

**510-RICR-00-00-20**

## **TITLE 510 – BUILDING CODE COMMISSION**

### **CHAPTER 00 – N/A**

### **SUBCHAPTER 00 – N/A**

PART 20 – State Rehabilitation Building and Fire Code for Existing Structures

## **20.1 Chapter 1: Administration**

### **20.1.1 101.0 Purpose and Intent**

101.1 The purpose of this code is to encourage the continued use or reuse of existing buildings and structures. This code is intended to permit repairs, renovations, alterations, reconstructions, additions, and/or changes of occupancy that maintain or improve the health, safety and welfare in existing buildings, without requiring full compliance with the construction requirements of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code, except for proportional additional work as specified in this code. Existing buildings, subject to this code, shall continue to be subject to the administrative, maintenance and operational requirements of the above-referenced codes. Building owners shall further comply with the regulations adopted by the Rhode Island Department of Health and all other public bodies charged with protecting the public health and safety. This code shall only apply to buildings in existence for at least ten (10) years prior to the application for a permit under this code. This code shall have an effective date of May 1, 2002.

101.1.1 Uses not covered: All repairs, renovations, alterations, reconstruction, additions and/or conversions (changes of occupancy) to health care facilities, nursing homes, child day care centers, community residences, educational occupancies, detention and correctional occupancies, high hazard occupancies, and one, two, and three family homes shall not be covered or enforced by this code at this time and shall comply with the applicable provisions of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code.

101.1.2 The fire code element of this code generally addresses means of egress, fire detection systems, fire suppression systems, and fire-related mechanical, electrical and plumbing systems. In general, the fire code element incorporates national rehabilitation code philosophies by coupling many of the passive fire protection elements of Nationally Applicable Recommended Rehabilitation Provisions developed by HUD and the newly drafted NFPA 5000 Chapter 54 for existing buildings. To achieve a level of active fire protection acceptable to the Fire Service of Rhode Island, this code

further incorporates the fire protection elements of the current Rhode Island fire alarm, sprinkler system and related active fire safety systems.

101.1.3 The building code element of this code generally addresses structural, energy, accessibility, boiler and elevator requirements along with all non-fire related mechanical, electrical and plumbing systems. In general, the building code elements incorporate the underlying philosophy of Nationally Applicable Recommended Rehabilitation Provisions developed by HUD and the newly drafted International Existing Building Code and NFPA provisions for the rehabilitation of existing buildings.

101.2 All work shall be classified into six categories: repair, renovation, alteration, reconstruction, addition, and change of occupancy. Specific requirements are established for each work category in this code. Work of more than one category shall be permitted to be part of a single work project.

101.2.1 Where a project includes one category of work in one building area and another category of work in a separate area of the building, each project area shall comply with the requirements of the respective category of work.

101.2.2 Where a project consisting of alterations and reconstruction is performed in the same work area, or in contiguous work areas, the project shall comply with the requirements applicable to a reconstruction.

Exception: Where the reconstruction work area is less than ten (10%) percent of the modification work area, the two shall be considered as independent work areas, and the respective requirements shall apply.

101.2.3 Nothing in this chapter shall be interpreted as requiring the repair, renovation, alteration or reconstruction of existing buildings which are in compliance with the Building and Fire Codes. If a building was originally inspected and determined not to be in compliance with either the Fire or Building Code, the owner shall have three options: first, the owner may correct the cited deficiencies and bring the building into compliance with the Fire or Building Code provisions in question. The second option would be to apply for an appropriate variance, with either the Fire Board or Building Board. The third option would be to present the authority having jurisdiction a plan of action bringing the facility into compliance with the provisions of this Code. In the case where an owner plans to unilaterally proceed with a repair, renovation, alteration or reconstruction of an existing building, the owner shall submit plans under this Code. Nothing herein shall prevent the owner from submitting plans for review under the current Building Code and Fire Code.

## **20.1.2 102.0 Compliance**

102.1 Categories of work: Repairs, renovations, alterations, reconstruction, additions, and changes of occupancy shall conform to the requirements of this code.

102.2 Equivalent alternatives: This code is not intended to prevent the use of any alternate material, alternate design or alternate method of construction not specifically

prescribed herein, provided any alternate has been deemed to be equivalent by the authority having jurisdiction and its use authorized by the Rehabilitation Board.

102.3 Other alternatives: Where compliance with this code or with any other code as required by this code is technically infeasible or would impose undue hardship because of structural, construction or dimensional difficulties, the Rehabilitation Board is authorized to accept other alternative materials, design features and/or operational features.

102.3.1 Notwithstanding the above, the local certified building official, with the approval of the Building Commissioner, may grant limited dimensional modifications from the building code element of this code; and the local certified fire marshal, with the approval of the State Fire Marshal, may grant limited dimensional modifications from the fire code element of this code. The dimensional modifications referred to above would be limited to existing ceiling heights, door widths, window openings, stairway and hallway widths, and the dimensions of stairway treads and risers. The above dimensional modifications may only be granted when the total existing egress width can accommodate the maximum occupancy load.

102.4 Effective date: Requirements of this code, and the requirements of this code that reference the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code or Accessibility Code shall be based on the respective codes in effect at the time of the issuance of the permit, and not on any subsequent amendments unless the above codes are specifically made retroactive by statute or administrative regulation adopted by the Fire Board, Building Board, or other authorized Board. This code shall only apply to buildings in existence for at least ten (10) years prior to the application for a permit under this code.

102.5 Permit expiration: Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. One or more extensions of not more than 180 days each shall be permitted when requests are submitted in writing and justifiable cause demonstrated.

102.6 Compliance with other codes: Buildings, elements, components or systems in compliance with the current edition of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code shall not be required to comply with any more restrictive requirement of this code.

Exception: Required sprinkler and fire alarm systems.

102.7 Elements, components and systems of existing buildings with features that exceed the requirements of the codes for new construction and not otherwise required as part of prior documented approved alternative arrangements shall not be prevented

by this code from being modified as long as they remain in compliance with the applicable codes for new construction.

102.8 It is not the intent of this Code to supersede any codes or ordinances that address dangerous or unsafe buildings.

102.9 Work mandated by any accessibility, property, housing, or fire code, or mandated by any licensing rule or ordinance, adopted pursuant to law, shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this chapter unless the code requiring such work so provides.

102.10 Buildings and structures located wholly or partially within the flood hazard area established by the Building Code shall comply with that code.

### **20.1.3 103.0 Nonconforming Rights (Existing Buildings)**

103.1 Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued, if such use or occupancy was legal at the time of the adoption of this code provided such continued use is not hazardous to life. Nothing in this code shall be interpreted as requiring the repair, renovation, alteration or reconstruction of existing buildings.

### **20.1.4 104.0 Relationship to Other Codes, Rules, and Ordinances**

104.1 It is not the intent of this code to supersede any codes or ordinances that address dangerous or unsafe buildings.

104.2 It is not the intent of this code to supersede any retroactive regulations that impose stricter requirements.

104.3 It is not the intent of this code to supersede the Minimum Housing Code by establishing minimum standards of habitability for housing.

104.4 Work mandated by any of the following codes, rules, or ordinances that is not part of a rehabilitation project shall conform only to the requirements of those codes, rules or ordinances and shall not be required to conform to this code unless the document requiring such work so provides:

1. accessibility, housing, property maintenance;
2. any codes or ordinances that address dangerous or unsafe buildings or conditions;
3. any licensing rule or ordinance, adopted pursuant to law; and
4. Rhode Island Fire Prevention Code.
5. Rhode Island Fire Safety Code.

6. Rhode Island Building Code.

**20.1.5 105.0 Preliminary Meeting**

105.1 If a building permit is required for a complex rehabilitation project involving multiple codes, then at the request of the prospective permit owner or authorized representative prior to the submission of the construction permit application, the certified building official and the certified fire marshal or their designees, and agency representatives from all necessary agencies in accordance with 105.2 to the extent possible, shall meet with the prospective applicant to discuss plans for any proposed work or change of occupancy under this code prior to the application for the permit.

105.2 The preliminary meeting, to the extent possible, shall include the officials responsible for permit approval and enforcement in the following areas, as may be applicable to the rehabilitation project:

1. Building Code;
2. Mechanical Code;
3. Plumbing Code;
4. Electrical Code;
5. Rhode Island Fire Safety Code;
6. Rhode Island Fire Prevention Code;
7. Boiler Safety Code;
8. Energy Code;
9. Elevator Code;
10. State and Local historical preservation ordinances;
11. Accessibility Code.

Where possible, a single meeting of all the parties shall be arranged. Where the total cost of the project exceeds five hundred thousand (\$500,000) dollars, the officials shall meet onsite if so requested by the owner.

105.3 The purpose of this preliminary meeting is for the prospective applicant to present its intentions for the proposed work to the responsible code officials so that together they can determine the specific requirements in the codes listed in 105.2 to be applied to proposed project. Any decisions reduced to writing and agreed to by all parties regarding the specific requirements of the codes listed in 105.2 that are to be applied to the proposed project made at the preliminary meeting shall be binding upon the prospective applicant and the code officials unless circumstances arise which were

unknown or could not be ascertained by the prospective applicant, the certified building official and/or the certified fire marshal, at the time of the preliminary meeting.

Notwithstanding the above, nothing herein shall relieve the applicant of the obligation to fully comply with the provisions of this code in good faith.

105.4 For a rehabilitation project or portion thereof that is in the repair, renovation or alteration category of work, a preliminary meeting may be granted at the discretion of the certified building official and the certified fire marshal when a request for a preliminary meeting is made by the prospective applicant prior to the submission of the construction permit application.

#### **20.1.6 106.0 Permits**

106.1 The rehabilitation work area, as defined in Chapter 2, shall be clearly identified on all construction permit applications, construction documents and permits required by certified building official and the certified fire marshal.

#### **20.1.7 107.0 Appeals**

107.1 Any appeal of issues under this code shall be heard exclusively by the Joint Committee on Rehabilitation Building Code for Existing Buildings and Structures pursuant to R.I. Gen. Laws § 23-29.1-4. Specifically, any building owner may consult the authority having jurisdiction for advice and assistance in complying with the provisions of the rehabilitation building and fire code. In case of practical difficulties, the authority having jurisdiction shall refer any request for variance to the joint committee. The petitioner for the variance shall set forth to the joint committee in the petition the grounds or reasons for requesting the variance.

The joint committee shall fix a day for hearing on the petition and shall give reasonable notice thereof to the petitioner and the property owners within two hundred (200) feet of the petitioner's building or structure when, in the board's discretion, it may have an adverse effect on neighboring properties. A properly indexed record of all variations made shall be kept in the office of the joint committee and shall be open to public inspection. Any building owner may file a petition for a variance to the board by registered mail, and a hearing date shall be set by the joint committee within thirty (30) days of filing a completed application including a filing fee, established in accordance with the following fee schedule:

Petitions related to construction, alteration, renovation, and/or conversion to other use of buildings and structures:

- a. not more than eight thousand (8,000) square feet...one hundred dollars (\$100) filing fee;
- b. more than eight thousand (8,000) square feet but not more than twenty-five thousand (25,000) square feet...three hundred dollars (\$300) filing fee;

- c. more than twenty-five thousand (25,000) square feet but not more than fifty thousand (50,000) square feet...five hundred dollars (\$500) filing fee;
- d. more than fifty thousand (50,000) square feet...one thousand dollars (\$1,000) filing fee.

The term "square feet," as used herein, shall be the total floor space and/or storage capacity of the subject building or structure, as determined and certified by the building code commission or his or her designee, subject to review by the board. The joint committee chairperson may delegate a subcommittee of the joint committee to conduct a hearing and take testimony from the petitioner. The subcommittee shall make recommendations to the joint committee as to their findings, and a decision shall be rendered within ten (10) days of the subcommittee's report. If the petitioner is aggrieved by the subcommittee's recommendations, the petitioner shall have the right of hearing before the entire joint committee within thirty (30) days of the rendered decision.

The application filing fee income shall be deposited as general review.

Appeals. Review of refusal of variation – Review of final order. Any building owner aggrieved by any decision of the joint committee refusing to grant a variation pursuant to the provisions of R.I. Gen. Laws § 23-29.1-4(A) may, within thirty (30) days after the decision, commence an action in district court against the executive secretary of the joint committee, only in his or her official capacity for a review of the decision. The findings of the joint committee shall be conclusive unless clearly erroneous. A party aggrieved by a final order of the court may seek review thereof in the Supreme Court by petition for writ of certiorari in accordance with the procedures contained in R.I. Gen. Laws § 24-25-16.

## **20.1.8 108.0 Enforcement**

108.1 The building code element of this code is only enforceable by the Building Commissioner, his or her staff, and those local building officials who are further trained and certified by the Building Commissioner. The fire code element of this code is only enforceable by the State Fire Marshal, his or her staff, and those assistant deputy state fire marshals who are further trained and certified by the State Fire Marshal. The above-certified officials shall utilize the existing enforcement procedures of the fire code, when enforcing a fire code element, and the building code, when enforcing a building code element.

108.2 Upon request of a building owner, his or her architect or engineer, the Building Commissioner, the State Fire Marshal, or any other interested party, the Rehabilitation Board shall provide reasonable interpretation of the provisions of the Rehabilitation Code. The above interpretations shall be binding upon all parties until such time as the subject code section is amended pursuant to R.I. Gen. Laws § 23-29.1-2(b)(2).

## **20.2 Chapter 2: Definitions**

### **20.2.1 201.0 General**

201.1 The words and terms used in this code shall have the following meanings unless the context clearly indicates otherwise. Any term not defined herein which is defined in any other code applicable to this code shall have the meaning as defined in that code. Where a term is defined in this code and is also defined in another code, then the term shall have the meaning as defined herein wherever it is used in this code. Words used in the present tense include the future. Words in the masculine gender include the feminine and neuter. The singular number includes the plural and the plural number includes the singular.

### **20.2.2 202.0 Definitions**

"Accessibility" means see § 20.10 of this Part (Chapter 10, Accessibility)

"Administrative requirements" means statutory and/or regulatory requirements addressing non-structural safety requirements of an occupancy such as firefighters on duty in a Place of Assembly or a certain number of fire drills in an Educational Occupancy.

"Approximate fire rating" means a determination by the Authority Having Jurisdiction that the referenced component of a building is the rough equivalent of a comparably listed or recognized assembly. For example, a solid core wood door, with a minimum thickness of one and three-eighths (1 3/8") inches, installed securely in an existing door jamb, may be determined to have an approximate fire rating of twenty minutes. Likewise, a layer of five-eighths (5/8") inch sheetrock over an existing plaster ceiling, or comparable assembly approved by the State Fire Marshal and the Building Commissioner, may be determined to provide an approximate fire separation of one hour between occupancies. In determining the approximate fire rating of an assembly, the authority having jurisdiction may rely upon § 720 (calculated fire resistance) of the International Building Code, 2000 edition. (Appendix A)

"Artist-in-residence" means an artist or artists using a space within a building for combined living and artistic working purposes.

"As amended" means the rules and regulations, legally adopted by the Building Board and/or Fire Board, which clarify, modify and/or amend the referenced model code or statutory provision.

"Authority having jurisdiction" means the State Building Commissioner, his or her certified staff and certified building officials shall enforce the Building Code element of this Code. The State Fire Marshal, his or her certified staff and certified Assistant Deputy State Fire Marshals shall enforce the Fire Code element of this Code. See also definitions of Certified Building Official and Certified Assistant Deputy State Fire Marshal.

“Boiler Code” means the Rhode Island Boiler and Pressure Vessel Code – 1989.

“Building Code” means R.I. Gen. Laws § 23-27.3-100 *et seq.* and all rules and regulations adopted by the Building Code Standards Committee pursuant to R.I. Gen. Laws §§ 23-27.3-101.9(a) through (c), [Part 1 of this Subchapter](#), dated May 1, 1998.

“Building Board” means the Rhode Island Building Code Standards Committee established pursuant to R.I. Gen. Laws § 23-27.3-100.1.4.

“Categories of work” means the nature and extent of construction work undertaken in an existing building. The following categories of work entail increased requirements respectively:

“Addition” means an increase in building area, aggregate floor area, height or number of stories of a structure.

“Alteration” means the reconfiguration of any space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

“Change of occupancy” means a change in the purpose for which a building or portion thereof is used or intended to be used as defined in the Building Code.

“Reconstruction” means the reconfiguration of a space which affects an exit, or a corridor shared by more than a single tenant; and/or reconfiguration of space such that the rehabilitation work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; and/or extensive alterations as defined in § 20.5 of this Part.

“Repair” means the patching, restoration, painting and/or minor replacement of materials, elements, components, equipment and/or fixtures for the purposes of maintaining such materials, elements, components, equipment and/or fixtures in good or sound condition.

“Renovation” means the change, strengthening or addition of load bearing elements, the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment and/or fixtures. Renovation involves no reconfiguration of spaces.

“Certified Assistant Deputy State Fire Marshal” means an Assistant Deputy State Fire Marshal, or certified member of the State Fire Marshal's staff, who has been trained and certified by the State Fire Marshal to enforce the fire code elements of this code.

“Certified Building Official” means a Building Official, or certified member of the Building Commissioner's staff, who has been trained and certified by the State Building Commissioner to enforce the building code elements of this code.

“Complex rehabilitation project involving multiple codes” means a rehabilitation project or portion thereof that involves two or more construction codes enumerated in Section 105.2 and (1) is in one of the following categories of work: addition, change of occupancy or reconstruction or (2) is in any category of work and involves the installation of sprinklers.

“Construction permit application” means any application made to a state or local jurisdiction for a permit or other government approval for a rehabilitation project.

“Covered occupancies” means See Table 202.0.

“Dangerous (structurally)” means where the stresses in any member, the condition of the building or any of its components or elements or attachments, or other condition that results in an overload exceeding one hundred fifty (150%) percent of the stress allowed for the member or material in the Building Code.

“Electrical Code” means see [Part 5 of Subchapter](#), as adopted and amended by the Building Code Standards Committee.

“Elevator Code” means Rhode Island Elevator Safety Code, dated May 15, 1999.

“Energy Code” means see regulation [Part 8 of this Subchapter](#), as adopted and amended by the Building Code Standards Committee.

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

“Exit” means that portion of a means of egress that is separated from all other spaces of the building or structure by construction or equipment, in accordance with the adopted version of NFPA 101 Life Safety Code for new construction, to provide a protected way of travel to the exit discharge. Exits include exterior exit doors, exit passageways, horizontal exits, separated exit stairs, and separated exit ramps.

“Exit access” means that portion of a means of egress that leads to an exit.

“Exit discharge” means that portion of a means of egress between the termination of an exit and a public way.

“Fire alarm system” means a mandated fire detection system as outlined in R.I. Gen. Laws § 23-28.25-1 *et seq.* including all related rules and regulations adopted by the Fire Safety Code Board of Appeal and Review pursuant to R.I. Gen. Laws § 23-28.3-3.

“Fire Board” means the Rhode Island Fire Safety Code Board of Appeal and Review established pursuant to R.I. Gen. Laws § 23-28.3-2.

“Fire Prevention Code” means NFPA 1- Fire Prevention Code and NFPA 101- Life Safety Code for new construction as amended by the Fire Safety Code Board of Appeal and Review.

“Fire Safety Code” means R.I. Gen. Laws § 23-28.1-1 *et seq.* and all rules and regulations adopted by the Fire Safety Code Board of Appeal and Review pursuant to R.I. Gen. Laws § 23-28.3-3, including the Rhode Island Fire Prevention Code.

“Hazard of Contents” means:

“High Hazard” means contents shall be classified as those that are likely to burn with extreme rapidity from which explosions are likely.

“Low Hazard” means contents shall be classified as those of such low combustibility that no self-propagating fire therein can occur.

“Ordinary Hazard” means contents shall be classified as those that are likely to burn with moderate rapidity or to give off a considerable volume of smoke.

“High-rise building” means a building greater than seventy-five (75') feet in height where the building height is measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story.

“Historical building” means 901.1.1 Definition: Historical Building.

“Horizontal exit” means a way of passage from one building to an area of refuge in another building on approximately the same level, or a way of passage through or around a fire barrier to an area of refuge on approximately the same level in the same building that affords safety from fire and smoke originating from the area of incidence and areas communicating therewith.

“Imminent danger” means any conditions or practices in any occupancy or structure that pose a danger that could reasonably be expected to cause death, serious physical harm, or serious property loss.

“Labeled” means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by who’s labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

“Legal Use” means the last recorded use of a building that was established and approved by the local zoning official.

“Life Safety Code” means provisions of the NFPA 101, Life Safety Code, 2000 Edition, unless otherwise noted.

“Load bearing element” means any column, girder, beam, joist, truss, rafter, wall, floor or roof sheathing which supports any vertical load in addition to its own weight, and/or any lateral load.

“Local jurisdiction” means see definitions of Certified Building Official and Certified Assistant Deputy State Fire Marshal above.

“Maintenance requirements” means statutory and/or regulatory requirements addressing the manner and frequency of inspection, repair and/or replacement of the fire protection equipment and systems in a building such as sprinkler and fire alarm systems, exit signs, emergency lighting, fire extinguishers and cooking and other suppression systems.

“Materials and methods requirements” means those requirements in the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code that specify material standards, details of installation and connection, joints, penetrations and continuity of any element, component or system in the building. The required quantity, fire-resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

“Means of egress” means a continuous and unobstructed way of travel from any point in a building or structure to a public way consisting of three separate and distinct parts: (1) the exit access, (2) the exit, and (3) the exit discharges.

“Means of escape” means a way out of a building or structure that does not conform to the strict definition of means of egress but does provide an alternate way out.

“Mezzanine” means an intermediate level between the floor and the ceiling of any room or space.

“Mechanical Code” means see [Part 4 of this Subchapter](#), dated April 1, 1998.

“Minimum Housing Code” means adopted pursuant to R.I. Gen. Laws § 45-24.2-1.

“Occupancy classification” means the classification of occupancies into groups in accordance with Section 302 of the Building Code as modified with Section 202 of this Code.

The following table is provided for the user's convenience in order to allow quick cross-reference between the chapters of NFPA 101, Life Safety Code and the Building Code covering a specific occupancy.

Table 202.0

| Occupancy or Use               | B.O.C.A. Use Group      | NFPA 101, Life Safety Code<br>2000 Edition Chapter |
|--------------------------------|-------------------------|--|
| Assembly                       | A-1, A-2, A-3, A-4, A-5 | Chapter 13   |
| Lodging or Rooming             | R-1                     | Chapter 26   |
| Hotels & Dormitories           | R-1                     | Chapter 29   |
| Apartments (4 units<br>and up) | R-2                     | Chapter 31   |
| Mercantile                     | M                       | Chapter 37   |
| Business                       | B                       | Chapter 39   |
| Industrial                     | F-1, F-2                | Chapter 40   |
| Storage                        | S-1, S-2                | Chapter 42   |

“Operational requirements” means statutory and/or regulatory requirements addressing how a building is operated such as the determination of the maximum occupancy in a Place of Assembly.

“Permit” means an official document or certificate issued by the authority having jurisdiction which authorizes performance of a specific activity.

“Plumbing Code” means see [Part 3 of this Subchapter](#), dated April 1, 1998.

“Rehabilitation” means any work, as described by the categories of work defined herein, undertaken in an existing building.

“Rehabilitation Board” means Rhode Island Joint Committee on the Rehabilitation Building Code for Existing Buildings and Structures established pursuant to R.I. Gen. Laws § 23-29.1-2.

“Rehabilitation Code” means a code designed to encourage the continued use or reuse of legally existing buildings adopted pursuant to the provisions of R.I. Gen. Laws § 23-29.1-1 *et seq.*

“Rehabilitation work area” means that portion of a building affected by any renovation, alteration or reconstruction work as initially intended by the owner and indicated as such

in the permit. Rehabilitation work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by this code.

“Sprinkler system” means a system, designed in accordance with NFPA 13, 13R and/or 13D, as required and/or amended pursuant to R.I. Gen. Laws § 23-29.1-1 *et seq.*, which sharply reduces the heat release rate of a fire and preventing its re-growth by means of direct and sufficient application of water through the fire plume to the burning surface.

“Structural frame” means the structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connection to the columns shall be considered secondary members and not a part of the structural frame.

“Substantial damage” means, for the purpose of determining compliance with the flood provisions of this code, damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50%) percent of the market value of the structure before the damage occurred.

“Substantial improvement” means, for the purpose of determining compliance with the flood provisions of this code, any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds fifty (50%) percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the code official and that are the minimum necessary to assure safe living conditions.
2. Any alteration of a historical structure provided that the alteration will not preclude the structure's continued designation as a historical structure.

“Substantial structural damage” means a condition where:

1. The vertical elements of the lateral force resisting system in any story, in any direction and taken as a whole, have suffered damage such that the lateral load-carrying capacity has been reduced by more than twenty (20%) percent from its pre-damaged condition, or;
2. The vertical load carrying components supporting more than thirty (30%) percent of the structure's floor or roof area have suffered a reduction in vertical load carrying capacity to below seventy-five (75%) percent of the International Building Code required strength levels calculated by either the strength or allowable stress method.

“Technically infeasible” means a change to a building that has little likelihood of being accomplished because the existing structural conditions require the removal or modification of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with applicable requirements.

“Unsafe buildings or equipment” means buildings or existing equipment that are unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition.

“Work area” means that portion or portions of a building consisting of all renovated or reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by this code.

## **20.3 Chapter 3: Repairs**

### **20.3.1 301.0 General**

301.1 Repairs are defined as the patching, restoration, painting and/or minor replacement of materials, elements, components, equipment and/or fixtures for the purposes of maintaining such materials, elements, components, equipment and/or fixtures in good or sound condition. All repairs shall comply with the requirements of this Chapter.

Exception: As modified in [Part 9 of this Subchapter](#) for repairs in historical buildings.

### **20.3.2 302.0 Requirements**

302.1 Except as is otherwise required herein, work shall be done using like materials, or materials permitted by the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, NFPA 101 Life Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code or Elevator Code as applicable. BFO

302.1.1 Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used. B

C302.1.2 Conformance: The work shall not make the building less conforming with the building, plumbing, mechanical, electrical or fire codes of the jurisdiction, or with alternative materials, design and methods of construction or any previously approved plans, modifications, alternate methods or compliance alternatives, than it was before the repair was undertaken. BFO

302.1.3 Flood hazard areas: In flood hazard areas, repairs that constitute substantial improvement shall require that the building comply with the Building Code § 20.1.7 of this Part. B

302.2 Replacement glazing in hazardous locations shall comply with the Safety Glazing requirements of Section 2406 of the Building Code, and paragraph 2403.1 referenced therein. B

Exceptions:

1. Glass-block walls may be repaired using like materials.
2. Louvered windows and jalousies may be repaired using like materials.

302.3 Structural: Repairs of structural elements shall comply with this section. The work shall cause no diminution of structural strength. The work shall not make the building less conforming with the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, NFPA 101-Life Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code where applicable, or with any previously approved alternative arrangements, than it was before the repair was undertaken. B

302.3.1 Wind design: Wind design of existing buildings shall be based upon the procedures specified in the Building Code. B

302.3.2 Reduction of strength: Repairs shall not reduce the structural strength or stability of the building, structure or any individual member thereof. B

Exception: Such reduction shall be allowed provided the capacity is not reduced to below the requirements of the Building Code.

302.3.3 Damaged buildings: Damaged buildings shall be repaired in accordance with this section. B

302.3.3.1 New structural frame members: New structural frame members used in the repair of damaged buildings, including anchorage and connections, shall comply with the Building Code unless the authority having jurisdiction specifically allows replacement with like materials. B

302.3.4 Substantial structural damage: Buildings which have sustained substantial structural damage shall comply with this section. B

302.3.4.1 Engineering evaluation and analysis: An engineering evaluation and analysis which establishes the structural adequacy of the damaged building shall be prepared by a registered design professional and submitted to the code official. The evaluation and analysis may assume that all non-damaged structural elements and systems have their original strength and stiffness. B

302.3.4.2      Extent of repair: The evaluation and analysis shall demonstrate that the building once repaired complies with the wind provisions of the Building Code. B

302.3.5          Below substantial structural damage: Repairs to buildings damaged to a level below the substantial structural damage level as defined in Part 3 of this Sub-Code shall be allowed to be made with the materials, methods and strengths in existence prior to the damage unless such existing conditions are dangerous as defined in Section 302.3.3.1. B

302.3.6          Other uncovered structural elements: Where in the course of conducting repairs, other uncovered structural elements are found to be unsound or otherwise structurally deficient, such elements shall be made to conform to the provisions of 302.3.4.1. B

302.3.7          Flood hazard areas: In flood hazard areas, damaged buildings that sustain substantial damage shall be brought into compliance with Building Code 3107.0. B

302.3.8          Re-roofing: Re-roofing in excess of twenty-five (25%) percent of the roof area of the entire building shall comply with 403.2.1. B

#### 302.4            Plumbing

302.4.1          Materials: The following plumbing materials and supplies shall not be used unless specifically allowed by the current plumbing code:

1.      Sheet and tubular copper and brass trap and tailpiece fittings less than the minimum wall thickness of .027" (0.69 mm).
2.      Solder having more than 0.2% lead in the repair of potable water systems.
3.      Water closets having a concealed trap seal or an unventilated space or having walls that are not thoroughly washed at each discharge in accordance with ASME A112.19.2.
4.      The following types of joints shall be prohibited:
  - a.      Cement or concrete joints
  - b.      Mastic or hot-pour bituminous joints
  - c.      Joints made with fittings not approved for the specific installation
  - d.      Joints between different diameter pipes made with elasto-meric rolling O-rings
  - e.      Solvent-cement joints between different types of plastic pipe
  - f.      Saddle-type fittings

5. The following type of traps are prohibited:
  - a. Traps that depend on moving parts to maintain the seal.
  - b. Bell traps
  - c. Crown-vented traps
  - d. Traps not integral with a fixture and that depend on interior partitions for the seal, except those traps constructed of an approved material that is resistant to corrosion and degradation. B

302.4.2 Water closet replacement: When any water closet is replaced, the replacement water closet shall comply with the Plumbing Code, [Part 3 of this Subchapter](#). The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 gallons (6L) per flushing cycle. B

Exception: Blowout design water closets [3.5 gallons (13L) per flushing cycle].

302.5 Electrical: Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material. B

Exceptions:

1. Electrical products shall comply with Section 110-3(b) "Installation and Use" of the Electrical Code.
2. Replacement of electrical receptacles shall comply with the requirements of Section 210-7(d) of the Electrical Code.
3. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per Section 240-51(b) of the Electrical Code.
4. For replacement of non-grounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuit, the grounding conductor of a grounding type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system as described in Section 250-81 of the Electrical Code, or to any accessible point on the grounding electrode conductor.
5. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor if all the conditions of Section 250-60 of the Electrical Code are met.

## 302.6 Mechanical

302.6.1 Defective material or parts shall be replaced or repaired in such a manner so as to preserve the original approval or listing. B

302.6.2 Temporary repairs may not be made to a damaged heat exchanger. B

## 302.7 Boilers and Pressure Vessels

302.7.1 Repairs and replacements of fittings or appliances shall comply with the Mechanical Code, [Part 4 of this Subchapter](#). B

302.7.2 Repairs of boilers or pressure vessels shall comply with the requirements specified in the Rhode Island Boiler and Pressure Vessel Code, 1989 edition. (Boilers over 200,000 BTU require approval by Department of Labor and Training.) BO

302.8 Elevators: All repairs shall be done in accordance the Rhode Island Elevator Safety Code, May 15, 1999 edition. (Elevator approval by the Department of Labor and Training.) BO

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## 20.4 Chapter 4: Renovations

### 20.4.1 401.0 General Requirements

401.1 Renovations are defined as the change, strengthening or addition of load bearing elements, the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment and/or fixtures. Renovation involves no reconfiguration of spaces. All renovations shall comply with the requirements of this Chapter.

Exception: As modified in Part 904.0 for historical buildings.

401.2 All new work shall comply with the materials and methods requirements, as defined in § Chapter 2.

401.3 The work shall not make the building less conforming with the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, NFPA 101, Life Safety Code for existing buildings, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code as applicable, or with any previously approved alternative arrangements, than it was before the renovation was undertaken. BFO

Exception: Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed, unless such reductions are prohibited by ADAAG.

#### **20.4.2 402.0 Additional Requirements**

402.1 New interior finishes shall comply with the flame spread requirements of NFPA 101, Life Safety Code for new construction. F

402.2 New carpeting used as an interior floor finish material shall comply with the radiant flux requirements of NFPA 101, Life Safety Code for new construction. F

402.3 Replacement glazing in hazardous locations shall comply with the Safety Glazing requirements of Section 2406 of the Building Code, and paragraph 2403.1 referenced therein. B

Exceptions:

1. Glass-block walls may be repaired using like materials.
2. Louvered windows and jalousies may be repaired using like materials.

#### **20.4.3 403.0 Structural Requirements**

403.1 Structural elements which are uncovered during the course of the renovation and which are found to be unsound or structurally dangerous, shall be rehabilitated to comply with the load requirements of Chapter 16 of the Building Code and the applicable material stress requirements of Chapters 19 (Concrete), 20 (Aluminum), 21 (Masonry), 22 (Steel), or 23 (Wood) of the Building Code. Where renovation work includes replacement of equipment that is supported by the building or where a re-roofing permit is required, the structural provisions of this section shall apply. B

403.2 Design criteria:

Existing structural components supporting renovation work shall comply with this section. B

#### 403.2.1 Replacement of roofing or equipment:

Where replacement of roofing or equipment results in additional dead loads, structural components supporting such re-roofing or equipment shall comply with the vertical load requirements of the Building Code. B

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings constructed in accordance with the conventional construction methods of the Building Code and where the additional dead load from the equipment is not increased by more than five (5%) percent.

#### 403.3 Roof diaphragm:

Where roofing materials are removed from more than fifty (50%) percent of the roof diaphragm of a building or section of a building where the roof diaphragm is a part of the main wind force resisting system the integrity of the roof diaphragm shall be evaluated and if found deficient due to insufficient or deteriorated connections such connections shall be provided or replaced. B

### **20.4.4 404.0 Accessibility**

404.1 Buildings undergoing a renovation that affects the usability of the building by persons with disabilities shall comply with Chapter 10. B

### **20.4.5 405.0 Plumbing**

405.1 Water conservation: When any water closet, urinal, lavatory faucet, kitchen faucet or shower head is replaced, the replacement fixture shall comply with the water conservation requirements specified in Table 604.4 of the International Plumbing Code, 2000. B

### **20.4.6 406.0 Boilers and Pressure Vessels**

406.1 Installation or replacement of fittings, appliances and boilers shall be in accordance with the Mechanical Code. BO

406.2 Replacement boiler installed in an existing building shall comply with access and egress requirements specified in the Rhode Island Boiler and Pressure Vessel Code, 1989 edition and/or the Mechanical Code SBC-4. (Boilers over 200,000 BTU require approval by the Department of Labor and Training.) BO

406.3 A boiler room in which a new or replacement boiler is installed shall comply with the air and ventilation requirements specified in Mechanical Code SBC 4. B

## **20.4.7 407.0 Elevators**

407.1 Any renovation of an existing elevator shall comply with Part XII of the ASME A 17.1-1996 and all subsequent amendments and revisions to it, as adopted by the Rhode Island Elevator Safety Code, May 15, 1999 edition. (Elevator approval by the Department of Labor and Training.) BO

Exception: The installation of new elevators shall comply with 501.3.

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.5 Chapter 5: Alterations**

### **20.5.1 501.0 General Requirements**

501.1 Alterations are defined as the reconfiguration of any space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment. All alterations shall comply with the requirements of Chapters 5 and 4.

Exception: As modified in Part 904.0 for historical buildings.

#### **501.2 Extensive Alterations**

501.2.1 The alteration of an entire building or an entire occupancy within a building shall be considered as a reconstruction and shall comply with the requirements of Chapter 6 for the applicable occupancy. BFO

Exception: Alteration work that is exclusively either plumbing, mechanical, fire protection system or electrical shall not be considered a reconstruction, regardless of its extent.

501.2.2 When the total area of all the rehabilitation work areas included in an alteration exceeds fifty (50%) percent of the area of the building the work shall be considered as a reconstruction and shall comply with the requirements of Chapter 6 for the applicable occupancy. BFO

Exception: Rehabilitation work areas in which the alteration work is exclusively either plumbing, mechanical, fire protection system or electrical shall not be included in the computation of total area of all rehabilitation work areas.

501.3 All newly constructed elements, components and systems, including the installation of new elevators and boilers, shall comply with the requirements of the Building Code, Mechanical Code, Plumbing Code, NFPA 101 Life Safety Code for new construction, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, and Accessibility Code as applicable. BFO

Exceptions:

1. Openable windows may be added without requiring compliance with the light and ventilation requirements of the Building Code.
2. Newly installed electrical equipment shall comply with the requirements of Part 504.0.

501.4 The alteration work shall not make the building less conforming with the building, plumbing, mechanical, electrical or fire codes of the jurisdiction, or with alternative materials, design and methods of construction or any previously approved plans, modifications, alternate methods or compliance alternatives, than it was before the alteration was undertaken. BFO

501.5 Interior Space Dimensions

501.5.1 In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, other than a kitchen, they shall not be less than seven (7') feet in any plan dimension. B

501.5.2 In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, they shall have a ceiling height of not less than seven (7') feet. B

Exceptions:

1. Beams, girders, ducts or pipes spaced not less than four (4') feet on center and projecting not more than six (6") inches below the required ceiling height.
2. For rooms with a sloped ceiling, the prescribed ceiling height is required for at least 35 square feet of the floor area of the room. Any portion of the

room measuring less than five (5') feet from the finished floor to the finished ceiling shall not be considered usable floor area and shall not be included in any computation of the minimum area thereof.

501.5.3 In Groups R-1 and R-2, when habitable spaces as defined in Chapter 2 of the Building Code are created in previously unoccupied space, other than a kitchen, they shall have a net floor area of not less than 70 square feet. B

## **20.5.2 502.0 Structural Requirements**

502.1 General: Where alteration work includes installation of additional equipment that is structurally supported by the building or reconfiguration of space such that portions of the building become subjected to higher gravity loads as required by Tables 1607.1 and 1607.6 of the Building Code, the provisions of this section shall apply. B

502.2 Reduction of strength: Alterations shall not reduce the structural strength or stability of the building, structure or any individual member thereof. B

Exception: Such reduction shall be allowed as long as the strength and the stability of the building are not reduced to below the Building Code requirements.

502.3 New structural members: New structural members in alterations, including connections and anchorage, shall comply with the Building Code unless the authority having jurisdiction specifically allows replacement with like materials. B

502.4 Existing structural members: Existing structural components supporting additional equipment or subjected to additional loads based on the Building Code Tables 1607.1 and 1607.6 as a result of a reconfiguration of spaces shall comply with 502.4.1 through 502.4.3. B

502.4.1 Gravity loads: Existing structural elements supporting any additional gravity loads as a result of additional equipment or space reconfiguration shall comply with the Building Code. B

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings of Group R occupancy with not more than five (5) dwelling units or guest rooms used solely for residential purposes where the existing building and its alteration comply with the conventional light-frame construction methods of the Building Code.

502.4.2 Snow drift loads: Any structural element of an existing building subjected to additional loads from the effects of snow drift as a result of additional equipment shall comply with the Building Code. B

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes where the existing building and its alteration comply with the conventional light-frame construction methods of the Building Code.

### **20.5.3 503.0 Accessibility**

503.1 Buildings undergoing an alteration that affects the usability of the building by persons with disabilities shall comply with Part Chapter 10. B

### **20.5.4 504.0 Electrical Equipment and Wiring**

504.1 All newly installed electrical equipment and wiring relating to work done in any rehabilitation work area shall comply with the materials and methods requirements as defined in Part Chapter 2. B

Exception: Electrical equipment and wiring in newly installed partitions and ceilings shall comply with all applicable requirements of the Electrical Code.

504.2 Existing wiring in all rehabilitation work areas in Groups A-1, A-2, and A-5 (Theater, Assembly), shall be upgraded to meet the materials and methods requirements as defined in Part Chapter 2. B

504.3 Service and/or feeder in Group R-2: Service to each existing dwelling unit in any rehabilitation work area shall be a minimum of one hundred ampere, three-wire capacity, and service equipment shall be dead front having no live parts exposed whereby accidental contact could be made. B

Exception: Existing service of sixty-ampere three-wire capacity, and feeders of thirty ampere or larger two- or three-wire capacity, shall be accepted if adequate for the electrical load being served.

504.3.1 Type "S" fuses shall be installed in accordance with 240-53 and 240-54 of the Electrical Code when fused equipment is used. B

504.4 In Group R-2, when the rehabilitation work area includes any of the following areas within a dwelling unit, the following requirements shall apply: B

504.4.1 All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms shall have a minimum of two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall type lighting outlet. B

504.4.2 Kitchen areas shall have a minimum of two duplex receptacle outlets and a hard-wired lighting outlet. At least one of the required duplex receptacles shall be provided to serve counter space. B

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

504.4.4 Ground fault circuit interruption shall be provided on newly installed receptacle outlets if required by Section 210-8(a) Electrical Code. B

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

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

504.4.7 Clearance for electrical service equipment shall be provided in accordance with 110-16 of the Electrical Code. B

504.5 In Group R-2, when the rehabilitation work area includes spaces converted into kitchen or laundry areas, receptacle outlets in these areas shall comply with applicable requirements of 210-52 (a), (b), (c), and (f) of the Electrical Code. B

504.6 Where the work changes an existing space where ground fault circuit interruption is not required into a location where such protection is required by 210-8 (dwelling units, all bathrooms and rooftops), 555-3 (boathouses), 511-10 (commercial garages), 620-85 (elevators, escalators and moving walkways), 517-20 and 517-21 (health care facilities), 422-8(d)(3) (high-pressure spray washing appliances), 680-70 (hydromassage bathtubs), 530-73(a)(1) (motion picture and TV studios), and 680-6(a) (permanently installed pools) of the Electrical Code, existing receptacle outlets shall be provided with such protection in accordance with the. B

## **20.5.5 505.0 Plumbing Fixtures**

505.1 Where the rehabilitation work area is more than fifty (50%) percent of the gross floor area as defined in 1002 of the Building Code, and the occupant load will be increased by at least twenty (20%) percent as a result of the modification, plumbing fixtures shall be provided based on the increased occupant load in the rehabilitation work area in quantities and locations specified in 403 of the Plumbing Code based on the increased occupant load. B

## **20.5.6 506.0 Mechanical**

506.1 All reconfigured spaces intended for occupancy and all spaces converted to habitable or occupiable space in any rehabilitation work area shall be provided with either natural or mechanical ventilation. B

506.1.1 Natural ventilation shall be provided by the minimum openable area to the outdoors of four (4%) percent of the floor area being ventilated. B

506.1.2 Newly installed mechanical ventilation systems shall comply with the requirements of Section 403 of the International Mechanical Code. B

Exception: Existing mechanical ventilation systems shall comply with the requirements of Section 506.2.

506.2 In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall be capable of providing not less than five (5) cubic feet per minute (cfm) per person of outdoor air and not less than fifteen (15) cfm of ventilation air per person. B

506.3 All newly-introduced devices, equipment or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities to adversely affect or impair health, or cause discomfort to occupants shall be provided with an exhaust system in compliance with Chapter 5 of the Mechanical Code or a means of collection and removal of the contaminants. Such exhaust shall discharge directly to an approved location at the exterior of the building. B

## **20.5.7 507.0 Commercial Kitchens**

507.1 Where the rehabilitation work area includes a commercial kitchen and the alteration includes reconfiguration or extension of cooking equipment or the installation of additional cooking equipment, existing grease ducts, exhaust equipment, and kitchen hoods shall be brought into compliance with all the requirements in Sections 506 and 507 of the Mechanical Code and enforced by the Building Official. Jurisdiction for the suppression system for commercial cooking will be enforced solely by the fire official in compliance with NFPA 96 as referenced in the State Fire Code. BF

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.6 Chapter 6: Reconstruction**

### **20.6.1 601.0 General Requirements**

601.1 Reconstruction work is defined as the reconfiguration of a space which affects an exit, or a corridor shared by more than a single tenant; and/or reconfiguration of space such that the rehabilitation work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; and/or extensive alterations as defined in Chapter 5. All reconstruction work shall comply with the requirements of this chapter.

Exception: As modified in Section 904.0 for historical buildings.

601.2 In addition to the requirements of Chapter 6, all work shall comply with all the requirements of Chapters 4 and 5. BF

Exceptions:

1. Buildings in which the reconfiguration of space affecting exits or shared egress access is exclusively the result of compliance with the accessibility requirements of Chapter 10 shall not be required to comply with Chapter 6.
2. Existing dead-end corridors shall be permitted to be extended and new dead-end corridors may be added in accordance with 602.1.5.
3. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.

601.3 Wherever the term "rehabilitation work area" is used in Chapter 6, it is intended to include only the area affected by reconstruction work, and areas covered by non-structural requirements and extensive alterations. Other rehabilitation work areas affected exclusively by renovation or alteration work shall not be included in the rehabilitation work area that needs to comply with Chapter 6. BFO

### **20.6.2 602.0 Nonstructural Requirements**

#### **602.1 Means of Egress**

602.1.1 General: The means of egress shall comply with the requirements of this section. F

602.1.2 Number of means of egress: Every story utilized for human occupancy on which there is a rehabilitation work area shall be provided with the minimum number of means of egress required by NFPA 101, Life Safety Code, for existing occupancies. F

602.1.2.1 Mezzanines: Mezzanines in the rehabilitation work area shall be provided with the minimum number of means of egress required by NFPA 101, Life Safety Code, for existing occupancies. F

602.1.2.2 Buildings with a single means of egress: In buildings having only one means of egress, the single exit condition serving the rehabilitation work area shall be allowed to continue if permitted by the occupancy requirements of NFPA 101, Life Safety Code, for existing occupancies. F

602.1.2.3 Assembly occupancies: Assembly occupancies shall be provided with a main entrance/exit as required by NFPA 101, Life Safety Code, for existing occupancies. F

602.1.2.4 Egress Stairways and Ramps: Egress stairways and ramps shall meet the requirements of NFPA 101 for existing buildings except as allowed by the authority having jurisdiction in §§ 102.3.1 and 601.2, Exception 3. F

602.1.3 Capacity of means of egress: The capacity of the means of egress in each rehabilitation work area and throughout the egress path of each rehabilitation work area shall be sufficient for the occupant load thereof. Capacity shall be determined in accordance with the requirements of NFPA 101, Life Safety Code, for existing occupancies. F

Exceptions:

1. The authority having jurisdiction shall be permitted to establish the occupant load as the number of persons for which existing means of egress is adequate, provided that measures are established to prevent occupancy by a greater number of persons.
2. Where the building was previously determined to have adequate egress capacity.

602.1.4 Egress Doorways

602.1.4.1 Large areas: In any rehabilitation work area, all rooms and spaces having an occupant load greater than 50 or in which the travel distance exceeds 75 ft (23 m) shall have a minimum of two egress doorways. F

Exception: Where a single means of egress is permitted by the existing occupancy requirements in NFPA 101, Life Safety Code.

602.1.4.2 Corridor doors: Corridor doors in the rehabilitation work area shall meet the requirements for existing occupancies in NFPA 101, Life Safety Code. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be

required only to resist smoke; shall not contain louvers; and shall be reasonably tight fitting. F

Exceptions:

1. 1 3/8 in solid bonded wood core doors shall be considered acceptable where 1 3/4 in (44 mm) solid bonded wood core doors are required but the existing frames will not accommodate such a door.
2. Existing doors meeting the requirements for a rating of 15 minutes or better.
3. In small residential board and care occupancies having prompt evacuation capability and which are protected with an approved automatic detection system, closing devices shall be permitted to be omitted.

602.1.4.3 Transom: In all buildings of residential and residential board and care occupancies, all transoms in corridor walls in rehabilitation work areas shall be either glazed with 1/4 in (6.3 mm) wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction. F

Exception: Where transoms are permitted by the existing occupancy requirements of NFPA 101, Life Safety Code.

602.1.4.4 Other corridor openings: In any rehabilitation work area, any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air, shall be sealed with materials consistent with the corridor construction. F

602.1.4.5 Supplemental requirements: The requirements of 602.1.4.3 through 602.1.4.5 shall apply on the entire floor when the rehabilitation work area exceeds fifty (50%) percent of the floor area. F

Exception: Corridors within a tenant space that is entirely outside the rehabilitation work area need not comply.

602.1.4.6 Door swing: In the rehabilitation work area and in the egress path from any rehabilitation work area to the exit discharge, all egress doors shall swing in the direction of egress travel unless it is determined by the authority having jurisdiction that re-swinging an exit discharge door would impose a structural hardship upon the owner, or impede exit access within, or pedestrian traffic outside, the subject building. F

602.1.4.7 Door closers: In any rehabilitation work area all doors opening onto an exit passageway at grade or exit stair shall be self-closing or automatic-closing by listed closing devices. F

Exception: Where exit enclosure is not required by the fire code.

602.1.4.7.1 Locking Mechanisms: All locking mechanisms on required egress or egress-access doors shall meet the requirements of NFPA 101 for existing buildings. F

602.1.4.8 Panic or fire exit hardware: In any rehabilitation work area, and in the egress path from any rehabilitation work area to the exit discharge, in a building or portions thereof of assembly or educational occupancies with an occupant load greater than 100 all required egress doors equipped with latching devices shall be equipped with approved panic or fire exit hardware. F

602.1.4.9 Supplemental requirements: The requirements 602.1.4.6 through 602.1.4.8 shall apply on the entire floor when the rehabilitation work area exceeds fifty (50%) percent of the floor area. F

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

602.1.5 Dead end corridors: Existing dead-end corridors in any rehabilitation work area shall not exceed 35 ft. (11 m). Newly constructed dead-end corridors shall comply with other sections of this code. F

Exceptions:

1. Where dead-end corridors of greater length are permitted by the existing occupancy requirements of NFPA 101, Life Safety Code.
2. In other than assembly occupancies and areas containing high hazard contents, the maximum length of an existing dead-end corridor shall be 50 ft (15 m) in buildings equipped throughout with an approved complete automatic fire alarm system.
3. In other than assembly occupancies and areas containing high hazard contents, the maximum length of an existing dead-end corridor shall be 70 ft (21 m) in buildings equipped throughout with an approved automatic sprinkler system.
4. In other than assembly occupancies and areas containing high hazard contents, the maximum length of a newly constructed or extended dead end corridor shall not exceed 50 ft (15 m) in buildings equipped throughout with an approved automatic sprinkler system.

602.1.6 Means of egress lighting

602.1.6.1 Means of egress in all rehabilitation work areas shall be provided with artificial and emergency lighting in accordance with the requirements of NFPA 101, Life Safety Code, for existing occupancies. F

602.1.6.2 Supplemental requirements

- (a) Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, means of egress throughout the floor shall be provided with artificial lighting in accordance with the requirements of other sections of this Code. F

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

- (b) In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, the means of egress within the rehabilitation work area and the means of egress, including the exit and exit discharge paths serving the rehabilitation work area, shall be provided with artificial lighting in accordance with the requirements of other sections of this Code. F

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

#### 602.1.7 Exit signs

602.1.7.1 Means of egress in all rehabilitation work areas shall be provided with exit signs in accordance with the requirements of NFPA 101, Life Safety Code for existing occupancies. F

#### 602.1.7.2 Supplemental requirements:

- (a) Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, means of egress throughout the floor shall be provided with exit signs in accordance with the requirements of NFPA 101, Life Safety Code for new construction. F

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

- (b) In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, means of egress from the floor of the highest rehabilitation work area to the floor of exit discharge shall be provided with exit signs in accordance with the requirements of other sections of NFPA 101, Life Safety Code for new construction. F

Exception: Means of egress within a tenant space that is entirely outside the rehabilitation work area need not comply.

602.1.8 Handrails: The following requirements shall apply from the highest rehabilitation work area floor to the level of exit discharge. F

602.1.8.1 Every required exit stairway that is part of the means of egress for any rehabilitation work area that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways with a required egress width of more than 66 in. (1675 mm) shall have handrails on both sides. F

602.1.8.2 Where there are no handrails or where the existing handrails must be replaced in accordance with 602.1.8.1, the handrails shall be designed and installed in accordance with the requirements of NFPA 101, Life Safety Code for new construction. F

602.1.9 Guards: The following requirements shall apply from the highest rehabilitation work area floor to the level of exit discharge but shall be confined to the egress path of any rehabilitation work area. F

602.1.9.1 Every open portion of a stair, landing, or balcony that is more than 30 in. (760 mm) above the floor or grade below and not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards. F

602.1.9.2 Where there are no guards or where the existing guards must be replaced in accordance with 602.1.9.1, the guards shall be designed and installed in accordance with the requirements of NFPA 101, Life Safety Code for new construction. F

## 602.2 Interior Finish

602.2.1 The interior finish of walls and ceilings in any rehabilitation work area shall comply with the requirements for existing occupancies in NFPA 101, Life Safety Code. All existing interior finish materials which do not comply with the requirements of Chapter 6 shall be removed or shall be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section. F

### 602.2.2 Supplemental Requirements

602.2.2.1 Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, the requirements of 602.2.1 shall apply to the interior finish in exits and corridors serving the rehabilitation work area on the entire floor. F

Exception: Interior finish within a tenant space that is entirely outside the rehabilitation work area need not comply.

602.2.2.2 In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, the requirements for interior finishes in exits shall apply from the floor of the highest rehabilitation work area to the floor of exit discharge. F

## 602.3 Shaft enclosures

602.3.1 In any rehabilitation work area, newly constructed vertical openings connecting two or more floors shall comply with the requirements of NFPA 101, Life Safety Code for new construction. All new shafts shall be continuous from floor to floor or floor to roof, including all affected areas that may be outside the rehabilitation work area. F

Exception: In buildings protected throughout by a fire alarm system installed in accordance with 602.6 or an automatic suppression system in accordance with NFPA 13 or NFPA 13R the following is permitted:

In buildings constructed of other than 3B or 5B construction, where continuity of the shaft enclosure is unfeasible, interior vertical openings other than stairways or other egress components, may be enclosed from floor to ceiling with an approved fire rated assembly.

602.3.2 In any rehabilitation work area, all existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies in accordance with NFPA 101, Life Safety Code for existing construction. All shafts shall be continuous from floor to floor or floor to roof, including all affected areas that may be outside the rehabilitation work area. F

Exceptions: In buildings protected throughout by a fire alarm system installed in 602.6 or an automatic suppression system in accordance with NFPA 13 or NFPA 13R the following is permitted:

In buildings constructed of other than 3B or 5B construction, where continuity of the shaft enclosure is unfeasible, interior vertical openings other than stairways or other egress components, may be enclosed from floor to ceiling with an approved fire rated assembly.

In apartment buildings that are no more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

In non-high-rise apartment buildings that are more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly provided the building is protected throughout by a fire alarm system installed in accordance with 602.6 and the stairwells are protected with an automatic suppression system in accordance with NFPA 13. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

In mixed-use buildings with apartments located above, that are no more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

In non-high rise mixed use buildings with apartments located above, that are more than three (3) stories in height, stairwells may be enclosed with lathe and plaster walls that have been maintained properly provided the building is protected throughout by a fire alarm system installed in accordance with 602.6 and the stairwells are protected with an automatic suppression system in accordance with NFPA 13. If there is wainscoting applied, the wainscoting shall be coated with a Class A, flame retardant paint.

### 602.3.3 Supplemental requirements

602.3.3.1 Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, 602.3.2 shall apply throughout the floor. F

602.3.3.2 Where the reconstruction rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, stairways that are part of the means of egress serving the rehabilitation work area shall be enclosed with smoke tight enclosures on all floors below the highest rehabilitation work area floor. F

Exception: Where stairway enclosure is not required for existing occupancies in, Life Safety Code.

602.3.3.3 In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate floor area within the building, stairways that are part of the means of egress shall be enclosed in accordance with 602.3.2 on the highest rehabilitation work area floor and on all floors below it. F

### 602.4 Fire barriers and smoke barriers

602.4.1 Health care occupancies: Where the rehabilitation work area is on a story used for sleeping purposes for more than 30 patients, the story shall be divided into not less than two compartments by smoke barriers as required for existing health care occupancies in NFPA 101, Life Safety Code. F

602.4.2 Small residential board and care: Where the rehabilitation work area is in any attached dwelling unit in a small residential board and care occupancy, walls separating the dwelling units which are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous 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 part of the rehabilitation work area. BF

Exception: Walls are not required to be continuous through concealed floor spaces.

### 602.5 Automatic sprinkler systems

602.5.1 All rehabilitation work areas in any building or portion thereof that is required to be suppressed in accordance with the provisions of NFPA 101, Life Safety Code for existing buildings shall be provided with an automatic sprinkler system. F

Exception: In other than high-rise structures, where an adequate water supply for sprinkler protection is not available, alternative protection measures that are acceptable to the authority having jurisdiction shall be permitted. For purposes of this exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi (138,000 N/m<sup>2</sup>) to meet the sprinkler system demand criteria.

#### 602.5.2 Supplemental requirements

602.5.2.1 Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area, 602.5.1 shall apply to the entire floor. F

Exception: In other than high-rise structures, where an adequate water supply for sprinkler protection is not available the authority having jurisdiction shall be permitted to accept alternative protection. For purposes of this exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi (138,000 N/m<sup>2</sup>) to meet the sprinkler system demand criteria.

602.5.2.2 In a building with rehabilitation work areas involving over fifty (50%) percent of the aggregate building area, automatic sprinkler systems shall be provided in accordance with requirements for new construction. This requirement shall apply to the highest floor containing a rehabilitation work area and all floors below. F

Exceptions:

1. In other than high-rise structures, where an adequate water supply for sprinkler protection is not available, the authority having jurisdiction shall be permitted to accept alternative protection. For purposes of this Exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi (138,000 N/m<sup>2</sup>) to meet the sprinkler system demand criteria.

2. Residential occupancies less than four stories in height and with no more than six units between fire walls.

602.5.3 Mixed uses: In buildings containing mixed uses, one or more of which requires automatic sprinkler protection in accordance with 602.5.1 or 602.5.2, automatic sprinklers will not be required throughout the building, provided that the occupancies requiring automatic sprinklers are separated from those not requiring automatic sprinklers by fire-resistive construction having a minimum 2-hour rating for high hazard content areas, and a minimum 1-hour rating for all other conditions. F

#### 602.5.4 Supervision

Automatic sprinkler systems required by 602.5 shall be supervised in accordance with NFPA 101 Life Safety Code for new construction and the fire alarm provisions of this code. F

Exceptions:

1. Underground gate valve with roadway boxes.
2. Halogenated extinguishing systems.
3. Carbon dioxide extinguishing systems.
4. Dry and wet chemical extinguishing systems.
5. Limited area sprinkler systems.
6. Residential occupancies complying with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height.
7. Where supervision is not required for existing occupancies in NFPA 101, Life Safety Code.

602.5.5 Standpipes: In a building more than three (3) stories in height or over fifty (50) feet in height above grade and containing intermediate stories or balconies, with rehabilitation work areas involving over fifty (50%) percent of the aggregate building area, a standpipe system shall be provided with standpipes up to and including the highest rehabilitation work area floor. The standpipes shall be located and installed in accordance with NFPA 14, Standard for the Installation of Standpipe, Private Hydrant, and Hose Systems. The standpipe system shall be designed to accommodate expansion to the entire building. F

Exceptions:

1. 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 (0.9 m<sup>3</sup>/min at 448,000 N/m<sup>2</sup>) to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi (1.9 m<sup>3</sup>/min at 448,000 N/m<sup>2</sup>) to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet these flow/pressure requirements for possible future extension of the standpipe.
2. In other than high-rise buildings, the required interconnection of the standpipes for a wet system shall be permitted at the lowest level of the rehabilitation work area.

602.5.6 Elevator recall: When sprinklers are installed in an elevator hoist way or elevator machine room as part of the rehabilitation work, the elevators shall comply with rule 211.3 of ASME/A17.1-1996, Safety Code for Elevators and Escalators. O

602.6 Fire alarm systems: In buildings covered by this chapter, fire alarm systems are required as follows: F

Assembly (A-2 through A-5)

- (a) A fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(a), as amended, shall be installed in all Class "C" places of assembly (50 to 300 persons).
- (b) A fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(b), as amended, shall be installed in all Class "A" and "B" places of assembly (Class A, 1001 or more persons; Class B, 301 to 1000 persons).
- (c) In addition to the locations prescribed in R.I. Gen. Laws § 23-28.25 as amended, a manual alarm station shall be installed on every stage and near any fixed lighting control panel and any projection booth.
- (d) A one hundred thirty-five degrees F (135o) to one hundred forty degrees F (140o) rate of rise or fixed temperature detector shall be installed above all stage areas and below all accessible stage areas and projection booths.

Hotels and Motels (R-1)

A fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(b), as amended, shall be installed in every hotel. In addition, a visual alarm signal shall be installed in guest rooms specifically designed for persons with disabilities. A rate of rise and one hundred thirty-five degree (135o) to one hundred forty degree (140o) fixed temperature thermodetector and a local single station AC smoke detector shall be installed in every sleeping room.

Exception: Buildings no more than two (2) stories high where each guest room has a direct exit to the outside of the building shall have a fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(a), as amended and a local single station AC smoke detector shall be installed in each sleeping room.

Boarding Homes (R-1)

- (a) A fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(b), as amended, shall be installed in every boarding house.

Exception: Buildings with accommodations for fewer than ten (10) persons shall have a fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(a), as amended.

- (b) In addition, a local single station AC smoke detector shall be installed in each sleeping room with either system.

#### Rooming Houses (R-1)

- (a) A fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(a), as amended, shall be installed in every rooming house.
- (b) In addition, a local single station AC smoke detector shall be installed in every sleeping room.

#### Apartment House (R-2)

- (a) Every apartment house shall have a fire alarm system installed as follows:
  - (1) Buildings containing more than three (3) and less than eight (8) living units shall have a local fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(a), as amended.
  - (2) Buildings containing eight (8) or more living units shall have a fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(b), as amended.
  - (3) Buildings classified as high-rise (more than seventy-five feet (75') in height) shall have a fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(c), as amended.
- (b) In addition, all living units shall have a smoke detection system as described in R.I. Gen. Laws §§ 23-28.34-2 through 23-28.34-4.

#### Industrial, Mercantile, Business, and Storage Building (F-1, F-2, M, B, S-1, S-2)

- (a) A fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(a), as amended, shall be installed in all industrial, mercantile, business, and storage buildings.
- (b) A fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(b), as amended, shall be installed in every industrial, mercantile, business, and storage building having a total floor area of more than ten thousand square feet (10,000 sq. ft.) per floor or extending three (3) stories or more above grade level.

#### Theaters (A-1)

- (a) A fire alarm system as prescribed in R.I. Gen. Laws § 23-28.25-4(b), as amended, shall be installed in every theater.
- (b) In addition to the location prescribed in R.I. Gen. Laws § 23-28.25-4(b), as amended, a manual station shall be installed on every stage and near any fixed lighting control panel and in every projection booth.
- (c) Manual stations, with the approval of the authority having jurisdiction, may be omitted from exits and installed in such locations as the ticket booth or the refreshment stand.
- (d) Alarm sounding devices and flashing lights shall be installed where required by the authority having jurisdiction. Voice communication evacuation systems are required and shall interrupt all audio systems.

#### 602.6.1 Smoke alarms

602.6.1.1 In hotels and dormitories and apartment occupancies, individual guest rooms and individual dwelling units in any rehabilitation work area shall be provided with smoke alarms complying with the requirements for new construction. F

602.6.1.2 Where the reconstruction rehabilitation work area is in residential board and care occupancies and three-family dwellings, smoke alarms complying with the requirements for new construction shall be provided throughout the dwelling unit at each level and outside each sleeping area. F

##### Exceptions:

- 1. Interconnection of smoke detectors shall not be required outside of the rehabilitation work area.
- 2. Battery-powered single station smoke detectors listed in accordance with UL 217, Standard for Safety for Single and Multiple Station Smoke Alarms, shall be permitted outside the rehabilitation work area.

#### 602.6.2 Local fire alarm systems

602.6.2.1 Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area and the rehabilitation work area is in a building that is required to have a local fire alarm system in accordance with 602.6, a local fire alarm system shall be provided on the floor. Alarm-indicating appliances shall be provided on the floor and shall be automatically activated as required by R.I. Gen. Laws § 23-28.25-4(a) as amended. F

602.6.2.2 Where the rehabilitation work area involves over fifty (50%) percent of the aggregate building area and the rehabilitation work area is in a building that is required

to have a local fire alarm system in accordance with other provisions of Section, a local fire alarm system shall be provided throughout the building. F

### 602.6.3 Supervised fire alarm systems

602.6.3.1 Where the rehabilitation work area is in a building that is required to have a supervised fire alarm system in accordance with 602.6 a supervised fire alarm system shall be installed in the rehabilitation work area. F

602.6.3.2 Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area and the rehabilitation work area is in a building that is required to have a supervised fire alarm system in accordance 602.6, the supervised fire alarm system shall be installed throughout the floor. F

602.6.3.3 Where the rehabilitation work area involves over fifty (50%) percent of the aggregate building area and the building is required to have a supervised fire alarm system in accordance with 602.6, a supervised fire alarm system shall be provided throughout the building. F

602.7 High-rise buildings: Any building or structure having one or more floors more than seventy-five (75') feet (23 m) above the lowest level accessible to a fire department vehicle shall comply with the high-rise provisions of R.I. Gen. Laws § 23-28.25-4(c) as amended along with the requirements of this section. F

602.7.1 Re-circulating air or exhaust systems: When the rehabilitation work area is on a floor that is served by a re-circulating air or exhaust system serving more than one floor, the re-circulating air or exhaust system that serves the rehabilitation work area shall be equipped with approved smoke and heat detection devices installed in accordance with the Mechanical Code. The devices shall stop the fans automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or smoke control system. BF

602.7.2 Elevators: When the rehabilitation work area is one entire floor or when the rehabilitation work area is twenty (20%) percent or more of the occupied floor area of the building, the elevators in the building shall be equipped with the following emergency control devices: BFO

- (1) All automatic (non-designated attendant) elevators having a travel of 25 ft (7620 mm) or more above or below the designated level shall be equipped with Phase I Emergency Recall Operation as required by ASME/ANSI A17.1-1987, Safety Code for Elevators and Escalators, Rules 211.3a and 211.3b.
- (2) All floors shall be accessible by at least one elevator equipped with Phase II Emergency In-Car Operation, as required by ASME/ANSI A17.1-1987, Safety Code for Elevators and Escalators, Rule 2.113c.

- (3) All designated attendant elevators having a travel of 25 ft (7620 mm) or more above or below the designated level shall be equipped with emergency controls, as required by ASME/ANSI A17.1-1987, Safety Code for Elevators and Escalators, Rule 211.4.

(Elevator approvals by the Department of Labor and Training.) BFO

602.7.3 Smoke barriers: Where the rehabilitation work area on any floor exceeds fifty (50%) percent of that floor area and is on a floor that is above the main floor level in hotel and dormitory occupancies and apartment occupancies, smoke barriers shall conform to the requirements for existing occupancies in NFPA 101, Life Safety Code. F

## 602.8 Boiler/furnace equipment rooms

602.8.1 Boiler/furnace equipment rooms shall be enclosed by one-hour fire-rated construction when the rehabilitation work area is in a daycare occupancy or residential board and care occupancy. BFO

Exceptions:

1. Furnace and boiler equipment of low pressure type [operating at pressures of 15 psig (103,000 N/m<sup>2</sup>) or less for steam equipment, or 160 psig (1,100,000 N/m<sup>2</sup>) or less for hot water equipment] when installed in accordance with manufacturer recommendations or furnace and boiler equipment of residential type [200,000 Btu/hour (210 MJ/hour) input rating or less] is not required to be enclosed.
2. Furnace rooms protected with automatic sprinkler protection.
3. Boiler/furnace equipment rooms protected in accordance with the Boiler Code.

(Boilers over 200,000 BTU require approval by the Department of Labor and Training.)

602.8.2 Emergency controls shall be provided in all structures classified as a day-care occupancy or residential board and care occupancy in accordance with the following: B

- (1) Emergency shutoff switches for furnaces and boilers in basements shall be at the top of the stairs leading to the basement.
- (2) Emergency shutoff switches for furnaces and boilers in other enclosed rooms shall be located outside of the room.

## 602.9 Structural

602.9.1 General: Where buildings are undergoing reconstruction including structural alterations, the provisions of this section shall apply. B

602.9.2 Reduction of strength: Reconstruction shall not reduce the structural strength or stability of the building, structure or any individual member thereof. B

Exception: Such reduction shall be allowed provided that the structural strength and the stability of the building are not reduced to below the Building Code levels.

602.9.3 New structural members: New structural members in reconstructions including connections and anchorage, shall comply with the Building Code unless the authority having jurisdiction specifically allows replacement with like materials. B

602.9.4 Minimum design loads: The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that no overstressed condition is created. B

602.9.5 Structural alterations: Buildings and structures undergoing structural reconstruction shall comply with this section. B

602.9.5.1 Evaluation and analysis: An engineering evaluation and analysis which establishes the structural adequacy of the altered structure shall be prepared by a registered design professional and submitted to the code official where more than thirty (30%) percent, within a 12-month period, of the floor and roof areas of the building or structure have been or are proposed to be involved in structural alteration. The evaluation and analysis shall demonstrate that the building or the buildings' structural system once altered complies with the Building Code for wind loading. The areas to be counted towards the thirty (30%) percent shall be those areas tributary to the vertical load carrying components such as joists, beams, columns, walls and other structural components that have been or will be removed, added or altered, as well as areas such as mezzanines, penthouses, roof structures and infilled courts and shafts. B

Exceptions:

- (1) Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes altered based on the conventional light-frame construction methods of the Building Code.
- (2) Where such alterations involve only the lowest story of a building and change of occupancy provisions of Chapter 7 do not apply; only the lateral force resisting components in and below that story need comply with this section.

602.9.6 Additional vertical loads: Where gravity loading is increased on the roof or floor of a building or structure, all structural members affected by such increase in loading shall meet the gravity load requirements of the Building Code. B

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes altered based on the conventional light frame construction methods of the Building Code.

602.9.7 Voluntary lateral force resisting system alterations: Alterations of existing structural elements that are initiated for the purpose of increasing the lateral force resisting strength or stiffness of an existing structure, and are not required by other sections of this code, shall not be required to be designed for forces conforming to the Building Code provided that an engineering analysis is submitted to show that:

1. The capacity of existing structural elements required to resist forces is not reduced;
2. The lateral loading to existing structural elements is not increased beyond their capacity;
3. New structural elements are detailed and connected to the existing structural elements as required by the Building Code;
4. New or relocated non-structural elements are detailed and connected to existing or new structural elements as required by the Building Code and
5. An imminent danger as defined in this code is not created.

Voluntary alterations to lateral force resisting systems conducted in accordance with the referenced standards of the Building Code shall be permitted. B

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.7 Chapter 7: Change of Use and Occupancy**

### **20.7.1 701.0 General**

701.1 Applicable requirements: Any repair, renovation, modification, or reconstruction work undertaken in connection with a change of character of use as outlined in 701.3.1 that does not involve a change of occupancy classification shall conform to the requirements of Chapters 3, 4, 5, and 6 respectively for the applicable occupancy classification. BF

701.2 Change of occupancy: The occupancy classification of an existing building or structure is defined as the classification of occupancies into groups in accordance with 202.0. The occupancy classification may be changed, provided the building or structure meets all the requirements of Chapter 6 applied throughout the building for the new occupancy classification, and the requirements of Chapter 7. BF

Exceptions:

1. Compliance with all the provisions of Chapter 6 is not required where the change of use complies with the requirements of 701.11.
2. As modified in Chapter 904.0 for historical buildings.

### 701.3 Special use and occupancy

701.3.1 Where the character of use of an existing building or part of an existing building is changed to one of the following special use or occupancy categories as defined in other sections of this Code, the building shall comply with all the applicable requirements of that chapter and the required provisions of NFPA 101, Life Safety Code, for new occupancies regardless of whether a change of occupancy classification is involved: BF

1. Covered mall buildings
2. Atriums
3. Private garages
4. Parking garages
5. Motion picture projection rooms
6. Stages and platforms
7. Special amusement buildings

701.3.2 An underground building, as defined in 405 of the Building Code, in which there is a change of occupancy shall comply with the requirements of 405 of the Building Code and the required provisions of NFPA 101, Life Safety Code for new construction applicable to underground structures. BF

### 701.3.3 Living and Work Quarters for Artists

701.3.3.1 Where the character of use of an existing building or part of an existing building is changed to artist-in-residence spaces the building or part of the building shall comply with the requirements of Section. B

701.3.3.2 Not over thirty-three (33%) percent of an artist-in-residence space shall be used or arranged for residential purposes such as sleeping area, kitchen, bathroom and closet areas. The minimum area of an artist-in-residence space shall be 750 square feet. A separation between the working space and the residential portion shall not be required. B

701.3.3.3 An artist-in-residence space shall not be used for public sales purposes or for instructional classes. No hazardous activity such as, but not limited to, welding, open flame, or storage of flammable liquids shall occur in an artist-in-residence space without specific written approval from the authority having jurisdiction (Fire Official) that the hazardous activity meets the requirements of the Rhode Island Fire Prevention Code. BF

701.3.3.4 Number of exits: The occupant load of an artist-in-residence space shall be based on one occupant per 750 square feet. Two exits shall be required from each space. BF

701.3.3.5 Fire escapes: An existing or newly constructed fire escape complying with the requirements of 7.2.8 of the NFPA 101 Life Safety Code for new construction, or as approved by the Fire Marshal and Building Commissioner, shall be accepted as providing one of the required means of egress. FB

701.3.3.6 Sleeping room emergency exit: The emergency egress from sleeping rooms as required by this code may be provided from appropriately sized windows in accordance with 24.2.2.3 of NFPA 101 Life Safety Code for new construction in the artist-in-residence working space provided no locking mechanism prevents access to the emergency egress window. F

701.3.3.7 Smoke detectors: Permanently wired smoke detectors shall be installed as required by 602.6 in the residential portion of artist-in-residence spaces. In the working space portion of the artist-in-residence space, one permanently wired smoke detector shall be installed on the ceiling. Where the working space is subdivided into separate rooms, one permanently wired smoke detector shall be installed on the ceiling of each such subdivided working room. Where the residential portions of an artist-in-residence space does not have at least one direct means of egress to an exit without passing through the artist-in-residence working space, the working space shall be provided with permanently wired smoke detectors installed in accordance with the manufacturers installation instructions, but at not over 30 feet on center on the ceiling. When more than one permanently wired smoke detector is required in an artist-in-residence space, all smoke detectors shall be interconnected so that activation of any smoke detector sounds all the smoke detectors within the space. F

701.3.3.8 Corridors: Existing exit access corridor walls shall consist of fire barriers in accordance with 31.3.6 of NFPA 101, Life Safety Code for existing construction that have not less than a 1/2-hour fire resistance rating. Newly constructed exit access corridor walls shall consist of fire barriers in accordance with 30.3.6 of NFPA 101, Life Safety Code for new construction. F

701.3.3.9 Shaft enclosures: Where artist-in-residence spaces are located on a floor, all existing interior vertical openings connecting two or more floors shall be enclosed in accordance with 602.3 and shall be classified as Apartments (R-2) for purposes of its Exceptions. F

701.3.3.10 Light and ventilation: Light and ventilation requirements for habitable spaces shall apply to the actual habitable space provided or, if not physically separated from the artist's working area, to thirty-three (33%) percent of the entire artist-in-residence space. Light for habitable rooms may be provided by means of required sized windows in the artist working space, provided that windows face the habitable rooms and any partitions separating the working space from the habitable rooms contain transparent material with an area fifty (50%) percent greater in area than the habitable room's window area required by this code. B

701.3.3.11 Toilet, shower and bath: Artist-in-residence spaces may share a code-required toilet, shower or bath space, provided each artist-in-residence space has direct access to the toilet, shower or bath from a public corridor. B

701.3.3.12 Electrical: In the habitable residential portion of an artist-in-residence space electrical equipment and wiring shall comply with the requirements for Group R-2 specified in 504.4 and 504.5. In an un-subdivided artist-in-residence space only five receptacle outlets shall be required. The habitable residential portion of an artist-in-residence space may be provided with a minimum 30ampere service. Electrical service, lighting and outlets for the workspace in an artist-in-residence space shall be as specified in the Electrical Code. B

701.3.3.13 Elevators: An elevator need not be provided when establishing an artist-in-residence space. B

#### 701.4 Plumbing Requirements

701.4.1 Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements in accordance with the Plumbing Code, or to increased water supply requirements in accordance with the Plumbing Code, the intent of the respective Plumbing Code provisions shall be complied with. B

701.4.2 If the new occupancy is a food handling establishment, all existing sanitary waste lines above the food or drink preparation, storage, display or serving areas shall be panned or otherwise protected to prevent leaking pipes or condensation on pipes from contaminating food or drink. New drainage lines, as opposed to replacement lines, shall not be installed above such areas. B

701.4.3 If the new occupancy will produce grease or oil laden wastes, it shall be provided with interceptors as required in Plumbing Code. B

701.4.4 If the new occupancy will produce chemical wastes, approval shall be obtained from the Department of Environmental Management and all other authorities with jurisdiction over chemical waste. BO

701.5 Mechanical requirements: Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to different kitchen exhaust requirements or to increased mechanical ventilation requirements in accordance with Chapter 5 and 403 respectively of the Mechanical Code, the intent of the respective Mechanical Code provisions, as articulated in paragraph 101.3 of the Mechanical Code, shall be complied with. In addition, whenever hoods, ductwork, or exhaust fans for kitchen exhaust systems are installed or replaced, the installation shall be in accordance with the Mechanical Code enforced by the Building Official. Jurisdiction for the suppression system for commercial cooking will be enforced solely by the local Fire Official in compliance with NFPA 96 as referenced in the State Fire Code. BF

#### 701.6 Electrical Requirements

701.6.1 Where the occupancy of an existing building or part of an existing building is changed to one of the following special occupancies as described in Chapter 5 of the Electrical Code, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with all applicable requirements of the Electrical Code. B

1. hazardous (classified) locations,
2. commercial garages, repair and storage,
3. aircraft hangars,
4. gasoline dispensing and service stations,
5. Bulk storage plants,
- 6 spray application, dipping and coating processes,
7. places of assembly,
8. theaters, audience areas of motion picture and television studios and similar locations,
9. motion picture and television studios and similar locations,
10. motion picture projectors, and

11. agricultural buildings.

701.6.2 Where the occupancy of an existing building or part of an existing building is changed, all unsafe electrical conditions, as determined by the authority having jurisdiction, shall be corrected, without requiring that all parts of the electrical system be brought into compliance with the Electrical Code. B

701.6.3 Where the occupancy of an existing building or part of an existing building is changed to a residential occupancy, other than hotel and dormitory occupancies, or a residential board and care occupancy, electrical service shall be upgraded to meet the requirements of Article 220 of the National Electrical Code for the new occupancy. B

701.7 Part Change of Occupancy Classification

701.7.1 Where a portion of an existing building is changed to a new occupancy classification, and that portion is not separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications or with approved compliance alternatives, the entire building shall comply with all the requirements of Chapter 6 applied throughout the building for the new occupancy classification, and with the requirements of this Chapter. BF

Exception: Compliance with all the provisions of Chapter 6 is not required when the change of occupancy complies with the requirements of 701.11.

701.7.2 Where a portion of an existing building is changed to a new occupancy classification, and that portion is separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications, or with approved compliance alternatives, the portion changed shall comply with all the requirements of Chapter 6 for the new occupancy classification, and with the requirements of this Chapter. B

Exception: Compliance with all the provisions Chapter 6 is not required when the change of occupancy complies with the requirements of 701.11.

701.8 Certificate of occupancy: Every change of occupancy to one classified in a different occupancy classification shall require a new certificate of occupancy in accordance with this Code regardless of whether any renovations, alterations, or reconstruction work are required by this code. B

701.9 Accessibility:

701.9.1 Where the occupancy of an existing building or part of an existing building is changed, and where renovation, alteration or reconstruction work is to be carried out, the requirements of Chapter 10 for the new occupancy shall be complied with. B

701.9.2 Where the occupancy of an existing building or part of an existing building is changed, and where no work is being performed, compliance with the Accessibility Code is not required. B

701.10 Hazard category classifications: The relative degree of hazard between different occupancy classifications shall be as set forth in the hazard category classifications, 702. BF

701.10.1 An existing building or portion thereof may have its use changed to an occupancy classification within the same hazard classification category or to an occupancy classification in a lesser hazard classification category (higher number) in all three hazard category classifications designated in Tables A, B, and C of this chapter except the highest classification, provided it complies with the provisions of Chapter 6 for the new occupancy classification applied throughout the building, or portion thereof in accordance with 701.7.2, and with 703.2 (Live Loads) and 703.3 (Vertical Loads on Roofs), and 704.0 (Handrails and Guards)). A fire alarm system shall be installed in accordance with 602.6. BF

Exception: Compliance with all the provisions of Chapter 6 is not required where the change of occupancy complies with the requirements 701.11.

701.10.2 An existing building shall comply with all the applicable requirements of NFPA 101, Life Safety Code for new construction, when a change in occupancy will place it in a higher hazard category. BF

701.10.3 An existing building may have its occupancy classification changed to a higher hazard rating (lower number) in all three hazard category classifications designated in Tables A, B, and C of Part provided it complies with this Chapter or with 3409 of the Building Code and 701.10.2. BF

701.11 Change of occupancy to an equal or lesser hazard: A change of use to an occupancy classification within the same hazard classification category or to an occupancy classification in a lesser hazard classification category (higher number) in the three hazard category classifications addressed by Tables A, B and C of § 20.7 of this Part shall be permitted in an existing building or portion thereof provided the provisions of this section are met. BF

701.11.1 Regardless of the occupancy classification involved, the following requirement shall be met: BF

1. The capacity of the means of egress shall comply with 602.1.3.
2. The interior finish of walls and ceilings shall comply with the requirements of 602.2.2.
3. The high-rise building requirements of NFPA 101, Life Safety Code for existing buildings shall apply throughout the building.

4. The boiler/furnace requirements of NFPA 101, Life Safety Code for existing buildings shall apply throughout the building.
5. The fire alarm provisions of 602.6 for the new occupancy classification shall apply throughout the building.

701.11.2 Where the new use is classified as Group R-1, or R-2, the following requirement shall be met throughout the building:

Corridor doors shall comply with the requirements of 602.1.4.2 through 602.1.4.5.  
F

701.11.3 No dwelling unit of a residential occupancy classified as Group R-1 or R-2 shall have its sole means of egress pass through any nonresidential occupancy in the same building. F

701.11.4 No multiple-dwelling unit of a residential occupancy classified as Group R-1 or R-2 shall be located above any nonresidential occupancy. F

Exceptions:

1. Where the dwelling unit of the residential occupancy and exits therefrom are separated from the nonresidential occupancy by construction having an approximate fire resistance rating of one (1) hour as approved by the authority having jurisdiction.
2. Where the nonresidential occupancy is protected throughout by an approved, supervised automatic sprinkler system in accordance with § 9.7 of NFPA 101, Life Safety Code for new construction.

701.11.5 Where the new use is classified as an apartment building (Group R-2), the following requirements shall be met: F

1. The smoke alarm requirements of 602.6 shall be met.
2. Buildings containing more than three (3) and less than eight (8) living units shall have a local fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(a), as amended, of the Rhode Island Fire Safety Code installed throughout the entire building.
3. Buildings containing eight (8) or more living units shall have a fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(b), as amended, of the Rhode Island Fire Safety Code installed throughout the entire building.
4. Buildings classified as high-rise (more than seventy-five feet (75') in height) shall have a fire alarm system as described in R.I. Gen. Laws § 23-28.25-4(c), as amended, of the Rhode Island Fire Safety Code installed throughout the entire building.

701.11.6 When a change of use or occupancy occurs throughout an entire building, a fire alarm system shall be installed throughout the building in accordance with 602.6. F

701.11.7 When a change of use or occupancy occurs in a portion of a building, if that portion is not separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications, a fire alarm system shall be installed throughout the entire building in accordance with 602.6 for the most hazardous occupancy classification. F

701.11.8 When a change of use or occupancy occurs in a portion of a building, and that portion is separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a fire-resistance rating as required in Table 302.3.3 of the Building Code for the separate occupancy classifications, a fire alarm system shall be installed in that portion of the building where the use or occupancy changed. The fire alarm system shall be installed in accordance with 602.6 and the system shall be designed to accommodate expansion to the entire building. F

701.11.9 When a change of occupancy includes a commercial kitchen, existing grease ducts, exhaust equipment and kitchen hoods shall be brought into compliance with all the requirements in 506 and 507 of the Mechanical Code and enforced by the Building Official. Jurisdiction for the suppression system for commercial cooking will be enforced solely by the local Fire Official in compliance with NFPA 96 as referenced in the State Fire Code. BF

## **20.7.2 702 Change of Occupancy**

### **702.1 Means of Egress**

| 702.1 Means of Egress/General F Table A |   |
|---|---|
| HAZARD CATEGORIES AND CLASSIFICATIONS:  |   |
| LIFE SAFETY AND EXITS                   |   |
| Relative Hazard                         | Occupancy Classification  |
| 1 (highest hazard)                      | High hazard contents  |
| 2                                       | Health care, detention and correctional, residential board and care |

|   |   |
|---|---|
| 3 | Assembly, educational, day care, ambulatory health care, residential, mercantile, business, industrial, storage |
|---|---|

702.1.1 When a change of occupancy classification is made to a higher hazard category (lower number) as shown in Table A, egress capacity, arrangement of the means of egress, and all elements of the means of egress, including but not limited to the exit access, exit discharge, occupant load, corridors, doors, enclosures, stairs and ramps, guards and handrails, means of egress doorways, fire escapes and exit lighting and signs, shall comply with the applicable requirements of the NFPA 101, Life Safety Code for new construction for the new occupancy classification. F

Exception: Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements of new stairs.

702.1.2 When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table A, existing elements of the means of egress shall comply with the requirements of 602.0 for the new occupancy classification. F

Exception: Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced, shall not be required to comply with the maximum riser height and minimum tread depth requirements.

## 702.2 Enclosure of Vertical Shafts

702.2.1 General: Vertical shafts shall be designed to meet the NFPA 101, Life Safety Code for new construction requirements for atriums, or the requirements of this section. F

702.2.2 Stairways: When a change of occupancy classification is made to a higher hazard category as shown in Table A, interior stairways shall be enclosed as required by NFPA 101, Life Safety Code for new construction. F

702.2.3 Shafts enclosing commercial kitchen exhaust ducts: When a change of occupancy classification is made to a higher hazard category as shown in Table A, shafts enclosing commercial kitchen exhaust ducts shall be enclosed as required by NFPA 101, Life Safety Code for new construction. F

702.2.4 Other vertical shafts: Interior vertical shafts other than stairways and those enclosing commercial kitchen exhaust ducts, including but not limited to elevator hoist ways and service and utility shafts, shall be enclosed as required by NFPA 101, Life Safety Code for new construction when there is a change of occupancy classification to a higher hazard category in Table A. When the change of occupancy is to an equal or

lesser hazard category, all newly constructed vertical openings, not addressed in 702.2, shall comply with the provisions of 602.3.1. When the change of occupancy is to an equal or lesser hazard category, all existing vertical openings, not addressed in 702.2 shall comply with 602.3.2 of this code. BF

Exceptions:

1. Existing one-hour interior shaft enclosures shall be accepted where a higher rating is required.
2. Vertical openings, other than stairways, need not be enclosed if the entire building is provided with an approved automatic sprinkler system.
3. Where one-hour fire-resistive floor construction is required, vertical shafts need not be enclosed where floor penetrations are fire stopped at every floor level.

702.2.5 Openings: All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire-protection rating of not less than one hour and shall be maintained self-closing or shall be automatic closing by actuation of a smoke detector. All other openings shall be fire protected in an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F. (75°C.). F

702.3 Automatic sprinkler systems: Any change of occupancy, reconstruction and/or addition shall comply with the following automatic sprinkler system requirements. 602.5 shall be used to determine the extent of sprinkler protection required using the area that has changed occupancy as the rehabilitation work area. F

High-rise buildings: All high-rise buildings shall be protected by an automatic sprinkler system in accordance with 11.8.2.1 of NFPA 101, Life Safety Code for new construction. F

Assembly (A1 through A-5): Any assembly occupancy required by Table 12.1.6 of NFPA 101 Life Safety Code for new construction, or buildings containing assembly occupancies with occupant loads of more than 300, shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 of NFPA 101, Life Safety Code for new construction as follows: F

1. Throughout the story containing the assembly occupancy
2. Throughout all stories below the story containing the assembly occupancy
3. In the case of an assembly occupancy located below the level of exit discharge, throughout all stories intervening between that story and the level of exit discharge, including the level of exit discharge

Exceptions:

1. This requirement shall not apply to assembly occupancies used primarily for worship with fixed seating and not part of a mixed occupancy. (See 6.1.14 of NFPA 101, Life Safety Code for new construction.)
2. This requirement shall not apply to assembly occupancies consisting of a single multipurpose room of less than 12,000 ft<sup>2</sup> (1100 m<sup>2</sup>) that are not used for exhibition or display and are not part of a mixed occupancy.
3. This requirement shall not apply to gymnasiums, skating rinks, and swimming pools used exclusively for participant sports with no audience facilities for more than 300 persons.
4. In stadia and arenas, sprinklers shall be permitted to be omitted over the floor area used for contest, performance, or entertainment; over the seating areas; and over open-air concourses where an approved engineering analysis substantiates the ineffectiveness of the sprinkler protection due to building height and combustible loading.
5. In unenclosed stadia and arenas, sprinklers shall be permitted to be omitted in the following areas:
  - (a) Press boxes less than 1000 ft<sup>2</sup> (93 m<sup>2</sup>)
  - (b) Storage facilities less than 1000 ft<sup>2</sup> (93 m<sup>2</sup>) if enclosed with not less than 1-hour fire resistance-rated construction
  - (c) Enclosed areas underneath grandstands that comply with 12.4.8.5 of NFPA 101, Life Safety Code for new construction.

Lodging or rooming houses (R-1): Lodging or rooming houses shall be protected throughout by an approved automatic sprinkler system in accordance with 26.3.5.1 of NFPA 101, Life Safety Code for new construction. F

Exception: Where every sleeping room has a door opening directly to the outside of the building at street or ground level, or has a door opening directly to the outside leading to an exterior stairway that meets the requirements of 26.2.1.1 of NFPA 101, Life Safety Code for new construction.

Hotels and dormitories (R-1): All buildings shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 28.3.5.1 through 28.3.5.4 of NFPA 101, Life Safety Code for new construction. F

Exception: Buildings other than high-rise buildings, where all guest sleeping rooms have a door that opens directly to the outside at street or ground level, or to exterior exit access arranged in accordance with 7.5.3 of NFPA 101, Life Safety Code for new construction.

Apartment buildings (R-2): All buildings, with sleeping accommodations above the third floor and/or having more than six units between fire walls, shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 30.3.5.1 through 30.3.5.5 of NFPA 101, Life Safety Code for new construction, except in buildings where every dwelling unit is provided with the following: F

- a. An exit door opening directly to the street or yard at ground level.

Mercantile (M): Mercantile occupancies shall be protected by an approved automatic sprinkler system in accordance with 9.7 of NFPA 101, Life Safety Code for new construction as follows: F

- 1. Throughout all mercantile occupancies three or more stories in height
- 2. Throughout all mercantile occupancies exceeding 12,000 ft<sup>2</sup> (1115 m<sup>2</sup>) in gross area
- 3. Throughout stories below the level of exit discharge where such stories have an area exceeding 2500 ft<sup>2</sup> (230 m<sup>2</sup>) used for the sale, storage, or handling of combustible goods and merchandise
- 4. Throughout mixed occupancies in accordance with 6.1.14 of NFPA 101, Life Safety Code for new construction where the conditions of 36.3.5.1(1), (2), or (3) of NFPA 101, Life Safety Code for new construction apply to the mercantile occupancy

Automatic sprinkler systems in Class A mercantile occupancies shall be supervised in accordance with 9.7.2 of NFPA 101, Life Safety Code for new construction.

Exception: In other than high-rise structures, where an adequate water supply for sprinkler protection is not available, the authority having jurisdiction shall be permitted to accept alternative protection. For purposes of this Exception, adequate water supply shall mean that the water supply available at the site has sufficient flow capability at a residual pressure of 20 psi to meet the sprinkler system demand criteria.

## 702.4 Heights and Areas

|                                 |
|---------------------------------|
| 702.4 Heights and Areas Table B |
|---------------------------------|

| HAZARD CATEGORIES AND CLASSIFICATIONS:<br>HEIGHTS AND AREAS |   |
|---|---|
| Relative Hazard   | Occupancy Classification  |
| 1 (highest hazard)  | High hazard contents  |
| 2   | Assembly, day care, health care, ambulatory health care, detention and correctional, large residential board and care |
| 3   | Educational, residential, small residential board and care, mercantile, business, industrial, storage                 |

702.4.1 Where a change of occupancy classification is made to a higher hazard category as shown in Table B, heights and areas of buildings and structures shall meet the limitations of Chapter 5 of the Building Code for the new occupancy classification. B

702.4.2 When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table B, the height and area of the existing building shall be deemed to be acceptable. B

702.4.3 Fire separation: When a change of occupancy classification is made to a higher hazard category as shown in Table B, fire barrier walls or horizontal assemblies or both in mixed use buildings shall comply with the requirements for mixed occupancies in 302.3 of the Building Code. BF

Exception: Where the fire barrier walls are required to have a one-hour fire-resistance rating, existing wood lath and plaster in good condition or existing stud wall clad in 1/2-inch-thick (12.7 mm) gypsum wallboard or other equivalent assemblies shall be permitted.

## 702.5 Exterior Wall Fire-Resistance Ratings

|   |
|---|
| 702.5 Exterior Wall Fire-Resistance Ratings Table C |
|---|

| HAZARD CATEGORIES AND CLASSIFICATIONS:<br>EXPOSURE OF EXTERIOR WALLS |   |
|--|---|
| Relative Hazard  | Occupancy Classification  |
| 1 (highest hazard)   | Occupancies containing exempt amounts greater than permitted by 417.0 of the Building Code  |
| 2  | Mercantile, industrial and storage occupancies with ordinary hazard contents  |
| 3  | Assembly, educational, day care, health care, ambulatory health care, detention and correctional, residential, residential board and care, and business |

702.5.1 Where a change of occupancy classification is made to a higher hazard category as shown in Table C, exterior walls shall have fire-resistance and exterior opening protectives as required in Chapter 7 of the Building Code. This provision shall not apply to walls at right angles to the property line. BF

Exception: Where a fire-resistance rating greater than two hours is required for a building of any type of construction, existing noncombustible exterior walls having a fire resistance rating equivalent to two hours as determined by HUD Guideline on Fire Ratings of Archaic Materials and Assemblies or other approved sources shall be accepted, provided the building does not exceed three stories in height and is classified as one of the following Groups: A-3 with an occupant load of less than 300, B, F, M, or S.

702.5.2 When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table C, existing exterior walls, including openings, shall be accepted. F

702.5.3 Opening protectives: Openings in exterior walls shall be protected as required by the Building Code. When openings in the exterior walls are required to be protected due to distance from the property line, the sum of the area of such openings shall not exceed fifty (50%) percent of the total area of the wall in each story. BF

Exceptions:

1. Where the Building Code permits openings in excess of fifty (50%) percent.
2. Existing openings shall not be required to be protected in buildings of Group R which do not exceed three stories in height and which have a fire separation distance of at least 3 feet (914mm).
3. Where exterior opening protectives are required, an automatic sprinkler system throughout may be substituted for opening protection.
4. Exterior opening protectives are not required when the change of occupancy is to an equal or lower hazard classification in accordance with Table C.

### **20.7.3 703.0 Structural Requirements**

703.1 Structural safety: In addition to the requirements of 701 and 702, a change in occupancy classification shall comply with the requirements of this section. B

703.2 Live loads: Any existing structure in which the proposed new occupancy requires floor live loads equal to or less than required for the existing occupancy is permitted to be continued in use for the originally approved live loads, provided that the structure is not dangerous and is adequate for the proposed occupancy. If the approved floor live load is less than required by 1607 of the Building Code, the areas designed for the reduced live load shall be posted with the approved load or shall be structurally strengthened to support the new load. Placards shall be of an approved design. B

Exception: Analysis and test methods for evaluation of existing materials shall be permitted to use the methods specified in the code under which the building was constructed, the current Building Code, or other standards as approved by the authority having jurisdiction [building official].

703.3 Vertical loads on roofs: Buildings and structures shall comply with the roof load requirements of 1607.11 of the Building Code for roof live load. B

Exception: Existing roofs shall be permitted to be retained provided any unsafe or overloaded conditions are corrected and where the roof dead load is not increased by use, re-roofing or added equipment.

703.4 Wind and snow loads: Where a change of occupancy results in an existing building being assigned a higher wind load or snow load importance factor in

accordance with Table 1604.5 of the Building Code, the building shall be strengthened to meet the wind load or snow load requirements of 1609 and 1608, respectively, of the Building Code. B

#### **20.7.4 704.0 Handrails and Guards**

704.1 Handrails: Existing handrails shall comply with the handrail requirements in 602.0. F

704.2 Guardrails: Existing guardrails shall comply with the guardrail requirements in 602.0. F

#### **20.7.5 705.0 Health and Hygiene**

705.1 Light and ventilation: Lighting and ventilation shall comply with the requirements of 1204 and 1202 respectively of the Building Code for the new occupancy classification to the extent deemed practical by the authority having jurisdiction. B

#### **20.7.6 706.0 Energy Conservation**

706.1 A change of use that would require an increase in space conditioning energy use in an existing building or structure that was constructed under an Energy Code shall not be permitted unless such building or structure is made to comply with the thermal envelope requirements of the Energy Code under which it was constructed for the new Use Group. B

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

### **20.8 Chapter 8: Additions**

#### **20.8.1 801.0 General Requirements**

801.1 An addition to a building or structure is defined as an increase in building area, aggregate floor area, height or number of stories of a structure. All additions shall comply with other sections of this Code, Mechanical Code, Plumbing Code, Fire Code,

Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, and Accessibility Code, without requiring the existing building or structure to comply with any requirements of those codes or of this Code. BF

801.2 An addition shall not create or extend any non-conformity in the existing building to which the addition is constructed with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing or electrical systems. BF

801.3 Any repair, renovation, alteration or reconstruction work within an existing building to which an addition is being made shall comply with the requirements of Chapters 3, 4, 5 and 6. BF

## **20.8.2 802.0 Heights and Areas**

802.1 No addition shall increase the height or area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the Building Code for new buildings unless fire separation as required in the Building Code is provided. B

Exception: Infilling of floor openings, non-occupiable appendages such as elevator and exit stair shafts, and the addition of mezzanines and equipment penthouses shall be permitted beyond that permitted by the Building Code.

## **20.8.3 803.0 Fire Protection Systems**

803.1 Existing compartment areas increased by the addition shall be protected with an approved automatic sprinkler system. F

803.1.1 All additions shall meet the automatic sprinkler system requirements of NFPA 101, Life Safety Code for new construction. F

803.1.2 All additions shall have the required fire alarm system installed. Use 602.6 to identify the required fire alarm system for the various occupancy classifications. F

803.1.3 Whenever an addition constitutes an increase in area that is equal to the square footage of the original building, the fire alarm system for the addition shall be extended throughout the existing building, unless the addition is separated from the remainder of the building with fire barrier walls or horizontal assemblies or both having a minimum fire-resistance rating of one hour. F

## **20.8.4 804.0 Structural**

804.1 Compliance with the Building Code: Additions to existing buildings or structures are new construction and shall comply with the Building Code. B

804.2 Additional gravity loads: Existing structural elements supporting any additional gravity loads as a result of additions shall comply with the Building Code. B

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the Building Code.

804.3 Lateral force resisting system: The lateral force resisting system of existing buildings to which additions are made shall comply with 804.3.1, 804.3.2 and 804.3.3. B

Exceptions:

1. In Type V construction, Group R occupancies where the lateral force story shear in any story is not increased by more than ten (10%) percent.
2. Buildings of Group R occupancy with no more than 5 dwelling units or guestrooms used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the Building Code.
3. Additions where the lateral force story shear in any story is not increased by more than five (5%) percent.

804.3.1 Vertical addition: Any element of the lateral force resisting system of an existing building subjected to an increase in vertical or lateral loads from the vertical addition shall comply with the lateral load provisions of the Building Code. B

804.3.2 Horizontal addition: Where horizontal additions are structurally connected to an existing structure, all lateral force resisting elements of the existing structure affected by such addition shall comply with the lateral load provisions of the Building Code. Lateral loads imposed on the elements of the existing structure and the addition shall be determined by a relative stiffness analysis of the combined structure including torsional effects. B

804.3.3 Voluntary addition of structural elements to improve lateral force resisting system: Voluntary addition of structural elements to improve the lateral force resisting system of a building shall comply with 602.9.6. B

804.4 Snow drift loads: Any structural element of an existing building subjected to additional loads from the effects of snow drift as a result of an addition shall comply with the Building Code. B

Exceptions:

1. Structural elements whose stress is not increased by more than five (5%) percent.
2. Buildings of Group R occupancy with no more than 5 dwelling units or guest rooms used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the Building Code.

804.5 Flood hazard areas: In flood hazard areas:

1. For horizontal additions that are structurally interconnected to the existing building:
  - 1.1 If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with the flood hazard provisions of the Building Code.
  - 1.2 If the addition constitutes substantial improvement, the existing building and the addition shall comply with the flood hazard provisions of the Building Code. B
2. For horizontal additions that are not structurally interconnected to the existing building:
  - 2.1 The addition shall comply with the flood hazard provisions of the Building Code.
  - 2.2 If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with the flood hazard provisions of the Building Code. B
3. For vertical additions and all other proposed work, when combined, that constitute substantial improvement, the existing building shall comply with the flood hazard provisions of the Building Code. B
4. For a new, replacement, raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute substantial improvement, the existing building shall comply with the flood hazard provisions of the Building Code. B

**20.8.5 805.0 Accessibility**

805.1 Accessibility requirements: Additions shall comply with Chapter 10. B

**20.8.6 806.0 Energy Conservation**

806.1 Additions to existing buildings or structures may be made to such buildings or structures without making the entire building or structure comply with the requirements

of the Energy Code. The addition shall conform to the requirements of the Energy Code as they relate to new construction only, provided that the allowable amount of glass in the addition shall be based on the area of the entire building. B

## **20.8.7 807.0 Plumbing**

807.1 In areas where public sanitary sewers are not available, existing structures that are being enlarged and discharge liquid wastes containing grease, flammable wastes, sand, solids, and other ingredients harmful to the building drainage system, shall comply with Rhode Island Department of Environmental Management (DEM) regulations. B

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.9 Chapter 9: Historical Buildings**

### **20.9.1 901.0 General**

901.1 Historical buildings shall comply with the provisions of this Chapter, or with the provisions of Chapters 3, 4, 5, 6 and 7, relating to their repair, renovation, alteration, reconstruction, movement and change of occupancy. Where the owner of a historical building wishes to use an alternative to comply with the intent of specific provisions of this code, a written request shall be submitted to the authority having jurisdiction in accordance 901.2. BO

901.1.1 Definition: Historical building (BFO) Any building or structure that:

- a. is listed in the Rhode Island Register or National Register of Historical Places either individually or as a contributing building to a historical district; or
- b. has been issued a Determination of Eligibility by the Keeper of the National Register of Historical Places; or

- c. has been designated by a city or town ordinance pursuant to R.I. Gen. Laws Chapter 45-24.1 and has been certified by the Executive Director of the RIHPHC as contributing to the heritage of the community; or
- d. the State Historic Preservation Officer (hereinafter the SHPO), pursuant to the request of the owner, has determined as eligible to be listed on the National Register of Historical Places either individually or as a contributing building to a historical district.

901.1.2 Owner's responsibility: In order to utilize the provisions of this Chapter, the building owner, or authorized representative, shall contact the Rhode Island Historical Preservation and Heritage Commission (hereinafter the RIHPHC) for written verification that the subject building qualifies as an Historical Building as defined in 901.1.1. The building owner shall further equip the subject building with an approved fire alarm system installed in accordance with the provisions of R.I. Gen. Laws Chapter 23-28.25, as amended. BFO

901.1.3 Modifications to historical buildings: This chapter shall only apply to the historically significant spaces, features, or fabric of the building as certified by the Executive Director of the RIHPHC. In order to utilize the provisions of this Chapter, the building owner shall maintain the historical interior of the subject building unless such proposed modifications are determined to be incidental by the Executive Director. The Executive Director shall so advise the building and fire officials, in writing, prior to the commencement of the plan review. BFO

901.1.4 Appeals: A building owner, utilizing the provisions of this chapter, shall notify Executive Director of the RIHPHC upon the filing of an appeal of any of the provisions of this Chapter with the Joint Committee on the Rehabilitation Building and Fire Code for Existing Buildings and Structures. BF

901.2 Alternatives: Where the owner of a historical building wishes to use an alternative to comply with the intent of the specific provisions of this Code, a written request shall be submitted to the authority having jurisdiction. Such request shall identify all non-conformities with the requirements of this Code and shall include: a statement of the requirements of this Code from which an alternative is sought, a statement of the manner in which strict compliance with the provisions of this Code would result in practical difficulties or would detract from the historical character of the building and a statement of feasible alternatives to the requirements of this Code that would adequately protect the health, safety, and welfare of the intended occupants and of the public generally. If in the opinion of the local building or fire official insufficient information has been provided in the request, the officials shall have the authority to require the submission of additional information, including an evaluation prepared by a registered architect, licensed engineer, or fire protection engineer for the appropriate subject matter. A copy of the request shall be submitted to the Executive Director of the RIHPHC including any additional information required by the authority having jurisdiction. In acting on the request, the authority having jurisdiction shall consider comments, if any, from the RIHPHC. BFO

901.3 Accessibility requirements: The accessibility requirements contained in Chapter 10 shall apply to historical buildings undergoing renovations, alterations, reconstruction or a change of occupancy. If the historical features or historical character of the building is adversely affected, and the building is required to comply with ADAAG by the provisions of Chapter 10, then substantially equivalent alternative provisions of accessibility shall be permitted, in accordance with Chapter 10. B

901.4 Museums: When a historical building is used as a museum, the building shall be classified as use Group B (Business) provided that the building complies with the following conditions:

1. A limit on occupancy, not to exceed 50, is set by the authority having jurisdiction based on egress capacity and travel distance using the following parameters: F
  - a. For buildings with a single means of egress, occupancy shall be limited to the first and second floors, and the travel distance shall not exceed 75 feet. F
  - b. Two means of egress shall be required from all floors above the second floor where occupancy is permitted. F
2. There is supervision by a guide or other employee or volunteer knowledgeable in the emergency exiting procedures during all times that the building is occupied by visitors. F

901.5 Flood hazard areas: For historical buildings or structures located in whole or in part in flood hazard areas, work on the building or structure shall be permitted, provided all of the following are met:

1. If a historical building will continue to be listed or eligible for listing as a historical building, then work proposed to be undertaken is not considered to be a substantial improvement. B
2. If all work proposed constitutes substantial improvement, including repairs, work required due to a change of occupancy, and alterations, then the existing building shall comply with the flood hazard provisions of the Building Code. B
3. The proposed work is the minimum necessary to comply with life and safety requirements of this Code. B
4. A variance to the flood provisions of this code is granted by the Board of Appeals. B

## **20.9.2 902.0 Repairs**

902.1 Repairs to any portion of a historical building or structure shall be permitted to be made with original or like materials and original methods of construction, subject to the provisions of this Chapter. B

### **20.9.3 903.0 Relocated Buildings**

903.1 Construction: Any repair, renovation, alteration, reconstruction, movement and change of use of relocated historical structures shall comply with the requirements of this Chapter. B

903.2 Foundations: Foundations of relocated historical buildings shall comply with Chapter 18 of the Building Code. Relocated historical buildings shall otherwise be considered as historical buildings for the purposes of this Code. B

903.3 Relocated historical buildings and structures shall be so sited that fire separation distance and opening protectives comply with the requirements of paragraphs 704.5 and 704.8 of the Building Code. B

### **20.9.4 904.0 Repair, Renovation, Alteration or Reconstruction**

904.1 General: Historical buildings undergoing repair, renovation, alteration or reconstruction shall comply with all of the applicable requirements Chapters 3, 4, 5 and 6, except as specifically permitted in this Chapter. BF

904.2 Replacement: Replacement of existing or missing features using original or like materials shall be permitted. Partial replacement for repairs that match the original in configuration, height and size shall be permitted. Such replacements shall not be required to meet the materials and methods requirements in 401.2. B

Exception: Replacement glazing in hazardous locations shall comply with 302.2.

904.3 Roof Covering: The existing type of roof covering shall be permitted to be continued and replaced with the same materials if the historical materials are documented to the satisfaction of the local jurisdiction. B

904.4 Means of egress: In buildings protected throughout by a fire alarm system installed in accordance with 602.6, existing door openings, window openings intended for emergency egress and corridor and stairway widths of less than those that would be acceptable for non-historical buildings under this code shall be approved, provided that in the opinion of the local jurisdiction there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load or where other operational controls to limit occupancy are approved by the authority having jurisdiction. F

904.4.1 Paneled doors: Existing paneled doors in corridor walls required to have a fire rating of one hour will be allowed to remain if fitted with smoke seals provided that the egress system of the entire building is equipped with an approved sprinkler system, with a head located on each side of the door. If the above sprinkler system is not otherwise

required, it may be domestically supplied provided that it is properly engineered to the satisfaction of the authority having jurisdiction. Alternative methods of establishing an approximate fire rating of twenty (20) minutes for the above doors may be approved by the authority having jurisdiction in accordance with certifications provided by nationally recognized testing facilities. F

904.4.2 Transoms: In all buildings of Group R-2, all transoms in corridor walls in rehabilitation work areas shall be either glazed with ¼ inch wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction. F

Exception: In buildings of Group R-2, where the egress system is fully sprinklered, existing transoms in corridors and other fire rated walls may be maintained if fixed in the closed position. A sprinkler head shall be installed on each side of the transom. If the above sprinkler system is not otherwise required, it may be domestically supplied provided that it is properly engineered to the satisfaction of the authority having jurisdiction.

904.4.3 Dead end corridors: In other than use group A, existing dead-end corridors in any rehabilitation work area shall not exceed 35 feet. Newly constructed dead-end corridors shall comply with NFPA 101, Life Safety Code, for new buildings. F

Exceptions:

Where existing dead-end corridors of greater length are permitted by NFPA 101, Life Safety Code, for existing buildings.

In other than Group A, the maximum length of an existing dead-end corridor shall be 50 feet in buildings equipped throughout with an automatic sprinkler system installed in accordance with Fire Safety Code.

904.5 Door swing: Existing front or main entry doors need not swing in the direction of exit travel when serving fewer than 50 persons, or if official having jurisdiction determines that other approved exits have sufficient capacity to serve the total occupant load. F

904.6 Interior finishes: The existing finishes of walls and ceilings shall be accepted where it is demonstrated that it is the historical finish. F

Exception: Finishes in exit ways shall have a flame-spread classification of Class C or better in accordance with NFPA 101, Life Safety Code for new construction. Existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish unless the building is equipped throughout with an automatic fire sprinkler system installed in accordance with NFPA 13, Standard for Installation of Sprinkler Systems.

904.7 Stairway Enclosure

904.7.1 Stairway enclosures may be omitted in a historical building where such stairway serves only one adjacent floor. F

904.7.2 In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight fitting doors and solid elements. Such elements need not have a fire rating. F

904.7.3 Riser height and tread width: When stairs are replaced or repaired, the existing or original riser height and tread width shall be permitted to remain. F

904.7.4 Approved sprinkler systems or other solutions may be considered in lieu of enclosure of a stairway. F

904.8 One-hour fire-resistive assemblies: Where one-hour fire-resistive construction is required by this code in buildings protected throughout by a fire alarm system installed in accordance with 602.6, one-hour construction need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lathe and plaster that is in good condition and egress system doors maintain an approximate fire rating of at least twenty (20) minutes or are otherwise protected as outlined in 904.4.1 above. F

904.8.1 Stairway railing: Historically significant stairways shall be accepted without complying with the handrail and guardrail requirements. Existing handrails and guards shall be permitted to remain provided they are not structurally dangerous. Stairway railings may be reconstructed with handrails matching the original handrails. F

904.8.2 Guardrails: Guardrails of at least 30 inches in height shall be accepted and the existing or original baluster spacing permitted to remain where the vertical drop does not exceed 48 inches. Historically significant guardrails of lesser dimension, deemed not to be hazardous by the authority having jurisdiction, shall also be allowed to remain. F

904.8.3 One-hour fire-resistive construction may be omitted when existing building is fully sprinklered. F

904.8.4 Occupancy separations of more than one hour may be reduced to one-hour fire-resistive construction with all openings protected by not less than  $\frac{3}{4}$  hour fire-resistive assemblies of the self-closing or automatic-closing type when building is fully sprinklered. F

904.8.5 Winders: Existing winders that are in good structural repair will be permitted to remain in R-2 occupancies, or in buildings with an occupant load less than 50, or if there is a second approved means of egress, or if the building is protected throughout with an approved fire alarm system. F

904.9 Exit signs: The local jurisdiction shall accept alternate exit sign or egress path marking location where such signs or markings would have an adverse effect upon the historical character. Alternative signs shall identify the exits and egress path. F

904.10 Sprinkler alternative: After review of the report specified in 901.2, every historical building which does not conform to the construction requirements specified in other chapters of this Code for the occupancy or use and which, due to conditions not addressed in this Chapter in the opinion of the local fire official constitutes a fire safety hazard, shall be equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13, Standard for Installation of Sprinkler Systems. However, such automatic sprinkler system shall not be used to substitute for, or act as an alternate to, the required number of exits from any facility. F

## **20.9.5 905.0 Change of Occupancy**

905.1 General: Historical buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 7 except as specifically permitted in this Chapter. Where Chapter 7 requires compliance with specific requirements of Chapter 6, and where those requirements are subject to Exceptions in 904.0, the same Exceptions shall apply in this section. BF

905.2 Building area: The allowable floor area for historical buildings undergoing a change of occupancy shall be permitted to exceed the allowable areas specified in Chapter 7 by fifty (50%) percent. B

905.3 Location on property: Historical structures undergoing a change of use to a higher hazard category in accordance with 702.4.1 may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with 901.2. B

905.4 Roof covering: Regardless of occupancy or use group, roof-covering materials not less than Class C shall be permitted where a fire-retardant roof covering is required. B

905.5 Means of egress: In buildings protected throughout by a fire alarm system installed in accordance with 602.6 or an automatic suppression system in accordance with NFPA 13 or NFPA 13R, existing door openings, window openings intended for emergency egress and corridor and stairway widths of less than those that would be acceptable for non-historical buildings under this code shall be approved, provided that in the opinion of the local jurisdiction there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are approved by the local jurisdiction. F

905.6 Door swing: When approved by the local jurisdiction, or when the occupant load is less than 50, the existing front or main entry doors need not swing in the direction of exit travel, provided other approved exits having sufficient capacity to serve the total occupant load are provided. F

905.7 Transoms: In corridor walls required to be fire rated by this code, existing transoms may be maintained if fixed in the closed position and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom. F

Exception: Transoms conforming to 904.4.2 shall be accepted.

905.8 Finishes: Where finish materials are required to have a flame-spread classification of Class C or better in accordance with NFPA 101, Life Safety Code for new construction, existing nonconforming materials shall be surfaced with an approved fire-retardant paint or finish. F

Exception: Existing nonconforming materials need not be surfaced with an approved fire-retardant paint or finish when the building is equipped throughout with an automatic fire suppression system installed in accordance with NFPA 13, and the nonconforming materials can be substantiated as historical in character.

905.9 One-hour fire-resistive assemblies: In buildings protected throughout by a fire alarm system installed in accordance with 602.6 or an automatic suppression system in accordance with NFPA 13 or NFPA 13R, where one-hour fire-resistive construction is required by this code, it need not be provided regardless of construction or occupancy where the existing wall and ceiling finish is wood lathe and plaster or provides an approximate twenty (20) minute rating. F

905.10 Stairs and railings: Existing stairways shall comply with the requirements of this Code. The local jurisdiction shall grant alternatives for historically significant stairways and railings if alternative stairways are found to be acceptable or if judged as meeting the intent of this Code. Existing open stairways shall comply with 904.10. F

905.11 Exit signs: The local jurisdiction may accept alternate exit sign locations where such signs would have an adverse effect upon the historical character. Such signs shall identify the exits and exit path. F

905.12 Exit stair live load: Existing historical stairways in buildings changed to Groups R-1 and R-2 shall be accepted where it can be shown that the stairway can support 75 pounds per square foot live load. B

905.13 Natural light: When it is determined by the local jurisdiction that compliance with the natural light requirements of 705.1 will lead to loss of historical character and/or historical materials in the building, the existing level of natural lighting shall be considered acceptable. B

905.14 Energy Conservation: Historical buildings shall comply with the requirements of 706.0 to the fullest extent possible without altering the historical fabric of the building. B

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.10Chapter 10: Accessibility**

### **20.10.1 1001.0 General**

1001.1 All buildings, with the Exception of those determined to be historical and so certified under the provisions of Chapter 9, shall further comply with the standards outlined herein. B

1001.2 All buildings certified as historical buildings under the provisions Chapter 9 shall also comply with the standards herein. BO

Exception: Where such modifications to the existing building are determined, by the State Historical Preservation Officer, in writing, to adversely impact the historical significance of the building. In all such cases, the owner shall meet with the State Historical Preservation Officer, the Building Commissioner, and the State ADA Coordinator, or their respective designees, to develop alternative means of compliance with this chapter.

### **20.10.2 1002.0 Requirements**

1002.1 General: Any alteration to a facility covered by this code, after passage of this code, shall be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs. B

1002.2 Alteration: For the purposes of this chapter, an alteration is a change to a place of public accommodation or a commercial facility that affects or could affect the usability of the building or facility or any part thereof. B

1002.3 Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historical restoration, changes or rearrangement in structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, re-roofing, painting or wallpapering, asbestos removal, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility. B

1002.4 If existing elements, spaces, or common areas are altered, then each such altered element, space, or area shall comply with the applicable provisions of the American with Disabilities Act Accessibility Guidelines (ADAAG). B

1002.5 To the maximum extent feasible: The phrase “to the maximum extent feasible”, as used in this section, applies to the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration. In these circumstances, the alteration shall provide the maximum physical accessibility feasible. Any altered features of the facility that can be made accessible shall be made accessible. If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would not be feasible, the facility shall be made accessible to persons with other types of disabilities (e.g., those who use crutches, those who have impaired vision or hearing, or those who have other impairments). B

### **20.10.3      1003.0 Alterations: Path of Travel**

1003.1 General. An alteration that affects or could affect the usability of or access to an area of a facility that contains a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, unless the cost and scope of such alterations is disproportionate to the cost of the overall alteration. B

1003.2 Primary function: A “primary function” is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, the customer services lobby of a bank, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out. Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, and restrooms are not areas containing a primary function.

1003.3 Alterations to an area containing a primary function: Alterations that affect the usability of or access to an area containing a primary function include, but are not limited to: B

- a.      Remodeling merchandise display areas or employee work areas in a department store;
- b.      Replacing an inaccessible floor surface in the customer service or employee work areas of a bank;
- c.      Redesigning the assembly line area of a factory; or
- d.      Installing a computer center in an accounting firm.

1003.4 For the purposes of this section, alterations to windows, hardware, controls, electrical outlets, and signage shall not be deemed to be alterations that affect the usability of or access to an area containing a primary function. B

1003.5 Landlord/tenant: If a tenant is making alterations as defined in 1002.2 that would trigger the requirements of this section, those alterations by the tenant in areas that only the tenant occupies do not trigger a path of travel obligation upon the landlord with respect to areas of the facility under the landlord's authority, if those areas are not otherwise being altered. B

1003.6 Path of travel: A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which the altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility. B

1003.7 An accessible path of travel may consist of walks and sidewalks, curb ramps and other interior or exterior pedestrian ramps; clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements. B

1003.8 For the purposes of this code, the term "path of travel" also includes the restrooms, telephones, and drinking fountains serving the altered area. B

1003.9 Disproportionality: Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds twenty (20%) percent of the cost of the alteration to the primary function area. B

1003.10 Costs that may be counted as expenditures required to provide an accessible path of travel may include: B

- a. Costs associated with providing an accessible entrance and an accessible route to the altered area, for example, the cost of widening doorways or installing ramps; B
- b. Costs associated with making restrooms accessible, such as installing grab bars, enlarging toilet stalls, insulating pipes, or installing accessible faucet controls; B
- c. Costs associated with providing accessible telephones, such as relocating the telephone to an accessible height, installing amplification devices, or installing a telecommunications device for deaf persons (TDD); B
- d. Costs associated with relocating an inaccessible drinking fountain. B

1003.11 Duty to provide accessible features in the event of disproportionality. When the cost of alterations necessary to make the path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be made accessible to the extent that it can be made accessible without incurring disproportionate costs. B

1003.12 In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order: B

- a. An accessible entrance;
- b. An accessible route to the altered area;
- c. At least one accessible restroom for each sex or a single unisex restroom;
- d. Accessible telephones;
- e. Accessible drinking fountains; and
- f. When possible, additional accessible elements such as parking, storage, and alarms.

1003.13 Series of smaller alterations: The obligation to provide an accessible path of travel may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking. B

1003.14 If an area containing a primary function has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area, or a different area on the same path of travel, are undertaken within three years of the original alteration, the total cost of alterations to the primary function areas on that path of travel during the preceding three year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate. B

1003.15 Only alterations undertaken after the passage of this chapter shall be considered in determining if the cost of providing an accessible path of travel is disproportionate to the overall cost of the alterations. B

#### **20.10.4 1004.0 Alterations: Elevator Exemption**

1004.1 This section does not require the installation of an elevator in an altered facility that is less than three stories or has less than 3,000 square feet per story, except with respect to any facility that houses a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal. B

1004.2 For the purposes of this section, "professional office of a health care provider" means a location where a person or entity regulated by a state to provide professional services related to the physical or mental health of an individual makes such services available to the public. The facility that houses a "professional office of a health care provider" only includes floor levels housing by at least one health care provider, or any floor level designed or intended for use by at least one health care provider. B

1004.3 For the purposes of this section, shopping center or shopping mall means: B

- a. A building housing five or more sales or rental establishments; or
- b. A series of buildings on a common site, connected by a common pedestrian access route above or below the ground floor, that is either under common ownership or common control or developed either as one project or as a series of related projects, housing five or more sales or rental establishments. The facility housing a “shopping center or shopping mall” only includes floor levels housing at least one sales or rental establishment, or any floor level designed or intended for use by at least one sales or rental establishment.

1004.4 The exemption provided in 1004.1 does not obviate or limit in any way the obligation to comply with the other accessibility requirements established in this subpart. For example, alterations to floors above or below the accessible ground floor must be accessible regardless of whether the altered facility has an elevator. B

## **20.10.5 1005.0 Removal of Barriers**

1005.1 General: A facility covered by this code shall remove architectural barriers in existing facilities, including communication barriers that are structural in nature, where such removal is readily achievable, i.e., easily accomplishable and able to be carried out without much difficulty or expense. B

1005.2 Examples: Examples of steps to remove barriers include, but are not limited to, the following actions: B

- a. Installing ramps;
- b. Making curb cuts in sidewalks and entrances;
- c. Repositioning shelves;
- d. Rearranging tables, chairs, vending machines, display racks, and other furniture;
- e. Repositioning telephones;
- f. Adding raised markings on elevator control buttons;
- g. Installing flashing alarm lights;
- h. Widening doors;
- i. Installing offset hinges to widen doorways;
- j. Eliminating a turnstile or providing an alternative accessible path;
- k. Installing accessible door hardware;

- l. Installing grab bars in toilet stalls;
- m. Rearranging toilet partitions to increase maneuvering space;
- n. Insulating lavatory pipes under sinks to prevent burns;
- o. Installing a raised toilet seat;
- p. Installing a full-length bathroom mirror;
- q. Repositioning the paper towel dispenser in a bathroom;
- r. Creating designated accessible parking spaces;
- s. Installing an accessible paper cup dispenser at an existing inaccessible water fountain;
- t. Removing high pile, low density carpeting.

1005.3 Priorities: A public accommodation is urged to take measures to comply with the barrier removal requirements of this section in accordance with the following order of priorities. B

1005.3.1 First, a public accommodation should take measures to provide access to a place of public accommodation from public sidewalks, parking or public transportation. These measures include, for example, installing an entrance ramp, widening entrances, and providing accessible parking spaces. B

1005.3.2 Second, a public accommodation should take measures to provide access to those areas of a place of public accommodation where goods and services are made available to the public. These measures include, for example, adjusting the layout of display racks, rearranging tables, providing Brail and other raised character signage, widening doors, providing visual alarms, and installing ramps. B

1005.3.3 Third, a public accommodation should take measures to provide access to restroom facilities. These measures include, for example, removal of obstructing furniture or vending machines, widening of doors, installation of ramps, providing accessible signage, widening of toilet stalls, and installation of grab bars. B

1005.3.4 Fourth, a public accommodation should take any other measures necessary to provide access to the goods, services, facilities, privileges, advantages, or accommodations of a place of public accommodation. B

1005.4 Relationship to alterations requirements of 1003.

1005.4.1 Except as provided in 1004.2, measures taken to comply with the barrier removal requirements of this section shall comply with the applicable requirements for alterations in 1002 and 1004 for the element being altered. The path of travel

requirements of 1003 shall not apply to measures taken solely to comply with the barrier removal requirements of this section. B

1005.4.2 If, as a result of compliance with the alterations requirements specified in 1005.4.1 the measures required to remove a barrier would not be readily achievable, a public accommodation may take other readily achievable measures to remove the barrier that do not fully comply with the specified requirements. Such measures include, for example, providing a ramp with a steeper slope or widening a doorway to a narrower width than that mandated by the alterations requirements. No measure shall be taken, however, that poses a significant risk to the health or safety of individuals with disabilities or others. B

1005.5 Portable ramps. Portable ramps should be used to comply with this section only when installation of a permanent ramp is not readily achievable. In order to avoid any significant risk to the health or safety of individuals with disabilities or others in using portable ramps, due consideration shall be given to safety features such as non-slip surfaces, railings, anchoring, and strength of materials. B

1005.6 Selling or serving space. The rearrangement of temporary or movable structures, such as furniture, equipment, and display racks is not readily achievable to the extent that it results in a significant loss of selling or serving space. B

1005.7 Limitation on barrier removal obligations.

1005.7.1 The requirements for barrier removal under 1005 shall not be interpreted to exceed the standards for alterations in ADAAG. B

1005.7.2 To the extent that relevant standards for alterations are not provided 1005, then the requirements of Chapter 10 shall not be interpreted to exceed the standards for new construction in ADAAG. B

NOTE: Where the section is followed by the letter "B", "F", or "O", the following meaning shall apply:

"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.11Chapter 11: Relocated or Moved Buildings**

### **20.11.1 1101.0 General**

1101.1 Scope: This chapter provides requirements for relocated or moved structures. B

1101.2 Conformance: The building shall be safe for human occupancy as determined by the Fire Code and the Building Code. Any repair, alteration, or change in occupancy undertaken within the moved structure shall comply with the requirements of this Code applicable to the work being performed. Any field-fabricated elements shall comply with the requirements of the Building Code. BF

### **20.11.2 1102.0 Requirements**

1102.1 Location on the Lot: The building shall be located on the lot in accordance with the requirements of the Building Code. B

1102.2 Foundation: The foundation system of relocated buildings shall comply with the Building Code. B

1102.2.1 Connection to the Foundation: The connection of the relocated building to the foundation shall comply with the Building Code. B

1102.3 Wind Loads: Building shall comply with the Building Code wind provisions. B

Exceptions:

1. All use groups where wind loads at the new location are not higher than the previous location.
2. Structural elements whose stress is not increased by more than five (5%) percent.

1102.4 Snow loads: Structure shall comply with Building Code snow loads where snow loads at the new location are higher than the previous location. B

Exception: Structural elements whose stress is not increased by more than five (5%) percent.

1102.5 Flood hazard areas: If relocated or moved into a flood hazard area, structures shall comply with the Building Code Section 3107. B

1102.6 Required Inspection and Repairs: The code official shall be authorized to inspect or require inspection by approved professionals at the expense of the owner, the various structural parts of a relocated building to verify that structural components and connections have not sustained structural damage. Any repairs required by the code official as a result of such inspection shall be made prior to the final approval. B

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"B" This means that the Building Official or the Plumbing, Mechanical or Electrical Inspector shall review the plans, issue the permit, inspect the installation, and approve the final certificate.

"F" This means that the Fire Official shall review the plans for approval, the Fire Official and/or the Building Official inspects the installation, and the Fire Official observes the final test and approves the final installation. The Building Official shall issue the permits.

"O" This would indicate another State agency approval and inspection is needed. An explanation will indicate the agency and approvals needed.

## **20.12Chapter 12: Construction Safeguards**

### **20.12.1 1201.0 General**

1201.1 Scope: The provisions of the chapter shall govern safety during construction which is under the jurisdiction of this Code and the protection of adjacent public and private properties. B

1201.2 Storage and placement: Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers or adjoining property for the duration of the construction project. B

1201.3 Alterations, repairs and additions: Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs or additions to any building or structure. B

Exceptions:

1. When such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
2. When the existing building is not occupied.

1201.4 Manner of removal: Waste materials shall be removed in a manner which prevents injury or damage to persons, adjoining properties and public rights-of-way. B

1201.5 Facilities required: Sanitary facilities shall be provided during construction or demolition activities in accordance with the International Plumbing Code. B

1201.6 Protection of pedestrians: Pedestrians shall be protected during construction and demolition activities as required by 1201.6.1 through 1201.6.7 and Table 1201.6. Signs shall be provided to direct pedestrian traffic. B

| Table 1201.6  |  |                             |
|---|--|-----------------------------|
| PROTECTION OF PEDESTRIANS   |  |                             |
| HEIGHT OF CONSTRUCTION  | DISTANCE OF CONSTRUCTION TO LOT LINE   | TYPE OF PROTECTION REQUIRED |
| 8 feet or less  | Less than 5 feet   | Construction railings       |
| 5 feet or more  |  | None                        |
| Less than 5 feet  |  | Barrier and covered walkway |
| 5 feet or more, but not more than one-fourth the height of construction |  | Barrier and covered walkway |
| More than 8 feet  | 5 feet or more, but between one-fourth and one-half the height of construction | Barrier                     |
| 5 feet or more, but exceeding one-half the height of construction       |  | None                        |

1201.6.1 Walkways: A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the appropriate authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than 4 feet (1219 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with Chapter 11 of the Building Code and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 psf (7.2kN/m<sup>2</sup>). B

1201.6.2 Directional barricades: Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path. B

1201.6.3 Construction railings: Construction railings shall be at least 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas. B

1201.6.4 Barriers: Barriers shall be a minimum of 8 feet (2438 mm) in height and shall be placed on the side of the walkway nearest the construction. Barriers shall extend the entire length of the construction site. Openings in such barriers shall be protected by doors which are normally kept closed. B

1201.6.4.1 Barrier design: Barriers shall be designed to resist loads required in Chapter 10 of the Building Code unless constructed as follows: B

1. Barriers shall be provided with 2 x 4 top and bottom plates.
2. The barrier material shall be a minimum of  $\frac{3}{4}$  inch (19.1mm) boards or  $\frac{1}{4}$  inch (6.4 mm) wood structural use panels.
3. Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.
4. Wood structural use panels  $\frac{1}{4}$  inch (6.4 mm) or  $\frac{1}{16}$  inch (23.8 mm) in thickness shall have studs spaced not more than 2 feet (610 mm) on center.
5. Wood structural use panels  $\frac{1}{3}$ -inch (9.5 mm) or  $\frac{1}{2}$  inch (12.7 mm) in thickness shall have studs spaces not more than 4 feet (1219 mm) on center, provided a 2 inch by 4 inch (51 mm by 102 mm) stiffener is placed horizontally at the mid-height where the stud spacing exceeds 2 feet (610 mm) on center.
6. Wood structural use panels  $\frac{5}{8}$  inch (15.9 mm) or thicker shall not span over 8 feet (2438 mm).

1201.6.5 Covered walkways: Covered walkways shall have a minimum clear height of 8 feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. Openings in the overhead structure are prohibited. In no case shall the design live load be less than 150 psf (7.2 kN/m<sup>2</sup>) for the entire structure. B

Exception: Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories in height are permitted to be designed for a live load of 75 psf (3.6kN/m<sup>2</sup>) or the loads imposed on them, whichever is greater. In lieu of such design, the roof and supporting structure of a covered walkway is permitted to be constructed as follows:

1. Footings shall be continuous 2 x 6 members.
2. Posts not less than 4 x 6 shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.

3. Stringers not less than 4 x 12 shall be placed on edge upon the posts.
4. Joists resting on the stringers shall be at least 2 x 8 and shall be spaced not more than 2 feet (610) mm on center.
5. The deck shall be planks at least 2 inches (51 mm) thick or wood structural panels with an exterior exposure durability classification at least 23/32 inch (18.3 mm) thick nailed to the joists.
6. Each post shall be knee-braced to joists and stringers by 2 x 4 minimum members 4 feet (1219 mm) long.
7. A 2 x 4 minimum curb shall be set on edge along the outside edge of the deck.

1201.6.6 Repair, maintenance and removal: Pedestrian protection required by 1201.6 shall be maintained in place and kept in good order for the entire length of time pedestrians may be endangered. The owner or the owner's agent, upon the completion of the construction activity, shall immediately remove walkways, debris and other obstructions and leave such public property in as good a condition as it was before such work was commenced. B

1201.6.7 Adjacent to excavations: Every excavation on a site located 5 feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6 feet (1829 mm) high. Where located more than 5 feet (1524 mm) from the street lot line, a barrier shall be erected when required by the code official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 10 of the Building Code. B

## **20.12.2      1202.0 Protection of Adjoining Property**

1202.1 Protection required: Adjoining public and private property shall be protected from damage during construction and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs. Provisions shall be made to control water run-off and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings advising them that the excavation is to be made and that the adjoining buildings should be protected. Said notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavations. B

## **20.12.3      1203.0 Temporary Use of Streets, Alleys and Public Property**

1203.1 Storage and handling of materials: The temporary use of streets or public property for the storage of handling of materials or of equipment required for construction or demolition and the protection provided to the public shall comply with the provisions of this chapter at the direction and to the satisfaction of the appropriate authority. B

1203.2 Obstructions: Construction materials and equipment shall not be placed or stored so as to obstruct access to fire hydrants, standpipes, fire or police alarm boxes, catch basins or manholes, nor shall such material or equipment be located within 20 feet (6.1 m) of a street intersection, or placed so as to obstruct normal observations of traffic signals or to hinder the use of public transit loading platforms. B

1203.3 Utility fixtures: Building materials, fences, sheds or any obstruction of any kind shall not be placed so as to obstruct free approach to any fire hydrant, fire department connection, utility pole, manhole, fire alarm box, or catch basin, or so as to interfere with the passage of water in the gutter. Protection against damage shall be provided to such utility fixtures during the progress of the work, but sight of them shall not be obstructed. B

#### **20.12.4      1204.0 Fire Extinguishers**

1204.1 Where required: All structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguisher at each stairway of all floor levels where combustible materials have accumulated. An approved portable fire extinguisher shall be provided in every storage and construction shed. The code official is authorized to require additional approved portable fire extinguishers where special hazards exist, such as flammable or combustible liquid storage hazards. Fire extinguishers shall comply with the State Fire Code. F

1204.2 Fire hazards: The provisions of this code and of the State Fire Code shall be strictly observed to safeguard against all fire hazards attendant upon construction operations. F

#### **20.12.5      1205.0 Exits**

1205.1 Stairways required: Where an existing building exceeding 50 feet (15240 mm) in height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are available for egress as the construction progresses. F

1205.2 Maintenance of exits: Required exits shall be maintained at all times during alterations and additions to any building. F

#### **20.12.6      1206.0 Standpipes System**

1206.1 Where required: Buildings required to have a standpipe system in accordance with this code shall be provided with not less than one standpipe for use during construction. Such standpipes shall be installed where the progress of construction is more than 40 feet (12192 mm) in height above the lowest level of fire department access. Such standpipes shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring. F

1206.2 Buildings being demolished: Where a building or portion of a building is being demolished and a standpipe is existing within such a building, such standpipe shall be maintained in an operable condition so as to be available for use by the fire department. Such standpipe shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished. F

1206.3 Detailed requirements: Standpipes shall be installed in accordance with the provisions of Chapter 9 of the International Building Code. F

Exception: Standpipes shall be either temporary or permanent in nature, and with or without a water supply, provided that such standpipes conform to the requirements of the Building Code as to capacity, outlets, and materials.

1206.4 Water supply: Water supply for fire protection, either temporary or permanent shall be made available as soon as combustible material accumulates. F

#### **20.12.7        1207.0 Automatic Sprinkler System**

1207.1 Completion before occupancy: In portions of a building where an automatic sprinkler system is required by this Part, it shall be unlawful to occupy those portions of the building until the automatic sprinkler system installation has been tested, approved, and placed into service. F

1207.2 Operation of valves: Operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by notification of duly designated parties. When the sprinkler protection is being regularly turned off and on to facilitate connection of newly completed segments, the sprinkler control valves shall be checked at the end of each work period to ascertain that protection is in service. F

#### **20.12.8        1208.0 Additional Fire Protection Safeguards:**

1208.1 Additional fire protection safeguards, as outlined in Chapter 29 of the NFPA Fire Prevention Code 1, 2000 Edition, shall be utilized during construction. F

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**TITLE 510 - BUILDING CODE COMMISSION**

**CHAPTER 00 - N/A**

**SUBCHAPTER 00 - N/A**

**PART 20 - RISRC-1 STATE REHABILITATION BUILDING AND FIRE CODE FOR  
EXISTING STRUCTURES**

Type of Filing: Refile Capabilities

**Department of State**

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Regulation Effective Date

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