

lv. In Section 909.20.6.3, Acceptance and testing, "building official" shall be deleted and "fire protection subcode official" shall be inserted.

lvi. Section 909.21, Elevator hoistway pressurization alternative, shall be deleted in its entirety.

lvii. In Section 910.1, General, "or otherwise installed" shall be inserted after "this code" in the first line.

lviii. In Section 911.1.1, Location and access, "fire chief" shall be deleted and "fire subcode official" shall be inserted.

lix. In Section 912.1, Installation, insert the following at the end of the section:

"Exceptions

1. Limited area sprinkler systems supplied from the domestic water system.

2. Where the local fire department approves a single connection for a large diameter hose of at least four inches (102 mm).

3. An automatic sprinkler system with less than 20 sprinklers."

lx. New section 912.2, Connections, shall be inserted as follows:

"912.2 Connections: Fire department connections shall be arranged in such a manner that the attachment to any one sprinkler connection will serve all sprinklers, and the attachment to any one standpipe connection will serve all standpipes within the building.

Exception: Fire protection systems in high rise buildings designed with a low zone and a high zone may be provided with a connection for each zone."

lxi. Section 912.2, Location, shall be renumbered as 912.3 and "fire protection subcode official in coordination with the" shall be inserted before "fire chief" in the last sentence.

lxii. Section 912.2.1, Visible location, shall be renumbered 912.3.1 and "or as otherwise approved by the fire chief" shall be deleted.

lxiii. Section 912.2.2, Existing buildings, shall be deleted in its entirety.

lxiv. New Section 912.4, Height, shall be inserted as follows:

"912.4, Height Fire department connections shall not be less than 18 inches (457 mm) and more than 42 inches (1,067 mm) in elevation, measured from the ground level to the centerline of the inlets."

lxv. Section 912.3, Fire hose threads, shall be renumbered as 912.5 with no change in text.

lxvi. Section 912.4, Access, shall be renumbered as 912.6. Additionally, in the last sentence of the section and the last sentence of the exception, "fire chief" shall be deleted and "fire protection subcode official" shall be inserted.

lxvii. Section 912.4.1, Locking fire department connection caps, shall be renumbered as 912.6.1 and "fire code official" shall be deleted and "fire protection subcode official" shall be inserted.

lxviii. Section 912.4.2, Clear space around connections, shall be renumbered as 912.6.2 and "except as otherwise required or approved by the fire chief" shall be deleted.

lxix. Section 912.4.3, Physical protection, shall be renumbered as 912.6.3 with no change in text.

lxx. Section 912.5, Signs, shall be renumbered 912.7 with no change in text.

lxxi. Section 912.5, Backflow protection, shall be renumbered as 912.7. Also, "International Plumbing Code" shall be deleted and "the plumbing subcode (N.J.A.C. 5:23-3.15)" shall be inserted.

lxxii. New Section 912.9, Projection, shall be inserted as follows: "912.9 Projection. Where the fire department connection will otherwise project beyond the property line or into the public way, a flush-type fire department connection shall be provided."

lxxiii. Section 913.2.2, Circuits supplying fire pumps, shall be deleted in its entirety.

lxxiv. Section 913.4.1, Test outlet valve supervision, shall be deleted.

lxxv. In Section 915.1, General, the last sentence shall be deleted.

9. Chapter 10, Means of Egress, shall be amended as follows:

i. The term "or Type B unit" shall be deleted and "or" shall be inserted between "Accessible units" and "Type A units" in the following sections: Section 1010.1.1, Exception 7; Section 1010.1.5, Exception 3; Section 1010.1.7, Exception 1.3; Section 1012.6.3, Exception 1; and Section 1012.6.4, Exception.

ii. In Section 1003.2, Ceiling height, "7 feet 6 inches (2286 mm)" shall be deleted and "7 feet (2134 mm)" shall be inserted.

iii. In Section 1004.1.2, Areas without fixed seating, the exception shall be deleted in its entirety.

iv. In Table 1004.1.2, MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT, in the first column, FUNCTION OF SPACE, 25th row, delete "swimming pools," "and pool," and "Decks"; in the second column,

OCUPANT LOAD FACTOR, 25th row, delete "15 gross."

v. In Section 1004.2, Increased occupant load, "7 square feet (.65 m²)" shall be deleted and "5 square feet (.47 m²)" shall be inserted.

vi. In Section 1006.2.1 Egress based on occupant load and common path of egress travel distance, in Exception #1, in the first sentence, "and R-3" shall be deleted. In the same sentence, "20" shall be deleted and "10" shall be inserted. In addition, a new exception shall be inserted as follows: "3. In buildings of Group R-3 occupancy."

vii. In Table 1006.3.2(2), Stories with One Exit or Access to One Exit from Other Occupancies, under the heading "Occupancy," "U" shall be deleted from the first row.

viii. In Section 1009.3, Stairways, Exception 5 shall be deleted.

ix. In Section 1009.4, Elevators, in the first sentence, "Chapter 27" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted. Additionally, Exception 2 shall be deleted.

x. In Section 1009.5, Platform lifts, in the second sentence, "Chapter 27" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

xi. In Section 1010.1.1, Size of Doors, Exception 8 shall be deleted.

xii. In Section 1010.1.4.4, Security grilles, "In Groups B, F, M, and S" shall be deleted and "horizontal" shall be capitalized.

xiii. In Section 1010.1.5, Floor elevation, in Exception 3, "7.75 inches (197 mm)" shall be deleted and "8.25 inches (210 mm)" shall be inserted. Additionally, Exception 5 shall be deleted.

xiv. In Section 1010.1.7, Thresholds, in the Exception #1, "7.75 inches (197 mm)" shall be deleted and "8.25 inches (210 mm)" shall be inserted. Additionally, Exception #2 shall be deleted.

xv. In Section 1010.1.9.1, Hardware, "locks" shall be deleted.

xvi. Section 1010.1.9.3, Locks and latches, shall be amended as follows: In Item 2, following "Group A," insert "other than nightclubs". In the same item, "and in places of religious worship" shall be deleted. In the same section, Item 6 shall be inserted as follows: "6. Key operation shall be permitted from a dwelling unit provided that the key cannot be removed from the lock when the door is locked from the side from which egress is made."

xvii. In Section 1010.1.10, Panic and fire exit hardware, in the exception, "other than nightclubs" shall be inserted after "Group A occupancies." Additionally, in the second paragraph, "1,200" shall be deleted and "800" shall be inserted.

xviii. In Section 1011.5.2, Riser height and tread depth, Exception 3, change the maximum riser height from "7 3/4 inches (197 mm)" to "8 1/4 inches (210 mm)," change the minimum tread depth from "10 inches (254 mm)" to "9 inches (229 mm)," and change the minimum winder tread depth at the walk line from "10 inches (254 mm)" to "9 inches (229 mm)." In the same section, Exception 4 shall be deleted.

xix. In Section 1013.5, Internally illuminated exit signs, "Chapter 27" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

xx. In Section 1013.6.3, Power source, in the last sentence, "Chapter 27" shall be deleted and "the electrical subcode (N.J.A.C. 5:23-3.16)" shall be inserted.

xxi. In Section 1014.2, Height, insert new Exception 1 as follows: "1. For occupancies of Group R-3, and within individual dwelling units in occupancies of Group R-2, handrails shall have a minimum height of 30 inches and a maximum height of 38 inches measured vertically from the nosing of the treads." In the same section, Exceptions 1 through 3 shall be renumbered as 2 through 4.

xxii. In Section 1014.4, Continuity, Exception 4 shall be deleted.

xxiii. In Section 1015.3, Height, in Exception 1 "not more than three stories above grade in height" in the first and second line shall be deleted and "not more than three stories above grade in height with separate means of egress" in the third through fifth line shall be deleted. Additionally, in Exception 3, "34 inches (864mm)" shall be deleted and "30 inches (762 mm)" shall be inserted.

xxiv. In Section 1015.8, Window sills, "36 inches (915 mm)" shall be deleted and "24 inches (610 mm)" shall be inserted.

xxv. In Table 1020.1, Corridor Fire Resistance Rating, under the heading "Occupancy," "U" shall be deleted from the third row. In addition, under the heading "without sprinkler system," "Not Permitted" shall be deleted from the fifth row and "1" shall be inserted.

xxvi. In Section 1029.1.1, Bleachers, after "ICC 300", insert "Chapters 2, 3 and 4".

xxvii. At Section 1029.2, entitled "Assembly main exit", add the text "other than nightclubs," after "used for assembly purposes" at the beginning of the first and fourth sentences.

accessory to Group R3” following “Note b”; added new (b)8iii; recodified former (b)8iii through (b)8v as (b)8iv through (b)8vi; in (b)8v, substituted “Exceptions 4 and 6” for “Exception 4” and “their” for “its”; in the second paragraph of (b)9ii, deleted “.1” following “903.1.2”; in (b)9v1, deleted “that conforms to the requirements of Section 1005.3.6,” following “stairway” and substituted “1023” for “1003.3.4”; in the introductory paragraph of (b)9vi, substituted “903.2.14” for “903.2.16”; in (b)9xii3, substituted “903.3.1.1” for “906.2.1”; rewrote (b)9xiii through (b)9xli; added (b)9xlii; rewrote (b)10, (b)17xiv through (b)17xxii; added new (b)18v; recodified former (b)18v through (b)18xi as (b)18vi through (b)18xii; rewrote (b)21; and in (b)22iv, deleted “In” preceding “Section” and “Item 3” preceding “shall”.
Amended by R.2009 d.126, effective April 20, 2009.
See: 41 N.J.R. 16(a), 41 N.J.R. 1725(a).

Added new (b)18v; and recodified former (b)18v through (b)18xii as (b)18vi through (b)18xiii.
Amended by R.2009 d.255, effective August 17, 2009.
See: 41 N.J.R. 1919(a), 41 N.J.R. 3065(a).

In (b)21ii, inserted “insert” twice, substituted “8.6” for “8.6.1.6.5” and deleted “shall be inserted” preceding “after” twice.
Amended by R.2010 d.195, effective September 7, 2010.
See: 41 N.J.R. 3140(a), 42 N.J.R. 2043(a).

Rewrote the section.
Amended by R.2012 d.179, effective November 5, 2012.
See: 44 N.J.R. 1679(a), 44 N.J.R. 2557(a).

Added new (b)9xlii, (b)10xxx and (b)10xxxi; recodified former (b)9xlii through (b)9liii as (b)9xliii through (b)9liv; and recodified former (b)10xxx through (b)10xxxviii as (b)10xxxii through (b)10xli.
Amended by R.2013 d.081, effective June 3, 2013.
See: 44 N.J.R. 1303(a), 45 N.J.R. 1393(a).

In (b)17i, substituted “1” for “I”.
Administrative correction.
See: 46 N.J.R. 74(b).
Amended by R.2015 d.139, effective September 21, 2015.
See: 47 N.J.R. 9(a), 47 N.J.R. 2352(b).
Rewrote the section.

Case Notes

In a dispute involving property insurance coverage, a trial court properly granted summary judgment to the insured for repair work to other parts of a damaged building since there was a clear causal connection between the collapse of the seventh floor and the code official’s mandate to bring the remaining floors into compliance to prevent them from collapsing. But for wind damage to the seventh floor of the insured’s building (a covered claim), the insured would not have been required to bring the wall-to floor connections in the rest of the building up to current code standards, therefore, those additional repairs were covered under the policy. *Deb Assocs. v. Greater N.y. Mut. Ins. Co.*, 407 N.J. Super. 287, 970 A.2d 1074, 2009 N.J. Super. LEXIS 124 (App.Div. 2009).

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

5:23-3.15 Plumbing subcode

(a) Rules concerning the plumbing 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 Plumbing Heating-Cooling Contractors—National Association, known as “The National Standard Plumbing Code/2015,” as the plumbing subcode for New Jersey.

i. Copies of this code may be obtained from the sponsor at: PHCC-NA, 180 S. Washington St., Suite 100, Falls Church, VA 22046.

2. “The National Standard Plumbing Code/2015,” including appendices, may be known and cited as “the plumbing subcode.”

i. Illustrations and comments contained in this code are presented in bold italics or denoted with a border and are supplemental information and not part of this subcode.

(b) The following pages, chapters, sections, or appendices of the plumbing subcode shall be amended as follows:

1. The section entitled “Administration,” comprising sections ADM 1.1 through ADM 1.13, is deleted in its entirety.

2. Chapter 1 of the plumbing subcode, entitled “Definitions,” shall be amended as follows:

i. Delete the term and definition of “Adopting Agency.”

ii. Amend the definition of “approved” as follows: delete “Sec. 3.12” and insert “N.J.A.C. 5:23-3.7.”

iii. Delete the definition of “Authority Having Jurisdiction” and insert the following: “Unless otherwise defined herein, or unless the context clearly indicates otherwise, the term “authority having jurisdiction” for purposes of the plumbing subcode, shall mean the “plumbing subcode official.”

iv. In the definition of “Building Classification” delete “code” and insert “subcode at N.J.A.C. 5:23-3.14.”

v. In the definition of “hot water” the following shall be inserted after the first sentence: “Hot Water is potable water at a temperature of not less than 120 degrees F and not more than 140 degrees F.”

vi. The term and definition of “nuisance” are deleted.

vii. In the definition of tempered water, “desired” shall be deleted. Additionally, “for its intended use, typically” shall be deleted and “of” shall be inserted.

3. Chapter 2 of the plumbing subcode, entitled “General Regulations,” shall be amended as follows:

i. Section 2.5, Health and Safety, is deleted in its entirety.

ii. In Section 2.9.3, From Weakened Structure, delete “Building Code” and insert “building subcode.”

iii. In Section 2.11, Piping materials exposed within plenums, “Codes” shall be deleted and “subcodes” shall be inserted.

iv. In Section 2.12, Sleeves for Piping, subparagraph e, “regulations” shall be deleted and “subcode” shall be inserted.

v. In Section 2.16, Freezing or overheating, at item 1, "42" shall be inserted in the blank space provided. Additionally, the following shall be inserted: "Combination domestic/fire water service piping shall be installed such that the minimum earth cover is 42 inches or the top of the pipe is 12 inches below the frost depth of the locality, whichever is greater. Limited-area sprinkler systems installed in accordance with Section 903.3.8 of the building subcode, shall be installed such that the minimum earth cover is 42 inches." In the same section, at Item 2, "24" shall be inserted in the blank space provided. In addition, in the third line of Item 2, "6" shall be inserted in the blank space provided.

vi. Section 2.19.1, Availability of Public Water and Sewer, is amended to delete the blank and the words "feet of any property line of the premises, or other."

vii. Section 2.19.2, Private Systems, is amended to delete the words "the Health Department or other agency having jurisdiction" and substitute in lieu thereof "The New Jersey Department of Environmental Protection."

viii. New Section 2.19.3, Common Systems, shall be inserted as follows:

a. Common water services shall be permitted to serve attached single-family dwellings in groups of three or more where the common water service is located within property subject to an association easement or on common property and there is a homeowners' association or other owner entity responsible for maintenance and upkeep.

b. Common building sewers shall be permitted to serve attached single-family dwellings in groups of three or more where the common sewer is located within property subject to an association easement or on common property and there is a homeowners' association or other owner entity responsible for maintenance and upkeep.

ix. Section 2.24, Toilet facilities for construction workers, shall be deleted in its entirety.

x. Section 2.26.1, General, shall be amended as follows:

(1) Subsection b shall be deleted.

(2) In subsection d, "Phase II firefighter override" shall be deleted and "firefighter emergency operation" shall be inserted.

xi. Section 2.26.2, Where Elevator Pit Drainage is Provided, shall be amended as follows:

(1) In subsection b, "Where the drainage discharge is outdoors," shall be deleted and "the" shall be capitalized.

(2) Subsection c shall be deleted.

(3) In subsection d, "hydraulic" shall be deleted. Additionally, "or there shall be oil separation for pump operation" shall be deleted.

(4) In subsection g, "Phase II firefighter override" shall be deleted and "firefighter emergency operation" shall be inserted. Additionally, the last sentence shall be deleted.

4. Chapter 3 of the plumbing subcode, entitled "Materials," shall be amended as follows:

i. In Section 3.1.1, Minimum Standards, delete "Minimum" in the title. In the same section at items (1) and (2), delete "Section 3.12.2" and insert "N.J.A.C. 5:23-3.7."

ii. In Section 3.1.2, General Requirements, at Item a, delete "at least." In the same section, delete "Section 3.12" and insert "N.J.A.C. 5:23-3.7."

iii. In Section 3.1.3, Standards applicable to plumbing materials, "Section 3.12.2" shall be deleted and "N.J.A.C. 5:23-3.7" shall be inserted.

iv. In Table 3.1.3, Approved Materials, Part XI, Installation Procedures and Practices, insert: "11. Entrapment Avoidance for Swimming Pools, Spas and Hot Tubs: APSP-7 – 2013."

v. Section 3.3.11 entitled "Tanks" is deleted in its entirety.

vi. Add new section 3.4.2.1 as follows: 3.4.2.1 Combination Domestic/Fire Water Service: Water service piping for combination domestic/fire water services shall be of materials listed in Table 3.4 and shall be water pressure rated not less than 200 psig at 73°F. Joint restraints shall comply with Section 6.3, entitled "Joint Restraint for Fire Mains" per NFPA 13.

Exception: Limited area sprinkler systems installed in accordance with Section 903.3.8 of the building subcode, shall be water pressure rated not less than 160 psig at 73°F.

vii. Section 3.12, Alternate materials and methods, shall be deleted in its entirety.

5. Chapter 5 of the plumbing subcode entitled, "Traps, Cleanouts and Backwater Valves," shall be amended as follows:

i. In Section 5.3.2, Trap seals, in Exception (2), "in accordance with N.J.A.C. 5:23-3.3" shall be inserted after "Authority Having Jurisdiction."

ii. In Section 5.3.4, Building traps, "in accordance with N.J.A.C. 5:23-3.3" shall be inserted after "Authority Having Jurisdiction."

iii. In Section 5.4.6, Building Drain and Building Sewer Junctions and the Property Line, in subsection b, "in accordance with the requirements of the Authority Having Jurisdiction" shall be deleted.

building inspector, construction official, and building subcode official (adopting as modified 2006 N.J. AGEN LEXIS 319). Office of Regulatory Affairs v. DiStefano, OAL Dkt. No. CAF 4604-05, 2006 N.J. AGEN LEXIS 518, Final Decision (April 17, 2006).

Fraud and deceit while practicing as a licensed code enforcement official or inspector warranted license revocation. Regulatory Affairs v. Zieniuk, 95 N.J.A.R.2d (CAF) 15.

Elevator inspector's misconduct warranted revocation of elevator subcode official and elevator inspection license. Garcia v. Department of Community Affairs, 94 N.J.A.R.2d (CAF) 63.

False information on applications for electrical inspector, fire protection inspector, plumbing inspector, and subcode official warranted revocation. Department of Community Affairs v. Zieniuk, 93 N.J.A.R.2d (CAF) 35.

Appearance of conflict of interest was ground for revocation of license of fire protection subcode official. Wood v. Bureau of Regulatory Affairs, 92 N.J.A.R.2d (CAF) 133.

Construction official who was convicted of theft by deception forfeited his licenses to practice under the Uniform Construction Code. Bureau of Regulatory Affairs v. Gaipa, 92 N.J.A.R.2d (CAF) 129.

Licenses of construction and fire protection subcode official of Class II municipality were revoked for violations of provisions of the New Jersey Administrative Code. Stankard v. Department of Community Affairs, Bureau of Regulatory Affairs, 92 N.J.A.R.2d (CAF) 77.

SUBCHAPTER 6. REHABILITATION SUBCODE

5:23-6.1 Introduction; using this subcode

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

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

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

3. This subcode takes a new approach. The requirements that apply to a project are based upon the type of work being done rather than on the extent of the work. There is only one exception to this rule. In the case of

reconstruction work, as the term reconstruction is defined in this subcode, there are some requirements which must be met when the project is a large one in floor area.

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

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

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

2. The installation of smoke alarms is required in any building of Groups R-3, R-4, R-5, and in dwelling units of Group R-2 that undergo a repair.

3. The installation of carbon monoxide alarms is required in buildings of Groups I-1, R-1, R-2, R-3, R-4, or R-5 containing a fuel burning appliance or having an attached garage.

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

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

2. The installation of smoke alarms is required in any building of Groups R-3, R-4, R-5, and in dwelling units of Group R-2, which undergoes a renovation.

3. The installation of carbon monoxide alarms is required in buildings of Groups I-1, R-1, R-2, R-3, R-4, or

R-5 containing a fuel burning appliance or having an attached garage.

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

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

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

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

2. The installation of smoke alarms is required in any building of Groups R-3, R-4, R-5, and in dwelling units of Group R-2, which undergoes an alteration.

3. The installation of carbon monoxide alarms is required in buildings of Groups I-1, R-1, R-2, R-3, R-4, or R-5 containing a fuel burning appliance or having an attached garage.

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

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

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

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

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

(e) Reconstruction Work: The requirements that apply to reconstruction work are in N.J.A.C. 5:23-6.7. Reconstruction is defined in N.J.A.C. 5:23-6.3. Unlike repair, renovation, and alteration, reconstruction is not a kind of work. A reconstruction may, as the definition of the term makes clear, include a combination of repair, renovation, and alteration work. It is the extent and nature of the work which makes a project a reconstruction. There are no quantitative criteria which determine whether a project is a reconstruction. A project becomes a reconstruction when the area where the project is taking place cannot be occupied while the work is in progress and when a new certificate of occupancy is required before the area can be re-occupied. Both criteria must be met.

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

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

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

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

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

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

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

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

3. Where a portion of the work is renovation:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

3. This subcode allows changes of use where the new use is similar to or less demanding in terms of hazard or safety requirements than the present use. No modifications

to the building are required by this subcode where such a change of use is planned.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Amended by R.2009 d.117, effective April 20, 2009.

See: 41 N.J.R. 18(a), 41 N.J.R. 1726(a).

In (c)2 and (d)2, substituted "alarms" for "detectors".

Amended by R.2011 d.270, effective November 7, 2011.

See: 43 N.J.R. 1297(a), 43 N.J.R. 2999(a).

In (d)7, substituted "(k)" for "(j)"; and in (g)1, deleted "and" preceding "Mechanical" and inserted ", Fuel Gas, Energy, and One- and Two-Family Dwelling".

Amended by R.2017 d.077, effective May 1, 2017.

See: 48 N.J.R. 1854(a), 49 N.J.R. 1020(a).

Rewrote (b) through (d).

8. When the work being performed exposes wood framing of any wall, floor, ceiling, or roof, fireblocking shall be provided as required by section 718.2 of the building subcode or section R302.11 of the one- and two-family dwelling subcode, as applicable. The fireblocking material shall comply with section 718.2.1 of the building subcode or section R302.11.1 of the one- and two-family dwelling subcode, as applicable.

(f) In buildings of Groups R-3, R-4, and R-5 and in dwelling units of Group R-2, smoke alarms 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, but shall not replace any AC-powered smoke alarms or a household fire alarm system. (Fire)

(g) In buildings of Groups I-1, R-1, R-2, R-3, R-4, or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with Section 915 of the building subcode or Section R315 of the one- and two-family dwelling subcode, as applicable. (Fire)

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

Inserted (e)5; and rewrote (f).

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

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

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

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

In (d), added new 6; in (e), added new 7.

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

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

Added (g).

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

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

Rewrote the section.

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

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

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

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

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

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

Administrative correction.

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

Amended by R.2009 d.117, effective April 20, 2009.

See: 41 N.J.R. 18(a), 41 N.J.R. 1726(a).

In (e)1, inserted "or by section R308.4 of the one- and two-family dwelling subcode, as applicable"; and in (f), substituted "alarms" for "detectors".

Amended by R.2011 d.270, effective November 7, 2011.

See: 43 N.J.R. 1297(a), 43 N.J.R. 2999(a).

In the introductory paragraph of (c)1, inserted "or Table R301.5 of the one- and two-family dwelling subcode, as applicable"; rewrote (c)2 and (e)4; in (e)1, substituted "2406.4" for "2406.3"; in (e)7, substituted "R302.11" for "R602.8" and "R302.11.1" for "R602.8.1", and deleted "or 717.2.1.1" following "717.2.1"; deleted (e)8 and (e)9; and in (g), inserted "N.J.A.C. 5:23-3.20(c) of" and "or Section R315 of the one- and two-family dwelling subcode, as applicable".

Amended by R.2017 d.077, effective May 1, 2017.

See: 48 N.J.R. 1854(a), 49 N.J.R. 1020(a).

Rewrote (c)3 and (d) through (g).

5:23-6.5 Renovations

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

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

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

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1607.1 of the building subcode or Table R301.5 of the one- and two-family dwelling subcode, as applicable, 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. Fire protection systems may be removed if the requirements of N.J.A.C. 5:23-6.6(c)2 or 6.7(c)2 are met, as applicable. (Fire)

3. No work shall be undertaken that diminishes accessibility below that which is required by Chapter 11 of the building 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 CFR 1630); (Building)

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

4. Plumbing materials and supplies:

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

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

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

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

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

- i. Exception: Within dwelling units of Groups R-2, R-3, R-4, and R-5. (Plan review – Building, Fire, Inspection – Building)

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

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

2. In buildings required by Chapter 11 of the building subcode to be accessible, when bathrooms or toilet rooms are renovated, the following requirements for providing accessibility shall apply unless the requirements of Chapter 11 of the building subcode have been met:

- i. When toilet partitions are moved or installed, but existing fixtures are not being moved, an accessible stall complying with ICC/ANSI A117.1, Section 604.9 shall be created provided that this can be accomplished without moving fixtures. (Building)
- ii. When bathroom fixtures or hardware are replaced, the replacement fixtures or hardware shall comply with ICC/ANSI A117.1, Sections 603 through 608, as applicable, for nonresidential buildings or ICC/ANSI A117.1, Chapter 10 for residential buildings required by Chapter 11 of the building 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 Chapter 11 of the building subcode to be accessible, replacement hardware shall comply with ICC/ANSI A117.1, Section 404.2.6.
- ii. Replacement dwelling unit, guest room or rooming unit corridor doors in Groups I-1, R-1 or R-2 shall be 1¾ inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wire glass in metal frames.

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

4. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Hazardous Locations" as specified by Sections 2406.4 and 2406.5 of the building subcode or by Section R308.4 of the one- and two-family dwelling subcode, as applicable. (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. 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. (Electrical)

7. Non-“hospital grade” receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with “hospital grade” receptacles. (Electrical)

8. 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)

9. When the work being performed exposes wood framing of any wall, floor, ceiling, or roof, fireblocking shall be provided as required by section 718.2 of the building subcode or section R302.11 of the one- and two-family dwelling subcode, as applicable. The fireblocking material shall comply with section 718.2.1 of the building subcode or section R302.11.1 of the one- and two-family dwelling subcode, as applicable.

10. When the work being performed creates or exposes the roof decking/sheathing or the framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space), any accessible voids in insulation shall be filled using insulation meeting the R-values of Table R402.1.2 (N1102.1.2) of the residential energy code for wood framing and of Table R402.2.6 (N1102.2.6) of the residential energy code for metal framing equivalents or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

i. In the event that insulation meeting the R-values above cannot be installed due to space constraints, and the equivalency exceptions of Sections R402.2.1 and R402.2.2 (N1102.2.1 and N1102.2.2) cannot be applied for residential buildings, insulation that fills the cavities of the framed assembly shall be installed.

11. When fenestration (windows, skylights or doors) is newly installed or replaced, the U-factor (thermal transmittance) shall not exceed the U-factor of Table R402.1.2 (N1102.1.2) of the residential energy code or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

i. Exception: In residential buildings, fenestration that meets Sections R402.3.3 (N1102.3.3) and R402.3.4 (N1102.3.4), as applicable.

12. Ducts that are newly installed or replaced shall be installed with insulation meeting the R-values of Section R403.3.1 (N1103.3.1) of the residential energy code or of Section 6.4.4.1.2 of the commercial energy code, as applicable.

13. The total replacement of a building lighting system or a newly installed building lighting system shall meet Section 404 (N1104) of the residential energy code or Section 9.1.2 of the commercial energy code, as applicable. (A “lighting system” is defined by the commercial energy code as “a group of luminaires circuited or controlled to perform a specific function.”)

i. Exception: The total replacement of a lighting system within a room, space or tenancy shall be required to meet Section 9.1.2 for the room, space, or tenancy only.

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

(f) In buildings of Groups R-3, R-4, and R-5 and in dwelling units of Group R-2, smoke alarms 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, but shall not replace any AC-powered smoke alarms or a household fire alarm system. (Fire)

(g) In buildings of Groups I-1, R-1, R-2, R-3, R-4, or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with Section 915 of the building subcode or Section R315 of the one- and two-family dwelling subcode, as applicable. (Fire)

(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 Groups R or I-1, where the size of window openings is being changed, at least one window shall:

(1) Be operable;

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

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

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

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

2. Newly installed and replacement handrails and guardrails shall comply with Sections 1010.1, 1012.8, 1014, and 1015 of the building subcode, respectively, or Sections R311.7.8, R311.8.3 and R312.1 of the one- and two-family dwelling subcode, respectively, as applicable. 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 above referenced sections. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Rewrote the section.

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

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

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

Amended by R.2005 d.4, effective January 3, 2005.

See: 36 N.J.R. 4049(a), 37 N.J.R. 47(a).

Added (e)9.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

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

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

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

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

Amended by R.2009 d.117, effective April 20, 2009.

See: 41 N.J.R. 18(a), 41 N.J.R. 1726(a).

In (e)4, inserted "or by section R308.4 of the one- and two-family dwelling subcode, as applicable"; and in (f), substituted "alarms" for "detectors".

Amended by R.2011 d.270, effective November 7, 2011.

See: 43 N.J.R. 1297(a), 43 N.J.R. 2999(a).

In the introductory paragraph of (c)1, inserted "or Table R301.5 of the one- and two-family dwelling subcode, as applicable,"; rewrote (c)2, (e)9, (e)10, (g), the introductory paragraph of (h) and (h)2; in (e)4, substituted "2406.4" for "2406.3"; in (e)8, substituted "R302.11" for "R602.8", and "R302.11.1" for "R602.8.1", and deleted "or 717.2.1.1" following "717.2.1"; added new (e)11 and (e)12; and recodified former (e)11 as (e)13.

Amended by R.2017 d.077, effective May 1, 2017.

See: 48 N.J.R. 1854(a), 49 N.J.R. 1020(a).

Rewrote (c)3 and (d) through (h).

5:23-6.6 Alterations

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

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

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

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1607.1 of the building subcode or Table R301.5 of the one- and two-family dwelling subcode, as applicable, 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. Fire protection system removal: Any fire protection system providing partial or redundant protection originally installed to protect a special hazard that no longer exists and that is not required in accordance with the current Uniform Construction Code, is allowed to be removed with the written approval of the fire subcode official and fire official. All disconnected equipment and devices, such as pull stations, nozzles, detectors, sprinklers, sensors, panels and hose connections, shall be removed so as not to give a false indication that the structure, area or space is protected. (Fire)

3. No work shall be undertaken that diminishes accessibility below that which is required by Chapter 11 of the building subcode. (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. (Plan review – Building, Fire, Inspection – 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 CFR 1630); (Plan review – Building, Fire, Inspection – Building)

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

4. Plumbing materials and supplies:

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

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

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

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

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. (Plan review – Building, Fire, Inspection – Building)

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

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

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

2. In buildings required by Chapter 11 of the building subcode to be accessible, when bathrooms or toilet rooms are altered, the following requirements for providing accessibility shall apply unless the requirements of Chapter 11 of the building subcode have been met:

- i. When toilet partitions are moved or installed, but existing fixtures are not being moved, an accessible stall complying with ICC/ANSI A117.1, Section 604.9 shall be created provided that this can be accomplished without moving fixtures. (Building)

- ii. When bathroom fixtures or hardware are replaced, the replacement fixtures or hardware shall comply with ICC/ANSI A117.1, Sections 603 through 608, as applicable, for nonresidential buildings or ICC/ANSI A117.1, Chapter 10 for residential buildings required by Chapter 11 of the building subcode to be accessible. (Plumbing)

- iii. 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)

- iv. Where it is technically infeasible to gain compliance with the altered bathroom, signage to the closest accessible bathroom (if any) shall be provided at the altered bathroom. (Building)

3. In buildings required by Chapter 11 of the building subcode to be accessible, when space is reconfigured, the altered space shall comply with Chapter 11 of the building subcode. Where full compliance is technically infeasible, compliance shall be achieved to the maximum extent feasible. (Building)

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

i. In buildings required by Chapter 11 of the building subcode to be accessible, when new door openings are created, existing door openings are enlarged or door assemblies are replaced and the required door width can be achieved within the existing opening, the new door shall comply with ICC/ANSI A117.1, Section 404.

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

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

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

5. In buildings required by Chapter 11 of the building 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.

6. 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 Chapter 11 of the building subcode. (Building)

7. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Hazardous Locations" as specified by Sections 2406.4 and 2406.5 of the building subcode or by Section R308.4 of the one- and two-family dwelling subcode, as applicable. (Building)

8. 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)

9. 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. (Electrical)

10. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles. (Electrical)

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

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

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

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

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

i. When the work being performed creates living space over a private garage, the private garage shall comply with Section 406.3.4 of the building subcode or R302.6 of the one- and two-family dwelling subcode, as applicable, for fire resistance rating.

ii. When the work being performed creates an additional dwelling unit within the building, the new dwelling unit shall be separated from the existing dwelling unit(s) with fire partitions or horizontal assemblies having a fire resistance rating of not less than one hour constructed in accordance with Sections 708 and 711 of the building subcode or R302 of the one- and two-family dwelling subcode, as applicable.

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

13. In buildings of Group R-1, in at least one sleeping room or suite of every 25 or fewer that are part of the scope of work, the work being performed shall comply with the applicable provisions of ICC/ANSI A117.1 unless the facility already provides the number of accessible sleeping rooms required by Chapter 11 of the building 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 Chapter 11 of the building subcode. (Building)

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

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

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

15. 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)

16. When the work being performed creates or exposes wood framing of any wall, floor, ceiling, or roof, fire-blocking shall be provided as required by section 718.2 of the building subcode or section R302.11 of the one- and two-family dwelling subcode, as applicable. The fire-blocking material shall comply with section 718.2.1 of the building subcode or section R302.11.1 of the one- and two-family dwelling subcode, as applicable.

17. When the work being performed creates or exposes the roof decking/sheathing or the framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space), any accessible voids in insulation shall be filled using insulation meeting the R-values of Table R402.1.2 (N1102.1.2) of the residential energy code for wood framing and of Table R402.2.6 (N1102.2.6) of the residential energy code for metal framing equivalents or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

i. In the event that insulation meeting the R-values above cannot be installed due to space constraints, and the equivalency exceptions of Sections R402.2.1 and R402.2.2 (N1102.2.1 and N1102.2.2) cannot be applied for residential buildings, insulation that fills the cavities of the framed assembly shall be installed.

18. When fenestration (windows, skylights, or doors) is newly installed or replaced, the U-factor (thermal transmittance) shall not exceed the U-factor of Table R402.1.2 (N1102.1.2) of the residential energy code or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

i. Exception: In residential buildings, fenestration that meets Sections R402.3.3 (N1102.3.3) and R402.3.4 (N1102.3.4), as applicable.

19. Ducts that are newly installed or replaced shall be installed with insulation meeting the R-values of Section R403.3.1 (N1103.3.1) of the residential energy code or of Section 6.4.4.1.2 of the commercial energy code, as applicable.

20. The total replacement of a building lighting system or a newly installed building lighting system shall meet Section 404 (N1104) of the residential energy code or Section 9.1.2 of the commercial energy code, as applicable. (A "lighting system" is defined by the commercial energy

code as "a group of luminaires circuited or controlled to perform a specific function.")

i. Exception: The total replacement of a lighting system within a room, space or tenancy shall be required to meet Section 9.1.2 for the room, space, or tenancy only.

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

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

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

23. The work shall not cause an exit enclosure to be used for any purpose other than means of egress, except those penetrations permitted by Section 1023.5 of the building subcode.

24. Existing openings that become part of an exit or exit access and newly created openings to be used as an exit or exit access shall meet Section 1008.3 and Section 1013 of the building subcode when more than one exit or exit access is required. This shall apply only to the portion of the building served by the new exit or exit access.

(f) In buildings of Groups R-3, R-4, and R-5 and in dwelling units of Group R-2, smoke alarms 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, but shall not replace any AC-powered smoke alarms or a household fire alarm system. (Fire)

(g) In buildings of Groups I-1, R-1, R-2, R-3, R-4, or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with Section 915 of the building subcode or Section R315 of the one- and two-family dwelling subcode, as applicable. (Fire)

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

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

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

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

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

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

(1) Be operable;

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

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

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

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

2. Newly installed and replacement handrails and guardrails shall comply with Sections 1010.1, 1012.8, 1014, and 1015 of the building subcode, respectively, or Sections R311.7.8, R311.8.3 and R312.1 of the one- and two-family dwelling subcode, respectively, as applicable. 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 above referenced sections. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

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

(k) In a building required by Chapter 11 of the building subcode to be accessible, where the space altered is a primary function space, an accessible path of travel to the altered space shall be provided up to the point at which the cost of providing accessibility is disproportionate to the cost of the overall alteration project; a cost is disproportionate if it exceeds 20 percent of the cost of the alteration work. (Building)

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

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

i. Windows, hardware, operating controls, electrical outlets and signage;

ii. Mechanical systems, electrical systems, installations or alterations of fire protection systems or abatement of hazardous materials; or

iii. The repair or installation of roofing, siding, or other exterior wall facade.

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

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

5. Where it is technically infeasible to comply with the technical standards in Chapter 11 of the building subcode, the work must comply to the maximum extent feasible.

(l) When work is performed in a Class 1 structure or when work is performed on a smoke control system, a list of all materials and work requiring special inspections, and a list of agencies, qualified licensed professionals or firms intended to be retained for conducting those inspections in accordance with the requirements of the building subcode shall be submitted as part of the permit application. (Building, except smoke control systems – 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 (d)5; in (e), changed N.J.A.C. reference in 1, inserted a second sentence in 2iii(2), deleted "In all use groups other than H," at the beginning of 3ii(1), rewrote 9, inserted a new 10, recodified former 10 and 11 as 11 and 12, and added 13; and rewrote (f).

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

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

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

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

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

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

Rewrote the section.
Administrative correction.

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

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

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

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

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

In (e)1, deleted the N.J.A.C. reference and added "by the plumbing subcode"; added (e)10iii and (e)12ii; in (e)14, added "or section R602.8 of the one- and two-family dwelling subcode, as applicable" and "or section R602.8.1 of the one- and two-family dwelling subcode, as applicable".

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

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

Amended by R.2009 d.117, effective April 20, 2009.
See: 41 N.J.R. 18(a), 41 N.J.R. 1726(a).

In (e)6, inserted "or by section R308.4 of the one- and two-family dwelling subcode, as applicable"; in (e)9i, substituted "alarm" for "detector" twice; in (e)14 and in the introductory paragraph of (e)15, inserted "creates or"; in (e)16, inserted "newly installed or"; added (e)19; and in (f), substituted "alarms" for "detectors".

Amended by R.2011 d.270, effective November 7, 2011.
See: 43 N.J.R. 1297(a), 43 N.J.R. 2999(a).

In the introductory paragraph of (c)1, inserted "or Table R301.5 of the one- and two-family dwelling subcode, as applicable,"; rewrote (c)2, (e)14, (e)15, (e)16, (g) and (i)2; in (e)6, substituted "2406.4" for "2406.3"; in (e)10i, substituted "R302.6" for "R309.2"; in (e)10ii, substituted "709 and 712" for "708 and 711" and "R302" for "R317.1"; in (e)14, substituted "R302.11" for "R602.8", and "R302.11.1" for "R602.8.1", and deleted "or 717.2.1.1" following "717.2.1"; added new (e)17, (e)18 and (l); recodified former (e)17 through (e)19 as (e)19 through (e)21; and in (e)21, substituted "1022.4" for "1020.1.2".

Amended by R.2013 d.081, effective June 3, 2013.
See: 44 N.J.R. 1303(a), 45 N.J.R. 1393(a).

Added new (e)2iii and (e)2iv; recodified former (e)2iii as (e)3; rewrote (e)3; and recodified former (e)3 through (e)21 as (e)4 through (e)22.

Amended by R.2017 d.077, effective May 1, 2017.
See: 48 N.J.R. 1854(a), 49 N.J.R. 1020(a).

Rewrote the section.

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 con-

struction official may designate the project a reconstruction project and require that the requirements of this section be met.

2. If work performed or to be performed in phases is so extensive that the project would require a new certificate of occupancy if the work were performed at one time, the construction official may designate the project a reconstruction project and require that the requirements of this section be met.

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

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

1. Newly introduced fixed loads shall not exceed the uniformly distributed live loads or concentrated live load criteria of Table 1607.1 of the building subcode or Table R301.5 of the one- and two-family dwelling subcode, as applicable, 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. Fire protection system removal: Any fire protection system providing partial or redundant protection originally installed to protect a special hazard that no longer exists and that is not required in accordance with the current Uniform Construction Code, is allowed to be removed with the written approval of the fire subcode official and fire official. All disconnected equipment and devices, such as pull stations, nozzles, detectors, sprinklers, sensors, panels and hose connections, shall be removed so as not to give a false indication that the structure, area or space is protected. (Fire)

3. No work shall be undertaken that diminishes accessibility below that which is required by Chapter 11 of the building subcode. (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. (Plan review – Building, Fire, Inspection – Building)

(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 CFR 1630); (Plan review – Building, Fire, Inspection – Building)

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

3. Plumbing materials and supplies:

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

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

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

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

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. (Plan review – Building, Fire, Inspection – Building)

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

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

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

2. In buildings required by Chapter 11 of the building subcode to be accessible, when bathrooms or toilet rooms are altered, the following requirements for providing accessibility shall apply unless the requirements of Chapter 11 of the building subcode have been met:

- i. When toilet partitions are moved or installed, but existing fixtures are not being moved, an accessible stall complying with ICC/ANSI A117.1, Section 604.9 shall be created provided that this can be accomplished without moving fixtures. (Building)

- ii. When bathroom fixtures or hardware are replaced, the replacement fixtures or hardware shall comply with ICC/ANSI A117.1, Sections 603 through 608, as applicable, for nonresidential buildings or ICC/ANSI A117.1, Chapter 10 for residential buildings required by Chapter 11 of the building subcode to be accessible. (Plumbing)

- iii. 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)

- iv. Where it is technically infeasible to gain compliance with the altered bathroom, signage to the closest accessible bathroom (if any) shall be provided at the altered bathroom. (Building)

3. In buildings required by Chapter 11 of the building subcode to be accessible, when space is reconfigured, the reconstructed space shall comply with Chapter 11 of the building subcode.

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

4. Replacement or new doors shall comply with the following: (Building)

- i. In buildings required by Chapter 11 of the building subcode to be accessible, when new door openings are created, existing door openings are enlarged or door assemblies are replaced and the required door width can

be achieved within the existing opening, the new door shall comply with ICC/ANSI A117.1, Section 404.

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

ii. Replacement dwelling unit, guest room or rooming unit corridor doors in 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.

5. In buildings required by Chapter 11 of the building 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.

6. 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 Chapter 11 of the building subcode. (Building)

7. Replacement glass shall comply with the "Safety Glazing" requirements of the building subcode and shall be installed in the "Hazardous Locations" as specified by Sections 2406.4 and 2406.5 of the building subcode or by Section R308.4 of the one- and two-family dwelling subcode, as applicable. (Building)

8. 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)

9. 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. (Electrical)

10. Non-"hospital grade" receptacles in patient bed locations of health care facilities, Group I-2, shall be replaced with "hospital grade" receptacles. (Electrical)

11. In buildings of Groups R-1 and R-2, when habitable space is created in previously unoccupied space, the minimum clear ceiling height shall be seven feet. For rooms with a sloped ceiling, the minimum clear ceiling height shall be seven feet for at least 35 square feet of the floor area of the room. Any portion of the room measuring less

than five feet from the finished floor to the finished ceiling shall not be considered usable floor area. (Building)

12. 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)

13. When the work being performed creates or exposes wood framing of any wall, floor, ceiling, or roof, fire-blocking shall be provided as required by Section 718.2 of the building subcode or Section R302.11 of the one- and two-family dwelling subcode, as applicable. The fire-blocking material shall comply with Section 718.2.1 of the building subcode or Section R302.11.1 of the one- and two-family dwelling subcode, as applicable.

14. When the work being performed creates or exposes the roof decking/sheathing or the framing of any wall, floor, ceiling, or roof assembly that is part of the building thermal envelope (encloses conditioned space), any accessible voids in insulation shall be filled using insulation meeting the R-values of Table R402.1.2 (N1102.1.2) of the residential energy code for wood framing and of Table R402.2.6 (N1102.2.6) of the residential energy code for metal framing equivalents or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

i. In the event that insulation meeting the R-values above cannot be installed due to space constraints, and the equivalency exceptions of Sections R402.2.1 and R402.2.2 (N1102.2.1 and N1102.2.2) cannot be applied for residential buildings, insulation that fills the cavities of the framed assembly shall be installed.

15. When fenestration (windows, skylights, or doors) is newly installed or replaced, the U-factor (thermal transmittance) shall not exceed the U-factor of Table R402.1.2 (N1102.1.2) of the residential energy code or of Table 5.5-4 or 5.5-5 of the commercial energy code, as applicable.

i. Exception: In residential buildings, fenestration that meets Sections R402.3.3 (N1102.3.3) and R402.3.4 (N1102.3.4), as applicable.

16. Ducts that are newly installed or replaced shall be installed with insulation meeting the R-values of Section R403.3.1 (N1103.3.1) of the residential energy code or of Section 6.4.4.1.2 of the commercial energy code, as applicable.

17. The total replacement of a building lighting system or a newly installed building lighting system shall meet Section 404 (N1104) of the residential energy code or Section 9.1.2 of the commercial energy code, as applicable. (A "lighting system" is defined by the commercial energy code as "a group of luminaires circuited or controlled to perform a specific function.")

i. Exception: The total replacement of a lighting system within a room, space or tenancy shall be required to meet Section 9.1.2 for the room, space or tenancy only.

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

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

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

20. The work shall not cause an exit enclosure to be used for any purpose other than means of egress, except those penetrations permitted by Section 1023.5 of the building subcode.

21. Existing openings that become part of an exit or exit access and newly created openings to be used as an exit or exit access shall meet Section 1008.3 and Section 1013 of the building subcode when more than one exit or exit access is required. This shall apply only to the portion of the building served by the new exit or exit access.

(f) In buildings of Groups I-1, R-1, R-2, R-3, R-4, or R-5 containing a fuel burning appliance or having an attached garage, carbon monoxide alarms shall be installed in accordance with Section 915 of the building subcode or Section R315 of the one- and two-family dwelling subcode, as applicable. (Fire)

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

1. For repair work undertaken as part of a reconstruction project, materials like those existing may be used. There is no limit to the amount of repair work which may be undertaken.

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

i. In sleeping rooms below the fourth story in occupancies of Groups R or I-1, where new window

openings are being created or the size of window openings is being changed, at least one window shall:

(1) Be operable;

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

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

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

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

3. Newly installed and replacement handrails and guardrails shall comply with Sections 1010.1, 1012.8, 1014, and 1015 of the building subcode, respectively, or Sections R311.7.8, R311.8.3, and R312.1 of the one- and two-family dwelling subcode, respectively, as applicable. 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 above referenced sections. The repair or replacement of less than 50 percent of a handrail or guardrail shall be permitted to match the existing handrail or guardrail. (Building)

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

(i) The basic requirements of this subchapter for the applicable group shall be met within the work area(s). Attendant work outside the work area(s) shall not make the building less conforming with the basic requirements than it was when the reconstruction was undertaken.

1. Where the building currently exceeds the basic requirements, the extent to which it exceeds shall not be reduced unless the building also exceeds the requirements of the corresponding subcode of the UCC. In this case, the extent of compliance with the basic requirements may be reduced, but not below the requirements of the corresponding subcode of the UCC. Existing fire alarm, automatic sprinkler and standpipe systems shall not be removed without replacement and shall be maintained in operating condition.

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

(k) In a building required by Chapter 11 of the building subcode to be accessible, where the space reconstructed is a primary function space, an accessible path of travel to the space shall be provided up to the point at which the cost of providing accessibility is disproportionate to the cost of the overall project; a cost is disproportionate if it exceeds 20 percent of the cost of the work. (Building)

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

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

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

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

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

5. Where it is technically infeasible to comply with the technical standards of ICC/ANSI A117.1, the work must comply to the maximum extent feasible.

(l) When work is performed in a Class 1 structure or when work is performed on a smoke control system, a list of all materials and work requiring special inspections, and a list of agencies, qualified licensed professionals or firms intended to be retained for conducting those inspections in accordance with the requirements of the building subcode shall be submitted as part of the permit application. (Building, except smoke control systems – Fire)

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

In (c), rewrote 2 and added 4; in (d), added 5; in (e), amended the N.J.A.C. reference in 5, rewrote 8iii, and substituted "Section 250-140" for "Section 250-60" in 8v.

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

In (d), added new 6; in (e), added new 11.
Amended by R.2003 d.137, effective April 7, 2003.
See: 34 N.J.R. 4277(a), 35 N.J.R. 1558(c).

Deleted (e)11; added a new (f); recodified former (f) through (j) as (g) through (k).

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

Rewrote the section.
Administrative correction.
See: 35 N.J.R. 4861(a).

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

Deleted references to use preceding references to group throughout and substituted references to automatic sprinkler for references to fire suppression throughout; in (g)2ii, amended the N.J.A.C. reference.

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

In (e), added 11.
Amended by R.2005 d.4, effective January 3, 2005.
See: 36 N.J.R. 4049(a), 37 N.J.R. 47(a).

Added (e)12.
Amended by R.2006 d.120, effective April 3, 2006.
See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (e)1, deleted the N.J.A.C. reference and added "by the plumbing subcode".

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

In (e) and (k)5, substituted "2003" for "1998" throughout; in (e)2ii, inserted "ICC/ANSI A117.1-2003, Chapter 10"; in (e)6, substituted "2406.3" for "2406.2"; added new (e)11 and (e)12; recodified former (e)11 and (e)12 as (e)13 and (e)14; and in (g)3, substituted "1009.10, 1010.8, 1012" for "1003.3.3.11, 1003.3.4.7" and "1013.1" for "1003.2.12".

Amended by R.2009 d.117, effective April 20, 2009.
See: 41 N.J.R. 18(a), 41 N.J.R. 1726(a).

In (e)6, inserted "or by section R308.4 of the one- and two-family dwelling subcode, as applicable"; in the introductory paragraph of (e)11, inserted "creates or"; in (e)12, inserted "newly installed or"; and added (e)15.

Amended by R.2011 d.270, effective November 7, 2011.
See: 43 N.J.R. 1297(a), 43 N.J.R. 2999(a).

In the introductory paragraph of (c)1, inserted "or Table R301.5 of the one- and two-family dwelling subcode, as applicable."; rewrote (c)2, (e)11, (e)12 and (g)3; in (e)6, substituted "2406.4" for "2406.3"; added new (e)13, (e)14 and (f); recodified former (e)13 through (e)15 as (e)15 through (e)17; in (e)17, substituted "1022.4" for "1020.1.2"; and in (f), inserted "N.J.A.C. 5:23-3.20(c) of" and "or Section R315 of the one- and two-family dwelling subcode, as applicable".

Amended by R.2013 d.081, effective June 3, 2013.
See: 44 N.J.R. 1303(a), 45 N.J.R. 1393(a).

In the introductory paragraph of (e)2, inserted a comma following "altered"; added new (e)2iii and (e)2iv; recodified former (e)2iii as (e)3; rewrote (e)3; and recodified former (e)3 through (e)17 as (e)4 through (e)18.

Amended by R.2017 d.077, effective May 1, 2017.
See: 48 N.J.R. 1854(a), 49 N.J.R. 1020(a).

Rewrote the section.

5:23-6.8 Materials and methods

(a) The following requirements shall be met for materials and installation methods for all items that are part of the applicant's proposed project for all categories of work other than repair as defined in N.J.A.C. 5:23-6.3.

1. Where sections listed below reference other sections not listed below, those sections shall apply within that limited context.

(b) Building and Fire Protection Materials and Methods: The following sections of the building subcode (N.J.A.C. 5:23-3.14) shall constitute the building and fire protection materials and methods requirements for this subchapter:

1. The following sections of Chapter 5 entitled "General Building Height and Areas":

i. Section 505 shall apply to newly constructed "Mezzanines";

2. The following sections of Chapter 7 entitled "Fire and Smoke Protection Features":

i. Sections 703.2, 703.3, 703.4, 703.5, 703.6;

ii. Sections 705.2.1, 705.2.2, 705.2.3, 705.4;

iii. Sections 706.2, 706.3;

iv. Sections 707.2, 707.9;

v. Section 708.2;

vi. Section 709.2;

vii. Sections 710.2, 710.5, 710.6, 710.7, 710.8;

viii. Sections 711.2.1, 711.3.1;

ix. Section 712.1.13;

x. Section 713.3;

xi. Section 714, except that the rating requirement of Section 714.4.1.2 shall not apply;

xii. Section 715;

xiii. Section 716;

xiv. Section 717;

xv. Sections 718.2.1, 718.3.1;

xvi. Section 719;

xvii. Section 720;

xviii. Section 721; and

xix. Section 722;

3. All of Chapter 8 entitled "Interior Finishes" except Section 802;

4. All of Chapter 9 entitled "Fire Protection Systems" except Sections 902, 903.2, 904.2, 905.3, 906.1, 907.2, 908, 910.2, 911, 916.1;

5. The following sections of Chapter 10 entitled "Means of Egress":

i. Sections 1010.1.4.1, 1010.1.4.2, 1010.1.4.3, 1010.1.4.4, 1010.1.9, 1010.1.10.1, 1010.1.10.2;

ii. Sections 1013.3, 1013.5, 1013.6.1, 1013.6.3;

iii. Section 1015.8.1; and

iv. Sections 1025.4, 1025.5;

6. The following sections of Chapter 12 entitled "Interior Environment":

i. Section 1203.5.2 shall apply to new sources of contaminants; and

ii. Section 1210;

7. All of Chapter 14 entitled "Exterior Walls" except Sections 1401, 1402, 1403.2, 1403.3, 1403.4;

8. All of Chapter 15 entitled "Roof Assemblies and Rooftop Structures" except Sections 1501, 1502, 1503.4, 1503.5, 1510.9;

9. All of Chapter 16 entitled "Structural Design," except Sections 1601, 1604, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, shall apply to new or replaced structural members. The referenced sections of Chapter 16 shall not be used to analyze any existing structural members, except as otherwise provided by this subcode;

10. All of Chapter 18 entitled "Soil and Foundations" except Sections 1801, 1802, 1803, 1804, 1805, 1806;

i. Additionally, the following requirements of Section 1805 shall be included as part of Materials and Methods: 1805.2.1, 1805.2.2, 1805.3.1, 1805.3.2, 1805.3.3, 1805.4.1, 1805.4.2, 1805.4.3;

11. All of Chapter 19 entitled "Concrete" except Sections 1901, 1902;

12. All of Chapter 20 entitled "Aluminum";

13. All of Chapter 21 entitled "Masonry" except Sections 2101, 2102;

14. All of Chapter 22 entitled "Steel" except Sections 2201, 2202;

15. All of Chapter 23 entitled "Wood" except Sections 2301.1, 2302;

16. All of Chapter 24 entitled "Glass and Glazing" except Sections 2401, 2402;

17. All of Chapter 25 entitled "Gypsum Board and Plaster" except Sections 2501.1, 2501.2, 2502;

18. All of Chapter 26 entitled "Plastic" except Sections 2601, 2602;

19. For the applicability of Chapter 30 entitled "Elevators and Conveying Systems," refer to (i) and (j) below; and

20. The following sections of Chapter 31 entitled "Special Construction":

i. Section 3105;

ii. Sections 3106.3;

iii. Section 3107;

iv. Section 3109 shall apply to newly installed and completely replaced enclosures for swimming pools, spas, and hot tubs. This shall also apply to partial enclosure replacement if the portion being replaced

7. Group M: A manual fire alarm system shall be installed and maintained as required by Section 907.2.7 of the building subcode.

8. Group R-1: A manual fire alarm system and an automatic smoke detection system shall be installed and maintained as required by Section 907.2.8 of the building subcode.

9. Group R-2: A fire alarm system shall be installed and maintained as required by Section 907.2.9 of the building subcode.

10. Group R-4: A manual fire alarm system and an automatic smoke detection system shall be installed and maintained as required by Section 907.2.10 of the building subcode. (Fire)

(i) Single and Multiple Station Smoke Alarms: When a change of use is made to any of the following groups, single and multiple station smoke alarms shall be installed in accordance with Section 907.2.11 of the building subcode.

1. Group R-1: Single or multiple station smoke alarms shall be installed and maintained as required by Section 907.2.11.1 of the building subcode.

2. Groups R-2, R-3, R-4, R-5, and I-1: Smoke alarms shall be installed and maintained as required by Section 907.2.11.2 of the building subcode or Section R314 of the one- and two-family dwelling subcode, as applicable.

3. Where the use of a portion of a building is changed such that any nonresidential use is located below or attached to one or more dwelling units (including single room occupancies), single or multiple station smoke alarms 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 alarms shall be AC powered with battery back-up. Hard-wired, interconnected smoke alarms installed throughout the building shall be accepted as meeting this requirement. (Fire)

(j) Carbon monoxide alarms: When the use of a building is changed to Groups I-1, R-1, R-2, R-3, R-4, or R-5 and the building contains a fuel-burning appliance or has an attached garage, carbon monoxide alarms shall be installed in accordance with Section 915 of the building subcode or Section 315 of the one- and two-family dwelling subcode, as applicable. (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.

(k) 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, I-4, R-1, R-2, R-3, R-4, R-5

1. When the use or the character of use of a building is changed to a higher load category as shown in Table K above, then the structure shall be capable of supporting the load requirement for the new use or character of use as specified in Table 1607.1 of the building subcode.

i. If the building subcode official determines that the number of occupants or the placement and weight of furniture and equipment can be controlled by the occupants, the areas designed for the reduced live load shall be posted with the approved live load. Placards stating the allowable live loads shall be posted. Placards may state loads in forms usable by the occupants, in addition to posting the allowable load in pounds per square foot. Such information shall be developed by a licensed design professional and be approved by the subcode official.

(1) Analysis and test methods for evaluation of existing structural members shall use methods specified in the code in effect at the time the building was originally constructed or other standards as approved by the subcode official.

ii. The corridor and lobby loading requirements of Table 1607.1 shall be met only if the corridor exceeds six feet in width or if the lobby or corridor area is used for queuing purposes.

2. Where the use or character of use within an existing building is changed to an equal or lower load category as shown in Table K above, then the existing structure may be used without modification, provided that the building is structurally sound and in good structural repair.

3. When a building is reclassified into one of the following occupancies, the building shall comply with the seismic design requirements of Section 1613 of the building subcode: Fire, rescue and police stations; Group I-2 having surgery or emergency treatment facilities; emergency preparedness centers; post-earthquake recovery vehicle garages; post-earthquake shelters; power-generating stations and other utilities required as emergency backup facilities; primary communication facilities; highly toxic materials as defined by Section 307 of the building subcode where the quantity of material exceeds the exempt amount as per Section 307.1 of the building subcode. (Building)

(l) Plumbing Requirements: When the character of the use of a building or portion of a building is changed, the following plumbing provisions shall apply:

1. The fixture requirements for the proposed new use shall comply with the basic requirements for that use.

2. If the new use is a food handling establishment, all existing sanitary waste lines above the food or drink preparation or storage areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines shall not be installed above such areas except where it is the only practical alternative. Where new lines are to be installed, they shall be protected in accordance with the plumbing subcode.

3. New uses that will produce grease or oil laden wastes shall be provided with interceptors as required in the plumbing subcode.

4. If the new use produces chemical wastes, the following shall apply:

i. If the existing piping is compatible with the chemical waste, no change to the existing piping material is required.

ii. If the existing piping is not compatible with the chemical waste, either the waste must be neutralized

prior to entering the drainage system or the piping must be changed to a compatible material.

iii. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.

5. Where a building's use is changed to a health care facility, the requirements of chapter 14 of the plumbing subcode shall apply. (Plumbing)

(m) Electrical Requirements: The following electrical requirements shall apply in changes of use:

1. When the character of the use of a building or portion thereof is changed to one of the following special occupancies as described in Chapter 5 of the electrical subcode, the electrical wiring and equipment of the building or portion thereof that contains the proposed use shall comply with all applicable requirements of the electrical subcode regardless of whether a change of group is involved:

- i. Hazardous (classified) Locations;
- ii. Commercial Garages, Repair and Storage;
- iii. Aircraft Hangars;
- iv. Gasoline Dispensing and Service Stations;
- v. Bulk Storage Plants;
- vi. Spray Application, Dipping, and Coating Processes;
- vii. Health Care Facilities;
- viii. Places of Assembly;
- ix. Theaters, Audience Areas of Motion Picture and Television Studios and Similar Locations;
- x. Motion Picture and Television Studios and Similar Locations; and
- xi. Agricultural Buildings.

2. When the use of a building is changed to Group R-2, R-3, R-4 or R-5, the electrical wiring and equipment of the building shall comply, at a minimum, with the Basic Requirements of this subcode for that use and shall have the electrical service (conductors and equipment) sized and rated in accordance with the electrical subcode. (Electrical)

(n) Mechanical Requirements: When the character of the use of a building is changed, the following mechanical provisions shall apply:

1. All spaces intended for human occupancy shall be provided with natural or mechanical ventilation. A building intended to be used as a public school shall be mechanically ventilated.

(2) All guest room doors shall be at least 1¾ inch solid core wood or approved equal with approved door closers and shall be reasonably tight fitting. Replacement doors shall be 1¾ inch solid cord wood or approved equal unless existing frame will accommodate only a 1¾ inch door.

viii. Existing handrails and guardrails provided for stairways and open sided floor areas shall be permitted to remain in place, provided they are structurally sound. When handrails or guardrails do not exist in locations where the building subcode requires them, or where handrails or guardrails are in danger of collapse when used under emergency conditions, handrails and guardrails complying with the building subcode shall be provided.

ix. Transoms shall be either glazed with ¼ inch wire glass set in metal frames and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

x. Interior finish shall comply with the following:

(1) Interior finish of exit enclosures shall have a flame spread of 0-25 and a smoke developed rating of 450 or less (Class I finish as determined by ASTM-E84);

(2) Interior finish of exit access enclosures shall have a flame spread of 26-75 and a smoke developed rating of 450 or less (Class II finish as determined by ASTM-E84);

(3) Interior finish of all other spaces shall have a flame spread rating of under 200 and a smoke developed rating of 450 or less (Class III finish as determined by ASTM-E84).

xi. Interior stairways and other vertical openings connecting more than six floor levels shall be enclosed with approved assemblies having a two-hour fire-resistance rating. Those connecting four to six floor levels shall be enclosed with approved assemblies having a one-hour fire-resistance rating. Interior stairways connecting three or fewer levels shall be enclosed as follows:

(1) A minimum one-hour fire barrier shall be provided to protect all interior stairways and other vertical openings not exceeding three stories. Such fire barrier may be omitted provided that:

(A) The building is provided throughout with an approved automatic fire suppression system complying with the building subcode; or

(B) All of the following conditions exist:

I. Every sleeping room has an operable window with a sill height of not more than 44 inches, a width of at least 20 inches, a height of

at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side;

II. The building is protected throughout by an automatic fire alarm system complying with the building subcode and is supervised in accordance with NFPA 72; and

III. Every sleeping room above the second floor or more than 16 feet above grade is provided with direct access to a fire escape or other approved secondary exit or any exit-access corridor exceeding 20 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.

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 Iii(5), and substituted "(Fire)" for "(Building)" at the end of 2i.

Administrative correction.

See: 32 N.J.R. 688(a).

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

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

In (a), rewrote 4; in (f)2, rewrote Use Group table; in (i), added 6; in (o), added 3 and in Table N amended the square foot values for Corridors and Utilities under Public Spaces.

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

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

In (b), rewrote 3; in (c), rewrote 1, inserted new iii and recodified existing iii through xii as iv through xiii in 2.

Amended by R.2002 d.15, effective January 22, 2002.

See: 33 N.J.R. 2933(b), 33 N.J.R. 3883(a), 34 N.J.R. 521(a).

In (k), inserted the last sentence preceding "(Fire)" in the introductory paragraph, and rewrote 1.

Amended by R.2002 d.255, effective August 5, 2002.

See: 33 N.J.R. 4177(a), 34 N.J.R. 2783(a).

In (a), added 5 through 7; in (b), deleted 3 and 4.

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

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

Rewrote (k).

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

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

In (a)5x, added (1) through (3).

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

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

Rewrote the section.

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

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

Rewrote the section.

Administrative correction.

See: 36 N.J.R. 3398(a).

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

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

In (a), deleted former (1), recodified former (2) and (3) as (1) and (2), in 5.

Administrative correction.

See: 36 N.J.R. 5337(a).

Amended by R.2005 d.82, effective March 7, 2005.

See: 36 N.J.R. 4222(a), 37 N.J.R. 771(a).

In (e), rewrote 4; in (i), deleted the last sentence; in (k), deleted "change of use results in a" following "When a", substituted "is" for "being" following "building", inserted "post-earthquake shelters;" following "vehicle garages".

Amended by R.2005 d.184, effective June 20, 2005.

See: 36 N.J.R. 5283(a), 37 N.J.R. 2201(b).

In (o), added 5.

Amended by R.2006 d.120, effective April 3, 2006.

See: 37 N.J.R. 3753(a), 38 N.J.R. 1567(a).

In (k)3, substituted section 1617 with section 1623 and made "Subcode" lowercase throughout; in introductory paragraph (p), deleted N.J.A.C. reference and added "this subchapter except as modified below"; added (p)1 and 2.

Administrative Correction.

See: 38 N.J.R. 3024(a).

Amended by R.2007 d.51, effective February 5, 2007.

See: 38 N.J.R. 375(a), 39 N.J.R. 371(a).

In the "Use Classification" column of TABLE C, inserted "A2 nightclubs" and "(other than A-2 nightclubs)"; in (g), substituted "TABLE" for "Table"; in the "Use Classification" column of TABLE G, inserted "A-2 nightclubs," substituted "(other than nightclubs)" for "Nightclubs," and deleted "A-2 Other than Nightclubs," following "A-1,"; and in (h)1, inserted "or automatic".

Administrative correction.

See: 39 N.J.R. 767(b).

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

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

Rewrote the section.

Administrative correction.

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

Amended by R.2009 d.117, effective April 20, 2009.

See: 41 N.J.R. 18(a), 41 N.J.R. 1726(a).

In (a)8i, substituted "alarms" for "detectors"; in (b)1i, (e)3ii, (f)1ii, (g)1i and the introductory paragraph of (h), substituted "706.3.9" for "508.3.3" and inserted "; mixed occupancies shall use the highest applicable rating from Table 706.3.9"; in (b)1i, substituted "a fire barrier or horizontal assembly, or both, having a" for "assemblies with the appropriate"; in (e)3ii, substituted "a fire barrier or horizontal assembly, or both" for "fire separation assemblies and floor/ceiling assemblies" and "rating" for "determined"; in (f)1ii, substituted "a fire barrier having a" for "walls with the appropriate"; in (g)1i, substituted "a fire barrier or horizontal assembly, or both, having a" for "assemblies that meet the applicable" and inserted "resistance" and "accordance with"; in the introductory paragraph of (h), substituted "a fire barrier having a" for "assemblies with the appropriate"; in the introductory paragraph of (i), in (i)1 through (i)3 and (p)2i, substituted "alarms" for "detectors" throughout; in the introductory paragraph of (i), substituted "Alarms" for "Detectors"; and in the introductory paragraph of (n)2, substituted "suppression" for "sprinkler" twice and "operations" for "equipment" and deleted ", except in groups R-2, R-3, R-4 and R-5" following "vapors".

Amended by R.2011 d.270, effective November 7, 2011.

See: 43 N.J.R. 1297(a), 43 N.J.R. 2999(a).

In (a)5i, substituted "and Open Mall Buildings" for "Building"; in (a)5v, inserted "Rooms"; in (a)5vii(1), substituted "Section 411" for "section 413.0"; in (a)5x, substituted "Finishes" for "Finished"; added (a)5xiii and (a)5xiv; in (a)8i, substituted "Section 907.2.11.2" for "Sections 907.2.10.1.2 and 907.2.10.1.3"; in (a)8ii(2), substituted "1-7/8-inch" for "1-inch"; in (b)1i, substituted "707.3.9" for "706.3.9"; in (c)1i, substituted "1028.2" for "1025.2"; rewrote (c)2i through (c)2xiii and the introductory paragraph of (g)1; added (c)2xiv; in (c)5, substituted "1021.2" for "1019.2"; in (c)7, substituted "1008.1.10 (panic and fire exit hardware)" for "1008.1.9"; in (e)3i(2), (e)3ii(1) and (e)3iii(1), substituted "508.2" for "508.3.1"; in (e)3ii, (f)1ii, (g)1i and the introductory paragraph of (h), substituted "707.3.9" for "706.3.9" throughout; in the introductory paragraph of (i), substituted "907.2.11" for "907.2.10"; in (i)1, substituted "907.2.11.1" for "907.2.10.1.1"; and in (i)2, substituted "Section 907.2.11.2" for "Sections 907.2.10.1.2 and 907.2.10.1.3".

Amended by R.2013 d.081, effective June 3, 2013.

See: 44 N.J.R. 1303(a), 45 N.J.R. 1393(a).

In (e)3i(3) and (i)3, inserted "or attached to"; and added (g)1ii.

Amended by R.2017 d.077, effective May 1, 2017.

See: 48 N.J.R. 1854(a), 49 N.J.R. 1020(a).

Rewrote the section.

5:23-6.32 Additions

(a) Any addition to a building or structure shall comply with the requirements of the Uniform Construction Code applicable to new construction.

1. Any repair, renovation, alteration or reconstruction work undertaken within an existing building in connection with an addition shall comply with the requirements of this subchapter.

(b) No addition shall create or extend any non-conformity in the existing building to which the addition is constructed with regard to accessibility, structural strength, egress capacity, exit access travel distance or the capacity of mechanical, plumbing, electrical or fire protection system provisions of the basic requirements of this subcode.

(c) No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of the building subcode for a new building of the same group. (Plan review—Building, Fire. Inspection—Building)

(d) No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of the building subcode unless a fire wall is provided in accordance with Section 706 of the building subcode.

1. Infilling of floor openings, such as elevator and exit stair shafts, and the addition of mezzanines and equipment penthouses shall be permitted as allowed by the building subcode. (Plan review—Building, Fire. Inspection—Building)

(e) Where an addition increases or extends the size of a fire area beyond that which is allowed by Section 903 of the building subcode, an automatic sprinkler system shall be provided throughout the fire area unless the addition is separated from the existing building by a fire barrier or horizontal assembly, or both, having a fire resistance rating in accordance with Table 707.3.10 of the building subcode; mixed occupancies shall use the highest applicable rating from Table 707.3.10.

1. Exception: This requirement shall not apply to increases to the floor area of the building of less than five percent. (Fire)

(f) Whenever an addition is made to a dwelling of Group R-3 or R-5, smoke alarms shall be installed in accordance with the following:

1. If the cumulative area of all floors of the addition(s) is 25 percent or more of the floor area of the largest floor of the existing dwelling, smoke alarms complying with the