated wall and ceiling assemblies.

1. Exception: Enclosure shall not be required for boiler/furnace equipment of low pressure type (operating at pressures of 15 psig or less for steam equipment or 160 psig or less for hot water equipment) when installed in accordance with manufacturer's recommendations or for boiler/furnace equipment of residential, single-family type (200,000 BTU per hour input rating or less.)

2. Exception: Enclosure shall not be required for boiler/furnace equipment rooms equipped with a limited area sprinkler system in accordance with Section 903.3.5.1.1 of the Building subcode.

3. For group homes and supervised transitional living homes heated by oil-burning equipment, an emergency shutoff switch is required at top of the stairs leading to the basement for equipment in the basement or outside of the room for equipment located in other enclosed rooms. (Plan review—Building, Fire, Inspection—Building)

(n) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on

existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(o) Electrical Equipment and Wiring:

1. All enclosed areas, other than kitchens, basements, garages, hallways, closets, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets.

2. Kitchen areas shall have a minimum of two duplex receptacle outlets or equivalent and a switch-controlled lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space.

3. Laundry areas shall have a minimum of one duplex receptacle outlet or equivalent located near the laundry equipment and installed on an independent circuit.

4. At least one switch controlled lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, detached garage with electric power, and to illuminate outdoor entrances and exits.

5. At least one switch controlled lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

6. Electrical service equipment (overcurrent devices) shall be located where they will not be subject to physical damage and shall not be located in the vicinity of easily ignitable material.

7. All 125 volt, single-phase, 15 and 20 ampere receptacles in locations specified in Section 210.8(A) of the electrical subcode shall have ground-fault circuit protection for personnel. (Electrical)

8. When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

(p) Plumbing Fixtures: Plumbing fixtures shall be provided as required by Table 7.21.1 of the plumbing subcode. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

(q) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but

not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(r) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(s) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection.

1. Exception: Specific occupancy areas within and serving a dwelling unit are not required to comply with this section. (Building)

(t) Accessibility: Accessible features shall be provided for all items that are part of the scope of work in those buildings with four or more dwelling units that are required by the barrier free subcode to be accessible.

(u) Communicating Attic Spaces: Where adjacent dwelling units have communicating space in the attic, a wall shall be constructed to provide a continuous one hour fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the dwelling unit that is undergoing reconstruction. (Plan review—Building, Fire. Inspection— Building)

(v) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Inserted a new (b); recodified former (b) through (s) as (c) through (t); in the new (f), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and inserted a reference to electric plan review in 1; in the new (g), made an internal reference change in the introductory paragraph, and rewrote the second sentence in 2; and rewrote the new (s).

Administrative change.

See: 32 N.J.R. 688(a).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (f), added second sentence in the introductory paragraph; and added (u).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (a)7, substituted "opening protectives and" for "opening protection"; in (l)2, substituted "Section 903.3.5.1.1" for "Section 907.0"; in (n)7, substituted "210.8(A)" for "210-8(a)"; in (p)2i and in the first sentence of (p)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (u), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Added a new (a); recodified former (a) to (u) as (b) to (v); in (k)3, inserted "UFC" following "30-minute"; substituted references to automatic sprinkler for references to fire suppression throughout.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

Added (o)8; in (q)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (q)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (v), substituted "717" for "716".

### 5:23-6.26A Supplemental requirements—Groups R-2 and R-4

(a) Automatic Sprinkler System: Automatic fire sprinkler systems shall be installed in Group R-2 and R-4 as follows:

1. In Group R-2 buildings four or more stories in height (excluding basements), when the work area is an entire floor, an automatic fire sprinkler system shall be installed throughout the work area.

2. In Group R-4 buildings where the occupant load of the work area exceeds eight occupants. (Fire)

(b) Manual Alarm Systems: When the work area exceeds 50 percent of the gross enclosed floor area of the building, a manual fire alarm system shall be required throughout the building.

1. Exception: No manual fire alarm system shall be required for buildings where all dwelling units are located fewer than three stories above the lowest level of exit discharge or one story or less below the highest level of exit discharge serving the dwelling unit(s). (Fire)

(c) Smoke Detection Systems: When the work area exceeds 25 percent of the gross enclosed floor area of the building, approved smoke detection systems shall be located in all interior common areas. Such systems shall be powered by an alternating current (AC) constantly active electric circuit that cannot be deactivated by the operation of any interconnected switching device and shall comply with NFPA 70-05 (National Electric Code) requirements, except as otherwise provided in this section. Such systems shall be on circuitry that is connected into the building owner's electric meter.

1. In multiple dwellings six stories or more in height and having 30 or more dwelling units, such systems:

i. Shall be connected to a supervisory type listed control panel conforming to U.L. 864 requirements and NFPA 72-02 standards, except as otherwise provided in this section;

ii. Shall be powered by an approved emergency power source as installed in conformance with NFPA 70-05 (National Electrical Code);

iii. Shall have a control panel of the multi-zoned type that will visually indicate the floor or zone from which the alarm is activated, which panel shall be located in accordance with NFPA 72-02 standards or as directed by the local fire subcode official.

2. A pre-signal alarm feature is not permitted.

3. The separate zoning of floors in high-rise buildings for selective floor evacuation is permitted at the discretion of the fire subcode official in consultation with the fire department.

4. Alarms shall be located so as to be effectively heard above all other sounds, by all the occupants, in every occupied space within the building not separated by fire walls having a fire-resistance rating of at least two hours.

5. With the approval of the fire subcode official, fixed temperature heat detectors in those locations where frequent nuisance alarms would be likely to occur. Such building spaces include, but are not limited to, garages, crawl spaces, uninhabitable attics, heater and boiler rooms, laundry rooms, kitchens, restaurant service areas, and other rooms where the ambient temperatures are below 40 degrees Fahrenheit or above 100 degrees Fahrenheit and/or have a relative humidity either below 20 percent or above 85 percent or where environmental conditions are likely to produce nuisance alarms.

6. Existing common area smoke detection systems that were installed in compliance with this subchapter or with the Regulations Governing Rooming and Boarding Houses or Regulations for the Maintenance of Hotels and Multiple Dwellings and maintained in accordance with N.J.A.C. 5:70-3, for which a construction permit was issued subject to plan review approval, shall be accepted as conforming to this section. (Fire)

(d) Smoke Detection within Dwelling Units: Smoke detectors shall be provided within dwelling units as follows:

1. When the work area is an entire dwelling unit, smoke detectors that meet the specifications of the building subcode shall be installed. The smoke detectors shall be installed in the locations indicated in the building subcode and placed within those locations in accordance with NFPA 72.

2. When any work is undertaken within a dwelling unit, single station smoke detectors shall be installed. (Battery-powered units shall be permitted.) The smoke detectors shall be installed in the locations indicated in the building subcode and placed within those locations in accordance with NFPA 72. (Fire)

(e) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels.

3. A minimum 30-minute UFC fire barrier shall be required for interior stairways and other vertical openings not exceeding three stories. Exceptions shall be permitted as follows:

i. Buildings with an automatic sprinkler system throughout;

ii. When the vertical opening connects not more than two floor levels with not more than four dwelling units per floor and each dwelling unit has access to a fire escape or other approved secondary exit; or

iii. Owner-occupied buildings with not more than four dwelling units per floor, and in which the following conditions are met:

(1) Every sleeping room is provided with an approved, operable window having a sill height not greater than 44 inches;

(2) Every dwelling unit or sleeping room above the second floor is provided with direct access to a fire escape or other approved secondary exit; and

(3) The building is protected throughout by a supervised, automatic fire alarm system, installed in accordance with the UCC. (Plan review—Building, Fire. Inspection—Building)

(f) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle, shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat

detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

4. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, central control station and communication systems shall be provided as follows:

i. An approved public address communication system consisting of loudspeakers in each common corridor, each elevator and elevator lobby and in each stair

enclosure which shall be capable of being operated from the central control station;

ii. A two-way fire department communication system which shall operate between the central control and every elevator, elevator lobby and entry to enclosed exit stairways;

iii. A central control station for fire department operations shall be provided in a location approved by the fire department. It shall contain the public address panel, the fire department communications panel, fire detection and alarm system annunciator panels, status indicators and controls for air handling systems, sprinkler valve and water flow detector display panels, and status indicators and a telephone for fire department use with controlled access to the public telephone system. (Fire)

(g) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g).

1. Exception: Elevator devices wholly within individual dwelling units and not accessible to the general public shall not be required to comply. (Elevator)

Amended by R.1999 d.259, effective August 16, 1999.  
See: 31 N.J.R. 825(a), 31 N.J.R. 2330(a).

Inserted (e); and recodified existing (e) through (g) as (f) through (h).  
Amended by R.2000 d.492, effective December 18, 2000.  
See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c)6 and in (g)2i, updated N.J.A.C. reference.  
Amended by R.2002 d.15, effective January 22, 2002.  
See: 33 N.J.R. 2933(b), 33 N.J.R. 3883(a), 34 N.J.R. 521(a).

In (e), substituted "alarms" for "detectors" and added the last sentence in the introductory paragraph, and rewrote 1.  
Amended by R.2003 d.137, effective April 7, 2003.  
See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted former (e); recodified former (f) through (h) as (e) through (g).  
Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).  
Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Substituted references to automatic sprinkler for references to fire suppression throughout; rewrote (a); in (e)3, inserted "UFC" following "30-minute".

Amended by R.2007 d.122, effective May 7, 2007.  
See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (c), substituted "05" for "93" and "02" for "90" throughout.

### 5:23-6.27 Basic requirements—Groups R-3 and R-5

(a) Smoke Detection within Dwelling Units: Smoke detectors that meet the specifications of the building subcode or one- and two-family dwelling subcode, as applicable, shall be installed. The smoke detectors shall be installed in the locations indicated in the building subcode or one- and two-family dwelling subcode, as applicable, and placed within those locations in accordance with NFPA 72. (Fire.)

(b) Egress Windows:

1. When the building is used as a bed and breakfast, every sleeping room below the fourth story shall be pro-

vided with an operable window having a sill height of not more than 44 inches.

i. Windows in sleeping rooms shall not be required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system. (Plan review—Building, Fire. Inspection—Building)

2. When the work being performed creates a bedroom below the fourth floor, at least one sleeping room window or exterior door shall:

i. Be operable;

ii. Have a sill height of not more than 44 inches; and

iii. Have a width of at least 20 inches, a height of at least 24 inches, and have a minimum total area of 5.7 square feet measured from head to sill and side to side.

iv. Windows are not required to meet these requirements in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits or in buildings equipped throughout with an automatic sprinkler system.

(c) When the work being performed creates living space over a private garage, the private garage shall comply with Section 406.1.4 of the building subcode for fire resistance rating or Section R309 of the one- and two-family dwelling subcode, as applicable.

(d) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(e) When the work being performed creates an additional dwelling unit within the building, the new dwelling unit shall be separated from the existing dwelling unit(s) with fire partitions or horizontal assemblies having a fire resistance rating of not less than one hour constructed in accordance with Sections 708 and 711 of the building subcode or R317.1 of the one- and two-family dwelling subcode, as applicable.

(f) Electrical Equipment and Wiring:

1. All enclosed areas, other than kitchens, basements, garages, hallways, closets, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets.

2. Kitchen areas shall have a minimum of two duplex receptacle outlets or equivalent and one switch controlled lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space.

3. Laundry areas shall have a minimum of one duplex receptacle outlet or equivalent located near the laundry equipment and installed on an independent circuit.

4. At least one switch controlled lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, detached garage with electric power, and to illuminate outdoor entrances and exits.

5. At least one switch controlled lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

6. Electrical service equipment (overcurrent devices) shall be located where they will not be subject to physical damage and shall not be located in the vicinity of easily ignitable material.

7. All 125 volt, single-phase, 15 and 20 ampere receptacles in locations specified in Section 210.8(A) of the electrical subcode shall have ground-fault circuit protection for personnel. (Electrical)

8. When finished space is created in previously unfinished space, receptacle and lighting outlets shall comply with Section 210.52 and 210.70, respectively, of the electrical subcode.

(g) Communicating Attic Spaces: Where adjacent dwelling units have communicating space in the attic, a wall shall be constructed to provide a continuous one hour fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the dwelling unit that is undergoing reconstruction. (Plan review—Building, Fire, Inspection—Building)

(h) Plumbing Fixtures: Each dwelling unit shall be provided with a minimum of one kitchen sink, one water closet, one lavatory, and one bathtub or shower or bathtub/shower combination.

(i) Fireblocking and Draftstopping: When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode for Group R-3 or Sections R502.12 and R602.8 of the one- and two-family dwelling subcode for Group R-5.

Amended by R.1999 d.259, effective August 16, 1999.  
See: 31 N.J.R. 825(a), 31 N.J.R. 2330(a).

Inserted (b); and recodified existing (b) through (e) as (c) through (f).  
Amended by R.1999 d.424, effective December 6, 1999.  
See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

Rewrote (c); inserted a new (d); recodified former (d) through (f) as (e) through (g); and added (h).  
Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

Added (i).  
Amended by R.2003 d.137, effective April 7, 2003.  
See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted former (b); recodified former (c) through (i) as (b) through (h).

Amended by R.2003 d.218, effective May 19, 2003.  
See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (c), substituted "Section R309" for "section 407"; in (e)7, substituted "Section 210.8(A)" for "Section 210-8(a)"; in (h), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

In (b), substituted "sprinkler" for "fire suppression" in li and 2iv; added a new (e) and recodified former (e) through (h) as (f) through (i).

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

Added (f)8; in (i), added "for Group R-3 or Sections R502.12 and R.602.8 of the one- and two- family subcode for Group R-5".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (a), inserted "or one- and two-family dwelling subcode, as applicable," in two places; in (c), substituted "406.1.4" for "R309", and inserted "or Section R309 of the one- and two-family dwelling subcode, as applicable"; in (e), substituted "711" for "710", and "R317.1" for "R321.1"; and in (i), substituted "717" for "716", and inserted "dwelling".

### 5:23-6.27A Supplemental requirements—Groups R-3 and R-5

There are no supplemental requirements applicable to Groups R-3 and R-5.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Substituted "R-3 and R-5" for "R-3/R-4".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Deleted "Use" preceding "Groups".

### 5:23-6.28 Basic requirements—Group S

(a) Exits: Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 30 and with an exit travel distance greater than 100 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 30 and the exit access travel distance does not exceed 100 feet.

3. A single exit is permitted in open parking structures where vehicles are mechanically parked.

4. A single exit is permitted in buildings of Group S-2 not more than two stories in height, with not more than 3,000 square feet per floor when the exit access travel distance does not exceed 50 feet and a minimum fire resistance rating of one hour is provided for the exit enclosure and the opening protection. (Plan review—Building, Fire, Inspection—Building)

(b) Egress Doorways: A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 30 or in which the travel distance exceeds 100 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways. (Plan review—Building, Fire, Inspection—Building)

(c) Capacity of Means of Egress: The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire, Inspection—Building)

(d) Dead End Corridors: Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with an automatic sprinkler system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire, Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss.

1. Exception: Lighting to illuminate the exit discharge shall not be required. (Plan review—Building, Fire, Electric, Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{4}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) except that continued illumination shall be required to be provided for not less than one hour in the case of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire, Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire, Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire, Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required. (Plan review—Building, Fire, Inspection—Building)

(j) **Structural Elements:** Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) **Plumbing Fixtures:** Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

Total Occupancy <sup>1</sup>	Water		Drinking	Service
	Closets	Lavatories	Water Facilities	Sinks
1-15	1 Unisex	1	1	1
16 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(l) **Mechanical Requirements:** All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

- i. Newly-installed HVAC systems shall comply with the requirements of the mechanical subcode.
- ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in the mechanical subcode, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes,

sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

(m) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(n) **Specific Occupancy Areas:** Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

(o) **Fireblocking and Draftstopping:** When the work being performed exposes the framing of any wall, floor, ceiling or roof, the exposed framing shall comply with Section 717 of the building subcode.

Administrative correction.

See: 30 N.J.R. 539(a).

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (e), substituted "except that continued illumination shall be required to be provided" for "to assure continued illumination" in the last sentence of the introductory paragraph, and inserted a reference to electric plan review in 1; and in (f)2, rewrote the second sentence.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

Added (o).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (l)2i and in the first sentence of (l)2ii, substituted "the International Mechanical Code, 2000 edition" for "ASHRAE 62-89"; in (o), substituted "Section 716" for "Section 721.0".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

In (a), inserted "an" preceding "exit" in the last sentence of the introductory paragraph, and deleted "Use" preceding "Group" in 4; in (b), substituted "30" for "50" following "load greater than" and "100" for "75" preceding "feet"; in (d)2, substituted "an automatic sprinkler" for "a suppression" preceding "system".

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (l)2i and ii, substituted "mechanical subcode" for "International Mechanical Code, 2000 edition".

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (l)2ii, deleted "unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount" following "ventilation air per person"; and in (o), substituted "717" for "716".

**5:23-6.28A Supplemental requirements—Group S**

(a) **Automatic Sprinkler System:** In buildings with a Group S-1 fire area greater than 12,000 square feet or a Group S-1 fire area more than three stories in height, when the work area exceeds 50 percent of the gross enclosed floor area of the building, an automatic sprinkler system shall be provided throughout the entire building.

(b) **Manual Alarm System:** For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building.

1. Exception: Manual alarm systems shall not be required in buildings equipped throughout with an automatic sprinkler system. (Fire)

(c) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels. (Plan review—Building, Fire, Inspection—Building)

(d) Requirements for high-rise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75 feet above the lowest level accessible to a fire department vehicle shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in N.J.A.C. 5:70-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls,

as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required. (Fire)

(e) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g). (Elevator)

(f) Public Garages: When the work area exceeds 50 percent of the gross floor area of a public garage, the entire building is required to comply with Section 406.3 of the Building subcode.

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (c)2i, updated N.J.A.C. reference.

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (e), substituted "Section 406.3" for "Section 408.0, except Subsection 408.3.3,".

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Added a new (a); recodified former (a) through (e) as (b) through (f); in (b)1 and (d)3i, substituted references to automatic sprinkler for references to fire suppression preceding "system".

### 5:23-6.29 Mixed use buildings

(a) Each portion of a building shall be separately classified as to use. The requirements of this subcode shall apply to each portion of the building based on the group of that portion, except that the most restrictive requirements of this subcode for an automatic sprinkler system shall apply to the entire building.

1. Exception: An automatic sprinkler system shall not be required for uses that would not otherwise need an automatic sprinkler system provided that there is a one-hour fire separation between the use(s) requiring an automatic sprinkler system and the other use(s) in the same building. A two-hour fire separation assembly shall be

required to apply this exception in any building where one or more of the uses is H. (Plan review—Building, Fire, Inspection—Building)

(b) Separation: In any nonresidential use located below one or more dwelling units, when the work area exceeds 50 percent of the gross enclosed floor area of the nonresidential use, the nonresidential use shall be separated from the residential use by a one hour fire resistance-rated ceiling assembly designed to protect the dwelling unit(s) above. (Plan review—Building, Fire, Inspection—Building)

(c) Alarms: In any nonresidential use located below one or more dwelling units (including single room occupancies), when the work area exceeds 50 percent of the gross enclosed floor area of the nonresidential use, single or multiple station smoke detectors shall be installed in the nonresidential portion(s) of the building in accordance with NFPA 72 and provided with an audible alarm located within each dwelling unit of the residential portion of the building. The detectors shall be AC powered with battery back-up. Hard-wired, interconnected smoke detectors installed throughout the building shall be accepted as meeting this requirement. (Fire)

Amended by R.2004 d.145, effective April 5, 2004.  
See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

In (a), substituted references to automatic sprinkler for references to fire suppression throughout and deleted "use" preceding "group of that portion" in the introductory paragraph.

### 5:23-6.30 Special technical requirements—all groups

(a) The requirements of this section shall apply to reconstruction projects in all groups except R-3 and R-5.

(b) When an automatic sprinkler system is required or provided, the sprinkler riser shall be sized to serve the entire building even if the system currently being installed serves only a portion of the building.

1. Exception: This requirement shall not apply to limited area sprinkler systems installed in accordance with Section 903.3.5.1.1 of the building subcode. (Fire)

(c) Windowless stories: In all buildings, any windowless basement or story located below the seventh story which is created by the work being performed or any existing windowless basement or story located below the seventh story in which the work area exceeds 50 percent of the gross enclosed floor area of the windowless story shall be equipped throughout with an automatic sprinkler system installed in accordance with the New Jersey Uniform Construction Code.

1. Stories or basements shall not be considered windowless when there is provided on at least one side of such story or basement firefighter access through openings, such as windows, doors or access panels, that are located entirely above the adjoining grade level.

2. Such openings shall be at least:

i. Thirty-two inches by 48 inches in size, spaced not more than 100 feet apart in each story or basement; or

ii. Twenty-two inches by 42 inches in size, spaced not more than 30 feet apart in each story or basement.

3. All openings for firefighter access shall conform to all the following:

i. Openings shall be unobstructed to allow fire fighting and rescue operations from the exterior;

ii. Openings in stories at or above grade shall have a sill height of not more than 36 inches as measured from the finished floor level. Openings in basements shall have no sill height restrictions; and

iii. Openings shall be readily identifiable and openable from the outside.

4. When openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet from such openings, the story shall be considered windowless unless openings as specified above are provided on at least two sides of the exterior walls of the story.

5. If any portion of a basement is located more than 75 feet from openings as specified above, the basement shall be considered windowless.

6. Windowless basements not exceeding 3,000 square feet in area shall be exempt from this automatic sprinkler system requirement, provided a supervised automatic fire alarm system shall be installed in accordance with the New Jersey Uniform Construction Code.

7. In windowless basements greater than 3,000 square feet, but not exceeding 10,000 square feet in area, the required automatic sprinkler system need not be connected to a water supply other than an existing domestic supply if the following conditions are met:

i. The automatic sprinkler system shall be provided with a fire department connection, which shall be marked with a sign reading "Basement Area Sprinkler Water Supply"; and

ii. A supervised automatic fire alarm system shall be installed in accordance with the New Jersey Uniform Construction Code. (Fire)

(d) Supervision of automatic sprinkler systems: When automatic sprinkler systems are required by this subcode to be supervised, this shall be accomplished by one of the following methods as determined by the fire subcode official:

1. Approved central station system in accordance with NFPA 72;

2. Approved proprietary system in accordance with NFPA 72;

code, the building or portion shall comply with the referenced section of the building subcode specific to the special use or occupancy regardless of whether a change of use group is involved.

- i. Covered Mall Building—Section 402;
- ii. Atriums—Sections 404;
- iii. Underground Buildings—Section 405;
- iv. Motor-Vehicle-Related Occupancies — Section 406;
- v. Motion Picture Projection—Section 409;
- vi. Stages and Platforms—Section 410;
- vii. Special Amusement Buildings—Section 411:

(1) A variation shall not be granted for the flame spread and smoke development ratings of interior finish and trim requirements of section 413.0.

(2) For the use of a building as a special amusement building, where a variation request has been submitted, the Construction Official shall consult with the Fire Official as required by N.J.A.C. 5:23-6.2(i).

- viii. Aircraft-Related Occupancies—Section 412;
- ix. Hazardous Materials—Section 414;
- x. Application of Flammable Finished—Section 416;
- xi. Drying Rooms—Section 417;
- xii. Organic Coatings—Section 418. (Plan review—Building, Fire. Inspection—Building.)

6. Any automatic sprinkler system or fire detection and/or alarm requirements applicable to the special use or occupancy shall be applied throughout the entire building unless the special use or occupancy is separated from the remainder of the building by fire separation assemblies having a rating of at least two hours. (Fire)

7. Group overnight stays: If any non-residential occupancy, other than Group F, H or S, accommodates seven or more non-consecutive group overnight stays within a calendar year for persons over 2½ years of age, and the activities involve planned periods of sleep, the building is considered to have undergone a change of use. In such a case, it shall be necessary to apply for and be issued a Certificate of Occupancy. This shall be a dual Certificate of Occupancy to allow Group R-1 in addition to the existing use of a building. Any facility that accommodates six or fewer overnight stays within a calendar year shall obtain a permit under the Uniform Fire Code, N.J.A.C. 5:70. Group overnight stays in Groups F, H and S shall be prohibited.

8. Where an existing single-family dwelling is converted into a two-family dwelling, the following shall apply:

i. Single or multiple smoke detectors shall be installed and maintained within each dwelling unit as required by Sections 907.2.10.1.2 and 907.2.10.1.3 of the building subcode.

ii. Fire separation between dwelling units.

(1) One-hour dwelling unit separation; or

(2) Two layers of ½-inch thick type X gypsum wallboard. The base layer shall be applied at right angles to the joists with 1¼-inch minimum drywall screws or nails at 24 inches on center. The face layer shall be applied at right angles to the joists with 1-inch minimum drywall screws or nails at 12 inches on center. The face layer joints shall be offset from the base layer joints by a minimum of one joist bay. The joints of the face layer shall be taped and provided with a minimum of one layer of spackle.

(b) Compliance with Basic Requirements: Compliance with the basic requirements shall be required as follows:

TABLE B

Relative Group Hazard

1 (highest)	H-1, H-2, H-3
2	A-1, A-2 Nightclubs, H-4, H-5, F-1, I-3, M, S-1
3	A-2 Other than Nightclubs, A-3, A-4, A-5, B, F-2, I-2, I-4, R-1, S-2
4	A-3 Churches, E, I-1, R-2 and R-4 buildings more than two stories in height or more than four dwelling units
5 (lowest)	R-2 and R-4 buildings two stories or fewer in height and four dwelling units or less, R-3, R-5, U

1. When the use of a building is changed to a higher relative use group hazard as shown in Table B above, the building shall comply with the basic requirements of N.J.A.C. 5:23-6.10 through 6.30 applied throughout the building for the new group unless otherwise provided. Where another lettered subsection of this section establishes a requirement that differs from the basic requirement, the requirement contained in that other lettered subsection shall govern.

i. Where a portion of a building is changed to a higher relative group hazard, the building shall comply with the basic requirements of N.J.A.C. 5:23-6.10 through 6.30 for an automatic sprinkler system and fire detection and/or alarms applied throughout the building for the new group unless the proposed use is separated from the existing use(s) by assemblies with the appropriate fire resistance rating in accordance with Table 508.3.3 of the building subcode in which case only the portion changed shall comply. The portion of the building changed shall comply with all the other basic requirements of N.J.A.C. 5:23-6.10 through 6.30 for the new group.

2. When a change of use is made to an equal or lesser relative group hazard as shown in Table B above, the exist-

ing building is not required to comply with the basic requirements except where required in connection with alteration or reconstruction work by the sections of this subcode applicable to alteration or reconstruction work.

(c) Means of Egress: The following requirements apply to means of egress in a change of use:

TABLE C

Hazard Categories and Classifications  
Means of Egress

<u>Relative Hazard</u>	<u>Use Classification</u>
1 (highest)	H-1, H-2, H-3, A2 nightclubs
2	I-2, I-3, I-4
3	A (other than A-2 nightclubs), E, I-1, M, R-1, R-2, R-4
4	B, F-1, R-3, R-5, S-1, H-4, H-5
5 (lowest)	F-2, S-2, U

1. For any change of use, except a change of use to Use Group A-2 Nightclubs, the occupant load of the space shall be calculated based on the capacity of the exits as per N.J.A.C. 5:23-6.11(b). The occupant load shall not exceed one occupant per five square feet floor area unless the building complies with chapter 10 of the building subcode in its entirety.

i. For Group A-2 Nightclubs, the occupant load shall be calculated using section 1025.2 of the building subcode, except the maximum occupant load shall not exceed one occupant per five square feet of occupiable floor space.

ii. Where a portion of a building undergoes a change of use, the determination of the capacity of the exit(s) serving that portion shall include all spaces served by those exit(s).

2. When a change in use is made to a higher hazard category as shown in Table C above, the entire building or portion thereof shall comply with the following requirements of the building subcode or of this subcode as specified below.

i. Sections 1011, (Exit signs), 1006, (Means of Egress illumination), and 1017.4 (Air movement in corridors);

ii. Section 1008.1 (Doors) except section 1008.1.1 (Size of doors). Apply the Basic Requirements (6.10 through 6.30) for door widths;

iii. Section 1008.2 (Gates);

iv. Section 1009 (Stairways) except 1009.1 (Stairway width), 1009.2 (Headroom), 1009.3, (Stair tread and riser) and 1009.10 (Handrails) Apply the Basic Requirements (6.10 through 6.30) for stair widths;

v. Section 1010 (Ramps);

vi. Section 1008.3 (Turnstiles);

vii. Section 1014.1 (General).

(1) Exception: The occupant load of the space may be restricted in order to comply with the requirements of these sections;

viii. Sections 1014.4 (Aisles) and 1017 (Corridors) except 1017.2 (Corridor width). Apply the Basic Requirements (6.10 through 6.30) for corridor widths.

(1) Existing lath and plaster in good condition or existing 1/2-inch thick gypsum wallboard on both sides of the wall shall be accepted where a one-hour fire separation assembly is required by 1017.1 (Construction);

ix. Section 1019 (Number of exits and continuity);

(1) Exception: The occupant load of the space may be restricted in order to comply with the requirements of these sections;

x. Sections 1018.2 (Exterior exit doors), 1021 (Exit passageways), 1022 (Horizontal exits);

xi. Section 1024 (Exit discharge);

xii. Sections 1015.3 (Boiler, incinerator and furnace rooms), 1015.4 (Refrigeration machinery rooms), 1015.5 (Refrigerated rooms or spaces), and 1015.6 (Stage means of egress); and

xiii. Section 1025 (Assembly).

3. When a change of use is made to an equal or lesser hazard category as shown in Table C above, the existing building is not required to comply with the requirements contained in (c)2 above except in areas where reconstruction work being performed in connection with the change of use triggers these requirements.

4. Vertical opening protection shall be provided for all stairs in accordance with N.J.A.C. 5:23-6.10 through 6.30 when a change of use that also constitutes a change of group is made and the proposed group is a higher hazard category as shown in Table C above.

i. Where the group of a portion of a building is changed to a higher hazard category, vertical opening protection shall be provided for all stairs serving the proposed group from the floor(s) on which the proposed group is located to the level of exit discharge.

5. Notwithstanding the relative hazard as determined by Table C above, where any change of use occurs to a single exit building, the building shall meet the requirements of Section 1019.2 (single exits) of the building subcode for the proposed use.

6. When a change of use is made to any residential group (R-1, R-2, R-3, R-4 or R-5) or to Group I-1, every sleeping room below the fourth story shall have at least one operable window or exterior door. Where windows are provided to comply with this requirement, the window shall

have a sill height of not more than 44 inches, and have a width of at least 20 inches, a height of at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side.

i. An outside window or exterior door is not required in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits.

ii. An outside window or exterior door is not required in buildings equipped throughout with an automatic sprinkler system.

iii. In a building that originally was in Group R-3 or R-5 and is returning to Group R-3 or R-5, the windows shall be permitted to remain as they were during the time when the building previously was in use as a residence. (Plan review—Building, Fire, Inspection—Building)

7. Notwithstanding the relative hazard as determined by Table B or C above, where any change in use occurs to a Group A or Group E with an occupant load greater than 100, approved panic hardware shall be installed in accordance with Section 1008.1.9 of the building subcode.

(d) Enclosure of vertical openings:

1. For any change of use that also constitutes a change in group, vertical openings other than stairs shall be protected as required by N.J.A.C. 5:23-6.10 through 6.30 for the proposed use within each space undergoing a change of use.

2. Stairs shall be enclosed in accordance with N.J.A.C. 5:23-6.10 through 6.30 for the proposed use when a change of use that also constitutes a change of group is made and the proposed group is a higher hazard category as shown in Table C above.

3. Atriums in compliance with Section 404 of the building subcode are not required to be enclosed. (Plan review—Building, Fire, Inspection—Building)

(e) Height and Area Limitations: The following height and area limitations apply in a change of use.

TABLE E

Hazard Categories and Classifications

Height and Area

Relative Hazard	Use Classification
1 (highest)	A-2 Nightclubs, H-1, H-2, I-2, I-3, I-4
2	A-1, A-2 Other than Nightclubs, A-3, A-4, E, F-1, H-3, H-4, H-5, I-1, M, S-1
3	A-3 Churches, B, R-1, R-2, R-4
4 (lowest)	F-2, R-3, R-5, S-2, U

1. When a change of use is made to a higher hazard category as shown in Table E above, the height and area of the building shall meet the limitations of Chapter 5 of the building subcode for the proposed group.

i. For the purpose of determining the construction type, the fire resistance rating of the following structural elements shall be considered: exterior loadbearing walls, interior loadbearing walls, columns, girders, trusses and framing, floor construction, including beams, and roof construction, including beams, trusses and framing, arches and roof decks.

2. When a change of use is made to an equal or lesser hazard category as shown in Table E, the existing building may continue to exceed the maximum allowable height and area permitted for new buildings.

3. Where a change of use is made in a mixed use building or a single use building is changed to a mixed use building, and any of the proposed uses is a higher category as per Table E, the building shall comply with one or any combination of the following:

i. Nonseparated groups: The maximum allowable height and area shall be determined by applying the more restrictive of the height and area limitations of each group, as per Table 503 of the building subcode, to the entire building.

(1) Occupancies of Group H shall not be permitted to be unseparated when located in the same building as Groups A, E, I, M, R, or non-accessory Group B.

(2) Accessory occupancies in compliance with Section 508.3.1 of the building subcode are not required to comply with this requirement.

(3) When a change of use is made such that any nonresidential use is located below a residential use, a one-hour fire separation shall be provided between the groups. The exits from the residential floors shall be separately enclosed.

ii. Separated groups: Each portion of the building containing a group shall be completely separated from adjacent groups by fire separation assemblies and floor/ceiling assemblies having a fire resistance determined in accordance with Table 508.3.3 of the building subcode. For buildings equipped throughout with an automatic sprinkler system, the required fire resistance rating for groups other than H is permitted to be reduced by one hour, but shall not be reduced to less than one hour. Each portion of the building shall comply with the height limitation of Table 503 of the building subcode for that group. In each story, the area shall be such that the sum of the ratios of the floor area of each group divided by the allowable area of Table 503 of the building subcode for each group shall not exceed 1.0.

(1) Exception: Accessory occupancies in compliance with Section 508.3.1 of the building subcode are not required to comply with this requirement.

iii. Separate buildings: If each group is separated from other groups by fire walls that meet the require-

ments of Table 601 of the building subcode, then each group shall be considered a separate building. Each building shall comply with the height and area limitation of Table 503 of the building subcode.

(1) Exception: Accessory occupancies in compliance with Section 508.3.1 of the building subcode are not required to comply with this requirement.

4. In an unlimited area building, when a change of use is made to a higher hazard category as shown in Table E above, the building or portion thereof is required to comply with Section 507 of the building subcode for the proposed new use. (Plan review—Building, Fire Inspection—Building)

(f) Exterior Wall Fire Resistance Ratings and Maximum Area of Exterior Wall Openings: The following exterior wall fire resistance ratings and maximum area of exterior wall openings apply in changes of use:

TABLE F

Hazard Categories and Classifications  
Exposure of Exterior Walls

Relative Hazard	Use Classification
1 (highest)	H
2	Buildings exceeding 12,000 sq ft of F-1, M or S-1
3	A, B, E, F-2, I, R-1, S-2 Buildings 12,000 sq ft or less of F-1, M or S-1
4 (lowest)	R-2, R-3, R-4, R-5, U

1. Exterior Wall Protection: If the group of a building is changed to a higher hazard classification in accordance with Table F, the requirements for exterior wall fire resistance rating in the table below shall be met.

Requirements for Exterior Wall Fire Resistance Rating Building Use Group<sup>b</sup>

Fire Separation Distance	A, B, E, F-2, S-2, H-4, H-5, I, R-1			
	H-2	F-1, H-3, M, S-1	H-4, H-5, I, R-1	
0-5 feet	4	3	2 <sup>a</sup>	
Over 5-10 feet	3	2	1	
Over 10-15 feet	2	1	0	
Over 15-30 feet	1	0	0	
Over 30 feet	0	0	0	

Note a: Existing eight-inch hollow or six-inch solid masonry walls shall be accepted as a two-hour rating in other than Group H-2 or H-3.

Note b: When the group of a building is changed to H-1, the building shall be located in accordance with Section 415.3 of the building subcode.

i. The requirements for exterior wall fire resistance rating shall not apply to exterior walls which face buildings on the same lot where the buildings are such that, if combined into one structure, the resulting building would comply with the height and area limitations of Table 503 of the building subcode.

ii. Where a portion of a building is changed to a higher hazard classification, exterior walls and openings of the entire building shall comply with the provisions of this section. If the proposed use is separated from the rest of the building by walls with the appropriate fire resistance rating in accordance with Table 508.3.3 of the building subcode, then only the portion changed must comply with the provisions of this section.

iii. When a change of use is made to an equal or lesser hazard classification as shown in Table F, no change in the rating of existing exterior walls is required.

iv. The fire resistance rating of non-loadbearing exterior walls may be reduced by one hour in buildings equipped throughout with an automatic sprinkler system. In a building equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13, the fire resistance rating of a non-loadbearing exterior wall may be reduced by one hour with the following exceptions:

(1) Exception: Where the fire separation distance is five feet or less, the fire resistance rating shall not be reduced to less than one hour.

(2) Exception: The rating of non-loadbearing exterior walls shall not be reduced in buildings of Group H.

2. Exterior Wall Openings: If the group of a building is changed to a higher hazard classification in accordance with Table F, the requirements for exterior wall openings in the table below shall be met.

Group	Exterior Wall Requirements
H	No opening permitted with a fire separation distance of three feet or less. Protected openings required with a fire separation distance of 20 feet or less.
A-1, A-2 Nightclubs, A-2 Other than Nightclubs, A-3, A-4, A-3 Churches, B, E, F-1, I-1, I-2, I-3, I-4, M, S-1, R-1	No openings permitted with a fire separation distance of three feet or less. Walls with a fire separation distance of 10 feet or less are permitted to have unprotected openings with an aggregate area not exceeding 10 percent of the area of the wall. Openings in excess of 10 percent of the aggregate wall area shall be protected.
F-2, S-2	No openings permitted with a fire separation distance of three feet or less. Protected openings required with a fire separation distance of five feet or less.

i. If the building is provided with an automatic sprinkler system throughout, the amount of unprotected openings shall be permitted to be increased to the limit for protected openings.

ii. In all occupancies other than Group H, unlimited unprotected openings are permitted in the first story of exterior walls facing a street which have a fire separation distance of greater than 15 feet, or facing unoccupied space. The unoccupied space shall be on the same lot or

dedicated for public use, shall not be less than 30 feet in width and shall have access from a street by a posted fire lane not less than 30 feet in width and shall have access from a street by a posted fire lane not less than 18 feet in width.

iii. When a change of use is made to an equal or lesser hazard classification as shown in Table F, no change in existing exterior wall openings is required. (Plan review—Building, Fire, Inspection—Building)

(g) Automatic Sprinkler Systems: The following automatic sprinkler system requirements apply in changes of use.

TABLE G

Hazard Categories and Classifications  
Automatic Sprinkler Systems

<u>Relative Hazard</u>	<u>Use Classification</u>
1 (highest)	A-2 nightclubs, H, I
2	A-2 (other than nightclubs), R-1, R-2, R-3, R-4
3	A-1, A-3, A-4
4	F-1, M, S-1
5	A-3 Churches, E
6 (lowest)	A-5, B, F-2, R-5, S-2, U

1. When a change of use is made to a higher hazard category as shown in Table G, the building shall be provided with an automatic sprinkler system as required by the following sections of the building subcode: 903.2.1 for Group A occupancies, 903.2.2 for Group E occupancies, 903.2.3 for Group F-1 occupancies, 903.2.4 for Group H occupancies, 903.2.5 for Group I occupancies, 903.2.6 for Group M occupancies, 903.2.7 for Group R occupancies, 903.2.8 for Group S-1, 903.2.9 for Group S-2, and 903.2.10 for windowless stories. When this section requires an automatic sprinkler system, compliance with 903.3 of the building subcode is also required.

i. When a portion of a building is changed to a higher hazard category and the proposed use is separated from the existing use(s) by assemblies that meet the applicable fire rating in Table 508.3.3 of the building subcode, an automatic sprinkler system as required above shall be installed only in the portion changed.

2. When a change of use is made to an equal or lesser hazard category as shown in Table G, there is no requirement to install an automatic sprinkler system except in areas where work being performed in connection with the change of use triggers a requirement for an automatic sprinkler system and in windowless stories in accordance with N.J.A.C. 5:23-6.30(c) of this subchapter.

3. Notwithstanding the relative hazard as determined by Table G, when a change in the character of the use is made to a higher degree of hazard as defined by NFPA 13 (Light Hazard, Ordinary Hazard Group 1, Ordinary Hazard Group 2, Extra Hazard Group 1, Extra Hazard Group 2 and Special Occupancy Hazards), the sprinkler system shall be

evaluated and, where required by NFPA 13, altered to conform to the required density and maximum sprinkler protection area per head for the proposed occupancy. (Fire)

4. Notwithstanding the relative hazard as determined by Table G above, when a change in the group or a change in the character of the use is made to create a dormitory, the building or portion thereof is required to be provided with an automatic sprinkler system.

(h) Fire Alarm and Detection Systems: When a change of use is made to any of the following use groups, a fire alarm system and/or an automatic fire detection system shall be installed in accordance with Section 907 of the building subcode. Where a portion of a building is changed to any of the following groups, a fire alarm system and/or an automatic fire detection system shall be installed throughout the building in accordance with Section 907 of the building subcode unless the proposed use is separated from the other use(s) in the building by assemblies with the appropriate fire resistance rating in accordance with Table 508.3.3 of the building subcode in which case only the portion changed shall comply. (For purposes of applying this section, horizontal separation shall not be considered.)

1. Group A: A manual or automatic fire alarm system shall be installed and maintained as required by Section 907.2.1 of the building subcode.

2. Group B: A manual fire alarm system shall be installed and maintained as required by Section 907.2.2 of the building subcode.

3. Group E: A manual fire alarm system shall be installed and maintained as required by Section 907.2.3 of the building subcode.

4. Group F: A manual fire alarm system shall be installed and maintained as required by Section 907.2.4 of the building subcode.

5. Group H: A manual fire alarm system shall be installed and maintained as required by Section 907.2.5 of the building subcode.

6. Group I: A manual fire alarm system and an automatic fire detection system shall be installed and maintained as required by Section 907.2.6 of the building subcode.

7. Group M: A manual fire alarm system shall be installed and maintained as required by Section 907.2.7 of the building subcode.

8. Group R-1: A manual fire alarm system and an automatic fire detection system shall be installed and maintained as required by Section 907.2.8 of the building subcode.

9. Group R-2: A fire alarm system shall be installed and maintained as required by Section 907.2.9 of the building subcode. (Fire)

(i) Single and Multiple Station Smoke Detectors: When a change of use is made to any of the following groups, single and multiple station smoke detectors shall be installed in accordance with Section 907.2.10 of the building subcode.

1. Group R-1: Single or multiple station smoke detectors shall be installed and maintained as required by Section 907.2.10.1.1 of the building subcode.

2. Groups R-2, R-3, R-4, R-5 and I-1: Single or multiple station smoke detectors shall be installed and maintained as required by Sections 907.2.10.1.2 and 907.2.10.1.3 of the building subcode.

3. Where the use of a portion of a building is changed such that any nonresidential use is located below one or more dwelling units (including single room occupancies), single or multiple station smoke detectors shall be installed in the nonresidential portion(s) of the building in accordance with NFPA 72 and provided with an audible alarm located within each dwelling unit of the residential portion of the building. The detectors shall be AC powered with battery back-up. Hard-wired, interconnected smoke detectors installed throughout the building shall be accepted as meeting this requirement. (Fire)

(j) Carbon monoxide alarms: When the use of a building is changed to Groups I-1, R-1, R-2, R-3, R-4 or R-5 and the building contains a fuel-burning appliance or has an attached garage, carbon monoxide alarms shall be installed in accordance with the mechanical subcode. (Fire)

1. Exceptions: Rooms or dwelling units which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be provided with single station carbon monoxide alarms provided that:

i. The room or dwelling unit is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage; the room or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and the building is provided with a common area carbon monoxide alarm system. The individual alarms shall be located in every room adjacent to the room(s) containing a fuel-burning appliance, and in every corridor, hall or lobby adjacent to such room(s) and in the immediate vicinity of any ventilated shaft, including, but not limited to, stair shafts, elevator shafts, ventilation shafts on the story containing the fuel-burning appliance and any story within two stories above or below said story. All such common area alarm devices shall be connected to an alarm monitoring station or shall be interconnected; or

ii. The building is provided with a monitored carbon monoxide alarm system. Individual alarms shall be located in every room containing a fuel-burning ap-

pliance. All such alarms shall be connected to an alarm monitoring station that shall be staffed at all times by a person who is trained and qualified to respond so as to protect the health and safety of building occupants in the event of the activation of one or more alarms. Carbon monoxide alarms and fire alarms may be incorporated into a common monitored system.

2. Carbon monoxide alarms shall be manufactured, listed and labeled in accordance with UL 2034 and shall be installed in accordance with the requirements of this section and NFPA 720. Carbon monoxide alarms shall be battery-operated, hard-wired or of the plug-in type.

(k) Structural Requirements: The following structural requirements shall apply in changes of use:

TABLE K  
Structural Load Categories

<u>Load Category</u>	<u>Use or Character of Use</u>
1 (highest)	F-1, F-2, S-1, S-2, stack areas in libraries, stages and platforms, areas subject to vehicular loads, queuing areas
2	All loading conditions not listed in category 1 or 3
3 (lowest)	B, E, I-1, I-2, I-3, I-4, R-1, R-2, R-3, R-4, R-5

1. When the use or the character of use of a building is changed to a higher load category as shown in Table K above, then the structure shall be capable of supporting the load requirement for the new use or character of use as specified in Table 1607.1 of the building subcode.

i. If the building subcode official determines that the number of occupants or the placement and weight of furniture and equipment can be controlled by the occupants, the areas designed for the reduced live load shall be posted with the approved live load. Placards stating the allowable live loads shall be posted. Placards may state loads in forms usable by the occupants, in addition to posting the allowable load in pounds per square foot. Such information shall be developed by a licensed design professional and be approved by the subcode official.

(1) Analysis and test methods for evaluation of existing structural members shall use methods specified in the code in effect at the time the building was originally constructed or other standards as approved by the subcode official.

ii. The corridor and lobby loading requirements of Table 1607.1 shall be met only if the corridor exceeds six feet in width or if the lobby or corridor area is used for queuing purposes.

2. Where the use or character of use within an existing building is changed to an equal or lower load category as shown in Table K above, then the existing structure may be used without modification, provided that the building is structurally sound and in good structural repair.

3. When a building is reclassified into one of the following occupancies, the building shall comply with the seismic design requirements of Section 1613 of the building subcode: Fire, rescue and police stations; Group I-2 having surgery or emergency treatment facilities; emergency preparedness centers; post-earthquake recovery vehicle garages; post-earthquake shelters; power-generating stations and other utilities required as emergency backup facilities; primary communication facilities; highly toxic materials as defined by Section 307 of the building subcode where the quantity of material exceeds the exempt amount as per Section 307.1 of the building subcode. (Building)

(l) Plumbing Requirements: When the character of the use of a building or portion of a building is changed, the following plumbing provisions shall apply:

1. The fixture requirements for the proposed new use shall comply with the basic requirements for that use.

2. If the new use is a food handling establishment, all existing sanitary waste lines above the food or drink preparation or storage areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines shall not be installed above such areas except where it is the only practical alternative. Where new lines are to be installed, they shall be protected in accordance with the plumbing subcode.

3. New uses that will produce grease or oil laden wastes shall be provided with interceptors as required in the plumbing subcode.

4. If the new use produces chemical wastes, the following shall apply:

i. If the existing piping is compatible with the chemical waste, no change to the existing piping material is required.

ii. If the existing piping is not compatible with the chemical waste, either the waste must be neutralized prior to entering the drainage system or the piping must be changed to a compatible material.

iii. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.

5. Where a building's use is changed to a health care facility, the requirements of chapter 14 of the plumbing subcode shall apply. (Plumbing)

(m) Electrical Requirements: The following electrical requirements shall apply in changes of use:

1. When the character of the use of a building or portion thereof is changed to one of the following special occupancies as described in Chapter 5 of the electrical subcode, the electrical wiring and equipment of the building or

portion thereof that contains the proposed use shall comply with all applicable requirements of the electrical subcode regardless of whether a change of group is involved:

- i. Hazardous (classified) Locations;
- ii. Commercial Garages, Repair and Storage;
- iii. Aircraft Hangars;
- iv. Gasoline Dispensing and Service Stations;
- v. Bulk Storage Plants;
- vi. Spray Application, Dipping, and Coating Processes;
- vii. Health Care Facilities;
- viii. Places of Assembly;
- ix. Theaters, Audience Areas of Motion Picture and Television Studios and Similar Locations;
- x. Motion Picture and Television Studios and Similar Locations; and
- xi. Agricultural Buildings.

2. When the use of a building is changed to Group R-2, R-3, R-4 or R-5, the electrical wiring and equipment of the building shall comply, at a minimum, with the Basic Requirements of this subcode for that use and shall have the electrical service (conductors and equipment) sized and rated in accordance with the electrical subcode. (Electrical)

(n) Mechanical Requirements: When the character of the use of a building is changed, the following mechanical provisions shall apply:

1. All spaces intended for human occupancy shall be provided with natural or mechanical ventilation. A building intended to be used as a public school shall be mechanically ventilated.

i. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

ii. Spaces intended to be mechanically ventilated shall comply with the following:

(1) If the occupancy of a building is changed and the new occupancy would require the same or a lesser amount of outdoor air based on the equations below, no change to the mechanical ventilation system is required.

(2) If the occupancy of a building is changed and the new occupancy would require a greater amount of outdoor air based on the equations below, the HVAC system shall be upgraded to satisfy the requirements of Table 403.3 in the mechanical subcode for the new occupancy.

(3) Residential buildings that are intended to be mechanically ventilated shall be provided with the ventilation specified in the mechanical subcode.

(4) When the use of a building is changed to a health care facility, mechanical ventilation shall be provided as required by the mechanical subcode and N.J.A.C. 5:23-3.2(b).

(5) When the group of a building is changed to B or E and the building is a class one or class two building, a test and balance report shall be submitted prior to the issuance of a certificate of occupancy. (Building)

2. A commercial hood and an automatic sprinkler system that comply with the mechanical subcode shall be required for commercial cooking equipment producing grease-laden vapors, except in Groups R-2, R-3, R-4 and R-5. No automatic sprinkler system shall be required for completely enclosed ovens, steam tables or similar equipment.

i. Exception: Bed and breakfast home stay facilities, which are designed to accommodate five or fewer guests, shall not be required to comply with this provision. (Fire)

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities as to be irritating or injurious to health shall be provided with local exhaust in accordance with Section 502 of the mechanical subcode. (Building)

<u>Occupancy</u>	<u>P/1,000 sq. ft.</u>	<u>CFM/ person</u>
Food & Bev Service		
Dining Rooms	70	15
Kitchens (cooking)	20	15
Hospitals, Nursing & Convalescent Homes		
Med Procedure Rooms	20	15
Physical Therapy	20	15
Recovery and ICU	20	15
Hotels, Motels, Resorts, Dormitories		
Assembly Rooms	120	15
Dormitory Sleep Areas	20	15
Lobbies	30	15
Specialty Shops		
Barber	25	15
Florists	8	15
Hardware, drug, fabric	8	15
Reducing Salons	20	15
Supermarkets	8	15
Theaters		
Auditoriums	150	15
Stages and Studios	70	15
Transportation		
Platforms	100	15
Vehicles	150	15
Waiting Rooms	100	15
Workrooms		
Bank Vaults	5	15
Meat Processing <sup>a</sup>	10	15
Pharmacy	20	15
Photo Studios	10	15
Sports and Amusement		
Spectator Areas	150	15
Correctional Facilities		
Cells	20	20
Education		
Laboratories	50	20
Training Shops	30	20
Food & Bev Service		
Cafeteria, fast food	100	20
Hotels, Motels, Resorts, Dormitories		
Conference Rooms	50	20
Dry Cleaners		
Commercial Laundry	10	25

TABLE N  
Outdoor Air Rates Based on Occupancy Type

<u>Occupancy</u>	<u>P/1,000 sq. ft.</u>	<u>CFM/ person</u>
Storage Warehouses	5	10
Correction Facilities		
Dining Halls	100	15
Guard Stations	40	15
Dry Cleaners, laundries		
Coin oper dry cleaner	20	15
Coin oper laundries	20	15
Education		
Auditoriums	150	15
Classrooms	50	15
Libraries	20	15
Music Rooms	50	15

<u>Occupancy</u>	P/1,000 sq. ft.	CFM/ person	<u>Occupancy</u>	CFM/ sq. ft.
Hospitals, Nursing and Convalescent Homes Patient Rooms	10	25	Elevators	1.0
Specialty Shops Beauty	25	25	Locker & Dressing Rooms	0.5
Dry Cleaners, Laundries Commercial Dry Cleaner	30	30	Public Restrooms	75 cfm per water closet or urinal
Food & Bev Service Bars & Cocktail Lounges	100	30	Retail Stores, Sales Floors and Showroom Floors	
Dry Cleaners, Laundries Storage, Pick-up	30	35	Basement and Street	0.3
Smoking Lounges	70	60	Dressing Rooms	0.2
Offices Conference Rooms	50	20	Malls and Arcades	0.2
Office Spaces	7	20	Shipping and Receiving	0.15
Reception Areas	60	20	Storage Rooms	0.15
Telecommunication Ctrs & Data Entry	60	20	Upper Floors	0.2
Theaters Lobbies	150	20	Warehouses	0.05
Ticket Booths	60	20	Specialty Shops Automotive Service	1.5
Sports and Amusement Playing floors (gym)	30	20	Clothes and Furniture	0.3
Sports and Amusement Ballrooms and Discos	100	25	Pet Shops	1.0
Bowling Alleys (Seating areas)	70	25	Sports & Amusement Ice Arenas	0.5
Game Rooms	70	25	Swimming Pools (Pool & Deck Area)	0.5
Hospitals, Nursing & Convalescent Homes Operating Rooms	20	30	Storage Repair Garages/Public Garages	1.5
Hotels, Motels, Resorts, Dormitories Gambling Casinos	120	30	Workrooms Darkrooms	0.5
			Duplicating	0.5
<u>Occupancy</u>	CFM/ sq. ft.		Note: P/1,000 sq. ft. = persons per 1,000 square feet of building area. Note a. Spaces unheated or maintained below 50 degrees F are not covered by these requirements unless the occupancy is continuous. Where the ventilation rates in Table N are based on CFM/person (1) $OL_n \times V_n$ is less than or equal to $OL_e \times V_e$ + no upgrade (2) $OL_n \times V_n$ is greater than $OL_e \times V_e$ + upgrade Where the ventilation rates in Table N are based on CFM/square footage (3) $SF_n \times V_n$ is less than or equal to $SF_e \times V_e$ + no upgrade (4) $SF_n \times V_n$ is greater than $SF_e \times V_e$ + upgrade Where the ventilation rates in Table N are based on CFM/square footage and CFM/person (5) $OL_n \times V_n$ is less than or equal to $SF_e \times V_e$ + no upgrade (6) $OL_n \times V_n$ is greater than $SF_e \times V_e$ + upgrade (7) $SF_n \times V_n$ is less than or equal to $OL_e \times V_e$ + no upgrade (8) $SF_n \times V_n$ is greater than $OL_e \times V_e$ + upgrade Where: $OL_n$ = the occupant load of the proposed occupancy based on Table N. When accepted by the administrative authority this occupant load can be reduced. $OL_e$ = the occupant load of the existing occupancy based on Table N. $SF_n$ = the square footage of the proposed occupancy. $SF_e$ = the square footage of the existing occupancy. $V_n$ = the ventilation rate for the proposed occupancy based on Table N. $V_e$ = the ventilation rate for the existing occupancy based on Table N.	
Education Corridors	0.1		(o) Accessibility requirements: The following accessibility requirements shall apply in changes of use:	
Locker Rooms	0.5		1. The change of use of a building of 10,000 square feet or more total gross enclosed floor area shall comply with all applicable provisions of the barrier free subcode, N.J.A.C. 5:23-7.	
Hospitals, Nursing and Convalescent Homes Autopsy Rooms	0.5		2. The change of use of a building of less than 10,000 square feet total gross enclosed floor area shall be exempt	
Public Spaces Corridors and Utilities	0.05			

from the provisions of the barrier free subcode, except as follows:

i. An alteration project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.6.

ii. A reconstruction project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.7.

3. In a building of any size, where there is a change of use of an area of 10,000 square feet or more, the proposed new use shall comply with the requirements of the barrier free subcode, N.J.A.C. 5:23-7.

4. In a building of any size, where there is a change of use of an area of less than 10,000 square feet, the proposed new use shall be exempt from the provisions of the barrier free subcode, except as follows:

i. A renovation project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.5.

ii. An alteration project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.6.

iii. A reconstruction project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.7. (Building)

5. When an assisted living facility that was constructed with adaptable dwelling units or rooms pursuant to N.J.A.C. 5:23-7.5(f) because it provided accommodations for stays of 30 or more consecutive days makes any of those dwelling units or rooms available for less than 30 consecutive days, 50 percent of the accommodations or rooms made thus available shall be made fully accessible. The work needed to make those units accessible shall be completed and approved before any occupancy of less than 30 days.

(p) Change of use to a bed and breakfast shall be done in compliance with this subchapter except as modified below. (Plan review—Building, Fire, Inspection—Building)

1. Single-family dwellings of Group R-3, R-4, or R-5 that are being converted to bed and breakfast guest houses shall meet the requirements of this section.

i. "Bed and breakfast guest house" shall mean a facility providing sleeping or dwelling accommodations to transient guests which:

(1) Consists of a structure originally constructed for the purposes of a private residence;

(2) Includes individual sleeping accommodations for six to 12 guests;

(3) Has at least one dwelling unit occupied by the owner of the facility as his or her place of residence during any time this facility is being used for the lodging of guests;

(4) Has not less than 300 square feet of common area for the exclusive use of the guests, including, but not limited to, parlors, dining rooms, libraries and solariums;

(5) Prohibits cooking and smoking in guest rooms;

(6) Provides a meal to the guests in the forenoon of each day but does not operate as a restaurant open to the general public;

(7) Is not a "rooming house" or "boarding house" as defined in N.J.S.A. 55:13B-3;

(8) Does not allow more than 15 percent of the guests to remain more than 30 successive days or more than 30 days of any period of 60 successive days; and

(9) Does not allow any guest to remain more than 60 successive days or more than 60 days of any period of 90 successive days.

2. Single-family dwellings of Group R-3, R-4, or R-5 that have been converted to bed and breakfast guest houses shall be deemed to have met the intent of the rules, as provided in N.J.A.C. 5:23-2.6(b)1, if the following requirements have been met:

i. AC-powered interconnected smoke detectors with battery back-ups shall be installed in accordance with the building subcode in the locations listed below. Fixed temperature or rate-of-rise and fixed temperature heat detectors may be substituted for smoke detectors in those locations where frequent nuisance alarms would be likely to occur. At least one portable visual alarm-type smoke detector for the deaf or hearing impaired shall be available. Notification of the availability of such devices shall be provided to each occupant. Installation shall be required at the following locations:

(1) In all guestrooms;

(2) On each story in common areas;

(3) In storage rooms;

(4) In basements; and

(5) In utility and mechanical rooms.

ii. Except as otherwise provided in (p)2ii(1) and (2) below, every story utilized for human occupancy shall be provided with a minimum of two exits.

(1) An existing fire escape shall be accepted as providing one of the required means of egress if it can safely be used under emergency exiting conditions. All occupants shall have unobstructed access to the

fire escape without having to pass through a room subject to locking. Access to a fire escape shall be through a door, except that window access shall be permitted from guest rooms.

(2) In buildings having a single exit, no additional exit shall be required if all of the following conditions are met:

(A) At all locations in the story at the level of discharge, the exit access travel distance shall not exceed 75 feet;

(B) In buildings not more than two stories in height, from floors that are not more than 16 feet above grade, where there are not more than four guestrooms per floor and the exit access travel distance does not exceed 50 feet, the exit shall be enclosed with construction and opening protection providing a one hour fire-resistance rating; and

(C) No part of the building open to guests shall be on a floor that is more than 16 feet above exterior grade.

iii. Every sleeping room shall be provided with an operable window having a sill height of not more than 44 inches, having a width of at least 20 inches, a height of at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side.

iv. Dead-end corridors shall not exceed 35 feet.

v. Emergency egress lighting shall be provided and shall be connected to an emergency electrical system conforming to NFPA 70 to assure continued illumination for a duration of not less than one hour, in case of primary power loss in all building rooms or spaces required to have more than one exit or exit access.

vi. In all buildings, rooms or spaces required to have more than one exit or exit access, all required means of egress shall be indicated with approved, internally illuminated or self-luminous exit signs that comply with the building subcode. Exit signs shall not be required if the second means of egress is a fire escape or on main exterior doors that are clearly identified as exits. Exit signs shall be connected to an emergency electrical system to assure continued illumination for not less than one hour in case of primary power loss.

vii. Means of egress doors shall comply with the following:

(1) All doors opening into a passageway at grade or exit stair shall be self closing or automatic closing by listed closing devices; and

(2) All guest room doors shall be at least 1 $\frac{3}{8}$  inch solid core wood or approved equal with approved door closers and shall be reasonably tight fitting. Replacement doors shall be 1 $\frac{3}{4}$  inch solid cord wood or

approved equal unless existing frame will accommodate only a 1 $\frac{3}{8}$  inch door.

viii. Existing handrails and guardrails provided for stairways and open sided floor areas shall be permitted to remain in place, provided they are structurally sound. When handrails or guardrails do not exist in locations where the building code requires them, or where handrails or guardrails are in danger of collapse when used under emergency conditions, handrails and guardrails complying with the building subcode shall be provided.

ix. Transoms shall be either glazed with  $\frac{1}{4}$  inch wire glass set in metal frames and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

x. Interior finish shall comply with the following:

(1) Interior finish of exit enclosures shall have a flame spread of 0-25 and a smoke developed rating of 450 or less (Class I finish as determined by ASTM-E84);

(2) Interior finish of exit access enclosures shall have a flame spread of 26-75 and a smoke developed rating of 450 or less (Class II finish as determined by ASTM-E84);

(3) Interior finish of all other spaces shall have a flame spread rating of under 200 and a smoke developed rating of 450 or less (Class III finish as determined by ASTM-E84).

xi. Interior stairways and other vertical openings connecting more than six floor levels shall be enclosed with approved assemblies having a two-hour fire-resistance rating. Those connecting four to six floor levels shall be enclosed with approved assemblies having a one-hour fire-resistance rating. Interior stairways connecting three or fewer levels shall be enclosed as follows:

(1) A minimum one-hour fire barrier shall be provided to protect all interior stairways and other vertical openings not exceeding three stories. Such fire barrier may be omitted provided that:

(A) The building is provided throughout with an approved automatic fire suppression system complying with the building subcode; or

(B) All of the following conditions exist:

(I) Every sleeping room has an operable window with a sill height of not more than 44 inches, a width of at least 20 inches, a height of at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side;

(II) Every sleeping room above the second floor is provided with direct access to a fire escape or other approved secondary exit;

(III) Any exit-access corridor exceeding eight feet in length which serves two means of egress, at least one of which is an unprotected vertical opening, shall be separated from the vertical opening by a one-hour fire barrier; and

(IV) The building is protected throughout by an automatic fire alarm system complying with the building subcode and is supervised by an approved central station system in accordance with NFPA 71, or an approved proprietary system in accordance with NFPA 72D, or an approved remote station system in accordance with NFPA 72C or an approved local alarm service which will cause sounding of an alarm in accordance with NFPA 72A.

Administrative correction.

See: 30 N.J.R. 539(a).

Amended by R.1999 d.259, effective August 16, 1999.

See: 31 N.J.R. 825(a), 31 N.J.R. 2330(a).

Inserted (k); and recodified existing (k) through (p) as (l) through (q).

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (c), rewrote 4; rewrote (d); in (e)1, inserted a new i and recodified former i as ii; in (f)1, changed fire prevention code reference in Note b, and rewrote i; in (g)1, added the last sentence in the introductory paragraph; in (h) and (i), inserted references to section 924.2 throughout the introductory paragraphs; in (j), added the last sentence in the introductory paragraph; and in (o), added "(Building)" at the end of 1ii(5), and substituted "(Fire)" for "(Building)" at the end of 2i.

Administrative correction.

See: 32 N.J.R. 688(a).

Amended by R.2000 d.492, effective December 18, 2000.

See: 32 N.J.R. 3219(a), 32 N.J.R. 4437(b).

In (a), rewrote 4; in (f)2, rewrote Use Group table; in (i), added 6; in (o), added 3 and in Table N amended the square foot values for Corridors and Utilities under Public Spaces.

Amended by R.2002 d.5, effective January 7, 2002.

See: 33 N.J.R. 3392(a), 34 N.J.R. 267(a).

In (b), rewrote 3; in (c), rewrote 1, inserted new iii and recodified existing iii through xii as iv through xiii in 2.

Amended by R.2002 d.15, effective January 22, 2002.

See: 33 N.J.R. 2933(b), 33 N.J.R. 3883(a), 34 N.J.R. 521(a).

In (k), inserted the last sentence preceding "(Fire)" in the introductory paragraph, and rewrote 1.

Amended by R.2002 d.255, effective August 5, 2002.

See: 33 N.J.R. 4177(a), 34 N.J.R. 2783(a).

In (a), added 5 through 7; in (b), deleted 3 and 4.

Amended by R.2003 d.137, effective April 7, 2003.

See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Rewrote (k).

Amended by R.2003 d.157, effective April 21, 2003.

See: 34 N.J.R. 4247(a), 35 N.J.R. 1663(b).

In (a)5x, added (1) through (3).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

Rewrote the section.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

Rewrote the section.

Administrative correction.

See: 36 N.J.R. 3398(a).

Amended by R.2004 d.423, effective November 15, 2004.

See: 36 N.J.R. 3004(a), 36 N.J.R. 5090(a).

In (a), deleted former (1), recodified former (2) and (3) as (1) and (2), in 5.

Administrative correction.

See: 36 N.J.R. 5337(a).

Amended by R.2005 d.82, effective March 7, 2005.

See: 36 N.J.R. 4222(a), 37 N.J.R. 771(a).

In (e), rewrote 4; in (i), deleted the last sentence; in (k), deleted "change of use results in a" following "When a", substituted "is" for "being" following "building", inserted "post-earthquake shelters;" following "vehicle garages".

Amended by R.2005 d.184, effective June 20, 2005.

See: 36 N.J.R. 5283(a), 37 N.J.R. 2201(b).

In (o), added 5.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (k)3, substituted section 1617 with section 1623 and made "Subcode" lowercase throughout; in introductory paragraph (p), deleted N.J.A.C. reference and added "this subchapter except as modified below"; added (p)1 and 2.

Administrative Correction.

See: 38 N.J.R. 3024(a).

Amended by R.2007 d.51, effective February 5, 2007.

See: 38 N.J.R. 375(a), 39 N.J.R. 371(a).

In the "Use Classification" column of TABLE C, inserted "A2 nightclubs" and "(other than A-2 nightclubs)"; in (g), substituted "TABLE" for "Table"; in the "Use Classification" column of TABLE G, inserted "A-2 nightclubs," substituted "(other than nightclubs)" for "Nightclubs", and deleted "A-2 Other than Nightclubs," following "A-1,"; and in (h)1, inserted "or automatic".

Administrative correction.

See: 39 N.J.R. 767(b).

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

Rewrote the section.

Administrative correction.

See: 39 N.J.R. 3296(a).

### 5:23-6.32 Additions

(a) Any addition to a building or structure shall comply with the requirements of the Uniform Construction Code applicable to new construction.

1. Any repair, renovation, alteration or reconstruction work undertaken within an existing building in connection with an addition shall comply with the requirements of this subchapter.

(b) No addition shall create or extend any non-conformity in the existing building to which the addition is constructed with regard to accessibility, structural strength, egress capacity, exit access travel distance or the capacity of mechanical, plumbing, electrical or fire protection system provisions of the basic requirements of this subcode.

(c) No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of the building subcode for a new building of the same group. (Plan review—Building, Fire. Inspection—Building)

(d) No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of the building subcode unless a fire wall is provided in accordance with Section 705 of the building subcode.

1. Infilling of floor openings, such as elevator and exit stair shafts, and the addition of mezzanines and equipment penthouses shall be permitted as allowed by the building subcode. (Plan review—Building, Fire. Inspection—Building)

(e) Where an addition increases or extends the size of a fire area beyond that which is allowed by Section 903 of the building subcode, an automatic sprinkler system shall be pro-

vided throughout the fire area unless the addition is separated from the existing building by a fire separation assembly in accordance with Table 508.3.3 of the building subcode.

1. Exception: This requirement shall not apply to increases to the floor area of the building of less than five percent. (Fire)

(f) Whenever an addition is made to a detached, single-family dwelling of Group R-3 or R-5, smoke detectors shall be installed in accordance with the following:

1. If the cumulative area of all floors of the addition(s) is 25 percent or more of the floor area of the largest floor of the existing building, smoke detectors complying with the building subcode shall be installed throughout the addition and the existing building.

2. If the cumulative area of all floors of the addition(s) is five percent or more, but less than 25 percent, of the floor area of the largest floor of the existing building, hardwired, interconnected smoke detectors with battery back-up meeting the requirements of NFPA 72, except as otherwise provided in the building or fire protection subcode, shall be installed and maintained in each story in the dwelling unit, including basements. (Fire)

(g) All additions shall comply with the requirements of the barrier free subcode (N.J.A.C. 5:23-7), where applicable.

1. The addition shall include accessible entrance(s) unless the requirement that 50 percent of the building entrances be accessible has been met in the existing building. (For purposes of calculating the number of accessible entrances required, all entrances in the existing building and planned for the addition shall be included.)

i. If the only accessible entrance to the addition is located in the existing building or facility, at least one interior accessible route shall provide access through the existing building to all rooms, elements, or spaces in the addition.

2. If there are no toilet rooms in the addition, accessible toilet facilities that comply with the barrier free subcode shall be provided in the existing building. (Building)

(h) Structural loads: The following concern structural loads imposed by additions:

1. An addition shall not impose new loads which would cause the existing building to be subject to stresses exceeding those permitted by the building subcode.

2. An addition shall not increase the forces in any structural element of the existing building or structure by more than five percent, unless the increased forces on the element are still in compliance with the building subcode for new structures.

3. An addition shall not decrease the strength of any structural element of the existing building or structure

unless the element still exceeds the strength required by the building subcode for new structures. (Building)

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (d)1, rewrote the first sentence; and in (g)2, deleted "Section 1110 of" following "comply with".

Administrative change.

See: 32 N.J.R. 1380(a).

Amended by R.2003 d.218, effective May 19, 2003.

See: 35 N.J.R. 29(a), 35 N.J.R. 2209(a).

In (d), substituted "Section 705" for "Section 313.1.3"; in (e), substituted "which is allowed by Section 903" for "allowed by Chapter 9" and substituted "Table 302.3.3" for "Section 313.1.2" in the introductory paragraph; in (f), substituted "R-5" for "R-4" in the introductory paragraph.

Amended by R.2004 d.145, effective April 5, 2004.

See: 35 N.J.R. 5190(a), 36 N.J.R. 1758(a).

In (c), deleted "use" preceding "group"; in (d), deleted 1 and recodified former 2 as 1; in (e), substituted "an automatic sprinkler system" for "suppression"; in (f), deleted "Use" preceding "Group" in the introductory paragraph, and substituted "If the cumulative area of all floors of the addition(s)" for "If the area of the addition" at the beginning of 1 and 2.

Amended by R.2007 d.122, effective May 7, 2007.

See: 38 N.J.R. 4951(a), 39 N.J.R. 1673(a).

In (e), substituted "508.3.3" for "302.3.3".

### 5:23-6.33 Historic buildings

(a) Except as provided for in this section, historic buildings shall comply with the provisions of this subcode relating to the repair, renovation, alteration, restoration, reconstruction, movement and/or change of use of structures.

1. For purposes of applying this section, historic buildings shall include any building that meets one or more of the following criteria:

i. Buildings listed on the New Jersey or National Registers of Historic Places either individually or as a contributing building to a historic district;

ii. Buildings that have been issued a Determination of Eligibility by the Keeper of the National Register of Historic Places;

iii. Buildings identified as contributing buildings to Local Historic Districts which have been certified by the Keeper of the National Register as substantially meeting the National Register Criteria; or

iv. Buildings with a State Historic Preservation Officer Opinion or Certification that the property is eligible to be listed on the National Register of Historic Places either individually or as a contributing building to a historic district.

2. Variations: Building owners wishing to use an alternative to compliance with specific provisions of this subcode shall submit request(s) for variations in writing in accordance with N.J.A.C. 5:23-2.10. Requests for variations shall identify all nonconformities with the requirements of this subcode and shall include: a statement of the requirements of this subcode from which a variation is sought, a statement of the manner by which strict compli-

ance with the provisions of this subcode would result in practical difficulties or would detract from the historic character of the building and a statement of feasible alternatives to the requirements of this subcode that would adequately protect the health, safety and welfare of the intended occupants and of the public generally.

i. The provisions of N.J.A.C. 5:23-2.10, Variations, notwithstanding, a variation may be granted where no feasible alternative to the strict requirements of the subcode exists, provided that the owner submits a finding by a qualified architect that the feature of the building which cannot be brought into strict compliance with the requirements of this subcode is essential to maintaining the historical value and character of the building. Any such finding submitted in support of a variation application shall be in writing and shall state the basis and reasons for the finding.

ii. Variations to applicable barrier free requirements may be granted only if the historic character of the building would be threatened or destroyed as determined by the New Jersey State Historic Preservation Office.

3. When a historic building is used as a historic museum, the building shall be classified as Group B provided that the following conditions are met:

i. A limit on occupancy, not to exceed 50, is set by the construction official based on egress capacity and travel distance using the following parameters:

(1) For buildings with a single means of egress, occupancy shall be limited to the first and second floors, and the travel distance shall not exceed 75 feet;

(2) Two means of egress shall be required from all floors above the second floor where occupancy is permitted.

ii. There is supervision by a guide or other employee or volunteer knowledgeable in the emergency exiting procedures during all times that the building is occupied by visitors. (Plan review—Building, Fire. Inspection—Building)

(b) Special provisions: Historic buildings undergoing repair, renovation, alteration, restoration or reconstruction consistent with the U.S. Secretary of the Interior Standards for the Treatment of Historic Properties may comply with the following in lieu of compliance with the corresponding requirements of this subcode.

1. Materials and methods: Original or replica materials and original methods of construction may be used, subject to the provisions of this section.

i. Exception: Components of building systems hidden from public view, including but not limited to electrical equipment and wiring, plumbing equipment and piping and heating equipment, shall comply with

N.J.A.C. 5:23-6.8, Materials and methods. (Plan review—Building, Fire. Inspection—Building)

2. Exterior Walls: Exterior walls shall not be required to be modified to meet the requirements for fire-resistant wall construction. (Plan review—Building, Fire. Inspection—Building)

3. One hour fire-resistant assemblies: Where one hour fire-resistant construction is required by this subcode, it need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is lath and plaster. (Plan review—Building, Fire. Inspection—Building)

4. Roof covering: Historic buildings shall meet the intent of Section 1504 of the building subcode, but shall not be required to meet Sections 1506 and 1507. The existing type of roof covering may be continued or replaced with the same materials or the preexisting materials may be replaced or restored if the materials are documented to be historic. (Building)

5. Means of Egress: Existing door openings and corridor and stairway widths of less than that specified in N.J.A.C. 5:23-6.10 through 6.30 may be approved, provided that, in the opinion of the subcode official, there is sufficient width and height for a person to pass through the opening or traverse the exit. (Plan review—Building, Fire. Inspection—Building)

6. Doors: The existing front or main exit doors need not swing in the direction of exit travel when serving fewer than 50 people or when other approved exits having sufficient capacity to serve the total occupant load are provided.

i. Existing or replica hardware shall be permitted provided that no life safety hazard is created and that the hardware meets the intent of the barrier free subcode if applicable (that is, operable without pinching, grasping or twisting.) Existing or replica hardware may be fixed in place or modified to meet the intent of the barrier free subcode. (Plan review—Building, Fire. Inspection—Building)

7. Transoms: Existing transoms in corridors and other fire rated walls may be retained in accordance with this subcode. (Plan review—Building, Fire. Inspection—Building)

8. Interior Finishes: The existing finishes or replacement finishes on corridor walls and ceilings may be accepted where it is demonstrated that it is the historic finish.

i. In buildings other than Group R-3 or R-5, finishes in exitways shall have a flame-spread classification of Class III or better. Existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish unless the building is equipped throughout with an automatic sprinkler system installed in accordance with the building subcode. (Plan review—Building, Fire. Inspection—Building)

3. Recreational park trailers, also known as “park models,” are subject to all of the provisions of the Uniform Construction Code, including the requirement to obtain a permit for installation and the requirement to have all applicable prior approvals. They are closed construction and are subject to the requirements of N.J.A.C. 5:23-4D. The basis for this determination is presented in (b) through (h) below.

(b) Any “building” or “structure” is subject to the State Uniform Construction Code. A building or a structure is, therefore, subject to all the substantive and procedural requirements of the Code. A “structure” is “a combination of materials to form a construction for occupancy, use or ornamentation whether installed on, above or below the surface of a parcel of land...” N.J.A.C. 5:23-1.4.

(c) A recreational park trailer is a combination of materials. In fact, it is a combination of the same types of materials used in any home and it involves all the same safety issues as a home. It is intended for occupancy—the same type of occupancy as any other vacation home. While there may be some dispute as to whether it is on or above the surface of the parcel, it clearly is one or the other.

(d) The jurisdictional definitions of the Uniform Construction Code were deliberately made very expansive. The intent was that there be no loopholes. That is why the Act provides for full pre-emption of any construction regulations incorporated in any Act of the State of New Jersey, or any municipality, board, department, commission or agency upon promulgation of a regulation by the Department. The Department has not yet promulgated regulations for everything potentially covered by the Act. It has, however, adopted rules governing recreational park trailers. (See N.J.A.C. 5:23-4D.)

(e) A recreational park trailer is a structure that is enclosed with exterior walls—walls identical in construction to those of any dwelling. It is clearly designed for housing or shelter and it is arranged for the support of individuals. It is equipped with plumbing, electrical and mechanical systems just as is any dwelling.

(f) A recreational park trailer can be distinguished from a conventional recreational vehicle (RV). The full term is “recreational park trailer.” It is a special type of RV that is intended for installation in a “park.” They are built under a different standard than conventional RVs. The principal difference between the national consensus standard for RVs, ANSI A119.2, and the recreational park trailer standard is that the recreational park trailer standard covers all types of the requirements typically found in a building code while the RV standard does not. The two are sufficiently different that there are even two different trade associations, one for recreational park trailers and one for traditional RVs.

(g) The UCC’s jurisdiction in this matter is not pre-empted by the Federal Manufactured Housing and Safety Standard Act (MHSSA), 42 U.S.C. §§5401 et seq. No manufacturer is

required to submit to the Federal system. If they voluntarily submit, then the Federal rules preempt any otherwise applicable State rules.

1. The reason for this approach is simple. Regulation to protect public health and safety is reserved, by the Constitution, to the states. Federal involvement in health and safety is only possible when a Federal interest can be found. The Federal interest in this case is the commerce clause.

2. The Federal government, therefore, can and does regulate in this area, but only so far as is necessary to facilitate interstate commerce. Multiple state regulations and enforcement procedures clearly can interfere with commerce in factory constructed buildings. It is not uncommon, however, for a manufacturer to build identical units on the same assembly line with some having Federal labels and some having none. Those with none are intended for shipment to states and localities that do not have codes.

3. In that context, it is clear that the jurisdictional definitions of the MHSSA only establish an eligibility for Federal regulation, not a requirement for it. Recreational park trailers were written out of the Federal law and then that opt-out was broadened by U.S. Department of Housing and Urban Development (HUD) regulations (something quite inconceivable if Federal regulation was mandatory). When recreational park trailers were written out of Federal law, any possibility of the pre-emption of state rules was eliminated.

(h) The fact that a recreational park trailer may be exempt from Federal regulation does not mean that it is exempt from State regulation. Exactly the opposite is the case. Confusion has arisen because there are State laws and rules that had to be passed to enable the State to work with HUD to administer the Federal standards when they are applicable. N.J.A.C. 5:23-4C.2 is such a rule. It only governs those structures that are eligible for and, in fact, have been made subject to Federal law by the manufacturers. Recreational park trailers are not eligible for Federal regulation, so N.J.A.C. 5:23-4C does not apply.

New Rule, R.1993 d.487, effective October 4, 1993.

See: 25 N.J.R. 2159(a), 25 N.J.R. 4592(a).

Amended by R.1995 d.647, effective December 18, 1995 (operative March 18, 1996).

See: 27 N.J.R. 3517(a), 27 N.J.R. 5012(a).

Amended by R.1999 d.424, effective December 6, 1999.

See: 31 N.J.R. 2428(a), 31 N.J.R. 4001(c).

In (a), substituted references to maintenance for references to repairs throughout, and inserted 4iii.

Amended by R.2003 d.473, effective December 15, 2003.

See: 35 N.J.R. 2421(a), 35 N.J.R. 5543(a).

In (a), rewrote 2vii, rewrote the first sentence in 2x, and substituted references to maintenance for references to repair throughout.

Amended by R.2004 d.60, effective February 2, 2004.

See: 35 N.J.R. 4000(a), 36 N.J.R. 649(b).

Added (a)4iv.

Repealed by R.2004 d.131, effective April 5, 2004.

See: 35 N.J.R. 5336(a), 36 N.J.R. 1755(a).

Recodified to N.J.A.C. 5:23-2.7(c). Section was “Interpretation: Ordinary maintenance”.

New Rule, R.2007 d.47, effective February 5, 2007.

See: 38 N.J.R. 3710(a), 39 N.J.R. 376(a).

Administrative correction.

See: 39 N.J.R. 1249(b).

Amended by R.2008 d.213, effective August 4, 2008.

See: 39 N.J.R. 2411(a), 40 N.J.R. 4523(b).

In (a)3 and (d), updated the N.J.A.C. references; and in (d), deleted “; UCC bulletin 93-6” following the N.J.A.C. reference.

#### 5:23-9.4 (Reserved)

New Rule, R.1990 d.490, effective October 1, 1990.

See: 22 N.J.R. 592(a), 22 N.J.R. 3148(a).

Repealed by R.1995 d.121, effective March 6, 1995 (operative July 1, 1995).

See: 26 N.J.R. 4875(a), 27 N.J.R. 894(c).

Formerly “Seismic Zones”.

#### 5:23-9.5 (Reserved)

Repealed by R.2006 d.24, effective January 17, 2006.

See: 37 N.J.R. 2111(a), 38 N.J.R. 485(a).

Section was “Interpretation: Records retention.”

#### 5:23-9.6 Interpretations: Construction requirements for new and existing casinos

(a) Fixed central pedestal seating (stools) shall be allowed within major aisles and cross-aisles in casinos for gaming patrons who use standard size slot machines or other similar machines, within these aisles, provided the following requirements have been met:

1. Schematic drawings which indicate the dimensions and locations of the stools, and the distances from adjacent fixtures, walls or other objects shall be submitted to the Department for review and release;

2. Stool placement shall not result in any reduction of the required aisle accessway width when measured from the stool and any other adjacent obstacle, including, without limitation, other stools in back-to-back seating arrangements;

3. Stools that swivel and have a back rest shall be restricted so as to rotate only in one direction, operate in series, and be self-centering;

4. A minimum clearance of eight inches, measured from the face of the gaming machine base at knee height, shall be provided between the gaming machine and the stool and a minimum clearance of 10 inches, measured from seat edge to seat edge, shall be provided between adjacent stools, in order to ensure discharge clearances; and

5. The minimum clear width of aisles with slot stools shall be 48 inches.

(b) The following code requirements shall apply to gaming floors:

1. The use group of the gaming floor area shall be A-2.

2. Each gaming floor area shall be designed using an open landscape plan such that there is clear visibility throughout the floor and at least two of the exits are clearly discernible from all portions of the floor. Line of sight

obstructions shall be limited and shall be subject to the approval of the Department.

3. An egress study shall be provided for each new egress route and for all modifications to an existing egress route, increases in occupant load or change of egress elements for gaming floor areas.

i. The occupant load shall be calculated at 11 square feet gross per person for all gaming floor areas, regardless of the gaming activity.

ii. The total capacity of the means of egress shall be calculated based on 116 2/3 percent of the calculated occupant load of any floor area containing gaming activities and any adjacent spaces using the gaming floor for exit access.

iii. Travel distances shall be delineated on the egress study and shall be measured from each and every occupiable point on the gaming floor to the closest exit. The travel distance shall be measured along the natural path of travel using a distance of one foot from obstructions, corners and walls and using the center of door openings.

iv. Each egress route shall identify the travel distance, number of occupants and size and type of egress elements.

4. Section 1017.4.1.3 of the building subcode, entitled “Special locking arrangements in penal facilities,” shall be permitted to apply for areas that are back-of-house to the gaming floor where security is necessary.

5. Gaming equipment, change banks, monitor cabinets and other obstructions located on the gaming floor shall not exceed 65 inches in height except as provided in this paragraph:

i. Equipment and obstructions located at or within 21 feet of perimeter walls, measured perpendicular to the wall, may be of unrestricted height;

ii. Equipment and obstructions located at columns, but not extending more than 12 feet in any direction around the column, including the column itself, may be of unrestricted height;

iii. Equipment and obstructions located so that they do not obstruct visibility throughout the gaming floor, the visibility of at least two exits, or the operation of fire protection systems, may be of such height as is consistent with such visibility and operation; and

iv. Slot machines and similar gaming equipment may be 75 inches in height at any location on the casino floor provided the following conditions are met throughout the entire casino floor(s):

(1) Machines taller than 65 inches shall be of a circle top or similar design so that the 75-inch height is not continuous and at least 40 percent of the vertical projected area between 65 inches and 75 inches is open;

(2) An exit catchment area shall be provided immediately in front of the means of egress having the largest egress capacity and each other means of egress, ranked from the largest to smallest in terms of egress capacity, until such areas are provided in front of means of egress comprising 67 percent of the required egress capacity. Each catchment area shall be a rectangle with the full width of the means of egress component and twice the depth. Gaming equipment and other obstructions within the catchment area shall require Department approval;

(3) All exit signs that are provided on the casino floor shall have a minimum letter height of 10 inches and a minimum letter stroke of two inches with approved distinguishable colors; and

(4) Prior to the installation of the 75-inch high machines, the permit applicant and the Department shall perform a means of egress and exit visibility survey. If directed by the Department, the permit applicant shall install additional signage, or other means found necessary to ensure the discernability of two exits.

6. Signage installed on the gaming floor shall comply with the following:

i. All signage shall be listed, labeled, approved and identified by an approved testing laboratory;

ii. Each sign shall be attached to a wall, post or ceiling. A post-mounted sign above slot machines shall be fastened to, and supported by, the slot machine base;

iii. A sign containing moving sections or ornaments shall be equipped with fail-safe provisions to prevent the sign from releasing and falling or from shifting its center of gravity more than 15 inches. The fail-safe device shall be in addition to the mechanism and mechanism housing that operate the movable section. The fail-safe device shall be capable of supporting the full dead weight of the sign when the moving mechanism releases; and

iv. A sign shall not obstruct visibility throughout the gaming floor, the visibility of exit signage or the operation of fire protection systems.

7. Monitor cabinets, change banks, fillers, slot machine bases, and similar items shall be constructed of non-combustible or fire retardant treated material.

8. All illuminated signs, amplification systems, turn tables, or sound-producing equipment located on or open and adjacent to the casino floor(s) shall be interlocked with the fire alarm system so that activation of the fire alarm system results in disconnection of electrical power to the device(s).

i. This requirement does not apply to exit signs or emergency communications systems.

ii. This requirement shall not apply to slot machines or similar gaming equipment.

9. On casino gaming floors and adjacent spaces open to the casino gaming floor, all house lighting shall return to normal lighting levels or all emergency lights shall be activated upon activation of the fire alarm system. For the purpose of applying this requirement, normal lighting level shall mean an illumination level of not less than one foot-candle (11 lux) at the floor level.

(c) All casino hotel standpipe connections throughout the building shall be identified by a constantly lit four-inch round blue light connected to an emergency electrical system located no less than 24 inches and not more than 48 inches above the hose connection. Standpipe connections located on columns shall be marked on all four sides of the column as described above.

1. This requirement shall not apply to standpipe hose connections in buildings or portions thereof of Group R-1 that are located in or within 10 feet of an approved exit stairway enclosure.

2. This requirement shall not apply to standpipe hose connections located in open parking structures.

(d) The following precautions shall be taken during construction in any portion of an occupied casino hotel:

1. Except for changes to gaming tables, slot bases or signage, temporary construction partitions shall be required when construction is undertaken in an area with public access or in an area where the automatic sprinkler system will be inoperable.

i. A fire partition with a fire resistance rating of one hour shall be required for projects with automatic sprinkler protection. Fire partitions shall be constructed of noncombustible materials as defined in the building subcode and shall be continuous from the top of the floor to the underside of the ceiling above and shall be securely attached thereto. Opening protectives shall be rated for ¾ hour.

ii. A fire separation assembly with a fire resistance rating of two hours shall be provided for projects where the automatic sprinkler system is inoperable. Fire separation assemblies shall be constructed of noncombustible materials, as defined in the building subcode, and shall be continuous from the top of the floor to the underside of floor/roof slab or deck above or to the top fire resistance rated floor ceiling assembly above and shall be securely attached thereto. Opening protectives shall be rated for 1½ hours.

2. Projects with the ceiling removed shall be provided with operable upright type automatic sprinklers.

New Rule, R.1991 d.61, effective February 19, 1991.

See: 22 N.J.R. 3610(a), 23 N.J.R. 406(a).

Amended by R.1995 d.647, effective December 18, 1995 (operative March 18, 1996).

See: 27 N.J.R. 3517(a), 27 N.J.R. 5012(a).

Amended by R.1998 d.471, effective September 21, 1998.

See: 30 N.J.R. 1678(a), 30 N.J.R. 3466(a).

In (a), added 5; and added (b) and (c).  
Amended by R.2000 d.414, effective October 16, 2000.  
See: 32 N.J.R. 2279(a), 32 N.J.R. 3870(b).

In (b)3i, substituted "11" for "7.5" and changed "per person gross" to "gross per person" following "square feet".  
Amended by R.2003 d.71, effective February 18, 2003.

See: 34 N.J.R. 3414(a), 35 N.J.R. 1054(b).  
In (a), substituted "have been" for "are" in the introductory paragraph and rewrote 1; in (b), rewrote 5 and inserted ", slot machine bases," in 7.  
Amended by R.2007 d.338, effective November 5, 2007.  
See: 39 N.J.R. 280(a), 39 N.J.R. 4569(a).

Deleted (b)5iv(3); recodified former (b)5iv(4) and (b)5iv(5) as (b)5iv(3) and (b)5iv(4); added (b)8, (b)9 and new (c); and recodified former (c) as (d).

#### Case Notes

In light of undeveloped record and uncertainty as to whether there was actually present conflict between two regulatory schemes, casino that objected to Department of Community Affairs' adoption of design and construction safety regulations for casinos, on theory that regulatory authority of Casino Control Commission prevailed over Department of Community Affairs' authority, was entitled to seek declaratory relief under Administrative Procedure Act at a joint hearing under auspices of Office of Administrative Law. *Atlantic City Showboat, Inc. v. Department of Community Affairs of State*, 331 N.J.Super. 40, 751 A.2d 111 (N.J.Super.A.D. 2000).

#### 5:23-9.7 Interpretation: Manufacturing, production and process equipment

(a) Manufacturing, production and process equipment is not under the jurisdiction of the Uniform Construction Code. Manufacturing, production, and process equipment is defined as all equipment employed in a system of operations for the explicit purpose of the production of a product.

(b) Manufacturing, production, and process equipment shall include, but is not limited to, the following:

1. Electrical generation equipment, such as turbines, condensers, generators, and the like;
2. Electrical transmission equipment such as transformers, capacitors, regulators, switchgears, and the like;
3. Air pollution equipment, such as scrubbers;
4. Metal working equipment, such as castings, screen machines, grinders, lathes, presses, drills, welders, and the like;
5. Material handling equipment, such as rollers, control belts, and the like;
6. Packaging equipment, such as bottling machines;
7. Process drying equipment, such as ovens, kettles, fans, and the like;
8. Finishing equipment, used for such purposes as heat treatment, plating, painting, and the like;
9. Petrochemical refinery/plant equipment used for distillation, conversion, treatment and blending;
10. Electric, steam, pneumatic- or hydraulic-actuated equipment, such as motors, pumps, compressors, and the like;

11. Tanks which constitute part of a controlled industrial process, including those tanks containing flammable and combustible liquids, together with the dikes surrounding the tanks;

12. All piping used to transport products to and between industrial processes; any piping connected to the potable water supply downstream of an appropriate back-flow prevention device; any piping located upstream of the first joint at the outlet of the equipment or upstream of the indirect connection to the sanitary or storm sewer;

13. Pipe racks, hangers, and the like that support the process piping and the storage racks for the raw materials and finished products. Building structural systems supporting the racks, hangers, storage loads, and the like are excluded from the definition of process equipment, except that pipe support units that include a foundation and support steel shall be included as process equipment when they do not transfer loads to structures whose main function is other than supporting process pipe;

14. Boilers, pressure vessels, furnaces and the like used exclusively for industrial process;

15. Pre-wired and/or pre-engineered (bearing name plate) electro-mechanical equipment or machinery used exclusively for an industrial process;

16. Electrical work which forms a part of the power or control system of industrial process equipment, up to the point where that work connects to the plant electrical distribution system. Such a point shall be considered a suitable junction box, panel board, disconnect switch, or a terminal box which constitutes the final connection to the factory-installed equipment wiring. Where these items are not supplied as a part of the equipment, they shall be subject to local enforcing agency jurisdiction; and

17. (Reserved)

New Rule, R.1993 d.132, effective April 5, 1993.

See: 24 N.J.R. 3458(a), 25 N.J.R. 1512(b).

Amended by R.1995 d.647, effective December 18, 1995 (operative March 18, 1996).

See: 27 N.J.R. 3517(a), 27 N.J.R. 5012(a).

#### 5:23-9.8 (Reserved)

Repealed by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

Section was "Interpretation: bed and breakfast guest houses—change in Group requirements".

#### 5:23-9.9 Foundation systems for garden type utility sheds and similar structures

(a) Garden-type utility sheds and similar structures that are 100 square feet or less in area, 10 feet or less in height and accessory to structures of Group R-2, R-3, R-4, or R-5 shall not be required to have a foundation system that extends below the frost line. These structures shall be of sufficient weight to remain in place or shall be anchored to the ground.

(b) Garden-type utility sheds and similar structures that are greater than 100 square feet, but not more than 200 square feet in area, 10 feet or less in height, and accessory to structures of Group R-2, R-3, R-4, or R-5 are not required to be provided with a foundation system that extends below the frost line provided the shed is dimensionally stable without the foundation system. A shed shall be considered dimensionally stable if it is provided with a floor system that is tied to the walls of the structure such that it reacts to loads as a unit. These sheds shall be placed on a bed of gravel not less than four inches in depth or shall have other frost protected design. These structures shall be of sufficient weight to remain in place or shall be anchored to the ground.

New Rule, R.2000 d.166, effective April 17, 2000.

See: 31 N.J.R. 4151(a), 32 N.J.R. 1376(a).

Amended by R.2004 d.67, effective February 17, 2004.

See: 35 N.J.R. 4627(a), 36 N.J.R. 949(b).

Inserted references to structures of Group R-2, R-3, R-4 or R-5 for references to Use Groups R-2, R-3 or R-4 throughout.

## SUBCHAPTER 10. RADON HAZARD SUBCODE

### 5:23-10.1 Title, scope; intent

(a) This part of the regulations, adopted pursuant to the State Uniform Construction Code Act, P.L. 1975, c. 217, as amended and as supplemented by P.L. 1989, c.186 (N.J.S.A. 52:27D-119 et seq.), and entitled Radon Hazard Subcode, shall be known, and may be cited throughout the regulations as, N.J.A.C. 5:23-10 and, when referred to in this subchapter, may be cited as "this subchapter".

1. This subchapter is intended to complement rules adopted by the New Jersey Department of Environmental Protection at N.J.A.C. 7:28-27 which provide for certification of persons who sell radon or radon progeny devices,

test for radon or radon progeny, or mitigate radon in buildings.

i. Copies of N.J.S.A. 26:2D-70 et seq. and N.J.A.C. 7:28-27 may be obtained from the New Jersey Department of Environmental Protection, PO Box 411, Trenton, NJ 08625-0411.

(b) This subchapter pertains to the construction of all buildings in Use Groups E and R, as defined in the building subcode, within recognized radon prone areas defined as tier one by the New Jersey Department of Environmental Protection and shall control matters relating to construction techniques to minimize radon gas and radon progeny entry and facilitate any subsequent remediation that might prove necessary.

(c) This subchapter seeks to protect and ensure public safety, health and welfare insofar as it is affected by radon entry into schools and residential buildings.

1. It is the purpose of this subchapter to establish standards and procedures to ensure that construction techniques that minimize radon entry and that facilitate any post-construction radon removal that is required shall be incorporated in the construction of all buildings in Use Groups E and R in tier one areas and are permitted to be incorporated elsewhere in New Jersey.

2. Radon is a colorless, odorless, tasteless, radioactive gas that occurs naturally in soil gas, underground water, and outdoor air. Prolonged exposure to elevated concentrations of radon and its progeny (that is, substances formed as a result of the radioactive decay of radon) has been associated with increases in the risk of lung cancer. An elevated concentration is defined as being at or above the guideline of 4 pCi/L or 0.02 WL average annual exposure.