

6. All of Chapter 5, entitled "Special Occupancies;"
7. All of Chapter 6, entitled "Special Equipment;"
8. All of Chapter 7, entitled "Special Conditions;" and
9. All of Chapter 8, entitled "Communication Systems."
10. Existing working clearances, clear space, access and entrance dimensions to working spaces, illumination, headroom clearances, and location of overcurrent protection devices shall be allowed to remain without modification.

(e) Mechanical Materials and Methods: The following sections of the mechanical subcode (N.J.A.C. 5:23-3.20) shall constitute the mechanical materials and methods requirements for this subchapter:

1. All of Chapter 3, entitled "Air Distribution Systems," except sections M-303.0, M-306.3, M-313.2 and M-314.0.

i. Section M-303.0 shall apply to newly-constructed plenums. Modifications to existing plenums, such as installation of new building, electrical or plumbing materials inside the plenum, increasing air flow rate within the plenum, etc. shall not require the plenum to comply with the construction requirements for new plenums. However, newly-installed materials within the plenum shall be consistent with material requirements of M-303.0.

2. All of Chapter 4, entitled "Mechanical Equipment," except sections M-405.2, M-405.6, M-408.1, M-409.2 and M-409.3.

3. All of Chapter 5, entitled "Kitchen Exhaust Equipment," except section M-508.1.

4. All of Chapter 6, entitled "Boilers and Water Heaters."

5. All of Chapter 7, entitled "Hydronic Piping."

6. All of Chapter 8, entitled "Gas Piping Systems," except section M-805.0.

i. Section M-805.0 sizing shall apply when the work being performed increases the load on the system such that the existing pipe does not meet the size required by code. Existing systems that are modified shall not require resizing as long as the load on the system is not increased and the system length is not increased even if the altered system does not meet code minimums.

7. All of Chapter 9, entitled "Flammable and Combustible Liquid Storage and Piping Systems."

8. All of Chapter 10, entitled "Combustion Air."

9. All of Chapter 11, entitled "Clearance Reduction."

10. All of Chapter 12, entitled "Chimneys and Vents."

11. All of Chapter 13, entitled "Mechanical Refrigeration."

12. All of Chapter 14, entitled "Fireplaces, Solid Fuel-Burning and Gas Accessory Appliances."

13. All of Chapter 15, entitled "Incinerators and Crematories."

14. All of Chapter 16, entitled "Ventilation Air," except sections M-1603.0, M-1604.0 and M-1605.0.

15. All of Chapter 18, entitled "Solar Heating and Cooling Systems."

16. Section M-2001.2 of Chapter 20, entitled "Boilers and Pressure Vessels, Maintenance and Inspection."

(f) Barrier Free Materials and Methods: The requirements of CABO/ANSI A117.1-1992 shall constitute the barrier free materials and methods requirements for this subchapter and shall apply to work projects in all buildings other than buildings of Use Group R-2, R-3 or R-4 containing fewer than four dwelling units or buildings of Use Group U.

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

2. For toilet or bathing facilities, at least one of each type of fixture shall be accessible. Where six or more toilet stalls are provided, in addition to a wheelchair accessible stall, at least one ambulatory accessible stall shall be provided.

- i. Exception: Nonpublic toilet rooms for individual use may be adaptable.

3. Limited exceptions to the accessibility requirements for theatres and auditoriums are permitted as follows:

- i. Where fixed seating is provided and it is technically infeasible to provide integrated accessible seating, accessible seating may be clustered.

- ii. When a facility contains more than one performing area and it is technically infeasible to make all performing areas accessible, the provision of one accessible performing area shall be accepted as meeting the requirement for providing access to performing areas.

4. In buildings of Use Group M, where fitting room partitions are installed or moved, five percent of the fitting rooms, but not less than one, shall comply.

(g) Elevator Devices Materials and Methods: The following sections of the elevator subcode (N.J.A.C. 5:23-12) shall constitute the elevator device materials and methods requirements for this subchapter:

1. All of ASME A17.1-1993 Part XII except Section 1206.

2. The following sections of Chapter 30 of the building subcode: Section 3008.3 "Elevator Opening Protectives—Hardware" and Section 3010.3 "Conveyors—Machinery Guards."

3. The requirements of ASME A17.1-1993 Rule 102.2(c)4, when an automatic fire suppression system is provided in an elevator hoistway, machine room and/or machinery space.

#### 5:23-6.9 New building elements

(a) Where the rehabilitation of an existing building creates or includes any new building element of a type listed in this section, then the new element shall comply with the requirements for such an element established by this section.

1. The installation of a floor system which did not previously exist shall be constructed utilizing the live load requirements as specified in section 1606.0 of the building subcode.

2. When the number of stories in a building is increased without increasing the height of the building, the building shall comply with the story requirements of Table 503 of the building subcode.

3. Newly created floor openings shall comply with the requirements of section 713.3 of the building subcode.

4. Newly created atriums shall comply with the requirements of section 404.0 of the building subcode.

5. Newly created door openings shall comply with section 1017.3 of the building subcode. Additionally, newly created door openings in walls which are fire-resistance rated shall comply with section 717.0 of the building subcode.

6. Newly created exit stairways shall comply with section 1014.0 of the building subcode.

7. Newly installed fire escapes shall be constructed in accordance with FTO-3 of the Uniform Construction Code. (Building)

8. Newly installed elevator devices (not replacing an existing device) and other newly installed (not replacement) equipment within the scope of Chapter 30 shall conform to the requirements of Chapter 30 of the building subcode.

9. Newly created corridors shall comply with sections 1011.1, 1011.2, 1011.4 of the building subcode.

10. Newly constructed mezzanines shall comply with section 505.0 of the building subcode.

11. Newly created covered mall buildings shall comply with section 402.0 of the building subcode.

12. Newly created motion picture projection rooms, screening rooms and sound stages shall comply with section 411.0 of the building subcode.

13. Newly created stages and platforms shall comply with section 412.0 of the building subcode.

14. Newly created spaces which are utilized for the application of flammable finishes shall comply with section 419.0 of the building subcode.

15. At least one newly created window opening in sleeping rooms below the fourth story in occupancies in Use Groups R or I-1 shall:

i. Be operable;

ii. Have a sill height of not more than 44 inches;

iii. 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. (Building)

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

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

16. Newly created specific occupancy areas shall comply with the following:

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

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

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

17. Newly installed electrical service equipment, switchboards, panelboards, motor control centers and other electrical equipment containing overcurrent, switching or control devices likely to require examination, adjustment, servicing or maintenance while energized shall conform with the requirements specified in N.J.A.C. 5:23-6.8, Materials and methods, and, in addition, shall conform with Sections 110-16 (Working Space About Electrical Equipment—600 Volts, Nominal or Less), 110-17 (Guarding of Live Parts—600 Volts, Nominal or Less), 110-32 (Work Space About Equipment), 110-33 (Entrance and Access to Work Space), 380-8 (Accessibility and Grouping—Switches), 384-4 (Installation—Switchboards and Panelboards) and 384-8 (Clearances—Switchboards and Panelboards), as applicable, of the electrical subcode. (Electrical)

(c) **Structural Elements:** Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(d) **Electrical Equipment and Wiring:**

1. All enclosed areas, other than kitchens, basements, garages, hallways, closets, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets.

2. Kitchen areas shall have a minimum of two duplex receptacle outlets or equivalent and one switch controlled lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space.

3. Laundry areas shall have a minimum of one duplex receptacle outlet or equivalent located near the laundry equipment and installed on an independent circuit.

4. At least one switch controlled lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, detached garage with electric power, and to illuminate outdoor entrances and exits.

5. At least one switch controlled lighting outlet shall be provided in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

6. Electrical service equipment (overcurrent devices) shall be located where they will not be subject to physical damage and shall not be located in the vicinity of easily ignitable material.

7. All 125 volt, single-phase, 15 and 20 ampere receptacles in locations specified in Section 210-8(a) of the electrical subcode shall have ground-fault circuit protection for personnel. (Electrical)

(e) **Communicating Attic Spaces:** Where adjacent dwelling units have communicating space in the attic, a wall shall be constructed to provide a continuous one hour fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the dwelling unit that is undergoing reconstruction. (Plan review—Building, Fire. Inspection—Building)

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

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

**5:23-6.28 Basic requirements—Use Group S**

(a) **Exits:** Two exits shall be required for stories with less than 500 occupants. Three exits shall be required for stories with 501 to 1,000 occupants. Four exits shall be required for stories with more than 1,000 occupants. Two means of egress are also required from all mezzanines with an occupant load greater than 30 and with exit travel distance greater than 100 feet.

1. When more than one exit is required, existing fire escapes shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions. For use of fire escapes, access shall be through a door except when serving an occupant load of 10 or fewer. All occupants shall have unobstructed access to fire escapes without having to pass through a room subject to locking.

i. When more than one exit is required and there is not sufficient space for an exterior stair within the lot line, a new fire escape shall be accepted as providing one of the required means of egress. Newly-installed fire escapes shall comply with FTO-3.

2. A single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 30 and the exit access travel distance does not exceed 100 feet.

3. A single exit is permitted in open parking structures where vehicles are mechanically parked.

4. A single exit is permitted in buildings of Use Group S-2 not more than two stories in height, with not more than 3,000 square feet per floor when the exit access travel distance does not exceed 50 feet and a minimum fire resistance rating of one hour is provided for the exit enclosure and the opening protection. (Plan review—Building, Fire. Inspection—Building)

(b) **Egress Doorways:** A minimum of two egress doorways shall be required for all rooms and spaces with an occupant load greater than 50 or in which the travel distance exceeds 75 feet. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

1. Exception: Storage rooms with a maximum occupant load of 10 shall not be required to have two egress doorways. (Plan review—Building, Fire. Inspection—Building)

(c) **Capacity of Means of Egress:** The capacity of the means of egress in each work area shall be determined in accordance with N.J.A.C. 5:23-6.11(b). (Plan review—Building, Fire. Inspection—Building)

(d) **Dead End Corridors:** Existing dead end corridors shall not exceed 35 feet in length. Exceptions are allowed as follows:

1. Dead end corridors may be up to 50 feet in length in a building with an automatic alarm system installed in conformance with the building code in effect at the time of its installation.

2. Dead end corridors may be up to 70 feet in length in a building with a suppression system installed in conformance with the building code in effect at the time of its installation. (Plan review—Building, Fire. Inspection—Building)

(e) Means of Egress Lighting: Artificial lighting with an intensity of not less than one foot candle at floor level shall be required during all times that the conditions of occupancy of the building require that the exits be available. In all buildings, rooms or spaces required to have more than one exit or exit access, means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (NEC) to assure continued illumination for not less than one hour in the case of primary power loss.

1. Exception: Lighting to illuminate the exit discharge shall not be required. (Plan review—Building, Fire. Inspection—Building)

(f) Illuminated Exit Signs: Illuminated exit signs shall be provided for all required means of egress in all buildings, rooms or spaces required to have more than one exit or exit access. Exit signs shall be visible from the exit access and supplemented by directional signs when necessary. (Plan review—Building, Fire. Inspection—Building) (Exception: Approved main exterior doors that are clearly identified as exits are not required to have exit signs.) Exit signs shall meet the following criteria:

1. Red or green letters at least six inches high; minimum width of each stroke  $\frac{3}{8}$  inch on a white background or in other approved distinguishable colors. Arrows, if provided, shall be such that the direction cannot readily be changed. The word "Exit" shall be clearly discernible when the sign is not energized.

2. Exit signs shall be illuminated at all times when the building is occupied by a source providing at least five foot candles at the illuminated surface or shall be approved self-luminous signs which provide evenly illuminated letters with a minimum luminance of 0.06 foot lamberts. Exit signs shall be connected to an emergency electrical system to provide continued illumination for at least one hour in the event of primary power loss. No emergency power shall be required for approved self-luminous signs. (Plan review—Building, Fire. Inspection—Building)

(g) Handrails: Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide shall have handrails on both sides unless the full width of the stairway is not needed to accommodate the design occupancy. (Plan review—Building, Fire. Inspection—Building)

(h) Guards: Every open portion of a stair, landing or balcony which is more than 30 inches above the floor or grade below and is not provided with guards or those in which the existing guards are in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. (Plan review—Building, Fire. Inspection—Building)

(i) Vertical Opening Protection: Vertical opening protection for interior stairways and other vertical openings shall be provided as follows:

1. For vertical openings connecting more than six floor levels, approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives shall be required.

2. For vertical openings connecting four to six floor levels, approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives shall be required. (Plan review—Building, Fire. Inspection—Building)

(j) Structural Elements: Structural elements which are uncovered during the course of the rehabilitation and which are found to be unsound or otherwise structurally deficient, shall be reinforced, supported or replaced in accordance with the applicable structural design criteria of the building subcode. Where structural elements are sound, there is no excessive deflection (defined as deflection in excess of the standards set forth in N.J.A.C. 5:23-6.7(c)1), and fixed loads are not changing in a way that will increase the stresses on existing structures beyond that which is permitted by N.J.A.C. 5:23-6.7(c), existing structural elements shall be permitted to remain. (Building)

(k) Plumbing Fixtures: Plumbing fixtures shall be provided as follows. Where the plumbing subcode allows for the substitution or omission of fixtures, such substitutions or omissions shall also be permitted under this section. (Plumbing)

Total Occupancy <sup>1</sup>	Water Closets	Lavatories	Drinking Water Facilities	Service Sinks
1-15	1 Unisex	1	1	1
16 and over	Fixtures to be provided as per Table 7.21.1 of the plumbing subcode.			

Note 1. For purposes of determining the number of plumbing fixtures required, total occupancy shall be the anticipated occupancy of the building under normal use conditions. It is not necessarily the same as the total permitted occupant load based on egress capacity.

(l) Mechanical Requirements: All spaces intended for occupancy shall be provided with either natural or mechanical ventilation.

1. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers, or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

2. Mechanically-ventilated spaces shall comply with the following:

i. Newly-installed HVAC systems shall comply with the requirements of ASHRAE 62-89.

ii. Existing systems that are altered or extended shall not reduce the amount of outside air below the existing rate per person or the rate included in ASHRAE 62-89, whichever is lower. As a minimum, mechanically-ventilated spaces shall be provided with five CFM per person of outdoor air and 15 CFM of ventilation air per person unless the indoor air quality procedure of ASHRAE 62-89 is followed and results in a lesser amount.

3. All newly-introduced devices, equipment or operations that produce airborne particulates, odors, fumes, sprays, vapors, smoke or gases in such quantities to be irritating or injurious to health shall be provided with local exhaust. (Building)

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

(n) Specific Occupancy Areas: Specific occupancy areas within the work area, as listed in N.J.A.C. 5:23-6.30(h), shall comply with the requirements established in that section for separation and/or protection. (Building)

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

(a) Manual Alarm System: For buildings greater than three stories in height with occupant loads over 25, when the work area exceeds 50 percent of the gross enclosed floor area of the building, manual fire alarms shall be required throughout the building.

1. Exception: Manual alarm systems shall not be required in buildings equipped throughout with an automatic suppression system. (Fire)

(b) Vertical Opening Protection: When the work area exceeds 50 percent of the gross enclosed floor area of the building, vertical opening protection shall be provided throughout the building as follows:

1. A minimum two hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting more than six floor levels.

2. A minimum one hour fire rated assembly with approved opening protectives shall be required for interior stairways and other vertical openings connecting four to six floor levels. (Plan review—Building, Fire. Inspection—Building)

(c) Requirements for highrise buildings: Any building or structure having one or more floors used for human occupancy located either more than six stories or more than 75

feet above the lowest level accessible to a fire department vehicle, shall comply with the following:

1. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area served by a recirculating air or exhaust system, the recirculating air or exhaust system which serves the work area shall be equipped with approved smoke and heat detection devices installed in accordance with the UCC. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shut-down is not required when the system is part of an approved smoke removal or smoke control system. (Building)

2. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, all elevators in the building shall be equipped with the following emergency control devices:

i. All automatic (nondesignated attendant) elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with Phase 1 Emergency Recall Operation as required by ASME A17.1-1987, Rules 211.3a and 211.3b listed in Appendix 3-A of N.J.A.C. 5:18-3;

ii. At least one elevator shall be equipped with Phase II Emergency In-Car Operation, as required by ASME A17.1-1987, Rule 211.3c;

(1) In buildings with multiple elevators, at least one elevator to each floor served by an elevator shall be equipped with Phase II Emergency In-Car Operation; and

iii. All designated attendant elevators having a travel distance of 25 feet or more above or below the designated level shall be equipped with emergency controls, as required by ASME A17.1-1987, Rule 211.4. (Elevator)

3. When the work area is one entire floor or more or when the work area is 20 percent or more of the occupied floor area of the building, standpipes shall be provided up to and including the highest floor that is part of the work area. The standpipes shall be located and installed in accordance with the building subcode, except as follows:

i. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gpm at 65 psi to the topmost floor in buildings equipped throughout with an automatic fire suppression system or a minimum of 500 gpm at 65 psi to the topmost floor in all other buildings. (Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these requirements (gpm/psi) for possible future extension of the standpipe.)

ii. Hose and hose cabinets shall not be required.  
(Fire)

(d) Elevator Devices: When the work area exceeds 50 percent of the gross enclosed floor area of the building, all elevator devices serving any part of the work area shall comply with the requirements of N.J.A.C. 5:23-6.30(g).  
(Elevator)

(e) Public Garages: When the work area exceeds 50 percent of the gross floor area of a public garage, the entire building is required to comply with Section 408.0, except Subsection 408.3.3, of the Building subcode.

#### 5:23-6.29 Mixed use buildings

(a) Each portion of a building shall be separately classified as to use. The requirements of this subcode shall apply to each portion of the building based on the use group of that portion, except that the most restrictive requirements of this subcode for fire suppression shall apply to the entire building.

1. Exception: An automatic fire suppression system shall not be required for uses that would not otherwise need suppression provided that there is a one hour fire separation between the use(s) requiring suppression and the other use(s) in the same building. A two hour fire separation assembly shall be required to apply this exception in any building where one or more of the uses is H.  
(Plan review—Building, Fire. Inspection—Building)

(b) Separation: In any nonresidential use located below one or more dwelling units, when the work area exceeds 50 percent of the gross enclosed floor area of the nonresidential use, the nonresidential use shall be separated from the residential use by a one hour fire resistance-rated ceiling assembly designed to protect the dwelling unit(s) above.  
(Plan review—Building, Fire. Inspection—Building)

(c) Alarms: In any nonresidential use located below one or more dwelling units (including single room occupancies), when the work area exceeds 50 percent of the gross enclosed floor area of the nonresidential use, single or multiple station smoke detectors shall be installed in the nonresidential portion(s) of the building in accordance with NFPA 72 and provided with an audible alarm located within each dwelling unit of the residential portion of the building. The detectors shall be AC powered with battery back-up. Hard-wired, interconnected smoke detectors installed throughout the building shall be accepted as meeting this requirement.  
(Fire)

#### 5:23-6.30 Special technical requirements—all use groups

(a) The requirements of this section shall apply to reconstruction projects in all use groups except R-3 and R-4.

(b) When an automatic sprinkler system is required or provided, the sprinkler riser shall be sized to serve the entire building even if the system currently being installed serves only a portion of the building.

1. Exception: This requirement shall not apply to limited area sprinkler systems installed in accordance with Section 907.0 of the building subcode. 9Fire)

(c) Windowless stories: In all buildings, any windowless basement or story located below the seventh story which is created by the work being performed or any existing windowless basement or story located below the seventh story in which the work area exceeds 50 percent of the gross enclosed floor area of the windowless story, shall be equipped throughout with an automatic fire suppression system installed in accordance with the New Jersey Uniform Construction Code.

1. Stories or basements shall not be considered windowless when there is provided on at least one side of such story or basement firefighter access through openings, such as windows, doors or access panels, that are located entirely above the adjoining grade level.

2. Such openings shall be at least:

i. Thirty-two inches by 48 inches in size, spaced not more than 100 feet apart in each story or basement; or

ii. Twenty-two inches by 42 inches in size, spaced not more than 30 feet apart in each story or basement.

3. All openings for firefighter access shall conform to all the following:

i. Openings shall be unobstructed to allow fire fighting and rescue operations from the exterior;

ii. Openings in stories at or above grade shall have a sill height of not more than 36 inches as measured from the finished floor level. Openings in basements shall have no sill height restrictions; and

iii. Openings shall be readily identifiable and openable from the outside.

4. When openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet from such openings, the story shall be considered windowless unless openings as specified above are provided on at least two sides of the exterior walls of the story.

5. If any portion of a basement is located more than 75 feet from openings as specified above, the basement shall be considered windowless.

6. Windowless basements not exceeding 3,000 square feet in area shall be exempt from this automatic fire suppression requirement, provided a supervised automatic fire alarm system shall be installed in accordance with the New Jersey Uniform Construction Code.

7. In windowless basements greater than 3,000 square feet, but not exceeding 10,000 square feet in area, the required suppression system need not be connected to a water supply other than an existing domestic supply if the following conditions are met:

- i. The suppression system shall be provided with a fire department connection, which shall be marked with a sign reading "Basement Area Sprinkler Water Supply"; and
- ii. A supervised automatic fire alarm system shall be installed in accordance with the New Jersey Uniform Construction Code. (Fire)

(d) Supervision of automatic fire suppression systems: When suppression systems are required by this subcode to be supervised, this shall be accomplished by one of the following methods as determined by the fire subcode official:

1. Approved central station system in accordance with NFPA 72;
2. Approved proprietary system in accordance with NFPA 72;
3. Approved remote station system of the jurisdiction in accordance with NFPA 72; or
4. Approved local alarm service which will cause the sounding of an alarm in accordance with NFPA 72;
5. The following are exceptions to (d) above:
  - i. Underground gate valves with roadway boxes;
  - ii. Halogenated extinguishing systems;
  - iii. Carbon-dioxide extinguishing systems;
  - iv. Dry chemical extinguishing systems; and
  - v. Limited area sprinkler systems. (Fire)

(e) Technical Requirements for Smoke Barriers: Whenever smoke barriers are required by this subchapter, they shall be constructed in accordance with the following provisions:

1. Smoke barriers shall have a fire resistance rating of not less than one-half hour and shall form an effective membrane continuous from outside wall to outside wall and from floor slab to floor or roof deck above, including continuity through all concealed spaces, such as those found above suspended ceilings, and including interstitial structural and mechanical spaces. Transfer grilles, whether equipped with fusible link-operated dampers or not, shall not be used in these partitions. Wire glass panels not exceeding 1,296 square inches in approved steel frames may be used in smoke barriers.

i. Exception: Smoke barriers are not required in interstitial spaces when such spaces are designed and constructed with ceilings that provide resistance to the

passage of fire and smoke equivalent to that provided by smoke barriers.

2. A means of egress shall be provided from each smoke compartment created by smoke barriers such that it is possible to reach an exit without re-entering the smoke compartment.

3. Doors in smoke barriers shall have a fire-resistance rating of not less than 20 minutes when tested in accordance with ASTM E152 without the hose stream and labeled by an approved agency. Double egress corridor doors shall have vision panels of one-quarter inch thick labeled wire glass mounted in approved steel frames. Such panels may also be provided in other doors in smoke barriers. The glass area of the vision panels shall be limited to 1,296 square inches for each door. The doors shall close the openings with only the clearance necessary for proper operation under self-closing or automatic closing and shall be without undercuts, louvers or grilles. Rabbits or astragals are required at the meeting edges of double egress doors, and stops are required on the head and jambs of all doors in smoke barriers. Positive latching devices are not required on double egress corridor doors, and center mullions are prohibited.

i. Exception: Protection at the meeting edges of doors and stops at the head and sides of door frames may be omitted in buildings equipped with an approved engineered smoke control system. The engineered smoke control system shall respond automatically, preventing the transfer of smoke across the barrier.

4. Doors in smoke barriers shall be self-closing or shall be provided with approved door hold-open devices of the fail-safe type which shall release the doors causing them to close upon the actuation of smoke detectors as well as upon the application of a maximum manual pull of 50 pounds against the hold-open device.

5. An approved damper designed to resist the passage of smoke shall be provided at each point a duct penetrates a smoke barrier. The damper shall close upon detection of smoke by an approved smoke detector located within the duct.

i. In lieu of an approved smoke detector located within the duct, ducts which penetrate smoke barriers above doors are permitted to have the approved damper arranged to close upon detection of smoke on either side of the smoke barrier door opening.

ii. Dampers are not required in buildings equipped with an approved engineered smoke control system.

iii. Dampers are not required where the openings in ducts are limited to a single smoke compartment and the ducts are of steel construction. (Plan review—Building, Fire. Inspection—Building)

(f) Existing alarm systems and suppression systems shall be accepted provided that they meet the requirements of

N.J.A.C. 5:23-6.8, Materials and methods, or the standards applicable at the time of their installation and provided that there is no increase in the hazard of the use or in the load. (Fire)

(g) Technical Requirements for Elevator Devices: Where elevator requirements are triggered by the supplemental requirements for each use group (N.J.A.C. 5:23-6.12A through 6.28A), the following shall apply:

1. Passenger elevators. Elevator devices accessible to the general public shall conform to:

i. ASME A17.3-1993 requirements for Hoistway Door Locking Devices, Parking Devices, and Access (Sections 2.7, 4.1); Hoistway Entrances (Sections 2.6, 4.1); Power Operation of Doors and Gates (Sections 2.8, 4.1); Floating Platforms (Sections 3.3.4); Car Doors and Gates (Section 3.4.2); Location of Car Doors and Gates (Section 3.4.3); Emergency Exits (Section 3.4.4); Car Illumination (Section 3.4.5) and Protection of Light Bulbs and Tubes (Section 3.4.6); Terminal Stopping Devices (Sections 3.9, 4.6); Operating Devices and Control Equipment (Section 3.10, 4.7 except 4.7.8); Car Emergency Signaling Devices (Sections 3.11.1 and 4.7.8); Stop Switch (Pits) (Sections 2.3.3, 4.1); Machine Rooms and Machinery Spaces; Lighting (Section 2.2.3) and Ventilation (Section 2.2.4); Check Valve (Hydraulic Elevators) (Section 4.4.2).

ii. ASME A17.1-1993 requirements for Supply Line Shutoff Valve (Rule 303.4a) and Manual Lowering Valve (Rule 303.4d)

2. Freight elevators. Elevators which are allowed to carry passengers by the authority having jurisdiction shall conform to ASME A17.1-1993 Rule 207.4 and ASME A17.3-1993 requirements for Car Frames and Platforms (Section 3.3) and Location of Car Doors and Gates (Section 3.4.3).

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

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

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

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

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

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

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

#### 5:23-6.31 Change of use

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

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

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

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

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

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

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

1 (highest)	H-1, H-2, H-3
2	A-1, A-2, H-4, F-1, I-3, M, S-1
3	A-3, A-5, B, F-2, I-2, R-1, S-2
4	A-4, E, I-1, R-2 more than two stories in height or more than four dwelling units
5 (lowest)	R-2 two stories or fewer in height and four dwelling units or less, R-3, R-4, U

1. When the use of a building is changed to a higher relative use group hazard as shown in Table B above, the building shall comply with the basic requirements of N.J.A.C. 5:23-6.10 through 6.30 applied throughout the building for the new use group unless otherwise provided. Where another lettered subsection of this section establishes a requirement that differs from the basic requirement, the requirement contained in that other lettered subsection shall govern.

i. Where a portion of a building is changed to a higher relative use group hazard, the building shall comply with the basic requirements of N.J.A.C. 5:23-6.10 through 6.30 for fire suppression and fire detection and/or alarms applied throughout the building for the new use group unless the proposed use is separated from the existing use(s) by assemblies with the appropriate fire-resistance rating in accordance with Table 313.1.2 of the building subcode in which case only the portion changed shall comply. The portion of the building changed shall comply with all the other basic requirements of N.J.A.C. 5:23-6.10 through 6.30 for the new use group.

2. When a change of use is made to an equal or lesser relative use group hazard as shown in Table B above, the existing building is not required to comply with the basic requirements except where required in connection with alteration or reconstruction work by the sections of this subcode applicable to alteration or reconstruction work.

3. Where the character of use of an existing building or portion thereof is changed to one of the following special use or occupancy categories as defined in the building subcode, the building or portion shall comply with the referenced section of the building subcode specific to the special use or occupancy regardless of whether a change of use group is involved.

- i. Covered Mall Building—Section 402.0;
- ii. Atriums—Sections 404.0;
- iii. Underground Structures—Section 405.0;

iv. Private Garages—Section 407.0;

v. Public Garages—Section 408.0;

vi. Motion Picture Projection Rooms, Screening Rooms and Sound Stages—Section 411.0;

vii. Stages and Platforms—Section 412.0;

viii. Special Amusement Buildings—Section 413.0;

ix. HPM Facilities—Section 416.0;

x. Hazardous Materials—Sections 417.0 and 418.0;

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

4. Any fire suppression or fire detection and/or alarm requirements applicable to the special use or occupancy shall be applied throughout the entire building unless the special use or occupancy is separated from the remainder of the building by fire separation assemblies having a rating of at least two hours. (Fire)

(c) Means of Egress: The following requirements apply to means of egress in a change of use:

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

1. For any change of use, the occupant load of the space shall be calculated based on the capacity of the exits as per N.J.A.C. 5:23-6.11(b). The occupant load shall not exceed one occupant per five square feet floor area unless the building complies with N.J.A.C. 5:23-10 of the building subcode in its entirety.

i. Where a portion of a building undergoes a change of use, the determination of the capacity of the exit(s) serving that portion shall include all spaces served by those exit(s).

2. When a change in use is made to a higher hazard category as shown in Table C above, the entire building or portion thereof shall comply with the following requirements of the building subcode or of this subcode as specified below.

i. Sections 1005.5 (Open-sided walking surfaces) and 1005.7 (Air movement in egress elements).

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

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

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

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

(1) Existing lath and plaster in good condition or existing 1/2-inch thick gypsum wall board on both sides of the wall shall be accepted where a one-hour fire separation assembly is required by 1011.4 (Corridor enclosure).

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

vi. Section 1013.0 (Grandstands).

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

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

ix. Section 1019.0 (Horizontal exits).

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

xi. Section 1023.0 (Exit signs and lights).

xii. Section 1024.0 (Means of egress lighting).

3. When a change of use is made to an equal or lesser hazard category as shown in Table C above, the existing building is not required to comply with the requirements contained in (c)2 above except in areas where reconstruction work being performed in connection with the change of use triggers these requirements.

4. When a change of use to a higher hazard category is made as shown in Table C above, vertical opening protection shall be provided for all stairs that are part of a required means of egress.

i. Where a portion of a building is changed to a higher hazard category, vertical opening protection shall be provided for all stairs that are part of a required means of egress serving the proposed use from the floor(s) on which the proposed use is located to the level of exit discharge.

5. Notwithstanding the relative hazard as determined by Table C above, where any change of use occurs to a single exit building, the building shall meet the requirements of Section 1010.3 (single exits) of the building subcode for the proposed use.

6. When a change of use is made to any residential use group (R-1, R-2, R-3 or R-4) or to Use Group I-1, every sleeping room below the fourth story shall have at least one operable window or exterior door. Where windows are provided to comply with this requirement, the window shall have a sill height of not more than 44 inches, and have a width of at least 20 inches, a height of at least 24 inches and a minimum total area of 5.7 square feet measured from head to sill and from side to side.

i. An outside window or exterior door is not required in buildings where the sleeping room is provided with a door to a corridor having access to two remote exits.

ii. An outside window or exterior door is not required in buildings equipped throughout with an automatic fire suppression system.

iii. In a building that originally was in Use Group R-3 and is returning to Use Group R-3, the windows shall be permitted to remain as they were during the time when the building previously was in use as a residence. (Plan review—Building, Fire. Inspection—Building)

(d) Enclosure of vertical openings other than stairs: The following requirements apply to enclosure of vertical openings other than stairs in a change of use:

1. For any change of use which also constitutes a change of use group, vertical openings other than stairs shall be protected as required by N.J.A.C. 5:23-6.10 through 6.30 for the proposed use within each space undergoing a change of use.

i. Exception: Atriums in compliance with Section 404 of the building subcode are not required to be enclosed.

2. Stairs shall be enclosed in accordance with N.J.A.C. 5:23-6.10 through 6.30 for the proposed use if required by (c) above. (Plan review—Building, Fire. Inspection—Building)

(e) Height and Area Limitations: The following height and area limitations apply in a change of use:

TABLE E  
Hazard Categories and Classifications  
Height and Area

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

1. When a change of use is made to a higher hazard category as shown in Table E above, the height and area of the building shall meet the limitations of chapter 5 of the building subcode for the proposed use group.

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

2. When a change of use is made to an equal or lesser hazard category as shown in Table E, the existing building may continue to exceed the maximum allowable height and area permitted for new buildings.

3. Where a change of use is made in a mixed use building or a single use building is changed to a mixed use building, and any of the proposed uses is a higher category as per Table E, the building shall comply with one or any combination of the following:

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

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

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

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

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

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

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

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

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

4. Change of use of an unlimited area building shall comply with the provisions of Section 507 of the building subcode for the proposed use. (Plan review—Building, Fire. Inspection-Building)

(f) Exterior Wall Fire Resistance Ratings and Maximum Area of Exterior Wall Openings: The following exterior wall fire resistance ratings and maximum area of exterior wall openings apply in changes of use:

TABLE F  
Hazard Categories and Classifications  
Exposure of Exterior Walls

Relative Hazard	Use Classification
1 (highest)	H
2	Buildings exceeding 12,000 sq ft of F-1, M or S-1
3	A, B, E, F-2, I, R-1, S-2 Buildings 12,000 sq ft or less of F-1, M or S-1
4 (lowest)	R-2, R-3, R-4, U

1. Exterior Wall Protection: If the use group of a building is changed to a higher hazard classification in accordance with Table F, the requirements for exterior wall fire resistance rating in the table below shall be met.

Requirements for Exterior Wall Fire Resistance Rating  
Building Use Group<sup>b</sup>

Fire Separation Distance	Building Use Group <sup>b</sup>		
	H-2	F-1, H-3, M, S-1	A, B, E, F-2, S-2, H-4, I, R-1
0-5 FEET	4	3	2 <sup>a</sup>
Over 5-10 feet	3	2 <sup>a</sup>	1
Over 10-15 feet	2	1	0
Over 15-30 feet	1	0	0
Over 30 feet	0	0	0

Note a. Existing eight-inch hollow or six-inch solid masonry walls shall be accepted as a two hours rating in other than Use Group H-2 or H-3.

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

i. Exterior wall protection shall not be required when the height of each building and the aggregate area of

all buildings on the same lot are within the limitations of Table 503 of the building subcode.

ii. Where a portion of a building is changed to a higher hazard classification, exterior walls and openings of the entire building shall comply with the provisions of this section. If the proposed use is separated from the rest of the building by walls with the appropriate fire-resistance rating in accordance with Table 313.1.2 of the building subcode, then only the portion changed must comply with the provisions of this section.

iii. When a change of use is made to an equal or lesser hazard classification as shown in Table F, no change in the rating of existing exterior walls is required.

iv. The fire resistance rating of non-loadbearing exterior walls may be reduced by one hour in buildings equipped throughout with an automatic fire suppression or sprinkler system. Exceptions shall be as provided in Section 705.2.4 of the building subcode, as follows:

(1) Exception: Where the fire separation distance is five feet or less, the fire resistance rating shall not be reduced to less than one hour.

(2) Exception: The rating of non-loadbearing exterior walls shall not be reduced in buildings of Use Group H.

2. Exterior Wall Openings: If the use group of a building is changed to a higher hazard classification in accordance with Table F, the requirements for exterior wall openings in the table below shall be met.

Use Group	Exterior Wall Requirements
H	No opening permitted with a fire separation distance of three feet or less. Protected openings required with a fire separation distance of 20 feet or less.
A-1, A-2, A-3, A-4, B, E, F-1, I-1, I-2, I-3, M, S-1, R-1	No openings permitted with a fire separation distance of three feet or less. Protected openings required with a fire separation distance of 10 feet or less.
F-2, S-2	No openings permitted with a fire separation distance of three feet or less. Protected openings required with a fire separation distance of five feet or less.
Newly created openings in Use Group R-2, R-3, and R-4 with a fire separation distance of three feet or less shall be provided with opening protectives.	

i. If the building is provided with an automatic fire suppression system throughout, the amount of unprotected openings shall be permitted to be increased to the limit for protected openings.

ii. In all occupancies other than Use Group H, unlimited unprotected openings are permitted in the first story of exterior walls facing a street which have a fire separation distance of greater than 15 feet, or facing unoccupied space. The unoccupied space shall be on the same lot or dedicated for public use, shall not be less than 30 feet in width and shall have access from a street by a posted fire lane not less than 18 feet in width.

iii. When a change of use is made to an equal or lesser hazard classification as shown in Table F, no change in existing exterior wall openings is required. (Plan review—Building, Fire. Inspection-Building)

(g) Fire Suppression Systems: The following fire suppression system requirements apply in changes of use:

TABLE G  
Hazard Categories and Classifications  
Fire Suppression

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

1. When a change of use is made to a higher hazard category as shown in Table G, the building shall be provided with an automatic fire suppression system as required by the following sections of the building subcode: Section 904.2 of the building subcode for Use Groups A-1, A-3 and A-4, Section 904.3 of the building subcode for Use Group A-2, Section 904.4 of the building subcode for Use Group E, Section 904.5 of the building subcode for Use Group H, Section 904.6 of the building subcode for Use Group I, Section 904.7 of the building subcode for Use Groups F-1, M and S-1, Section 904.8 of the building subcode for Use Group R-1. Section 904.9 of the building subcode for Use Group R-2 and Section 904.10 of the building subcode for windowless stories.

i. When a portion of a building is changed to a higher hazard category and the proposed use is separated from the existing use(s) by assemblies that meet the applicable fire rating in Table 313.1.2 of the building subcode, an automatic fire suppression system as required above shall be installed only in the portion changed.

2. When a change of use is made to an equal or lesser hazard category as shown in Table G, there is no requirement to install a suppression system except in areas where work being performed in connection with the change of use triggers a requirement for suppression and in windowless stories in accordance with N.J.A.C. 5:23-6.30(c) of this subchapter.

3. Notwithstanding the relative hazard as determined by Table G, when a change in the character of the use is made to a higher degree of hazard as defined by NFPA 13 (Light Hazard, Ordinary Hazard Group 1, Ordinary Hazard Group 2, Extra Hazard Group 1, Extra Hazard Group 2 and Special Occupancy Hazards), the sprinkler system shall be evaluated and, where required by NFPA 13, altered to conform to the required density and maximum sprinkler protection area per head for the proposed occupancy. (Fire)

(h) Fire Alarm Systems: When a change of use is made to any of the following use groups, a fire alarm system shall be installed in accordance with Section 918.0 of the building subcode. Where a portion of a building is changed to any of the following use groups, a fire alarm system shall be installed throughout the building in accordance with Section 918.0 of the building subcode unless the proposed use is separated from the other use(s) in the building by assemblies with the appropriate fire-resistance rating in accordance with Table 313.1.2 of the building subcode in which case only the portion changed shall comply. (For purposes of applying this section, horizontal separation shall not be considered.)

1. Use Group A-4 or E: A fire alarm system shall be installed and maintained as required by Section 918.4.1 of the building subcode.

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

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

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

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

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

(i) Automatic Fire Detection Systems: When a change of use is made to any of the following use groups, an automatic fire detection system shall be installed in accordance with Section 919.0 of the building subcode. Where a portion of a building is changed to any of the following use groups, an automatic fire detection system shall be installed throughout the building in accordance with Section 919.0 of the building subcode unless the proposed use is separated from the other use(s) in the building by assemblies with the appropriate fire-resistance rating in accordance with Table 313.1.2 of the building subcode in which case only the portion changed

shall comply. (For purposes of applying this subsection, horizontal separation shall not be considered.)

1. Use Group I-1: An automatic fire detection system shall be installed and maintained as required by Section 919.4.1 of the building subcode.

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

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

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

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

(j) Single and Multiple Station Smoke Detectors: When a change of use is made to any of the following use groups, single and multiple station smoke detectors shall be installed in accordance with Section 920.0 of the building subcode.

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

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

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

4. Where the use of a portion of a building is changed such that any nonresidential use is located below one or more dwelling units (including single room occupancies), single or multiple station smoke detectors shall be installed in the nonresidential portion(s) of the building in accordance with NFPA 72 and provided with an audible alarm located within each dwelling unit of the residential portion of the building. The detectors shall be AC powered with battery back-up. Hard-wired, interconnected smoke detectors installed throughout the building shall be accepted as meeting this requirement. (Fire)

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

TABLE K  
Structural Load Categories

Load Category	Use or Character of Use
1 (highest)	F-1, F-2, S-1, S-2, stack areas in libraries, stages and platforms, areas subject to vehicular loads, queuing areas
2	All loading conditions not listed in category 1 or 3
3 (lowest)	B, E, I-1, I-2, I-3, R-1, R-2, R-3, R-4

1. When the use or the character of use of a building is changed to a higher load category as shown in Table K above, then the structure shall be capable of supporting the load requirement for the new use or character of use as specified in Table 1606 of the building subcode.

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

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

ii. The corridor and lobby loading requirements of Table 1606 shall be met only if the corridor exceeds six feet in width or if the lobby or corridor area is used for queuing purposes.

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

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

(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 use group is involved:

i. Hazardous (classified) Locations;

ii. Commercial Garages, Repair and Storage;

iii. Aircraft Hangars;

iv. Gasoline Dispensing and Service Stations;

v. Bulk Storage Plants;

vi. Spray Application, Dipping, and Coating Processes;

- vii. Health Care Facilities;
- viii. Places of Assembly;
- ix. Theaters, Audience Areas of Motion Picture and Television Studios and Similar Locations;
- x. Motion Picture and Television Studios and Similar Locations; and
- xi. Agricultural Buildings.

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

(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 public school shall be mechanically ventilated.

i. Spaces intended to be naturally ventilated shall be provided with openable doors, windows, louvers or other openings to the outdoors. The minimum openable area to the outdoors shall be four percent of the floor area being ventilated. Where rooms without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least eight percent of the floor area of the interior room or space, but not less than 25 square feet. The ventilation openings to the outdoors shall be based on the total floor area being ventilated.

ii. Spaces intended to be mechanically ventilated shall comply with the following:

(1) If the occupancy of a building is changed and the new occupancy would require the same or a lesser amount of outdoor air based on the equations below, no change to the mechanical ventilation system is required.

(2) If the occupancy of a building is changed and the new occupancy would require a greater amount of outdoor air based on the equations below, the HVAC system shall be upgraded to satisfy the requirements of Table N below for the new occupancy. As an alternative to providing the amount of outdoor air required by Table N below, the indoor air quality procedure of ASHRAE 62-89 can be used.

(3) Residential buildings that are intended to be mechanically ventilated shall be provided with the ventilation specified in the mechanical subcode.

(4) When the use of a building is changed to a health care facility, mechanical ventilation shall be provided as required by the mechanical subcode and N.J.A.C. 5:23-3.2(b).

(5) When the use group of a building is changed to B or E and the building is a class one or class two building, a test and balance report shall be submitted prior to the issuance of a certificate of occupancy.

2. A commercial hood and an automatic fire suppression system that comply with the mechanical subcode shall be required for commercial cooking equipment producing grease-laden vapors, except in Use Groups R-2, R-3 and R-4. No suppression system shall be required for completely enclosed ovens, steam tables or similar equipment.

i. Exception: Bed and breakfast homestay facilities, which are designed to accommodate five or fewer guests, shall not be required to comply with this provision. (Building)

TABLE N  
Outdoor Air Rates Based on Occupancy Type

Occupancy	P/1,000 sq. ft.	CFM/ person
Storage Warehouses	5	10
Correction Facilities		
Dining Halls	100	15
Guard Stations	40	15
Dry Cleaners, laundries		
Coin oper dry cleaner	20	15
Coin oper laundries	20	15
Education		
Auditoriums	150	15
Classrooms	50	15
Libraries	20	15
Music Rooms	50	15
Food & Bev Service		
Dining Rooms	70	15
Kitchens (cooking)	20	15
Hospitals, Nursing & Convalescent Homes		
Med Procedure Rooms	20	15
Physical Therapy	20	15
Recovery and ICU	20	15
Hotels, Motels, Resorts, Dormitories		
Assembly Rooms	120	15
Dormitory Sleep Areas	20	15
Lobbies	30	15
Specialty Shops		
Barber	25	15
Florists	8	15
Hardware, drug, fabric	8	15
Reducing Salons	20	15
Supermarkets	8	15

<u>Occupancy</u>	<u>P/1,000</u> <u>sq. ft.</u>	<u>CFM/</u> <u>person</u>	<u>Occupancy</u>	<u>P/1,000</u> <u>sq. ft.</u>	<u>CFM/</u> <u>person</u>
<b>Theaters</b>					
Auditoriums	150	15	Sports and Amusement		
Stages and Studios	70	15	Playing floors (gym)	30	20
<b>Transportation</b>			Sports and Amusement		
Platforms	100	15	Ballrooms and Discos	100	25
Vehicles	150	15	Bowling Alleys		
Waiting Rooms	100	15	(Seating areas)	70	25
			Game Rooms	70	25
<b>Workrooms</b>			Hospitals, Nursing &		
Bank Vaults	5	15	Convalescent Homes		
Meat Processing <sup>a</sup>	10	15	Operating Rooms	20	30
Pharmacy	20	15			
Photo Studios	10	15	Hotels, Motels, Resorts,		
<b>Sports and Amusement</b>			Dormitories		
Spectator Areas	150	15	Gambling Casinos	120	30
<b>Correctional Facilities</b>					
Cells	20	20	<u>Occupancy</u>		
<b>Education</b>			<u>Education</u>		
Laboratories	50	20	Corridors		CFM/ sq. ft.
Training Shops	30	20	Locker Rooms		0.1
<b>Food &amp; Bev Service</b>			Hospitals, Nursing and		0.5
Cafeteria, fast food	100	20	Convalescent Homes		
			Autopsy Rooms		0.5
<b>Hotels, Motels, Resorts,</b>			<b>Public Spaces</b>		
<b>Dormitories</b>			Corridors and Utilities		0.5
Conference Rooms	50	20	Elevators		1.0
<b>Dry Cleaners</b>			Locker & Dressing Rooms		0.5
Commercial Laundry	10	25	Public Restrooms		75 cfm per water closet or urinal
<b>Hospitals, Nursing and</b>			<b>Retail Stores, Sales Floors</b>		
<b>Convalescent Homes</b>			and Showroom Floors		
Patient Rooms	10	25	Basement and Street		0.3
<b>Specialty Shops</b>			Dressing Rooms		0.2
Beauty	25	25	Malls and Arcades		0.2
<b>Dry Cleaners, Laundries</b>			Shipping and Receiving		0.15
Commercial Dry			Storage Rooms		0.15
Cleaner	30	30	Upper Floors		0.2
<b>Food &amp; Bev Service</b>			Warehouses		0.05
Bars & Cocktail			<b>Specialty Shops</b>		
Lounges	100	30	Automotive Service		1.5
<b>Dry Cleaners, Laundries</b>			Clothes and Furniture		0.3
Storage, Pick-up	30	35	Pet Shops		1.0
<b>Smoking Lounges</b>	70	60	<b>Sports &amp; Amusement</b>		
<b>Offices</b>			Ice Arenas		0.5
Conference Rooms	50	20	Swimming Pools		
Office Spaces	7	20	(Pool & Deck Area)		0.5
Reception Areas	60	20	<b>Storage</b>		
Telecommunication			Repair Garages/Public		
Ctrs & Data Entry	60	20	Garages		1.5
<b>Theaters</b>			<b>Workrooms</b>		
Lobbies	150	20	Darkrooms		0.5
Ticket Booths	60	20	Duplicating		0.5

Note: P/1,000 sq. ft. = persons per 1,000 square feet of building area.  
 Note a. Spaces unheated or maintained below 50 degrees F are not covered by these requirements unless the occupancy is continuous.  
 Where the ventilation rates in Table N are based on CFM/person  
 (1)  $OL_n \times V_n$  is less than or equal to  $OL_e \times V_e$  + no upgrade

- (2)  $OL_n \times V_n$  is greater than  $OL_e \times V_e$  + upgrade  
Where the ventilation rates in Table N are based on CFM/square footage
  - (3)  $SF_n \times V_n$  is less than or equal to  $SF_e \times V_e$  + no upgrade
  - (4)  $SF_n \times V_n$  is greater than  $SF_e \times V_e$  + upgrade
- Where the ventilation rates in Table N are based on CFM/square footage and CFM/person
- (5)  $OL_n \times V_n$  is less than or equal to  $SF_e \times V_e$  + no upgrade
  - (6)  $OL_n \times V_n$  is greater than  $SF_e \times V_e$  + upgrade
  - (7)  $SF_n \times V_n$  is less than or equal to  $OL_e \times V_e$  + no upgrade
  - (8)  $SF_n \times V_n$  is greater than  $OL_e \times V_e$  + upgrade

Where:

$OL_n$  = the occupant load of the proposed occupancy based on Table N. When accepted by the administrative authority this occupant load can be reduced.

$OL_e$  = the occupant load of the existing occupancy based on Table N.

$SF_n$  = the square footage of the proposed occupancy.

$SF_e$  = the square footage of the existing occupancy.

$V_n$  = the ventilation rate for the proposed occupancy based on Table N.

$V_e$  = the ventilation rate for the existing occupancy based on Table N.

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

1. The change of use of a building of 10,000 square feet or more total gross enclosed floor area shall comply with all applicable provisions of the barrier free subcode, N.J.A.C. 5:23-7.

2. The change of use of a building of less than 10,000 square feet total gross enclosed floor area shall be exempt from the provisions of the barrier free subcode, except as follows:

i. An alteration project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.6.

ii. A reconstruction project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.7.

3. In a building of any size, where there is a change of use of an area of 10,000 square feet or more, the proposed new use shall comply with the requirements of the barrier free subcode, N.J.A.C. 5:23-7.

4. In a building of any size, where there is a change of use of an area of less than 10,000 square feet, the proposed new use shall be exempt from the provisions of the barrier free subcode, except as follows:

i. A renovation project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.5.

ii. An alteration project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.6.

iii. A reconstruction project undertaken in connection with the change of use of a small building shall provide accessibility as required by N.J.A.C. 5:23-6.7. (Building)

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

**5:23-6.32 Additions**

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

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

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

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

(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 313.1.3 of the building subcode.

1. Exception: Existing one and two story buildings may be expanded beyond what is permitted by Table 503 of the building subcode by up to 25 percent of the existing floor area without providing fire separation. This exception may be applied only once in the life of the building or may be used in increments that total not more than 25 percent over the life of the building.

2. 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 allowed by Chapter 9 of the building subcode, suppression shall be provided throughout the fire area unless the addition is separated from the existing building by a fire separation assembly in accordance with Section 313.1.2 of the building subcode.

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

(f) Whenever an addition is made to a detached, single family dwelling of Use Group R-3 or R-4, smoke detectors shall be installed in accordance with the following:

1. If the area of the addition is 25 percent or more of the floor area of the largest floor of the existing building, smoke detectors complying with the building subcode shall be installed throughout the addition and the existing building.

2. If the area of the addition is five percent or more, but less than 25 percent, of the floor area of the largest floor of the existing building, hardwired, interconnected smoke detectors with battery back-up meeting the requirements of NFPA 72, except as otherwise provided in the building or fire protection subcode, shall be installed and maintained in each story in the dwelling unit, including basements. (Fire)

(g) All additions shall comply with the requirements of the barrier free subcode (N.J.A.C. 5:23-7), where applicable.

1. The addition shall include accessible entrance(s) unless the requirement that 50 percent of the building entrances be accessible has been met in the existing building. (For purposes of calculating the number of accessible entrances required, all entrances in the existing building and planned for the addition shall be included.)

i. If the only accessible entrance to the addition is located in the existing building or facility, at least one interior accessible route shall provide access through the existing building to all rooms, elements, or spaces in the addition.

2. If there are no toilet rooms in the addition, accessible toilet facilities that comply with Section 1110 of the barrier free subcode shall be provided in the existing building. (Building)

(h) Structural loads: The following concern structural loads in changes of use:

1. An addition shall not impose new loads which would cause the existing building to be subject to stresses exceeding those permitted by the building subcode.

2. An addition shall not increase the forces in any structural element of the existing building or structure by more than five percent, unless the increased forces on the element are still in compliance with the building subcode for new structures.

3. An addition shall not decrease the strength of any structural element of the existing building or structure unless the element still exceeds the strength required by the building subcode for new structures. (Building)

### 5:23-6.33 Historic buildings

(a) Except as provided for in this section, historic buildings shall comply with the provisions of this subcode relating to the repair, renovation, alteration, restoration, reconstruction, movement and/or change of use of structures.

1. For purposes of applying this section, historic buildings shall include any building that meets one or more of the following criteria:

i. Buildings listed on the New Jersey or National Registers of Historic Places either individually or as a contributing building to a historic district;

ii. Buildings that have been issued a Determination of Eligibility by the Keeper of the National Register of Historic Places;

iii. Buildings identified as contributing buildings to Local Historic Districts which have been certified by the Keeper of the National Register as substantially meeting the National Register Criteria; or

iv. Buildings with a State Historic Preservation Officer Opinion or Certification that the property is eligible to be listed on the National Register of Historic Places either individually or as a contributing building to a historic district.

2. Variations: Building owners wishing to use an alternative to compliance with specific provisions of this subcode shall submit request(s) for variations in writing in accordance with N.J.A.C. 5:23-2.10. Requests for variations shall identify all nonconformities with the requirements of this subcode and shall include: a statement of the requirements of this subcode from which a variation is sought, a statement of the manner by which strict compliance with the provisions of this subcode would result in practical difficulties or would detract from the historic character of the building and a statement of feasible alternatives to the requirements of this subcode that would adequately protect the health, safety and welfare of the intended occupants and of the public generally.

i. The provisions of N.J.A.C. 5:23-2.10, Variations, notwithstanding, a variation may be granted where no feasible alternative to the strict requirements of the subcode exists, provided that the owner submits a finding by a qualified architect that the feature of the building which cannot be brought into strict compliance with the requirements of this subcode is essential to maintaining the historical value and character of the building. Any such finding submitted in support of a variation application shall be in writing and shall state the basis and reasons for the finding.

3. Barrier Free Requirements: All buildings undergoing rehabilitation or change of use shall comply with the requirements of N.J.A.C. 5:23-7.1(b)17 except when compliance is technically infeasible. Unless the historic character of the building would be threatened or destroyed, there shall be, at a minimum, at least one accessible route from an accessible parking space, public transportation stop or passenger loading zone to an accessible entrance, at least one accessible entrance, an accessible route from the accessible entrance to all publicly-used spaces on the level of the accessible entrance, and, when toilet facilities are provided, at least one accessible toilet facility. (Building)