

Case Notes

Registered architect retained to sign and seal drawings to comply with permit regulations entitled to approve as prepared or return for compliance modifications (citing Small Dwelling Energy Subcode). *Deck House, Inc. v. New Jersey State Board of Architects*, 531 F.Supp. 633 (D.N.J.1982).

Departments of Community Affairs and Energy could not amend state energy subcode. *New Jersey Builders Ass'n v. Coleman*, 227 N.J.Super. 23, 545 A.2d 783 (A.D.1988).

5:23-3.19 Manufactured home subcode

(a) Pursuant to authority of P.L. 1975, c.217, as amended, the Commissioner hereby adopts the Federal Manufactured Home Construction and Safety Standards, as set forth in Part 3280 of Title 24 of the Code of Federal Regulations, including all subsequent revisions and amendments thereto, as the manufactured home subcode for New Jersey.

1. Copies of the volume of the Code of Federal Regulations containing Part 3280 of Title 24 may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20420.

2. Part 3280 of Title 24 of the Code of Federal Regulations, including all subsequent revisions and amendments thereto, may be known and cited as the manufactured home subcode.

(b) The following sections of Subpart A of Part 3280 are deemed to be administrative in nature and are therefore excluded from the manufactured home subcode:

1. Section 3280.1, entitled "Scope";
2. Section 3280.5, entitled "Data plate";
3. Section 3280.6, entitled "Serial number";
4. Section 3280.7, entitled "Modular homes"; and
5. Section 3280.8, entitled "Certification label".

(c) Any manufactured home construction or safety issue not covered under the manufactured home subcode which is, however, covered under another subcode adopted pursuant to this subchapter shall be determined in accordance with such other subcode.

(d) The adoption of a manufactured home subcode shall not be construed as in any way limiting the power or duty of the Department of Community Affairs to enforce and comply with all applicable provisions of the Federal Manufactured Housing Construction and Safety Standards Act of 1974 and the regulations promulgated pursuant thereto, including all subsequent revisions and amendments thereto, when authorized to do so by the Secretary of the United States Department of Housing and Urban Development.

Amended by R.1982 d.7, eff. February 1, 1982.

See: 13 N.J.R. 171(a), 14 N.J.R. 142(a).

This section was recodified from 5:23-3.9.

5:23-3.20 Mechanical 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 International Code Council, Inc., known as the International Mechanical Code/2000. This code is hereby adopted by reference as the Mechanical Subcode for the State of New Jersey subject to the modifications stated in (b) below.

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

ii. The International Mechanical Code/2000 may be known and cited as the "mechanical subcode."

2. Any references to the International Building Code, International Plumbing Code, ICC Electrical Code, International Fire Code or the International Energy Conservation Code listed in Chapter 15 shall be considered a reference to the appropriate adopted building, plumbing, electrical, BOCA National Fire Prevention Code-1996 or energy subcode in N.J.A.C. 5:23-3.

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 Mechanical Code/2000 are amended as follows:

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

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

i. Section 201.3 is amended to delete the words "International Building Code, ICC Electrical Code, International Fire Code, International Plumbing Code," and in lieu thereof substitute "building, electrical, fire protection, and plumbing subcodes."

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

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

iv. The definition of the term "building" is deleted and substitute the definition found in N.J.A.C. 5:23-1.4.

v. The definition of the term "code" is deleted.

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

3. Chapter 3 of the mechanical subcode, entitled "General Regulations," is amended as follows:

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

ii. Section 301.4 is amended to delete the words "in accordance with Section 105."

iii. Section 301.11 is deleted.

iv. Section 307.1 is amended to delete "approved plumbing fixture" on line 3 and insert the following: "drywell, sump pump, floor drain, or drainage system below floor."

v. Section 307.2.1 is amended to add the following after the word "disposal" on line 3: "in accordance with the adopted plumbing subcode."

vi. Section 307.2.2 is deleted.

vii. Section 309 is deleted.

viii. Section 312 is deleted.

4. Chapter 4 of the mechanical subcode, entitled "Ventilation," is amended as follows:

i. Section 403.2 is amended to add the following language: "Exception: Where the registered design professional demonstrates that an engineered ventilation system design will prevent the maximum concentration of contaminants from exceeding that obtainable by the rate of outdoor air ventilation determined in accordance with Section 403.3, the minimum required rate of outside air shall be reduced in accordance with such engineered system design."

5. Chapter 5 of the mechanical subcode, entitled "Exhaust Systems," is amended as follows:

i. Section 503.1 is amended to replace the second sentence with the following: "The type and wiring methods for motors in areas that contain flammable vapors or dusts shall be in accordance with the electrical subcode."

ii. Section 512.1 is amended to add a sentence as follows: "This section shall not apply to radon construction techniques covered by subchapter 10 of the Uniform Construction Code."

iii. 513.11 is amended to replace the third sentence with the following: "Secondary power shall be from a legally required standby power source complying with the electrical subcode." Also, delete the following sentences: "Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power."

iv. 513.12.1 is amended to delete the wording in its entirety and substitute the following: "Wiring. All wiring shall be in accordance with the electrical subcode."

6. Chapter 6 of the mechanical subcode, entitled "Duct Systems," is amended as follows:

i. Section 602.2.1 is amended to modify Exception 3 to read: "This section shall not apply to materials exposed within plenums in one-and two-family dwellings. Wire exposed in plenums of one-and two-family dwellings shall conform to the requirements of the electrical subcode."

ii. Section 602.2.1.1 is deleted in its entirety and substitute the following language: "Wiring, cable and raceways installed in a plenum shall be listed and installed in accordance with the electrical subcode."

iii. Section 602.2.1.4 is deleted in its entirety and substitute the following language: "Combustible electrical equipment exposed within a plenum shall be listed and labeled and shall be installed in accordance with the requirements of the electrical subcode."

7. Chapter 9 of the mechanical subcode, entitled "Specific Appliances, Fireplaces and Solid Fuel Burning Equipment," is amended as follows:

i. Section 917.2 is deleted in its entirety.

ii. Section 917.3 is deleted in its entirety.

8. Chapter 10 of the mechanical subcode, entitled "Boilers, Water Heaters and Pressure Vessels," is amended as follows:

i. Section 1001.1 is amended to replace the words "installation, alteration, and repair of boilers," with the words "installation and alteration of boilers."

ii. Section 1003.1 is amended to add the following phase: "Pressure vessels shall be designed and constructed in accordance with the requirements of ASME "Rules for Construction of Pressure Vessels, Section VIII/1998"."

9. Chapter 11 of the mechanical subcode, entitled "Refrigeration," is amended as follows:

i. Section 1102.2.2 is deleted.

ii. Section 1109 is deleted.

10. Chapter 13 of the mechanical subcode, entitled "Fuel Oil Piping And Storage," is amended as follows:

i. Section 1301.2 is amended to add the following sentence: "Where the tank is of a size and type that is subject to the Department of Environmental Protection rules for the installation of Underground Storage Tanks at N.J.A.C. 7:14B, those rules shall apply."

11. Chapter 15 of the mechanical subcode, entitled "Referenced Standards," is amended as follows:

i. Under the heading "ICC," amend the following titles:

(1) Delete "IEC—2000 Electrical Code."

(2) Delete "IFC—2000 International Fire Code" and substitute the following: "BOCA National Fire Prevention Code/1996."

(3) Delete "IBC—2000 International Building Code."

(4) Delete "IEEC—2000 International Energy Conservation Code."

(5) Delete "IPC—2000 International Plumbing Code."

12. Appendix A of the mechanical subcode entitled "Combustion Air and Chimney Connector Pass-Throughs" is informative and is not part of the code.

13. Appendix B of the mechanical subcode entitled "Recommended Permit Fee Schedule," is deleted in its entirety.

(c) Single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any guestroom or dwelling unit located in a building of Use Group I-1, R-1, R-2, or any dwelling unit of Use Group R-3 located in a building required to be registered as a multiple dwelling, if that building 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.

1. Exceptions: Guestrooms 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 guestroom 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 guestroom 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 appliance. 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.

R.1984 d.314, eff. August 6, 1984.

See: 16 N.J.R. 1139(a), 16 N.J.R. 2084(b).

New rule.

Amended by R.1985 d.154, effective April 1, 1985 (operative July 1, 1985).

See: 17 N.J.R. 239(a), 17 N.J.R. 810(a).

(a)2 added; subsection (c) added.

Amended by R.1986 d.380, effective September 22, 1986.

See: 18 N.J.R. 1235(a), 18 N.J.R. 1931(a).

Substantially amended.

Amended by R.1987 d.14, effective January 5, 1987.

See: 18 N.J.R. 2083(a), 19 N.J.R. 63(a).

In (b)5iv Section M-508 was deleted and Section M-508.1 was substituted.

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.270, effective June 20, 1988.

See: 20 N.J.R. 575(a), 20 N.J.R. 1344(a).

Added (a)3 and (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; (c)1 and 3 added.

Amended by R.1990 d.507, effective October 15, 1990.

See: 22 N.J.R. 2208(a), 22 N.J.R. 3214(a).

Text conformed to BOCA National Code/1990.

Amended by R.1991 d.429, effective August 19, 1991.

See: 23 N.J.R. 1487(a), 23 N.J.R. 2501(a).

In (a), added 3. Added new (c).

Amended by R.1992 d.183, effective April 20, 1992.

See: 24 N.J.R. 167(a), 24 N.J.R. 1475(b).

Text added at (b)7 and (c)1, deleting parts of article 16 of the mechanical subcode.

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.120, effective March 6, 1995 (operative July 1, 1995).

See: 26 N.J.R. 4874(b), 27 N.J.R. 894(b).

Amended by R.1999 d.259, effective August 16, 1999.

See: 31 N.J.R. 825(a), 31 N.J.R. 2330(a).

Added (c).

Amended by R.2001 d.196, effective June 18, 2001.

See: 33 N.J.R. 6(a), 33 N.J.R. 2090(a).

Rewrote (a) and (b).

Administrative correction.

See: 33 N.J.R. 3310(a).

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 (c), added the last sentence in the introductory paragraph, and rewrote 1.

5:23-3.20A (Reserved)

New Rule R.1992 d.183, effective April 20, 1992.

See: 24 N.J.R. 167(a), 24 N.J.R. 1475(b).

Repealed by R.2001 d.196, effective June 18, 2001.

See: 33 N.J.R. 6(a), 33 N.J.R. 2090(a).

Section was "Indoor air quality subcode".

5:23-3.21 One-and two-family dwelling subcode

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

1. Pursuant to authority of P.L. 1975, c.217, as modified by P.L. 1996, c.53, the Commissioner hereby adopts the model code of the Council of American Building Officials known as "The CABO One and Two Family Dwelling Code/1995" as the one and two-family dwelling subcode for New Jersey subject to the modifications stated in (c) below.

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

(b) The provisions of this subcode shall apply to the construction, alteration, repair or increase in size of detached one-or two-family dwellings or single family townhouses, of Use Group R-4, of type 5B construction that are not more than two stories or 35 feet in height and no more than 4,800 square feet in area per floor. For the purpose of applying this section, a habitable attic shall not constitute a story. A habitable attic shall be an attic which has a stairway as a means of access and egress and in which the ceiling area at a height of seven feet above the attic floor is not more than one-third the area of the next floor below.

1. The use of the CABO Code for the construction of one or two family detached dwellings, as described in (b) above, in flood prone areas shall be permitted. The requirements of Section 3107.0 of the building subcode shall supplement the requirements of the One and Two-Family Dwelling Subcode when dwellings are built in flood prone areas as identified by the most recent Flood Insurance Rate Map published by the Federal Emergency Management Agency.

(c) The following chapters or sections of the one and two-family dwelling subcode are modified as follows:

1. Chapter 1 entitled "General Administration" is deleted in its entirety.

2. Chapter 2, entitled "Building Definitions," is amended as follows:

i. The definition of the term "approved" is deleted. In lieu thereof substitute "approved by the building subcode official or other authority having jurisdiction in accordance with the regulations."

ii. The definition of the term "Approved Agency" is amended to add the phrase "or other authority having jurisdiction in accordance with the UCC" after the word "Official" on line 4.

iii. The definition of the term "Building Official" is deleted and is redefined herein and throughout the subcode as the "building subcode official" as defined in N.J.A.C. 5:23-1.4 unless indicated otherwise.

iv. The definition of the term "Grade Plane" is deleted. In lieu thereof substitute: "A reference plane representing the average elevation of finished ground level adjoining the building at all exterior walls. When the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line, or when the lot line is more than 6 feet from the building, between the building and a point 6 feet from the building."

v. The definition of the term "Story" is amended to delete "except that the topmost story shall be that habitable portion of a building included between the upper surface of the topmost floor and ceiling or roof above."

3. Chapter 3, entitled "Building Planning" is amended as follows:

i. Section 301.2 is amended to modify Table 301.2a to read as follows:

Table No. 301.2a
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Roof Snow Load (lbs./sq. ft.)	Wind Pressure (lbs./sq. ft.)	Seismic Condition by Zone	Subject to Damage from Weathering	Frost Line Depth	Subject to Damage from	
20	see	see note 2	severe	2'-6"	Termite	Decay
see note 3	notes 4, 5, 6 and fig. 301.2d		see note 1	(Southern Area)	Yes	Yes
				3'-0" (Northern Area) See notes 1, 2 and 3		

Notes:

1. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy structural requirements of this code. The grade of masonry units shall be determined from the ASTM C34, C55, C62, C73, C90, C129, C145, C216, or C625 listed in Chapter 47. The frost line depth may require deeper footings than indicated in figure 403.1a.

2. New Jersey is divided into two zones: Zone one consists of Monmouth and Burlington Counties and all counties to the south. Zone 2 consists of Mercer and Middlesex Counties and all counties to the north.

3. The enforcing agency having jurisdiction may establish values other than the ones listed for "roof snow load," and "frost line depth" if warranted by documented local climatic and geographic conditions.

4. Wind speed for Atlantic, Cape May, Monmouth, and Ocean counties, and Bass River, Washington, and Woodland townships in Burlington County shall be 90 mph.

5. Wind speed for Bergen, Camden, Cumberland, Essex, Gloucester, Hudson, Mercer, Middlesex, Morris, Passaic, Salem, Somerset, Union, and Burlington (except for Bass River, Washington, and Woodland townships) counties shall be 80 mph.

6. Wind speed for Hunterdon, Warren and Sussex counties shall be 70 mph.

ii. Section 302.1, in the first and fourth lines, delete "3 feet" and substitute in lieu thereof, "5 feet."

iii. Sections 303.4 and 303.4.1 are deleted in their entirety.

iv. Section 303.6 "Required Heating" is deleted.

v. Section 309.1 Opening Protection—Delete and substitute in lieu thereof the following: "Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid core wood doors not less than 1¾ inches in thickness or approved equivalent. The sills of all door openings between garages and adjacent interior spaces shall be raised not less than 4 inches above the garage floor."

vi. Section 309.2—Separation Required—Delete and substitute in lieu thereof the following: "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 1 hour fire resistance rating. 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."

vii. Section 310.2.1—Minimum Size—In the second sentence, in the fourth line, delete "22 inches (559 mm)" and substitute in lieu thereof "24 inches (610 mm)."

viii. Section 312.1, under the second exception in the second line, delete "8¼ inches" and substitute in lieu thereof, "8 inches";

ix. Sections 314.1, 314.2, 314.2.1 and 314.3 are deleted and substitute in lieu thereof the text of Section R-213.1 of the 1992 CABO One and Two Family Dwelling Code as follows:

"R-213.1 General: When risers are closed, all treads may have a uniform projection not to exceed 1½ inches.

The greatest riser height within a flight of stairs shall not exceed the smallest by more than ¾ inch.

The greatest tread run within any flight of stairs shall not exceed the smallest by more than ¾ inch.

Stairways shall not be less than 3 feet clear width, and the headroom, rise and run shall conform to the following requirements from Figure No. R-213.1 of the 1992 CABO One and Two-Family Dwelling Code. As per this figure, tread depth is 9" minimum, riser height is 8¼" maximum and headroom is 6'8" minimum. Handrails may project from each side of a stairway a distance of 4½ inches into the required width."

x. Section 314.4 is amended to change "10 inches (254 mm)" in the third line to "9 inches (229 mm)."

xi. Section 314.6 is amended to change "10 inches (254 mm)" in the fourth line to "9 inches (229 mm)."

xii. Section 314.7 is deleted in its entirety;

xiii. Section 315.2 is deleted and substitute in lieu thereof the following text from Section R-214.1 of the 1992 CABO One and Two-Family Dwelling Code.

"The handgrip portion of the handrails shall not be more than 2 ⅝ inches in cross-sectional dimension, or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners."

xiv. Section 316.1.1 entitled "Alterations, repairs and additions" is deleted in its entirety.

xv. In Section 317.2.4, after the words "foam filled doors" add the phrase "except for fire doors";

"Change of use" means a change from one use to another use in a building or tenancy or portion thereof.

"Equipment" or "fixture" means plumbing, heating, electrical, ventilating, air conditioning, refrigerating and fire protection equipment, elevators devices, boilers, pressure vessels and other mechanical facilities or installations, which are related to building services and shall not include manufacturing, production or process equipment, but which shall include any connections from building services to process equipment.

"Load bearing element" means any column, beam, joist, girder, wall, floor or roof sheathing which supports any load in addition to its own weight.

"New building element" means any one of the elements listed in N.J.A.C. 5:23-6.9 that did not exist previously.

"Primary function space" means a room or space housing a major activity for which the building or tenancy is intended including, but not limited to, office area, auditorium, assembly space, dining room, bar or lounge, warehouse, factory, dwelling, care, confinement, retail, and educational spaces, but not including kitchens, bathrooms, storage rooms or other spaces supporting a primary function space; a building or tenancy may contain more than one primary function space.

"Primary structural component" means any component of the primary load bearing structure of a building including footings, piles, foundations, columns, girders, beams, joists, wind or seismic bracing but not including, for the purposes of this subcode, sheathing or subflooring.

"Reconstruction" means any project where the extent and nature of the work is such that the work area cannot be occupied while the work is in progress and where a new certificate of occupancy is required before the work area can be reoccupied. Reconstruction may include repair, renovation, alteration or any combination thereof. Reconstruction shall not include projects comprised only of floor finish replacement, painting or wallpapering, or the replacement of equipment or furnishings. Asbestos hazard abatement and lead hazard abatement projects shall not be classified as reconstruction solely because occupancy of the work area is not permitted.

"Rehabilitation" means the repair, renovation, alteration or reconstruction of any building or structure.

"Renovation" means the removal and replacement or covering of existing interior or exterior finish, trim, doors, windows, or other materials with new materials that serve the same purpose and do not change the configuration of space. Renovation shall include the replacement of equipment or fixtures.

"Repair" means the restoration to a good or sound condition of materials, systems and/or components that are worn, deteriorated or broken using materials or components identical to or closely similar to the existing.

"System" means the primary structural, mechanical, plumbing, electrical, fire protection, or occupant service components of a building including any equipment, fixtures, connections, conduits, wires, pipes, ducts, as well as any associated sensors, controls, distribution or safety elements.

"Technically infeasible" means, in connection with accessibility requirements, a change that has little likelihood of being accomplished because the existing structural conditions require the removal or alteration of a loadbearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

"Tenancy" means an entire building or that portion of a building or story which is or is intended to be under the control of a single owner or tenant.

"Use" means that portion of a building or tenancy which is devoted to a single use group or special use or occupancy as defined in the building subcode or as established by the provisions of any other subcode for the purpose of specifying special requirements applicable to that portion of a building or tenancy.

"Use Group" means the use group classification of the building subcode.

"Work area" means any entire use, primary function space, or tenancy comprising all or part of a reconstruction project as delineated on the approved permit application and/or plans.

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

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

Amended "Addition".

5:23-6.4 Repairs

(a) Repairs, as defined in N.J.A.C. 5:23-6.3, shall comply with the requirements of this section. There is no limit to the amount of repair work which may be undertaken.

1. The following work shall be considered renovation, alteration, or reconstruction, as appropriate, and not repair work:

- i. The cutting away of any wall, partition, or portion thereof;
- ii. The permanent, partial or complete removal of any primary structural component;

iii. The removal or rearrangement of any part of a required means of egress; and

iv. Addition to, alteration or relocation of:

(1) Any fire protection system piping;

(2) Water supply, sewer, drainage, gas, oil, waste, vent, or similar piping;

(3) Electrical wiring, other than wiring for a low voltage communication system in a one or two family dwelling;

(4) Mechanical system components such as duct-work; or

(5) Elevator devices.

(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.

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1606 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, fire suppression, 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 N.J.A.C. 5:23-7, Barrier Free Subcode. (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 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. The following practices shall not be used on painted surfaces in all buildings of Use Group R that were constructed before 1978, Use Group E and Use Group I-2 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.

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 Use Groups R-2, R-3 and R-4.

(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 2405.2 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 210-7(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, Use 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 CABO/ANSI A117.1-1992 Section 4.13.9. (Building)

4. Replacement handrails and guardrails shall comply with Sections 1022.0 and 1021.0 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 721.6 of the building subcode. The fireblocking material shall comply with section 721.2 of the building subcode.

(f) In buildings of Use Group R-3 and R-4 and in dwelling units of Use 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)

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.

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 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 1606 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, fire suppression, 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 N.J.A.C. 5:23-7, Barrier Free Subcode. (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 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 Use 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 Use Group R that were constructed before 1978, Use Group E and Use Group I-2 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.

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 Use Groups R-2, R-3 and R-4.

(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 at N.J.A.C. 5:23-3.15(b)8ii. (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 CABO/ANSI A117.1-1992 Section 4.18 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 CABO/ANSI A117.1-1992 Sections 4.16 through 4.22, as applicable, for nonresidential buildings or Section 4.33 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 CABO/ANSI A117.1-1992 Section 4.13.9.

ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Use Groups I-1, R-1 or R-2 shall be 1 $\frac{3}{4}$ 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 $\frac{3}{8}$ 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 2405.2 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 210-7(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, Use 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 721.6 of the building subcode. The fireblocking material shall comply with section 721.2 of the building subcode.

9. When the work being performed includes the replacement or the installation of a fuel-burning appliance,

carbon monoxide alarms shall be installed in locations required by the mechanical subcode.

(f) In buildings of Use Group R-3 and R-4 and in dwelling units of Use 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) 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 Use 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 fire suppression system.

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

2. Replacement handrails and guardrails shall comply with Sections 1022.0 and 1021.0 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.

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 1606 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, fire suppression, 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. (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 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 Use 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 Use Group R that were constructed before 1978, Use Group E and Use Group I-2 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.

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 Use Groups R-2, R-3 and R-4.

(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 at N.J.A.C. 5:23-3.15(b) 8ii. (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 CABO/ANSI A117.1-1992 Section 4.18 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 CABO/ANSI A117.1-1992 Sections 4.16 through 4.22, as applicable, for nonresidential buildings or Section 4.33 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 CABO/ANSI A117.1-1992 Section 4.13.

(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 CABO/ANSI A117.1-1992 Section 4.13.

ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Use Groups I-1, R-1 or R-2 shall be 1 $\frac{3}{4}$ 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 $\frac{3}{4}$ inch solid core replacement doors shall be accepted if the existing frame is not being replaced and will accommodate only a 1 $\frac{3}{4}$ 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 2405.2 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 210-7(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, Use 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 Use 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 fire suppression system.

10. In buildings of Use Group R-3 and R-4, when the work being performed creates living space over a private garage, the private garage shall comply with Section 407 of the building subcode for fire resistance rating.

11. In buildings of Use 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 CABO/ANSI A117.1 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 Use 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.

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 721.6 of the building subcode. The fireblocking material shall comply with section 721.2 of the building subcode.

15. When the work being performed includes the replacement or the installation of a fuel-burning appliance, carbon monoxide alarms shall be installed in locations required by the mechanical subcode.

(f) In buildings of Use Group R-3 and R-4 and in dwelling units of Use 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) 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.

(h) 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 Use 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 fire suppression system.

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

2. Replacement handrails and guardrails shall comply with Sections 1022.0 and 1021.0 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)

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

(j) 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 (j)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.

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 1606 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, fire suppression, 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. (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 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 Use 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 Use Group R that were constructed before 1978, Use Group E and Use Group I-2 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.

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 Use Groups R-2, R-3 and R-4.

(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 at N.J.A.C. 5:23-3.15(b)8ii. (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 CABO/ANSI A117.1-1992 Section 4.18 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 CABO/ANSI A117.1-1992 Sections 4.16 through 4.22, as applicable, for nonresidential buildings or Section 4.33 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 CABO/ANSI A117.1-1992 Section 4.13.

(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 be accessible.

ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Use Groups I-1, R-1 or R-2 shall be 1 $\frac{3}{4}$ 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 $\frac{3}{4}$ inch solid core replacement doors shall be accepted if the existing frame is not being replaced and will accommodate only a 1 $\frac{3}{4}$ 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 2405.2 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 210-7(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, Use 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 Use Group 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 includes the replacement or the installation of a fuel-burning appliance, carbon monoxide alarms shall be installed in locations required by the mechanical subcode.

(f) 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 Use 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 fire suppression system.

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

3. Replacement handrails and guardrails shall comply with Sections 1022.0 and 1021.0 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)

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

(h) The basic requirements of this subchapter for the applicable use 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, fire suppression and standpipe systems shall not be removed without replacement and shall be maintained in operating condition.

(i) The supplemental requirements of this subchapter for the applicable use group shall be met whenever the extent of the work is such that the trigger accompanying each requirement is met or exceeded.

(j) 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 (j)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 CABO/ANSI A117.1, 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.

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. Section 505.0 of Chapter 5 entitled "General Building Limitations" shall apply to newly-constructed "Mezzanines."

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 fire barrier shall be required, with the following exception:

- i. Exception: Vertical opening protection shall not 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)

(l) 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 907.0 of the building subcode.

3. For group homes and supervised transitional living homes heated with oil-burning equipment, 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)

(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 ASHRAE 62-89.

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 ASHRAE 62-89, 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 unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount.

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 721.0 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).

5:23-6.21A Supplemental requirements—Use Group I-1

(a) Automatic Fire Suppression System: When the work area is more than two floors or when the work area will be occupied by more than 20 persons, excluding staff, an automatic fire suppression system shall be required throughout the work area. 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 entire building. (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 in buildings, other than boarding homes, with an automatic fire suppression 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)

(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) Carbon monoxide alarms: When the work area exceeds 25 percent of the gross enclosed floor area of the building, single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any room or dwelling unit in a building that contains a fuel-burning appliance or has an attached garage. (Fire)

1. Exception: 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;

ii. 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

iii. The building is provided with a common area carbon monoxide alarm system. Individual alarms shall be located in the immediate vicinity of the room(s) containing a fuel-burning appliance 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.

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.

(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 one hour 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)

(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 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)

(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 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.

5:23-6.22 Basic requirements—Use Group I-2

(a) Automatic Fire Suppression System: Fire suppression shall be required.

1. Exception: Suppression 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.

2. Exception: Suppression 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)

(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 a suppression 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 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 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 2½ 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 907.0 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 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)

(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 ASHRAE 62-89.

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 ASHRAE 62-89, 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 unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount.

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 721.0 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).

5:23-6.25A Supplemental requirements—Use Group R-1

(a) **Automatic Fire Suppression System:** In buildings four or more stories in height (excluding basements), when the work area is an entire floor, an automatic fire suppression 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 920.3.1 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) Carbon monoxide alarms: When the work area exceeds 25 percent of the gross enclosed floor area of the building, single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any guestroom or dwelling unit located in a building that 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. (Fire)

1. Exceptions: Guestrooms 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 guestroom 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 guestroom 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 appliance. 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.

(f) 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 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 fire suppression 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 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)

(g) 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 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)

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 Fire Suppression System: When the work area is an entire floor, an automatic fire suppression 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)

(h) 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.

5:23-6.26 Basic requirements—Use Group R-2

(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. 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 fire suppression 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 not 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 protection 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)

(b) 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 fire suppression system. For dwelling units in basements, one of the two remote exits may be as per (a)3 above.

(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 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 fire suppression system, doors are only required 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)

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 ASHRAE 62-89, 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 unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount.

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)

(q) Interior finishes shall comply with N.J.A.C. 5:23-6.11(c). (Plan review—Building, Fire. Inspection—Building)

(r) 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)

(s) 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.

(t) 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)

(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 721.0 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).

5:23-6.26A Supplemental requirements—Use Group R-2

(a) Automatic Fire Suppression System: In buildings four or more stories in height (excluding basements), when the work area is an entire floor, an automatic fire suppression system shall be installed throughout the work area. (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 70-93 (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 72-90 standards, except as otherwise provided in this section;

ii. Shall be powered by an approved emergency power source as installed in conformance with NFPA 70-93 (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 72-90 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) 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 that is part of the scope of work in a building that contains a fuel-burning appliance or has an attached garage. Additionally, when the work area exceeds 25 percent of the gross enclosed floor area of the building, single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in every room or dwelling unit in the building. An "open parking structure," as defined in the building subcode, shall not be deemed to be an attached garage. (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 appliance. 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.

(f) 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. Buildings with an automatic fire suppression 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)

(g) 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 shut-down 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 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)

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)

(h) 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.

5:23-6.27 Basic requirements—Use Group R-3/R-4

(a) Smoke Detection within Dwelling Units: 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. (Fire.)

(b) Carbon monoxide alarms: In any dwelling unit that is located in a building required to be registered as a multiple dwelling and that contains a fuel-burning appliance or has an attached garage, single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area. (Fire.)

1. Exception: 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 dwelling unit is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;

ii. The 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

iii. The building is provided with a common area carbon monoxide alarm system. Individual alarms shall be located in the immediate vicinity of the room(s) containing a fuel-burning appliance 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.

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.

(c) Egress Windows:

1. When the building is used as a bed and breakfast, every sleeping room below the fourth story shall be provided 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 fire suppression 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 fire suppression system.

(d) When the work being performed creates living space over a private garage, the private garage shall comply with section 407 of the building subcode for fire resistance rating.

(e) 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)

(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)

(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 721.0 of the building subcode.

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).

5:23-6.27A Supplemental requirements—Use Groups R-3/R-4

There are no supplemental requirements applicable to Use Group R-3/R-4.

5:23-6.28 Basic requirements—Use 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 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 Use 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 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 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. 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 ¹	Water Closets	Lavatories	Drinking Water Facilities	Service 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 ASHRAE 62-89.

- 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 ASHRAE 62-89, 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 unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount.

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 721.0 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).

5:23-6.28A Supplemental requirements—Use Group S

(a) 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 suppression system. (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. (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 shut-down 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 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)

(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) 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 408.0, except Subsection 408.3.3, 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.

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 use group of that portion, except that the most restrictive requirements of this subcode for fire suppression shall apply to the entire building.

1. Exception: An automatic fire suppression system shall not be required for uses that would not otherwise need suppression provided that there is a one hour fire separation between the use(s) requiring suppression 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)

3. Elevators shall be equipped with emergency operation as required by ASME A.17.1-1987, Rules 211.3 through 211.4 and 211.7.

i. Phase II emergency operation shall be provided only if required by the requirements for highrise buildings contained in the supplemental requirements for each use group, N.J.A.C. 5:23- 6.12A through 6.28A. In addition, when phase II emergency operation is required, standby power shall be provided. Standby power shall be installed in accordance with the electrical subcode. The elevator powered by a standby power system shall be subject to the requirements of ANSI/ ASME A17.1-1993 Rule 211.2.

4. Escalators shall conform to ASME A17.3-1993 for Operating and Safety Devices (Section 5.3), Anti-Slide Devices (5.1.4), Handrail Guards (5.1.6), Guards at Ceiling or Soffit Intersection (5.1.3), Lighting (5.4), Distinction Between Comb and Step (5.5.2), Adjacent Floor Surfaces (5.5.3). (Elevator)

(h) Specific Occupancy Areas: Specific occupancy areas, as listed below, shall comply with the following:

1. Paint shops in other than Use Group F which contain chemicals below the exempt amount for Use Group H, waste and soiled linen collection rooms and chute termination rooms shall be separated from other portions of the building by a one hour fire partition or provided with an automatic fire suppression system.

2. Incinerator rooms in all use groups shall be separated from other portions of the building by a two hour fire separation assembly and provided with an automatic fire suppression system.

3. In Use Groups I-2 and I-3, physical plant maintenance shops, laundries in excess of 100 square feet in area and padded cells shall be separated from other portions of the building by a one hour fire partition or provided with an automatic fire suppression system. (Building)

5:23-6.31 Change of use

(a) General: The following are of general applicability to changes of use:

1. When the use of a building is changed, then the building must be brought into compliance with the requirements of this section. Each of the lettered subsections of this section establishes a specific type of requirement. This section establishes requirements for compliance with the basic requirements of this subcode, for means of egress, for enclosure of vertical openings, for height and area limitation, for exterior wall fire resistance, for fire suppression systems, for fire alarm systems, for fire detection systems, for structural soundness, for plumbing, electrical, and mechanical systems, and for accessibility.

i. Limit on new buildings undergoing a change of use: Buildings that have been occupied for their originally intended use for less than one year shall be required to comply with the requirements of the Uniform Construction Code for new construction for the proposed use.

2. The subsections governing compliance with the basic requirements, means of egress, height and area limitations, exterior wall fire resistance, and fire suppression incorporate Relative Use Group Hazard Index Tables. Compliance with the requirements of the subsection is required when the change of use will increase the relative hazard. Each of the subsections should be applied separately to the proposed new use.

3. This section may require an owner to undertake work in order to be permitted to change the use of a building or a portion of a building. Additionally, the owner of a building may wish to undertake other work not required by the section. That work must comply with the requirements for repair, renovation, alteration, and/or reconstruction applicable to the new use group in accordance with the provisions of this subcode.

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

5. Where the character of use of an existing building or portion thereof is changed to one of the following special use or occupancy categories as defined in the building subcode, 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 Buildings—Section 402.0;
- ii. Atriums—Section 404.0;
- iii. Underground Structure—Section 405.0;
- iv. Open Parking Structures—Section 406.0;
- v. Private Garages—Section 407.0;
- vi. Public Garages—Section 408.0;
- vii. Use Group I-3—Section 410.0;
- viii. Motion Picture Projection Rooms, Screening Rooms and Sound Stages—Section 411.0;
- ix. Stages and Platforms—Section 412.0;
- x. Special Amusement Buildings—Section 413.0;
- xi. HPM Facilities—Section 416.0. (Plan review—Building, Fire. Inspection—Building);
- xii. Hazardous Materials—Sections 417.0 and 418.0; and

xiii. Spray Booths, Spray Rooms, and Spray Storage Rooms—Section 419.0. (Plan review—Building, Fire, Inspection—Building).

6. Any fire suppression 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 Use Group F, H or S, accommodates seven or more non-consecutive groups 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 Use Group R-1 in addition to the existing use of the 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 Use Groups F, H and S shall be prohibited.

(b) Compliance with Basic Requirements: Compliance with the basic requirements shall be required as follows:

TABLE B
Relative Use Group Hazard

1 (highest)	H-1, H-2, H-3
2	A-1, A-2, H-4, F-1, I-3, M, S-1
3	A-3, A-5, B, F-2, I-2, R-1, S-2
4	A-4, E, I-1, R-2 more than two stories in height or more than four dwelling units
5 (lowest)	R-2 two stories or fewer in height and four dwelling units or less, R-3, R-4, 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 use 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 use group hazard, the building shall comply with the basic requirements of N.J.A.C. 5:23-6.10 through 6.30 for fire suppression and fire detection and/or alarms applied throughout the building for the new use group unless the proposed use is separated from the existing use(s) by assemblies with the appropriate fire-resistance rating in accordance with Table 313.1.2 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 use group.

2. When a change of use is made to an equal or lesser relative use group hazard as shown in Table B above, the existing 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

Relative Hazard	Use Classification
1 (highest)	H-1, H-2, H-3
2	I-2, I-3
3	A, E, I-1, M, R-1, R-2
4	B, F-1, R-3, R-4, S-1, H-4
5 (lowest)	F-2, S-2, U

1. For any change of use, except a change of use to Use Group A-2, 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 Use Group A-2, the occupant load shall be calculated using section 1008.1 of the building subcode, except the maximum occupant load shall not exceed one occupant per 5 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 1005.5 (Open-sided walking surfaces) and 1005.7 (Air movement in egress elements).

ii. Sections 1006.2 (Arrangement), 1006.3 (Exit discharge), 1006.4 (Remote location), 1006.5 (Length of travel), 1006.6 (Elevators, escalators and moving walks) and 1006.7 (Common path of travel).

iii. Section 1008.1 for Use Group A-2, except the maximum occupant load shall not exceed one occupant per 5 square feet of occupiable floor space.

iv. Sections 1010.2 (Minimum number) and 1010.3 (Buildings with one exit).

(1) Exception: The occupant load of the space may be restricted in order to comply with the requirements of these sections.

v. Section 1011.4 (Corridor enclosure) and the Basic Requirements of this subcode (N.J.A.C. 5:23-6.10 through 6.30) for corridor widths.

(1) Existing lath and plaster in good condition or existing ½-inch thick gypsum wall board on both sides of the wall shall be accepted where a one-hour fire separation assembly is required by 1011.4 (Corridor enclosure).

vi. Section 1012.0 (Assembly aisles and aisle accessways).

vii. Section 1013.0 (Grandstands).

viii. Section 1014.8 (Stairway egress doors) and the Basic Requirements of this subcode (N.J.A.C. 5:23-6.10 through 6.30) for stairway widths, handrails and guardrails.

ix. Section 1017.0 (Means of egress doorways) except 1017.3 (size of doors) and the Basic Requirements of this subcode (N.J.A.C. 5:23-6.10 through 6.30) for door widths.

x. Section 1019.0 (Horizontal exits).

xi. Section 1020.0 (Level of exit discharge passageways used as an exit element).

xii. Section 1023.0 (Exit signs and lights).

xiii. Section 1024.0 (Means of egress lighting).

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 use group is made and the proposed use group is a higher hazard category as shown in Table C above.

i. Where the use 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 use group from the floor(s) on which the proposed use 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 1010.3 (single exits) of the building subcode for the proposed use.

6. When a change of use is made to any residential use group (R-1, R-2, R-3 or R-4) or to Use 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 fire suppression system.

iii. In a building that originally was in Use Group R-3 and is returning to Use Group R-3, 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)

(d) Enclosure of vertical openings:

1. For any change of use that also constitutes a change in use 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 use group is made and the proposed use 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, H-1, H-2, I-2, I-3
2	A-1, A-3, E, F-1, H-3, H-4, M, I-1, S-1
3	A-4, B, R-1, R-2
4 (lowest)	F-2, R-3, R-4, 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 use 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.

ii. Exception: One and two story buildings in use groups other than H may exceed the floor area permitted by Table 503 of the building subcode by up to 25 percent of the existing floor area without providing fire separation.

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 use groups: The maximum allowable height and area shall be determined by applying the more restrictive of the height and area limitations of each use group, as per Table 503 of the building subcode, to the entire building.

(1) One and two story buildings of all use groups, except H, are permitted to exceed that allowable area by 25 percent.

(2) Occupancies of Use Group H shall not be permitted to be unseparated when located in the same building as Use Groups A, E, I, M, R, or non-accessory Use Group B.

(3) Accessory occupancies in compliance with Section 302.1.2 of the building subcode are not required to comply with this requirement.

(4) When a change of use is made such that any non-residential use is located below a residential use, a one-hour fire separation shall be provided between the use groups. The exits from the residential floors shall be separately enclosed.

ii. Separated use groups: Each portion of the building containing a use group shall be completely separated from adjacent use groups by fire separation assemblies and floor/ceiling assemblies having a fire resistance determined in accordance with Table 313.1.2 of the building subcode. For buildings equipped throughout with an automatic fire suppression system, the required fire resistance rating for use 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 use group. In each story, the area shall be such that the sum of the ratios of the floor area of each use group divided by the allowable area of Table 503 of the building subcode for each use group shall not exceed 1.0 for buildings three or more stories in height, and 1.25, for one and two story buildings.

(1) Exception: Accessory occupancies in compliance with Section 302.1.2 of the building subcode are not required to comply with this requirement.

iii. Separate buildings: If each use group is separated from other uses by fire walls that meet the requirements of Table 602 of the building subcode, then each use shall be considered a separate building. Each building shall comply with the height and area limitation of Table 503 of the building subcode. One and two story buildings of all use groups, except H, are permitted to exceed the allowable area of the new use group by 25 percent.

(1) Exception: Accessory occupancies in compliance with Section 302.1.2 of the building subcode are not required to comply with this requirement.

4. Change of use of an unlimited area building shall comply with the provisions of Section 507 of the building subcode for the proposed 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, U

1. Exterior Wall Protection: If the use 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^b

Fire Separation Distance	H-2	F-1, H-3, M, S-1	A, B, E, F-2, S-2, H-4, I, R-1
0-5 feet	4	3	2 ^a
Over 5-10 feet	3	2 ^a	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 Use Group H-2 or H-3.

Note b: When the use group of a building is changed to H-1, the building shall be located in accordance with Table F3004.3 of the 1996 BOCA National Fire Prevention Code.

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 313.1.2 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 fire suppression or sprinkler system. Exceptions shall be as provided in Section 705.2.4 of the building subcode, as follows:

(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 Use Group H.

2. Exterior Wall Openings: If the use 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.

Use 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, A-3, A-4, B, E, F-1, I-1, I-2, I-3, 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 fire suppression 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 Use 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 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) Fire Suppression Systems: The following fire suppression system requirements apply in changes of use.

TABLE G
Hazard Categories and Classifications
Fire Suppression

Relative Hazard	Use Classification
1 (highest)	H, I
2	A-2, R-1, R-2
3	A-1, A-3
4	F-1, M, S-1
5	A-4, E
6 (lowest)	B, F-2, R-3, R-4, 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 fire suppression system as required by the following sections of the building subcode: Section 904.2 of the building subcode for Use Groups A-1, A-3 and A-4, Section 904.3 of the building subcode for Use Group A-2, Section 904.4 of the building subcode for Use Group E, Section 904.5 of the building subcode for Use Group H, Section 904.6 of the building subcode for Use Group I, Section 904.7 of the building subcode for Use Groups F-1, M and S-1, Section 904.8 of the building subcode for Use Group R-1, Section 904.9 of the building subcode for Use Group R-2 and Section 904.10 of the building subcode for windowless stories. When the use group of a building is changed to Use Group A, E, H, I, M, or R, and a fire suppression system is required by this section, the fire suppression system shall be supervised in accordance with Section 924.1 of the building subcode.

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 313.1.2 of the building subcode, an automatic fire suppression 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 a suppression system except in areas where work being performed in connection with the change of use triggers a requirement for suppression 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)

(h) Fire Alarm Systems: When a change of use is made to any of the following use groups, a fire alarm system shall be installed in accordance with sections 918.0 and 924.2 of the building subcode. Where a portion of a building is changed to any of the following use groups, a fire alarm system shall be installed throughout the building in accordance with sections 918.0 and 924.2 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 313.1.2 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. Use Group A-4 or E: A fire alarm system shall be installed and maintained as required by Section 918.4.1 of the building subcode.

2. Use Group B: A fire alarm system shall be installed and maintained as required by Section 918.4.2 of the building subcode.

3. Use Group H: A fire alarm system shall be installed and maintained as required by Section 918.4.3 of the building subcode.

4. Use Group I: A fire alarm system shall be installed and maintained as required by Section 918.4.4 of the building subcode.

5. Use Group R-1: A fire alarm system shall be installed and maintained as required by Section 918.4.5 of the building subcode.

6. Use Group R-2: A fire alarm system shall be installed and maintained as required by Section 918.4.6 of the building subcode. (Fire)

(i) Automatic Fire Detection Systems: When a change of use is made to any of the following use groups, an automatic fire detection system shall be installed in accordance with Sections 919.0 and 924.2 of the building subcode. Where a portion of a building is changed to any of the following use groups, an automatic fire detection system shall be installed throughout the building in accordance with Sections 919.0 and 924.2 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 313.1.2 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. Use Group I-1: An automatic fire detection system shall be installed and maintained as required by Section 919.4.1 of the building subcode.

2. Use Group I-2: An automatic fire detection system shall be installed and maintained as required by Section 919.4.2 of the building subcode.

3. Use Group I-3: An automatic fire detection system shall be installed and maintained as required by Section 919.4.3 of the building subcode.

4. Use Group R-1: An automatic fire detection system shall be installed and maintained as required by Section 919.4.4 of the building subcode.

5. Exception: A fire detection system is not required in the above use groups when the building is equipped throughout with an automatic fire sprinkler system installed in accordance with Sections 906.2.1 or 906.2.2 of the building subcode. These buildings are required to be provided with a fire alarm system installed in accordance with Section 918.0 of the building subcode. (Fire)

6. An automatic fire detection system shall be installed throughout all Use Group E buildings or portions thereof as follows:

i. An approved system of automatic smoke detectors;

ii. An approved automatic fire suppression system equipped with automatic fire alarm devices; or

iii. An approved system which combines the following elements shall be acceptable when devices are located as indicated below:

(1) Combination fixed temperature/rate-of-rise detectors in classrooms and ancillary spaces;

(2) Photoelectric or projected-beam smoke detectors in exit access corridors and at the top of the exit stair enclosures; and

(3) 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.

(j) Single and Multiple Station Smoke Detectors: When a change of use is made to any of the following use groups, single and multiple station smoke detectors shall be installed in accordance with Section 920.0 of the building subcode. Smoke detectors that are located closer than five feet to a kitchen or bathroom area shall be of the photoelectric type only.

1. Use Group R-1: Single or multiple station smoke detectors shall be installed and maintained as required by Section 920.3.1 of the building subcode.

2. Use Group R-2, R-3 and R-4: Single or multiple station smoke detectors shall be installed and maintained as required by Section 920.3.2 of the building subcode.

3. Use Group I-1: Single or multiple station smoke detectors shall be installed and maintained as required by Section 920.3.3 of the building subcode. Single or multiple station smoke detectors shall not be required where the building is equipped throughout with an automatic detection system in accordance with Section 919.4.1 of the building subcode.

4. 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)

(k) Carbon monoxide alarms: When the use of a building is changed to Use Group I-1, R-1 or R-2, or to Use Group R-3 when the dwelling unit is located in any building required to be registered as a multiple dwelling, single station carbon monoxide alarms shall be installed and maintained in full operating condition in the immediate vicinity of each sleeping area in any room or dwelling unit in a building that 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. (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 appli-

ance. 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.

(l) Structural Requirements: The following structural requirements shall apply in changes of use:

TABLE K Structural Load Categories	
Load Category	Use or Character of Use
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, R-1, R-2, R-3, R-4

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 1606 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 1606 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 change of use results in a building being reclassified into one of the following occupancies, the building shall comply with the seismic design requirements of Section 1610.0 of the building subcode: Fire, rescue and police station; Use Group I-2 having surgery or emergency treatment facilities; emergency preparedness centers; post-earthquake recovery vehicle garages; power-generating stations and other utilities required as emergency backup facilities; primary communication facilities; highly toxic materials as defined by Section 307.0 of the building subcode where the quantity of material exceeds the exempt amount as per Section 307.8 of the building subcode. (Building)

(m) 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)

(n) 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 use 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 Use Group R-2, R-3 or R-4, 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)

(o) 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 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 N below for the new occupancy. As an alternative to providing the amount of outdoor air required by Table N below, the indoor air quality procedure of ASHRAE 62-89 can be used.

(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 use 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 fire suppression system that comply with the mechanical subcode shall be required for commercial cooking equipment producing grease-laden vapors, except in Use Groups R-2, R-3 and R-4. No suppression 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 M-1605.0 of the mechanical subcode. (Building)

TABLE N
Outdoor Air Rates Based on Occupancy Type

Occupancy	P/1,000 sq. ft.	CFM/ person
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		

Occupancy	P/1,000 sq. ft.	CFM/ person
Auditoriums	150	15
Classrooms	50	15
Libraries	20	15
Music Rooms	50	15
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 ^a	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
Hospitals, Nursing and Convalescent Homes		

Occupancy	P/1,000 sq. ft.	CFM/ person
Patient Rooms	10	25
Specialty Shops		
Beauty	25	25
Dry Cleaners, Laundries		
Commercial Dry Cleaner	30	30
Food & Bev Service		
Bars & Cocktail Lounges	100	30
Dry Cleaners, Laundries		
Storage, Pick-up	30	35
Smoking Lounges	70	60
Offices		
Conference Rooms	50	20
Office Spaces	7	20
Reception Areas	60	20
Telecommunication Ctrs & Data Entry	60	20
Theaters		
Lobbies	150	20
Ticket Booths	60	20
Sports and Amusement		
Playing floors (gym)	30	20
Sports and Amusement		
Ballrooms and Discos	100	25
Bowling Alleys		
(Seating areas)	70	25
Game Rooms	70	25
Hospitals, Nursing & Convalescent Homes		
Operating Rooms	20	30
Hotels, Motels, Resorts, Dormitories		
Gambling Casinos	120	30
Occupancy	CFM/ sq. ft.	
Education		
Corridors	0.1	
Locker Rooms	0.5	
Hospitals, Nursing and Convalescent Homes		
Autopsy Rooms	0.5	
Public Spaces		
Corridors and Utilities	0.05	
Elevators	1.0	
Locker & Dressing Rooms	0.5	
Public Restrooms	75 cfm per water closet or urinal	
Retail Stores, Sales Floors and Showroom Floors		
Basement and Street	0.3	

Occupancy	CFM/ sq. ft.
Dressing Rooms	0.2
Malls and Arcades	0.2
Shipping and Receiving	0.15
Storage Rooms	0.15
Upper Floors	0.2
Warehouses	0.05
Specialty Shops	
Automotive Service	1.5
Clothes and Furniture	0.3
Pet Shops	1.0
Sports & Amusement	
Ice Arenas	0.5
Swimming Pools (Pool & Deck Area)	0.5
Storage	
Repair Garages/Public Garages	1.5
Workrooms	
Darkrooms	0.5
Duplicating	0.5

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.

(p) Accessibility Requirements: The following accessibility requirements shall apply in changes of use:

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.

2. The change of use of a building of less than 10,000 square feet total gross enclosed floor area shall be exempt 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)

(q) Change of use to a bed and breakfast shall be done in compliance with N.J.A.C. 5:23-9.8. (Plan review Building,—Fire. Inspection—Building)

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.

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 use group. (Plan review—Building, Fire. Inspection—Building)