**Supplement to the 6th Edition (2017) Florida Building Code, Existing Building**

**Note 1**: Throughout the document, change International Building Code to Florida Building Code, Building; change the International Energy Conservation Code tothe Florida Building Code, Energy Conservation; change the International Existing Building Code to Florida Building Code, Existing Building; change the International Fire code to Florida Fire Prevention Code; change International Fuel Gas Code to Florida Building Code, Fuel Gas; change the International Mechanical Code to Florida Building Code, Mechanical; change the International Plumbing Code to Florida Building Code, Plumbing; change the International Residential Code to Florida Building Code, Residential.

Chapter 1 **SCOPE AND ADMINISTRATION**

No change

**Chapter 2 DEFINITIONS**

Revise section 202 General Definitions as follows:

[A] CHANGE OF OCCUPANCY. ~~A change in the use of the building or a portion of a building. A change of occupancy shall include any change of occupancy classification, any change from one group to another group within an occupancy classification or any change in use within a group for a specific occupancy classification.~~

**New Definition:**

**[A]**  **CHANGE OF OCCUPANCY.**A change in the use of a building or a portion of a building which results in:

1.     A change of occupancy classification,

2.     A change from one group to another group within an occupancy classification, or

3.     Any change in use within a group for which there is a change in the application of the requirements of this code.

(CA7690)/(I-Code)

**EXISTING STRUCTURE~~S (for flood hazard areas)~~.** ~~See Section 1612.2 of the~~ *~~Florida Building Code, Building~~*~~.~~ A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building *permit* has been issued.

(SP7461) /(I-Code)

**SUBSTANTIAL STRUCTURAL ALTERATION.** An alteration in which the gravity load-carrying structural elements altered within a 5-year period support more than 30 percent of the total floor and roof area of the building or structure. The areas to be counted toward the 30 percent shall include mezzanines, penthouses, and in-filled courts and shafts tributary to the altered structural elements.

(EB6-16)

**POSITIVE ROOF DRAINAGE.**The drainage condition in which consideration has been made for all loading deflections of the roof deck, and additional slope has been provided to ensure drainage of the roof within 48 hours of precipitation.

(R7312)

**[BS] SEISMIC ~~LOADING~~ FORCES**The loads, forces, and related requirements prescribed herein, related to the response of the ~~structure~~building to earthquake motions, to be used in the analysis and design of the structure and its components. Seismic forces are considered either full or reduced, as provided in Chapter 3.

 (S8157) /(I-Code)

[BS]SUBSTANTIAL STRUCTURAL DAMAGE. A condition where one or both of the following apply:

      1.The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 33 percent from its pre-damage condition.

      2.The capacity of any vertical component carrying gravity load, or any group of such components, that supports more than 30 percent of the total area of the structure’s floors and roofs has been reduced more than 20 percent from its pre-damage condition and the remaining capacity of such affected elements, with respect to all dead and live loads, is less than 75 percent of that required by ~~this code~~ the Florida Building Code Building for new buildings of similar structure, purpose and location.

(S7487 and S7483)

**[BS] SEISMIC ~~LOADING~~ FORCES** The loads, forces, and related requirements prescribed herein, related to the response of the ~~structure~~ building to earthquake motions, to be used in the analysis and design of the structure and its components. Seismic forces are considered either full or reduced, as provided in Chapter 3.

(SP8157)

**Chapter 3 PROVISIONS FOR ALL COMPLIANCE METHODS**

Revise section as follows:

**SECTION 301 ADMINISTRATION**

**301.1 General.** The *repair*, *alteration*, *change of occupancy*, *addition* or relocation of all *existing buildings* shall comply with Section 301.2 or 301.3, as applicable.

**301.2 Repairs. Repairs shall comply with the requirements of Chapter 4.**

**~~301.1~~301.3 ~~General~~ Alteration, change of occupancy, addition or relocation.** The

~~repair,~~ *alteration*, *change of occupancy*, *addition* or relocation of all *existing buildings* shall comply with one of the methods listed in Sections ~~301.1.1~~ 301.3.1 through ~~301.1.3~~ 301.3.3 as selected by the applicant. Sections ~~301.1.1~~ 301.3.1 through ~~301.1.3~~ 301.3.3 shall not be applied in combination with each other. Where this code requires consideration of the seismic force resisting system of an *existing building* subject to ~~repair,~~ *alteration*, *change of occupancy*, *addition* or relocation of *existing buildings,* the seismic evaluation and design shall be based on Section ~~301.1.4~~ 301.3.4 regardless of which compliance method is used.

Exception: Subject to the approval of the *code official*, *alterations* complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code unless the building is undergoing more than a limited structural *alteration*as defined in Section 907.4.4. New structural members added as part of the *alteration*shall comply with the *Florida Building Code*. *Alteration*s of *existing buildings*in *flood hazard areas*shall comply with Section 701.3. This exception shall not apply to alterations that constitute substantial improvement in flood hazard areas which shall comply with Section 701.3. This exception shall not apply to the structural provisions of Chapter 4 or to the structural provisions of Sections 707, 807, and 907.

**~~301.1.1~~301.3.1 Prescriptive compliance method.** ~~Repairs, alterations~~

*Alterations*, *additions* and *changes of occupancy* complying with Chapter ~~4~~5 of this code in buildings complying with the *Florida Fire Code* shall be considered in compliance with the provisions of this code.

**~~301.1.2~~301.3.2 Work area compliance method.**

~~Repairs,alterations~~ *Alterations, additions, changes in occupancy and relocated buildings complying with the applicable requirements of Chapters* ~~5~~ *6 through 13 of this code shall be considered in compliance with the provisions of this code.*

**~~301.1.3~~301.3.3 Performance compliance method.** ~~Repairs, alterations~~ *Alterations*, *additions*, changes in occupancy and relocated buildings complying with Chapter 14 of this code shall be considered in compliance with the provisions of this code.

*(Renumber subsequent sections)*

(CA8211 and EB7-16/CA8167)))

**301.3.4  Concrete evaluation and design procedures**.

Evaluation and design of structural concrete in compliance with ACI 562 shall be permitted.

Exception: ACI 562 shall not be used to comply with provisions of this code for seismic evaluation and design procedures.

[BS]**301.~~4~~ Seismic evaluation and design procedures.**

The seismic evaluation and design shall be based on the procedures specified in the Florida Building Code, Building or ASCE 41. The procedures contained in Appendix A of this code shall be permitted to be used as specified in Section 301.4.2.

(S7840 G6)

**[BS] 301.4.1 Compliance with ~~Florida Building Code-level~~ full seismic forces.**Where compliance ~~with~~requires the ~~seismic design provisions~~use of ~~the Florida Building Code is required~~ full seismic forces, the criteria shall be in accordance with one of the following:

 **1.      One-hundred percent of the values in the Florida Building Code. Where the existing seismic force-resisting system is a type that can be designated as "Ordinary," values of *R*,**

values of *R*, 0 and *Cd*  used for analysis in accordance with Chapter 16 of the Florida Building Code shall be those specified for structural systems classified as "Ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system will provide performance equivalent to that of a "Detailed," "Intermediate" or "Special" system.

2.      ASCE41,using a Tier 3procedureandthetwolevelperformanceobjectiveinTable 301.1.~~4~~5.1for the applicable risk category.

**TABLE [BS] 301.4.1 PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH ~~FLORIDA BUILDING~~ ~~CODE-LEVEL~~ FULL SEISMIC FORCES**

**[BS] 301.4.2 Compliance with reduced ~~Florda Building Code-level~~ seismic forces.**Where seismic evaluation and design is permitted to ~~meet~~use reduced ~~International Building Code~~seismic ~~force~~ ~~levels~~forces, the criteria used shall be in accordance with one of the following:

 1. The *Florida Building Code*using 75 percent of the prescribed forces. Values of *R*, O0 and *C*d used for analysis shall be as specified in Section 301.~~4~~.1 of this code.

2. Structuresorportionsofstructuresthatcomplywiththerequirementsoftheapplicablechapterin Appendix A as specified in Items 2.1 through 2.~~5~~4 and subject to the limitations of the respective Appendix A chapters shall be deemed to comply with this section.

2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Risk Category I or II are permitted to be based on the procedures specified in Appendix Chapter A1.

2.2 Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Risk Category I or II are permitted to be based on the procedures specified in ChapterA2.

2.3. Seismicevaluationanddesignofcripplewallsandsillplateanchorageinresidentialbuildings of light-frame wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A3.

2.4. Seismic evaluation and design of soft, weak, or open-front wall conditions in multiunit residential buildings of wood construction in Risk Category I or II are permitted to be based on the procedures specified in ChapterA4.

2.5~~. Seismic evaluation and design of concrete buildings assigned to Risk Category I, II or III are permitted to be based on the procedures specified in ChapterA5~~.

3.      ASCE 41, using the performance objective in Table 301.4.2 for the applicable risk category.

**[BS] TABLE 301.~~4~~.2**

**PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH**

**REDUCED FLORIDA BUILDING CODE, BUILDING-LEVEL SEISMIC FORCES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **RISK CATEGORY****(Based on IBC Table 1604.5)** | **STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1E EARTHQUAKE HAZARD LEVEL** | **STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2E EARTHQUAKE HAZARD LEVEL** |   |
|   | I | Life Safety (S-3). See Note a | Collapse Prevention (S-5) |   |
|   | II | Life Safety (S-3). See Note a | Collapse Prevention (S-5) |   |
|   | III | Damage Control (S-2). See Note a | Limited Safety (S-4). See Note b |   |
|   | IV | Immediate Occupancy (S-1) | Life Safety (S-3). See Note c |   |
|   | ~~a.~~  | ~~Tier 1 evaluation at the Damage Control performance level shall use the Tier 1 Life Safety checklists and Tier 1 Quick Check provisions midway between those specified for Life Safety and Immediate Occupancy performance.~~ |   |
|  |  |  |  |  |  |

**Add Footnote:**

For Risk Category I, II, and III buildings, the Tier 1 and Tier 2 procedures need not be considered for the BSE-1E earthquake hazard level.

For Risk Category III, the Tier 1 screening checklists shall be based on Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on the *MS*–factors that checklist statements using the Quick Check provisions shall be based on *MS* –factors that are the average of the values for Collapse Prevention and Life Safety.

For Risk Category IV, the Tier screening checklists shall be based on Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors for Life Safety.

(S8189, 8178 and S8157)

**301.~~1.~~5 Existing mechanical equipment.** An agency or local government may not require that existing mechanical equipment located on or above the surface of a roof be installed in compliance with the requirements of the *Florida Building Code* except during reroofing when the equipment is being replaced or moved and is not in compliance with the provisions of the *Florida Building Code* relating to roof-mounted mechanical units.

**Chapter ~~6~~4 REPAIRS**

**Relocate Chapter 6 as follows: ~~6~~ 4**

**REPAIRS**

*(Renumber Subsequent sections in this Chapter) (Renumber Chapters 4 and 5)*

(CA8211)/I-Code)

**SECTION ~~6~~401**

**GENERAL**

**401.1 Scope.** Repairs as described in Section 402 shall comply with the requirements of this chapter and with the provisions of Section 706. Repairs to *historic buildings* need only comply with Chapter 12.

**401.2 Conformance.** The work shall not make the building less conforming than it was before the *repair* was undertaken.

**[BS] 401.3 Flood hazard areas.** In flood hazard areas, repairs that constitute *substantial improvement* shall require that the building comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

**401.4 Structure seaward of a coastal construction line.** Structures located seaward of the coastal construction line shall be designed to resist the predicted forces of a 100-year storm event in accordance with Section 3109 of the *Florida Building Code, Building.*

**401.5 Dangerous buildings.** When an historic building is determined as dangerous, no work shall be required except as necessary to correct identified dangerous conditions.

**SECTION 402**

**BUILDING ELEMENTS AND MATERIALS**

**~~402.1 Existing building materials.~~** ~~Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the~~ *~~code official~~* ~~to render the building or structure unsafe or~~ *~~dangerous~~* ~~as defined in Chapter 2.~~

**~~602.2~~402.1 New and replacement materials.** Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs ~~and alterations~~, provided no dangerous or unsafe condition, as defined in Chapter 2, is created. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

Exception: Repairs to a historic building shall be permitted using original or like materials. Materials shall comply with Sections 402.1, 402.2 and 402.3.

 (CA8374 and CA8225)

**402.~~3~~2 Glazing in hazardous locations.** Replacement glazing in hazardous locations shall comply with the safety glazing requirements of the *Florida Building Code, Building* or *Florida Building Code, Residential* as applicable.

**Exception:** Glass block walls, louvered windows, and jalousies repaired with like materials.

**402.~~4~~3 Replacement.** For repairs in an historic building, replacement or partial replacement of existing or missing features that match the original in configuration, height, size and original methods of construction shall be permitted.

**Exception:** Glazing in hazardous locations shall comply with Section 402.2.

 (CA8225)

**SECTION 403**

**FIRE PROTECTION**

**403.1 General.** Repairs shall be done in a manner that maintains the level of fire protection provided.

**403.2 Smoke alarms in one-family and two-family dwellings and townhomes.** One-family and two-family dwellings and townhomes undergoing a repair, or a Level 1 alteration as defined in the *Florida Building Code*, may use smoke alarms powered by 10-year nonremovable, nonreplaceable batteries in lieu of retrofitting such dwelling with smoke alarms powered by the dwelling’s electrical system. A battery-powered smoke alarm that is newly installed or replaces an existing battery-powered smoke alarm as a result of a Level 1 alteration

must be powered by a nonremovable, nonreplaceable battery that powers the alarm for at least 10 years. The battery requirements of this section do not apply to a fire alarm, smoke detector, smoke alarm, or ancillary component that is electronically connected as a part of a centrally monitored or supervised alarm system; that uses a low-power radio frequency wireless communication signal; or that contains multiple sensors, such as a smoke alarm combined with a carbon monoxide alarm or other multi devices, and is approved and

listed by a nationally recognized testing laboratory.

**SECTION 404**

**MEANS OF EGRESS**

**404.1 General.** Repairs shall be done in a manner that maintains the level of protection provided for the means of egress.

**SECTION 405**

**ACCESSIBILITY**

**405.1 General.** Repairs shall be done in a manner that maintains the level of accessibility provided.

**SECTION 406**

**STRUCTURAL**

**[BS] 406.1 General.** Structural repairs shall be in compliance with this section and Section 401.2. Regardless of the extent of structural or nonstructural damage, *dangerous* conditions shall be eliminated. Regardless of the scope of *repair*, new structural members and connections used for *repair* or *rehabilitation* shall comply with the detailing provisions of the *Florida Building Code, Building* for new buildings of similar structure, purpose and location.

**[BS] 406.2 Repairs to damaged buildings.** Repairs to damaged buildings shall comply with this section and Section 706, Reroofing.

**[BS] 406.2.1 Repairs for less than substantial structural damage.** For damage less than *substantial structural damage*, the damaged elements shall be permitted to be restored to their predamage condition.

**[BS] 406.2.2 Substantial structural damage to vertical elements of the lateral force-resisting system.** A building that has sustained *substantial structural damage* to the vertical elements of its lateral force-resisting system shall be evaluated in accordance with Section 406.2.2.1, and either repaired in accordance with Section 406.2.2.2 or repaired and rehabilitated in accordance with Section 406.2.2.3, depending on the results of the evaluation.

**Exceptions:**

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage

was not caused by earthquake need not be evaluated or rehabilitated for load combinations that

include earthquake effects.

2. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that

include earthquake effects.

**[**

**[BS] 406.2.2.1 Evaluation.**The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the *code official*. The evaluation shall establish whether the damaged building, if repaired to its predamage state, would comply with the provisions of the *Florida Building Code*for load combinations that include wind or earthquake effects*,*except that the seismic forces shall be the reduced ~~International Building Code-level~~seismic forces.

 (S8157)

**[BS] 406.2.2.2 Extent of repair for compliant buildings.** If the evaluation establishes that the building in its

predamage condition complies with the provisions of Section 406.2.2.1, then the damaged elements shall be

permitted to be restored to their predamage condition.

**[BS] 606.2.2.3 Extent of repair for noncompliant buildings.**If the evaluation does not establish that the building in its predamage condition complies with the provisions of Section 406.2.2.1, then the building shall be rehabilitated to comply with the provisions of this section. The wind loads for the *repair*and *rehabilitation* shall be those required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be in accordance with the *Florida Building Code*. The seismic loads forces for this *rehabilitation*design shall be those required by the building code in effect at the time of original construction, but not less than the reduced ~~FLorida Building Code-level~~seismic forces.

(S8157)

**[BS] 406.2.3 Substantial structural damage to gravity load-carrying components.** Gravity load-carrying components that have sustained *substantial structural damage* shall be rehabilitated to comply with the applicable provisions for dead and live loads in the *Florida Building Code, Building*. Snow loads shall be considered if the *substantial structural damage* was caused by or related to snow load effects. Undamaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated if required to comply with the design loads of the *rehabilitation* design.

**[BS] 406.2.3.1 Lateral force-resisting elements.** Regardless of the level of damage to gravity elements

of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was

caused primarily by wind or seismic effects, then the building shall be evaluated in accordance with Section

406.2.2.1 and, if noncompliant, rehabilitated in accordance with Section 406.2.2.3.

**Exceptions:**

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural

damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations

that include earthquake effects.

2. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations

that include earthquake effects.

**[BS] 406.2.4 Flood hazard areas.** In *flood hazard* areas, buildings that have sustained *substantial damage* shall be brought into compliance with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

**SECTION 407 ELECTRICAL**

**407.1 Material.** Existing electrical wiring and equipment undergoing *repair* shall be allowed to be repaired or replaced with like material.

**407.1.1 Receptacles.** Replacement of electrical receptacles shall comply with the applicable requirements of Section 406.4(D) of NFPA 70.

**407.1.2 Plug fuses.** Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of Section 240.51(B) of NFPA 70.

**407.1.3 Nongrounding-type receptacles.** For replacement of nongrounding-type receptacles with grounding type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system or to any accessible point on the grounding electrode conductor in accordance with Section 250.130(C) of NFPA 70.

**407.1.4 Group I-2 receptacles.** Non-“hospital grade” receptacles in patient bed locations of Group I-2 shall be

replaced with “hospital grade” receptacles, as required by NFPA 99 and Article 517 of NFPA 70.

**407.1.5 Grounding of appliances.** 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 in accordance with Section 250.140 of NFPA 70.

**SECTION 408 MECHANICAL**

**408.1 General.** Existing mechanical systems undergoing *repair* shall not make the building less conforming than it was before the *repair* was undertaken.

**408.2 Mechanical draft systems for manually fired appliances and fireplaces.** A mechanical draft system shall be permitted to be used with manually fired appliances and fireplaces where such a system complies with all of the following requirements:

1. The mechanical draft device shall be listed and installed in accordance with the manufacturer’s installation

instructions.

2. A device shall be installed that produces visible and audible warning upon failure of the mechanical draft

device or loss of electrical power at any time that the mechanical draft device is turned on. This device shall

be equipped with a battery backup if it receives power from the building wiring.

3. A smoke detector shall be installed in the room with the appliance or fireplace. This device shall be equipped

with a battery backup if it receives power from the building wiring.

**SECTION 409**

**PLUMBING**

**609.1 Materials.** Plumbing materials and supplies shall not be used for repairs that are prohibited in the *Florida Building Code, Plumbing.*

**409.2 Water closet replacement.** The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 gallons (6 L) per flushing cycle.

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

**CHAPTER 45PRESCRIPTIVE COMPLIANCE METHOD**

**Relocate Chapter 6 as follows: ~~6~~ 4**

**REPAIRS**

*(Renumber Subsequent sections in this Chapter) (Renumber Chapters 4 and 5)*

(CA8211) /(I-Code)

Relocate Chapter 4 to 5 and renumber as follows:

**SECTION 501 GENERAL**

**501.1 Scope.** The provisions of this chapter shall control the *alteration, repair, addition* and *change of occupancy* or relocation of *existing buildings* and structures, including *historic buildings* and structures as referenced in Section ~~301.1.1~~ 301.3.1.

**Exception:** Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

**501.1.1 Compliance with other methods.** *Alterations*~~, repairs~~, *additions* and *changes of occupancy* to or relocation of, *existing buildings* and structures shall comply with the provisions of this chapter or with one of the methods provided in Section ~~301.1~~ 301.3.

**~~501.2 Building materials and systems.~~** ~~Building materials and systems shall comply with the requirements of this section.~~

**~~501.2.1 Existing materials.~~** ~~Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the build- ing official to be unsafe.~~

**501.2.2 New and replacement materials.** Except as otherwise required or permitted by this code, materials per- mitted by the applicable code for new construction shall be used. Like materials shall be permitted for *~~repairs~~* ~~and~~ *alterations*, provided no hazard to life, health or property is created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

**~~501.2.3 Existing seismic force-resisting systems.~~** ~~Where the existing seismic force-resisting system is a type that can be designated ordinary, values of~~ *~~R~~*~~, 0 and~~ *~~Cd~~* ~~for the existing seismic force-resisting system shall be those specified by the~~ *~~Florida Building Code, Building~~* ~~for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate or special system.~~

**(CA8211)** /(I-Code)

**501.2 Fire resistance ratings**Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the Florida Building Code has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable requirements of the International Building Code.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means-of-egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

(F8235) /(I-Code)

**501.3 Dangerous conditions.** The building official shall have the authority to require the elimination of conditions deemed *dangerous*.

**SECTION 502 ADDITIONS**

**502.1 General.** *Additions* to any building or structure shall comply with the requirements of the *Florida Building Code, Building* for new construction. Alterations to the *existing building* or structure shall be made to ensure that the *existing building* or structure together with the *addition* are no less conforming to the provisions of the *Florida Building Code,*

*Building* than the *existing building* or structure was prior to the *addition*. An *existing building* together with its *additions* shall comply with the height and area provisions of Chapter 5 of the *Florida Building Code, Building.*

**[BS] 502.2 Flood hazard areas.** For buildings and structures in *flood hazard* areas established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any *addition* that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential,* as applicable, any *additions* that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

**[BS] 502.3 Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an *addition* and its related alterations cause an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by the *Florida Building Code, Building* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased shall be considered an altered element subject to the requirements of Section 503.3. Any existing element that will form part of the lateral load path for any part of the *addition* shall be considered an existing lateral load-carrying structural element subject to the requirements of Section 502.4.

**[BS] 502.3.1 Design live load.** Where the *addition* does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the *addition*. If the approved live load is less than that required by Section 1607 of the *Florida Building Code, Building*, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the *addition* does result in increased design live load, the live load required by Section 1607 of the *Florida Building Code, Building* shall be used.

**[BS] 502.4 Existing structural elements carrying lateral load.** Where the *addition* is structurally independent of the existing structure, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the existing structure, the existing structure and its *addition* acting together as a single structure shall be shown to meet the requirements of Sec- tions1609 and 1613 (the High-Velocity Hurricane Zone shall comply with Section 1620) of the *Florida Building Code, Building.*

**Exception:** Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is no more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the *Florida Building Code, Building*. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

**502.5 Smoke alarms in existing portions of a building.** Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the *existing building* shall be pro- vided with smoke alarms in accordance with the *Florida Fire Prevention Code*.

**502.6 Carbon monoxide protection**. An addition to an existing building shall be equipped with carbon monoxide alarms in accordance with the Florida Fire Prevention Code, Section 915 of the Florida Building Code-Building, or Section R315 of the Florida Building Code-Residential, as applicable.

(7355 A1 only)

**SECTION 503 ALTERATIONS**

**503.1   General.** Except as provided by ~~Section 401.2~~ Sections 302.3, 302.4, or this section, *alterations* to any building or structure shall comply with the requirements of the *International Building Code* for new construction. *Alterations* shall be such that the *existing building* or structure is no less conforming to the provisions of the *International Building Code* than the *existing building* or structure was prior to the *alteration*.

**Exceptions:**

 **1.** An existing stairway shall not be required to comply with the requirement of Section1011of the *Florida*  *Building Code, Building* where the existing space and construction does not allow a reduction in pitch or slope.

 2.       Handrails otherwise required to comply with Section1011.11of the *Florida Building Code, Building* shall not be required to comply with the requirements of Section 1014.6 of the *Florida Building Code, Building* regarding full extension of the handrails where such extensions would be hazardous due to plan configuration.

 (CA8374 and CA8225) /(I-Code)

**[BS] 503.2 Flood hazard areas.** For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any *alter- ation* that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code,*

*Residential*, as applicable, any alterations that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

**[BS] 503.3 Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an *alteration* causes an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, replaced or otherwise altered as needed to carry the increased gravity load required by the *Florida Building Code, Building* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the *alteration* shall be shown to have the capacity to resist the applicable design gravity loads required by the *Florida Building Code, Building* for new structures.

**[BS] 503.3.1 Design live load.** Where the *alteration* does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the *alteration*. If the approved live load is less than that required by Section 1607 of the *Florida Building Code, Building*, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the *alteration* does result in increased design live load, the live load required by Section 1607 of the *Florida Building Code, Building* shall be used.

**[BS] 503.4 Existing structural elements carrying lateral load.** Except as permitted by Section 503.5, where the alteration increases design lateral loads in accordance with Section 1609 or 1613 (the High-Velocity Hurricane Zone shall comply with Section 1620) of the *Florida Building Code, Building,* or where the alteration results in a prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load- carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613 of the *Florida Building Code, Building.* For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 301.1.4.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 (the HVHZ shall comply with Section 1620) of the *Florida Building Code, Building.*

**Exception:** Any existing lateral load-carrying structural element whose demand-capacity ratio with the *alteration* considered is no more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 (the HVHZ shall comply with Section 1620) of the *Florida Building Code, Building*. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

**[BS] 503.4.1 Seismic Design Category F.** Where the portion of the building undergoing the intended alteration exceeds 50 percent of the aggregate area of the building, and where the building is assigned to Seismic Design Category F, the structure of the altered building shall be shown to meet the earthquake design provisions of the *Florida Building Code, Building*. For purposes of this section, the earthquake loads need not be taken greater than 75 percent of those prescribed in Section 1613 of the *Florida Building Code, Building* for new buildings of similar occupancy, purpose and location. New structural members and connections required by this section shall comply with the detailing provisions of this code for new buildings of similar structure, purpose and location.

**503.4.2 Substantial structural alteration.**

Where the work area exceeds 50 percent of the building area and where more than 30 percent of the total floor and roof areas of the building or structure have been or are proposed to be involved in structural alteration within a 5-year period, the lateral load-resisting system of the altered building shall satisfy the requirements of Sections 1609 and 1613 of the Florida Building Code, Building. Reduce Florida Building Code-level seismic forces shall be permitted. The areas to be counted toward the 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 in-filled courts and shafts.

**Exceptions:**

 1.    Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the Florida Building Code, Building or in compliance with the provisions of the Florida Building Code, Residential.

 2.    Where the intended alteration involves only the lowest story of a building, only the lateral load-resisting components in and below that story need comply with this section.

(S8054) /(I-Code)

**[BS] 503.5 Bracing for unreinforced masonry parapets upon reroofing.** Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. For purposes of this section, design seismic forces need not be taken greater than 75 percent of those that would be required for the design of similar nonstructural components in new buildings of similar purpose and location.

**[BS] 503.6 Wall anchorage for unreinforced masonry walls in major alterations.** Where the portion of the building undergoing the intended alteration exceeds 50 percent of the aggregate area of the building, the building is assigned to Seismic Design Category C, D, E or F, and the building’s structural system includes unreinforced masonry walls, the alteration work shall include installation of wall anchors at the roof line to resist seismic forces, unless an evaluation demonstrates compliance of existing wall anchorage. For pur- poses of this section, design seismic forces need not be taken greater than 75 percent of those that would be required for the design of new buildings of similar structure, purpose and location.

**[BS] 503.7 Bracing for unreinforced masonry parapets in major alterations.** Where the portion of the building under- going the intended alteration exceeds 50 percent of the aggregate area of the building, and where the building is assigned to Seismic Design Category C, D, E or F, parapets constructed of unreinforced masonry shall have bracing installed as needed to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. For purposes of this section, design seismic forces need not be taken greater than 75 percent of those that would be required for the design of similar nonstructural components in new buildings of similar purpose and location.

**503.8 Roof diaphragms resisting wind loads in high-wind regions.**

Where the ~~intended alteration requires a permit for reroofing and involves removal of roofing materials~~ structural roof deck is removed from more than ~~50~~30 percent of the~~roof~~ structural diaphragm of a building or section of a building located where the ultimate design wind speed is greater than 115 mph (51 m/s) in accordance with Figure 1609.3(1) of the Florida Building Code, Building as defined in Section 1609 (the HVHZ shall comply with Section 1620) of the Florida Building Code, Building, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the Florida Building Code, Building, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the Florida Building Code, Building.

**~~Exceptions:~~**

1.    This section does not apply to buildings permitted subject to the Florida Building Code.

~~2.    This section does not apply to buildings permitted subject to the 1991 Standard Building Code, or later edition, or designed to the wind loading requirements of the ASCE 7-88 or later editions, where an evaluation is performed by a registered design professional to confirm the roof diaphragm, connections of the roof diaphragm to roof framing members, and roof-to-wall connections are in compliance with the wind loading requirements of either of these standards or later editions.~~

~~3.    Buildings with steel or concrete moment resisting frames shall only be required to have the roof diaphragm panels and diaphragm connections to framing members evaluated for wind uplift.~~

~~4.    This section does not apply to site-built single-family dwellings. Site-built single-family dwellings shall comply with Sections 706.7 and 706.8.~~

~~5.    This section does not apply to buildings permitted within the HVHZ after January 1, 1994 subject to the 1994 South Florida Building Code, or later editions, or where the building’s wind design is based on the wind loading requirements of ASCE 7-88 or later editions.~~

(R7960/R7525 A1 Only)

**[BS] 503.9 Voluntary ~~seismic improvements~~ lateral force-resisting system alterations.**

~~Alterations to existing structural elements or additions of new structural elements~~Structural alterations that are intended exclusively to improve the lateral force-resisting system and are not ~~otherwise~~ required by other sections of this ~~chapter and are initiated for~~ code shall not be required to meet the ~~purpose~~ requirements of ~~improving the performance~~ Section 1609 or Section 1613 of the ~~seismic force-resisting system of an existing structure or the performance of seismic bracing or anchorage of existing nonstructural elements shall be permitted~~ International Building Code, provided that ~~an engineering analysis is submitted demonstrating the following:~~

~~1. The altered structure and the altered nonstructural elements are no less conforming to the provisions of the International Building Code with respect to earthquake design than they were prior to the alteration.~~

~~2. New structural elements are detailed as required for new construction.~~

1. The capacity of existing structural systems to resist forces is not reduced;

2.New structural elements are detailed and connected to existing or new structural elements as required by the International Building Code for new construction;

3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the International Building Code for new construction~~.~~; and

4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

(S8067) /(I-Code)

**503.10 Smoke alarms.** Individual sleeping units and individual dwelling units in Group R and I-1 occupancies shall be provided with smoke alarms in accordance with the *Florida Fire Prevention Code*.

**503.11 Refuge areas.** Where alterations affect the configuration of an area utilized as a refuge area, the capacity of the refuge area shall not be reduced below that required in Sections 503.11.1 through 503.11.3.

**503.11.1 Smoke compartments.** In Group I-2 and I-3 occupancies, the required capacity of the refuge areas for smoke compartments in accordance with Sections 507.5.1 and 508.6.2 of the *Florida Building Code, Building* shall be maintained.

**503.11.2 Ambulatory care.** In ambulatory care facilities required to be separated by Section 422.2 of the *Florida Building Code, Building*, the required capacity of the refuge areas for smoke compartments in accordance with Section 422.4 of the *Florida Building Code, Building* shall be maintained.

**503.11.3 Horizontal exits.** The required capacity of the refuge area for horizontal exits in accordance with Section 1026.4 of the *Florida Building Code, Building* shall be maintained.

**503.12 Smoke alarms in one-family and two-family dwellings and townhomes.** One-family and two-family dwellings and townhomes undergoing a repair, or a Level 1 alteration as defined in the *Florida Building Code,* may use smoke alarms powered by 10-year nonremovable, nonreplaceable batteries in lieu of retrofitting such dwelling with smoke alarms powered by the dwelling’s electrical system. A battery-powered smoke alarm that is newly installed or replaces an existing battery-powered smoke alarm as a result of a level 1alteration must be powered by a nonremovable, nonreplaceable battery that powers the alarm for at least 10 years. The battery requirements of this section do not apply to a fire alarm, smoke detector, smoke alarm, or ancillary component that is electronically connected as a part of a centrally monitored or supervised alarm system, that uses a low-power, radio frequency wireless communication signal; or that contains multiple sensors, such as a smoke alarm combined with a carbon monoxide alarm or other multisensor devices, and is approved and listed by a nationally recognized testing laboratory.

**503.13** **Substantial structural alteration.** Where the work area exceeds 50 percent of the building area and where more than 30 percent of the total floor and roof areas of the building or structure have been or are proposed to be involved in structural *alteration* within a 5-year period, the lateral load-resisting system of the altered building shall satisfy the requirements of Sections 1609 and 1613 of the *International Building Code.* Reduced *International Building Code-*level seismic forces shall be permitted. The areas to be counted toward the 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 in- filled courts and shafts.

**Exceptions:**

1. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the *International Building Code* or in compliance with the provisions of the *International Residential Code*.

2. Where the intended *alteration* involves only the lowest story of a building, only the lateral load-resisting components in and below that story need comply with this section.

(EB31-16)

**~~SECTION 504 REPAIRS~~**

***~~504.1~~* ~~General.~~** ~~Buildings and structures, and parts thereof, shall be repaired in compliance with Sections 501.2 and 504. Work on nondamaged components that is necessary for the required~~ *~~repair~~* ~~of damaged components shall be considered part of the~~ *~~repair~~* ~~and shall not be subject to the requirements for~~ *~~alterations~~* ~~in this chapter. Routine maintenance required by Section 501.2, ordinary repairs exempt from permit in accordance with Section 105.2.2 of the~~ *~~Florida Building Code, Building,~~* ~~and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.~~

 (CA8374 and CA8225)) /(I-Code)

**~~[BS] 504.2 Substantial structural damage to vertical ele- ments of the lateral force-resisting system.~~** ~~A building that has sustained~~ *~~substantial structural damage~~* ~~to the vertical elements of its lateral force-resisting system shall be evaluated and repaired in accordance with the applicable provisions of Sections 504.2.1 through 504.2.3.~~

**~~Exceptions:~~**

~~1. Buildings assigned to Seismic Design Category A, B or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earth- quake effects.~~

~~2. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.~~

**~~[BS] 504.2.1 Evaluation.~~** ~~The building shall be evaluated by a~~ *~~registered design professional~~*~~, and the evaluation findings shall be submitted to the~~ *~~building official~~*~~. The evaluation shall establish whether the damaged building, if repaired to its predamage state, would comply with the provisions of the~~ *~~Florida Building Code, Building~~* ~~for wind and earthquake loads.~~

~~Wind loads for this evaluation shall be those prescribed in Section 1609 (the High-Velocity Hurricane Zone shall comply with Section 1620) of the~~ *~~Florida Building Code, Building~~*~~. Earthquake loads for this evaluation, if required, shall be permitted to be 75 percent of those prescribed in Section 1613 of the~~ *~~Florida Building Code, Building~~*~~. Alternatively, compliance with ASCE 41, using the per- formance objective in Table 301.1.4.2 for the applicable risk category, shall be deemed to meet the earthquake evaluation requirement.~~

**~~[BS] 504.2.2 Extent of repair for compliant buildings.~~** ~~If the evaluation establishes compliance of the predamage building in accordance with Section 504.2.1, then repairs shall be permitted that restore the building to its predamage state.~~

**~~[BS] 504.2.3 Extent of repair for noncompliant buildings.~~** ~~If the evaluation does not establish compliance of the predamage building in accordance with Section 504.2.1, then the building shall be rehabilitated to comply with applicable provisions of the~~ *~~Florida Building Code, Building~~* ~~for load combinations that include wind or seismic loads. The wind loads for the repair shall be as required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be as required by the~~ *~~Florida Building Code, Building~~*~~. Earthquake loads for this rehabilitation design shall be those required for the design of the pre- damage building, but not less than 75 percent of those pre- scribed in Section 1613 of the~~ *~~Florida Building Code, Building~~*~~. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the~~ *~~Florida Building Code, Build-~~*

*~~ing~~* ~~for new buildings of similar structure, purpose and location. Alternatively, compliance with ASCE 41, using the performance objective in Table 301.1.4.2 for the appli- cable risk category, shall be deemed to meet the earth- quake rehabilitation requirement.~~

**~~[BS] 504.3 Substantial structural damage to gravity loadcarrying components.~~** ~~Gravity load-carrying components that have sustained~~ *~~substantial structural damage~~* ~~shall be rehabilitated to comply with the applicable provisions of the~~ *~~Florida Building Code, Building~~* ~~for dead and live loads. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Exist- ing gravity load-carrying structural elements shall be permit- ted to be designed for live loads approved prior to the damage. If the approved live load is less than that required by Section 1607 of the~~ *~~Florida Building Code, Building~~*~~, the area designed for the nonconforming live load shall be posted with placards of~~ *~~approved~~* ~~design indicating the~~ *~~approved~~* ~~live load. Nondamaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated or shown to have the capacity to carry the design loads of the~~ *~~rehabilitation~~* ~~design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the~~ *~~Florida Building Code, Building~~* ~~for new buildings of similar structure, purpose and location.~~

**~~[BS] 504.3.1 Lateral force-resisting elements.~~** ~~Regard- less of the level of damage to vertical elements of the lateral force-resisting system, if~~ *~~substantial structural damage~~* ~~to gravity load-carrying components was caused primarily by wind or earthquake effects, then the building shall be evaluated in accordance with Section 504.2.1 and, if noncompliant, rehabilitated in accordance with Section 504.2.3.~~

**~~Exceptions:~~**

~~1. One- and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.~~

~~2. Buildings assigned to Seismic Design Category A, B or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.~~

**~~[BS] 504.4 Less than substantial structural damage.~~** ~~For damage less than~~ *~~substantial structural damage~~*~~, repairs shall be allowed that restore the building to its predamage state. New structural members and connections used for this~~ *~~repair~~* ~~shall comply with the detailing provisions of the~~ *~~Florida Building Code, Building~~* ~~for new buildings of similar structure, purpose and location.~~

**~~[BS] 504.5 Flood hazard areas.~~** ~~For buildings and structures in~~ *~~flood hazard areas~~* ~~established in Section 1612.3 of the~~ *~~Florida Building Code, Building~~*~~, or Section R322 of the~~ *~~Florida Building Code, Residential~~*~~, as applicable, any repair that constitutes~~ *~~substantial improvement~~* ~~or repair of~~ *~~substantial damage~~* ~~of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.~~

~~For buildings and structures in flood hazard areas established in Section 1612.3 of the~~ *~~Florida Building Code, Building~~*~~, or Section R322 of the~~ *~~Florida Building Code, Residential~~*~~, as applicable, any repairs that do not constitute~~ *~~substantial improvement~~* ~~or repair of~~ *~~substantial damage~~* ~~of the existing structure are not required to comply with the flood design requirements for new construction.~~

(CA8211) /(I-Code)

**SECTION 50~~5~~ 4 FIRE ESCAPES**

**504.1 Where permitted.** Fire escapes shall be permitted only as provided for in Sections 50~~5~~4.1.1 through 50~~5~~4.1.4.

**504.1.1 New buildings.** Fire escapes shall not constitute any part of the required means of egress in new build- ings.

**504.1.2 Existing fire escapes.** Existing fire escapes shall continue to be accepted as a component in the means of egress in *existing buildings* only.

**504.1.3 New fire escapes.** New fire escapes for *existing buildings* shall be permitted only where exterior stairways cannot be utilized due to lot lines limiting stairway size or due to the sidewalks, alleys or roads at grade level. New fire escapes shall not incorporate ladders or access by windows.

**504.1.4 Limitations.** Fire escapes shall comply with this section and shall not constitute more than 50 percent of the required number of exits nor more than 50 percent of the required exit capacity.

**504.2 Location.** Where located on the front of the building and where projecting beyond the building line, the lowest landing shall be not less than 7 feet (2134 mm) or more than 12 feet (3658 mm) above grade, and shall be equipped with a counterbalanced stairway to the street. In alleyways and thor- ough fares less than 30 feet (9144 mm) wide, the clearance under the lowest landing shall be not less than 12 feet (3658 mm).

**504.3 Construction.** The fire escape shall be designed to support a live load of 100 pounds per square foot (4788 Pa) and shall be constructed of steel or other approved *noncom- bustible materials*. Fire escapes constructed of wood not less than nominal 2 inches (51 mm) thick are permitted on build- ings of Type V construction. Walkways and railings located over or supported by combustible roofs in buildings of Type III and IV construction are permitted to be of wood not less than nominal 2 inches (51 mm) thick.

**504.4 Dimensions.** Stairways shall be at least 22 inches (559 mm) wide with risers not more than, and treads not less than, 8 inches (203 mm) and landings at the foot of stairways not less than 40 inches (1016 mm) wide by 36 inches (914 mm) long, located not more than 8 inches (203 mm) below the door.

**504.5 Opening protectives.** Doors and windows along the fire escape shall be protected with 3/4-hour opening protectives.

**SECTION 50~~6~~5 GLASS REPLACEMENT**

**AND REPLACEMENT WINDOWS**

**505.1 Replacement glass.** The installation or replacement of glass shall be as required for new installations.

**505.2 Replacement window opening control devices.**

In Group R-2 or R-3 buildings containing dwelling units, and one-and two-family dwellings and townhouses regulated by the Florida Building Code, Residential, window opening control devices complying with ASTM F 2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1.The window is operable;

2.The window replacement includes replacement of the sash and the frame;

3.~~The top of the sill of the window opening is at a height less than 36 inches ()915 mm) above the finished floor.~~ One of the following applies:

3.1 In Group R-2 or R-3 building containing dwelling units, the top of the sill of the window

opening is at a height less than 36 inches (915 mm) above the finished floor; or

3.2 In one-and two-family dwellings and townhouses regulated by the Florida Building Code, Residential, the top sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor;

4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position; and

5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window

to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the Florida Building Code, Building.

Exceptions:

 1.    Operable windows where the top of the sill of the window opening is located more than 75 feet (22860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.

 2.    Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F 2090.

**505.3 Replacement window emergency escape and rescue openings.**

Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one-and two-family dwellings and townhouses regulated by the Florida Building Code, Residential, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.5 of the Florida Building Code, Building and Sections R310.2.1 and R310.2.3 of the Florida Building Code, Residential provided the replacement window meets the following conditions:

 1.    The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

 2.    The replacement of the window is not part of a change of occupancy.

Window opening control devices complying with ASTM F 2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.

(F8049)

**SECTION 50~~7~~ 6 CHANGE OF OCCUPANCY**

**506.1 Conformance.** No change shall be made in the use or occupancy of any building unless such building is made to comply with the requirements of the *Florida Building Code, Building* for the use or occupancy. Changes in use or occupancy in a building or portion thereof shall be such that the existing building is no less complying with the provisions of this code than the existing building or structure was prior to the change. Subject to the approval of the building official, the use or occupancy of *existing buildings* shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all of the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

**Exception:** The building need not be made to comply with the seismic requirements for a new structure unless required by Section 506.4.

**506.1.1 Change in the character of use.** A change in occupancy with no change of occupancy classification shall not be made to any structure that will subject the structure to any special provisions of the applicable *Florida Building Code*, without approval of the *building official*. Compliance shall be only as necessary to meet the specific provisions and is not intended to require the entire building be brought into compliance.

**506.2 Certificate of occupancy.** A certificate of occupancy shall be issued where it has been determined that the requirements for the new occupancy classification have been met.

**506.3 Stairways.** An existing stairway shall not be required to comply with the requirements of Section 1011 of the *Florida Building Code, Building* where the existing space and construction does not allow a reduction in pitch or slope.

**[BS] 506.4 Structural.** When a *change of occupancy* results in a structure being reclassified to a higher risk category, the structure shall conform to the seismic requirements for a new structure of the higher risk category. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 301.1.4.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 of the *Florida Building Code, Building.*

**Exceptions:**

1. Specific seismic detailing requirements of Section 1613 of the *Florida Building Code, Building* for a new structure shall not be required to be met where the seismic performance is shown to be equivalent to that of a new structure. A demonstration of equivalence shall consider the regularity, overstrength, redundancy and ductility of the structure.

2. When a change of use results in a structure being reclassified from Risk Category I or II to Risk Cate-

gory III and the structure is located where the seis- mic coefficient, SDS*,* is less than 0.33, compliance with the seismic requirements of Section 1613 of the *Florida Building Code, Building* is not required.

**SECTION 50~~8~~7 HISTORIC BUILDINGS**

**See Chapter 12**

**SECTION 50~~9~~8 MOVED STRUCTURES**

**508.1 Conformance.** See Chapter 13.

**SECTION 5~~1~~09 ACCESSIBILITY FOR EXISTING BUILDINGS**

***509.1* Scope.** See the provisions of the *Florida Building Code, Accessibility.*

**509.2 Maintenance of facilities.** Reserved.

**509.3 Extent of application.** Reserved.

**509.4 Change of occupancy.** Reserved.

**509.4.1 Partial change in occupancy.** Reserved.

**509.4.2 Complete change of occupancy.** Reserved.

**509.5 Additions.** Reserved.

**509.6 Alterations.** Reserved.

**509.7 Alterations affecting an area containing a primary function.** Reserved.

**509.8 Scoping for alterations.** Reserved.

**509.8.1 Entrances.** Reserved.

**509.8.2 Elevators.** Reserved.

**509.8.3 Platform lifts.** Reserved.

**509.8.4 Stairways and escalators in existing buildings.**

Reserved.

**509.8.5 Ramps.** Reserved.

**Table 509.8.5 Ramps.** Reserved.

**509.8.6 Accessible dwelling or sleeping units.** Reserved.

**509.8.7 Type A dwelling or sleeping units.** Reserved.

**509.8.8 Type B dwelling or sleeping units.** Reserved.

**509.8.9 Jury boxes and witness stands.** Reserved.

**509.8.10 Toilet rooms.** Reserved.

**509.8.11 Dressing, fitting and locker rooms.** Reserved.

**509.8.12 Fuel dispensers.** Reserved.

**509.8.13 Thresholds.** Reserved.

**509.8.14 Amusement rides.** Reserved.

**509.9 Historic buildings.** Reserved.

**509.9.1 Site arrival points.** Reserved.

**509.9.2 Multilevel buildings and facilities.** Reserved.

**509.9.3 Entrances.** Reserved.

**509.9.4 Toilet and bathing facilities.** Reserved.

**SECTION 51~~1~~ 0 EXISTING ROOFING**

**510.1 General.** The provisions of Section 706, Existing Roofing of this code, shall govern requirements of all reroofing work performed under this code.

**SECTION 51~~2~~1 ENERGY CONSERVATION**

See the *Florida Building Code, Energy Conservation*.

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**CHAPTER ~~5~~ 6CLASSIFICATION OF WORK**

**Relocate Chapter 6 as follows: ~~6~~ 4**

**REPAIRS**

*(Renumber Subsequent sections in this Chapter) (Renumber Chapters 4 and 5)*

(CA8211) /(I-Code)

**SECTION 601 GENERAL**

**601.1 Scope.**The provisions of this chapter shall be used in conjunction with Chapters ~~6~~ 7 through 13 and shall apply to the *alteration*~~, repair~~, *addition*and *change of occupancy*of existing structures, including historic and moved structures, as referenced in Section 301.1.2. The work performed on an *existing building*shall be classified in accordance with this chapter.

**601.1.1 Compliance with other alternatives.***Alterations*~~, repairs~~, *additions*and *changes of occupancy*to existing structures shall comply with the provisions of Chapters ~~6~~7 through 13 or with one of the alternatives provided in Section 301.1.

(CA8211) /(I-Code)

**601.2 Work area.** The *work area*, as defined in Chapter 2, shall be identified on the construction documents.

\* **601.3 Structure seaward of a coastal construction line.**

Structures located seaward of the coastal construction line shall be designed to resist the predicted forces of a 100-year storm event in accordance with Section 3109 of the *Florida Building Code, Building.*

**601.4 Dangerous buildings.** When an historic building is determined as dangerous, no work shall be required except as necessary to correct identified dangerous conditions.

**~~SECTION~~ ~~602 REPAIRS~~**

**~~Scope.~~** ~~Repairs, as defined in Chapter 2, include the patching or restoration or replacement of damagedmaterials,elements,equipmentorfixturesforthepurposeofmaintainingsuchcomponentsin good or sound condition with respect to existing loads or performancerequirements.~~

**~~Application.~~** ~~Repairs shall comply with the provisions of Chapter6.~~

**~~602.3 Related work.~~** ~~Work on nondamaged components that is necessary for the required repair of damaged componentsshallbeconsideredpartoftherepairandshallnotbesubjecttotheprovisionsof Chapter 7, 8, 9, 10 or 11.~~

(CA8211 and CA8374) /(I-Code)

**SECTION 60~~3~~2 ALTERATION—LEVEL 1**

**602.1 Scope.** Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

**602.2 Application.** Level 1 *alterations* shall comply with the provisions of Chapter 7.

**SECTION 60~~4~~3 ALTERATION—LEVEL 2**

**603.1 Scope.** Level 2 *alterations* include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

**603.2 Application.** Level 2 *alterations* shall comply with the provisions of Chapter 7 for Level 1 *alterations* as well as the provisions of Chapter 8.

**SECTION 60~~5~~4 ALTERATION—LEVEL 3**

**604.1 Scope.** Level 3 *alterations* apply where the work area exceeds 50 percent of the *building area*.

**604.2 Application.** Level 3 *alterations* shall comply with the provisions of Chapters 7 and 8 for Level 1 and 2 *alterations*, respectively, as well as the provisions of Chapter 9.

**SECTION 60~~6~~5CHANGE OF OCCUPANCY**

**605.1 Scope.** *Change of occupancy* provisions apply where the activity is classified as a *change of occupancy* as defined in Chapter 2.

**605.2 Application.** *Changes of occupancy* shall comply with the provisions of Chapter 10.

**SECTION 60~~7~~ 6ADDITIONS**

**606.1 Scope.** Provisions for *additions* shall apply where work is classified as an *addition* as defined in Chapter 2.

**606.2 Application.** *Additions* to *existing buildings* shall com- ply with the provisions of Chapter 11.

**SECTION 60~~8~~7 HISTORIC BUILDINGS**

**607.1 Scope.** *Historic building* provisions shall apply to buildings classified as historic as defined in Chapter 12.

**608.2 Application.** Except as specifically provided for in Chapter 12, *historic buildings* shall comply with applicable provisions of this code for the type of work being performed.

**SECTION 60~~9~~8 RELOCATED BUILDINGS**

**608.1 Scope.** Relocated building provisions shall apply to relocated or moved buildings.

**608.2 Application.** Relocated buildings shall comply with the provisions of Chapter 13.

**SECTION 6~~1~~09 RETROFITTING**

**609.1 Scope.** Retrofitting of buildings, as defined in Chapter 2, includes work of a voluntary nature for the purposes of improving the ability of the building or building elements or building components to better serve the purpose for which they were originally intended or the purpose that current building codes intend. Retrofit work shall not include repair work as defined in Chapter 2 and described in ~~Section 502.1~~ Chapter 4.

**610.2 Application.** Retrofitting of existing buildings shall comply with the provisions of Chapter 17 of this code.

**Chapter 7 ALTERATIONS—LEVEL 1**

Revise as follows:

**702.4 Window opening control devices on replacement windows.**

In Group R-2 or R-3 buildings containing dwelling units and one-and two-family dwellings and townhouses regulated by the Florida Building Code, Residential, window opening control devices complying with ASTM F 2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable;

2. The window replacement includes replacement of the sash and the frame;

3. One of the following applies:

3.1 In Group R-2 or R-3 buildings containing dwelling units, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor; or

3.2 In one-and two-family dwellings and town-houses regulated by the Florida Building Code, Residential, the top sill of the window opening is at a height less than 24 inches (610 mm) above the finished floor;

4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position; and

5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the Florida Building Code, Building.

**Exceptions:**

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.

2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F 2090.

**702.5 ~~Emergency~~Replacement window emergency escape and rescue openings.**

Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies and one-and two-family dwellings and townhouses regulated by the Florida Building Code, Residential, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.5 of the Florida Building Code, Building and Sections R310.21 and R310.2.3 of the Florida Building Code, Residential accordingly, provided the replacement window meets the following conditions:

1.The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

2. The replacement of the window is not part of a change of occupancy.

Window opening control devices complying with ASTM F 2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.

(F8049) /(I-Code)

**706.5 Reinstallation/Reuse of materials.**

Existing or salvaged slate, clay or ~~cement~~ concrete tile shall be permitted for reinstallation or reuse, to repair an existing slate or tile roof, except that salvaged slate or tile shall be of like kind in both material and profile. D~~d~~amaged, cracked or broken slate or tile shall not be reinstalled. The building official may permit salvaged slate, clay and concrete tile to be installed on additions and new construction, when the tile is tested in compliance with the provisions of Section 1507 or 1523 (HVH shall comply with Section 1523) and installed in accordance with Section 1507 or 1518 (HVHZ shall comply with Section 1518). Existing vent flashing, metal edgings, drain outlets, collars and metal counter flashings shall not be reinstalled where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled. (High-Velocity Hurricane Zones shall comply with Sections 1512 through 1525 of the Florida Building Code, Building).

(R7314)

**706.7 Mitigation.**

When a roof covering on an existing ~~site-built single-family residential~~ structure with a sawn lumber, wood plank, or wood structural panel roof deck is removed and replaced, the following procedures shall be permitted to be performed by the roofing contractor:

(a) Roof-decking attachment shall be as required by Section 706.7.1.

(b) A secondary water barrier shall be provided as required by Section 706.7.2.

**Exception:**~~Single-family residential~~ structures permitted subject to the Florida Building Code are not required to comply with this section.

**706.7.1 Roof decking attachment for existing ~~site-built~~ ~~single family residential~~ structures with wood roof decks.**

~~For site-built single-family residential structures the f~~Fastening for sawn lumber, wood plank, or wood structural panel roof decks shall be in accordance with Section 706.7.1.1 or 706.7.1.2 as appropriate for the existing construction. 8d nails shall be a minimum of 0.113 inch (2.9 mm) in diameter and shall be a minimum of 21/4 inches (57 mm) long to qualify for the provisions of this section for existing nails regardless of head shape or head diameter.

Remaining text unchanged.

**706.7.2 Roof secondary water barrier for existing ~~site-built~~ ~~singlefamily residential~~ structures with wood roof decks.**

Remaining text unchanged

**706.8** When a roof covering on an existing ~~site-built~~ ~~single family residential~~ structure with a sawn lumber, wood plank, or wood structural panel roof deck is removed and replaced on a building that is located in the wind-borne debris region as defined in the Florida Building Code, Building and that has an insured value of $300,000 or more or, if the building is uninsured or for which documentation of insured value is not presented, has a just valuation for the structure for purposes of ad valorem taxation of $300,000 or more:

(a) Roof to wall connections shall be improved as required by Section 706.8.1.

(b) Mandated retrofits of the roof-to-wall connection shall not be required beyond a 15 percent increase in the cost of reroofing.

**Exception:**~~Single-family residential~~ structures permitted subject to the Florida Building Code are not required to comply with this section.

**706.8.1 Roof-to-wall connections for ~~site-built~~ ~~singlefamily residential~~ structures with wood roof decks.**

Remaining text unchanged.

**Revise as follows:**

**SECTION 707
STRUCTURAL**

**707.3.2 Roof diaphragms resisting wind loads in high-wind regions.**   Where ~~roofing materials are~~ the structural roof deck is removed from more than ~~50~~ 30 percent of the ~~roof~~ structural diaphragm or section of a building located where the ultimate design wind speed, V*ult*, is greater than 115 mph, as defined in Section 1609 (the HVHZ shall comply with Section 1620) of the *Florida Building Code, Building*, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *Florida Building Code, Building*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *Florida Building Code, Building*.

**Exception~~s~~:**

~~1.~~  This section does not apply to buildings permitted subject to the Florida Building Code.

~~2.This section does not apply to buildings permitted subject to the 1991~~*~~Standard Building Code~~*~~, or later edition, or designed to the wind loading requirements of the ASCE 7-88 or later editions, where an evaluation is performed by a registered design professional to confirm the roof diaphragm, connections of the roof diaphragm to roof framing members, and roof-to-wall connections are in compliance with the wind loading requirements of either of these standards or later editions.~~

~~3.Buildings with steel or concrete moment resisting frames shall only be required to have the roof diaphragm panels and diaphragm connections to framing members evaluated for wind uplift.~~

~~4. This section does not apply to site-built singlefamily dwellings. Site-built single-family dwellings shall comply with Sections 706.7 and 706.8.~~

~~5. This section does not apply to buildings permitted within the HVHZ after January 1, 1994 subject to the 1994 South Florida Building Code, or later editions, or where the building’s wind design is based on the wind loading requirements of ASCE 7-88 or later editions.~~

(R7525 A1 Only)

**Revise as follows:**

**706.7.2 Roof secondary water barrier for site-built single family residential structures**. A secondary water barrier shall be installed using one of the following methods when roof covering is removed and replaced:

1. In High-Velocity Hurricane Zone regions:

a) All joints in structural panel roof sheathing or decking shall be covered with a ~~minimum~~ 4 inch (102 mm) to six inch (153 mm) wide strip of self-adhering polymer modified bitumen tape applied directly to the sheathing or decking. The deck and self-adhering polymer modified bitumen tape shall be covered with one of the underlayment systems approved for the particular roof covering to be applied to the roof.

(R7219 AS Commission)

**[BS] 707.3.1 Bracing for unreinforced masonry bearing wall parapets.**Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing to resist the reduced ~~Florida Building Code level~~ seismic forces ~~as specified in Section 301.1.4.2 of this code~~, unless an evaluation demonstrates compliance of such items.

(S8157)

**707.3.2 Roof diaphragms resisting wind loads in high-wind regions.**

Where ~~roofing materials are~~ the structural roof deck is removed from more than ~~50~~30 percent of the ~~roof~~ structural diaphragm of a building or section of a building located where the ultimate design wind speed, Vult, determined in accordance with Figure 1609.3(1) of the Florida Building Code, Building, is greater than 115 mph (51 m/s), as defined in Section 1609(the High-Velocity Hurricane Zone shall comply with Section 1620) of the Florida Building Code, Building, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the Florida Building Code, Building, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the Florida Building Code, Building.

~~Exceptions:~~

1. This section does not apply to buildings permitted subject to the Florida Building Code.

2. ~~This section does not apply to buildings permitted subject to the 1991 Standard Building Code, or later edition, or designed to the wind loading requirements of the ASCE 7-88 or later editions, where an evaluation is performed by a registered design professional to confirm the roof diaphragm, connections of the roof diaphragm to roof framing members, and roof-to-wall connections are in compliance with the wind loading requirements of either of these standards or later editions.~~

3. ~~Buildings with steel or concrete moment resisting frames shall only be required to have the roof diaphragm panels and diaphragm connections to framing members evaluated for wind uplift.~~

4. ~~This section does not apply to site-built singlefamily dwellings. Site-built single-family dwellings shall comply with Sections 706.7 and 706.8.~~

5. ~~This section does not apply to buildings permitted within the HVHZ after January 1, 1994 subject to the 1994 South Florida Building Code, or later editions, or where the building’s wind design is based on the wind loading requirements of ASCE 7-88 or later editions.~~

(R7525 A1 Only)

**Chapter 8 ALTERATIONS—LEVEL 2**

Revise as follows:

**804.4.1.7 Group R-4.** A manual fire alarm system shall be installed in work areas of Group R-4 residential care/assisted living facilities as required by the Florida Fire Prevention Code for existing Group R-4 occupancies.

(F8297)

**805.3 Number of exits.**

The number of exits shall be in accordance with Sections 805.3.1 through 805.3.3.

**805.3.1 Minimum number.**

Every story utilized for human occupancy on which there is a *work area* that includes exits or corridors shared by more than one tenant within the *work area* shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the Florida Building Code, Building. In addition, the exits shall be permitted to comply with Sections 805.3.1.1 and 805.3.1.2.

**805.3.1.1 Single-exit buildings.**

~~Only one exit is required from buildings and spaces of the following occupancies:~~ A single exit or access to a single exit shall be permitted from spaces, any story or any occupied roof where one of the following exist:

1.The occupant load, number of dwelling units and exit access travel distance do not exceed the values in Table 805.3.1.1(1) or 805.3.1.1(2).

~~1.In Group A, B, E, F, M, U and S occupancies, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22 860 mm).~~

~~2.Group B, F-2, and S-2 occupancies not more than two stories in height that are not greater than 3,500 square feet per floor (326 m2), when the exit access travel distance does not exceed 75 feet (22 860 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour.~~

~~3.Open parking structures where vehicles are mechanically parked.~~

~~4.In Group R-4 occupancies, the maximum occupant load excluding staff is 16.~~

~~5.Groups R-1 and R-2 not more than two stories in height, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet (15 240 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour.~~

~~6.In multilevel dwelling units in buildings of occupancy Group R-1 or R-2, an exit shall not be required from every level of the dwelling unit provided that one of the following conditions is met:~~

~~6.1.The travel distance within the dwelling unit does not exceed 75 feet (22 860 mm); or~~

~~6.2.The building is not more than three stories in height and all third-floor space is part of one or more dwelling units located in part on the second floor; and no habitable room within any such dwelling unit shall have a travel distance that exceeds 50 feet (15 240 mm) from the outside of the habitable room entrance door to the inside of the entrance door to the dwelling unit.~~

2.      In Group R-1 or R-2, non-sprinklered buildings, individual single-story or multistory dwelling or sleeping units shall be permitted to have a single exit or access to a single exit from thedwelling or sleeping unit provided one of the following criteria are met:

2.1 The occupant load is not greater than 10 and the exit access travel distance within the unit does not exceed 75 feet (22 860 mm).

2.2 The building is not more than three stories in height; all 3rd story space is part of dwelling with an exit access doorway on the 2nd story; and the portion of the exit access travel distance from the door to any habitable room within any such unit to the unit entrance doors does not exceed 50 feet (15 240 mm).

~~7.In Group R-2, H-4, H-5 and I occupancies and in rooming houses and child care centers, a single exit is permitted in a one-story building with a maximum occupant load of 10 and the exit access travel distance does not exceed 75 feet (22 860 mm).~~

~~8.In buildings of Group R-2 occupancy that are equipped throughout with an automatic fire sprinkler system, a single exit shall be permitted from a basement or story below grade if every dwelling unit on that floor is equipped with an approved window providing a clear opening of at least 5 square feet (0.47 m2) in area, a minimum net clear opening of 24 inches (610 mm) in height and 20 inches (508 mm) in width, and a sill height of not more than 44 inches (1118 mm) above the finished floor.~~

~~9.~~ 3. In buildings of Group R-2 occupancy of any ~~height~~ number of stories and with not more than four dwelling units per floor; served by an interior exit stairway with a smokeproof enclosure in accordance with Sections 909.20 and 1023.11 of the Florida Building Code, Building or an exterior exit stairway ~~or~~outside stairway as an exit; and with such exit~~located within 20 feet (6096 mm) of travel to the entrance doors to all dwelling units served thereby.~~ where the portion of the exit access travel distance from the dwelling unit entrance door to the exit is a maximum of 20 feet (6096 mm).

~~10.In buildings of Group R-3 occupancy equipped throughout with an automatic fire sprinkler system, only one exit shall be required from basements or stories below grade.~~

**TABLE 805.3.1.1(1)**

**STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES**

|  |  |  |  |
| --- | --- | --- | --- |
| STORY | OCCUPANCY | MAXIMUM NUMBER OFDWELLING UNITS | MAXIMUM EXIT ACCESSTRAVEL DISTANCE |
| Basement, First or second story above grade plane | R-22 | 4 dwelling units | 50 feet |
| Third story above grade plane and higher | NP | NA | NA |

For SI: 1 foot=3048 NP=Not Permitted. NA=Not Applicable.

a.     Group R-2, non-sprinklered and provided with emergency escape and rescue openings in accordance with Section 1030 of the *International BuildingCode*.

|  |
| --- |
|  |

**TABLE 805.3.1.1(2)**

**STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES**

|  |  |  |  |
| --- | --- | --- | --- |
| STORY | OCCUPANCY | MAXIMUM OCCUPANTS LOADPER STORY | MAXIMUM EXIT ACCESSTRAVEL DISTANCE (feet) |
| First story above or below grade plane | B, F-2, S-2a | 35 | 75 |
| Second story abovegrade plane | B, F-2, S-2a | 35 | 75 |
| Third story above grade plane and higher | NP | NA | NA |

For SI: 1 foot = 304.8mm.

NP=Not Permitted

NA=Not Applicable

a.     The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet (30480mm).

(F7359)/ **(F8359 G1)** /(I-Code)

**[BS] 807.5 Existing structural elements resisting lateral loads.**Except as permitted by Section 807.6, where the alteration increases design lateral loads, or where the alteration results in prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the wind and seismic provisions of the *Florida Building Code*. Reduced ~~Florida Building~~ ~~Code-level~~seismic forces~~in accordance with Section 301.1.4.2~~shall be permitted.

**Exception:**Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with *Florida Building Code*Sections 1609 and 1613. Reduced *~~Florida~~* ~~Building Code level~~seismic forces~~in accordance with Section 301.1.4.2~~shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

(S8157) /(I-Code)

|  |
| --- |
| **[BS] 807.6 Voluntary lateral force-resisting system alterations.**Structural ~~Alterations~~ alterations ~~of existing structural elements and additions of new structural elements~~ that are ~~initiated for the purpose of increasing~~ intended exclusively to improve the lateral force-resisting ~~strength or stiffness of an existing structure~~ system and ~~that~~ are not required by other sections of this code shall not be required to ~~be designed for forces conforming to~~ meet the requirements of Section 1609 or Section 1613 of the International Building Code, provided that ~~an engineering analysis is submitted to show that~~:1. The capacity of existing structural ~~elements required~~ systems to resist forces is not reduced;~~2. The lateral loading to existing structural elements is not increased either beyond its capacity or more than 10 percent;~~2~~3~~. New structural elements are detailed and connected to the existing or new structural elements as required by the International Building Code for new construction;3~~4~~. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the International Building Code for new construction; and4.The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.~~5. A dangerous condition as defined in this code is not created.~~~~Voluntary alterations to lateral force-resisting systems conducted in accordance with Appendix A and the referenced standards of this code shall be permitted.~~ |
|  (S8067) /(I-Code) |

**Chapter 9 ALTERATIONS—LEVEL 3**

Revise as follows:

**~~804.2.4~~ 904.1.4 Other required automatic sprinkler systems.**

In buildings and areas listed in Table 903.2.11.6 of the Florida Building Code, Building, *work areas* that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with an automatic sprinkler system under the following conditions:

1. 1.The *work area* is required to be provided with an automatic sprinkler system in accordance with the Florida Building Code, Building applicable to new construction; and

2. ~~2.The building has sufficient municipal water supply for design of an automatic sprinkler system available to the floor without installation of a new fire pump.~~

2.The building site has sufficient municipal water supply for design and installation of an automatic sprinkler system.

 (F8048) /(I-Code)

***Revise as follows:***

**[BS] 907.4 Existing structural elements resisting lateral loads.** All existing elements of the lateral force-resisting system shall comply with this section.

**Exceptions:**

1. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the *International Building Code* or in compliance with the provisions of the *International Residential Code*.

~~2~~. ~~Where such~~ *~~alterations~~* ~~involve only the lowest story of a building and the~~ *~~change of occupancy~~* ~~provisions of Chapter 10 do not apply, only the lateral force-resisting components in and below that story need comply with this section.~~

2. Where the intended *alteration* involves only the lowest story of a building, only the lateral load-resisting components in and below that story need comply with this section.

**[BS] 907.4.2 Substantial structural alteration.** Where more than 30 percent of the total floor and roof areas of the building or structure have been or are proposed to be involved in structural *alteration* within a 5-year period, the ~~evaluation and analysis shall demonstrate that the~~ lateral load-resisting system of the altered building ~~or structure complies with~~ shall satisfy the requirements of Sections 1609 and 1613 of the *International Building Code.* ~~for wind loading and with reduced~~ Reduced *International Building Code-*level seismic forces ~~in accordance with Section 301.1.4.2~~ shall be permitted. The areas to be counted toward the 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 in- filled courts and shafts.

(EB31-16/F8054)

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|  |
| **Revise as follows:** |

**[BS] 907.4.2 Substantial structural alteration.** Where ~~more than 30 percent of~~ the ~~total floor and roof~~ ~~areas of the building or structure have been or are proposed to be involved in~~ work involves a substantial structural *~~alteration~~* ~~within a 5-year period~~ alteration, the evaluation and analysis shall demonstrate that the lateral load-resisting system of the altered building or structure complies with the *Florida Building Code* for wind loading and with reduced *~~Florida Building Code-~~*~~level~~ seismic forces ~~in accordance with Section 301.1.4.2~~. ~~The areas to be counted toward the 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 in-filled courts and shafts.~~

(EB6-16/S8157)

**[BS] 907.4.3 Seismic Design Category F.**Where the building is assigned to Seismic Design Category F, the evaluation and analysis shall demonstrate that the lateral load-resisting system of the altered building or structure complies with reduced ~~Florida Building Code-level~~seismic forces~~in accordance with Section 301.1.4.2~~ and with the wind provisions applicable to a limited structural alteration.

**[BS] 907.4.5 Wall anchors for concrete and masonry buildings.**For any building assigned to Seismic Design Category D, E or F with a structural system consisting of concrete or reinforced masonry walls with a flexible roof diaphragm and any building assigned to Seismic Design Category C, D, E or F with a structural system consisting of unreinforced masonry walls with any type of roof diaphragm, the alteration work shall include installation of wall anchors at the roof line to resist the reduced ~~Florida Building~~ ~~Code-level~~seismic forces~~in accordance with Section 301.1.4.2~~, unless an evaluation demonstrates compliance of existing wall anchorage.

**~~[BS] 907.4.6 Bracing for unreinforced masonry parapets.~~**Parapets constructed of unreinforced masonry in buildings assigned to Seismic Design Category C, D, E or F shall have bracing installed as needed to resist the reduced ~~Florida Building Code-~~level seismic forces~~in accordance with Section 301.1.4.2~~, unless an evaluation demonstrates compliance of such items.

(S8157)

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| --- |
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**Chapter 10 CHANGE OF OCCUPANCY**

Revise as follows:

[BS] 1007.3.1 Compliance with ~~International Building Code-level~~ full seismic forces. Where a building or portion thereof is subject to a *change of occupancy*that results in the building being assigned to a higher risk category based on Table 1604.5 of the *International Building Code,*the building shall comply with the requirements for ~~Florida Building Code-leve~~l full seismic forces~~as specified in Section 301.1.4.1~~for the new risk category.

Exceptions:

1.       Where approved by the *code official*, specific detailing provisions required for a new structure are not required to be met where it can be shown that an equivalent level of performance and seismic safety is obtained for the applicable risk category based on the provision for reduced ~~Florida Building Code-level~~ seismic forces~~as specified in Section301.1.4.2~~.

2.       Where the area of the new occupancy with a higher hazard category is less than or equal to 10 percent of the total building floor area and the new occupancy is not classified as Risk Category IV. For the purposes of this exception, buildings occupied by two or more occupancies not included in the same risk category, shall be subject to the provisions of Section 1604.5.1 of the *Florida Building Code*. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.

3.       Unreinforced masonry bearing wall buildings in Risk Category III when assigned to Seismic Design Category A or B shall be allowed to be strengthened to meet the requirements of Appendix Chapter A1 of this code [Guidelines for the Seismic Retrofit of Existing Buildings (GSREB)].

(S8157)

**TABLE 1012.4**

**MEANS OF EGRESS HAZARD CATEGORIES**

|  |  |
| --- | --- |
| **RELATIVE HAZARD** | **OCCUPANCY CLASSIFICATIONS** |
| 1 (Highest Hazard) | H |
| 2 | I-2, I-3, I-4 |
| 3 | A, E, I-1, M, R-1, R-2, R-4 Condition 2 |
| 4 | B, F-1, R-3, R-4 Condition 1, S-1 |
| 5 (Lowest Hazard) | F-2, S-2, U |

**TABLE 1012.5**

**HEIGHTS AND AREAS HAZARD CATEGORIES**

|  |  |
| --- | --- |
| **RELATIVE HAZARD** | **OCCUPANCY CLASSIFICATIONS** |
| 1 (Highest Hazard) | H |
| 2 | A-1, A-2, A-3, A-4, I, R-1, R-2, R-4 Condition 2 |
| 3 | E, F-1, S-1, M |
| 4 (Lowest Hazard) | B, F-2, S-2, A-5, R-3, R-4 Condition 1, U |

(F8369) /(I-Code)

Chapter 11 **ADDITIONS**

**Revise as follows:**

[BS] 1103.3 Lateral force-resisting system. The lateral force-resisting system of *existing buildings*to which additions are made shall comply with Sections 1103.3.1, 1103.3.2 and 1103.3.3.

Exceptions:

1. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes where the *existing building*and the *addition*comply with the conventional light-frame construction methods of the *Florida Building Code*or the provisions of the *International Residential Code*.

2.       Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is not more than 10 percent greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction. For purposes of calculating demand capacity ratios, the demand shall consider applicable load combinationsinvolving~~Florida BuildingCode-level~~fullseismicforces~~inaccordancewithSection301.1.4.1~~.

**[BS] 1103.3.1 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 *Florida Building Code*wind provisions and the ~~Florida Building Code-level~~ full seismic forces~~specified in Section 301.1.4.1 of this code~~.

**[BS] 1103.3.2 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 *Florida Building Code*wind provisions and the ~~FBC level~~ full seismic forces~~specified in Section 301.1.4.1 of this code~~.

(S8157)

**Add as follows:**

**SECTION 1108 CARBON MONOXIDE PROTECTION**

**1108.1 Carbon monoxide protection.**  An addition to an existing building shall be equipped with carbon monoxide alarms in accordance with the Florida Fire Prevention Code, Section 915 of the Florida Building Code-Building, or Section R315 of the Florida Building Code-Residential, as applicable.

(F7355 A1 Only)

**CHAPTER 12 HISTORIC BUILDINGS**

No change

**CHAPTER 13 RELOCATED OR MOVED BUILDINGS**

No change

**Chapter 14 PERFORMANCE COMPLIANCE METHODS**

**Revise as follows:**

**1401.1 Scope.** The provisions of this chapter shall apply to the *alteration*~~, repair~~, *addition* and *change of occupancy* of existing structures, including historic and moved structures, as referenced in

**Section ~~301.1.3~~ 301.3.3. The provisions of this chapter are intended to maintain or increase the current degree of public safety, health and general welfare in *existing buildings* while**

permitting ~~repair~~, *alteration*, *addition* and *change of occupancy* without requiring full compliance with Chapters ~~5~~ 6 through 13, except where compliance with other provisions of this code is specifically required in this chapter.

**1401.1.1 Compliance with other methods.** *Alterations,* ~~repairs~~ *additions, and changes of occupancy* to existing structures shall comply with the provisions of this chapter or with one of the methods provided in Section ~~301.1~~ 301.3.

**1401.2.4 Alterations and repairs. An *existing building* or portion thereof that does not comply with the requirements of this code for new construction shall not be altered or repaired in such a manner that results in the building being less safe or sanitary than such building is currently. If, in the *alteration* or *repair*, the current level of safety or sanitation is to be reduced, the portion altered or ~~repaired~~ shall conform to the requirements of Chapters 2 through 12 and Chapters 14 through 33 of the *Florida Building Code*.**

(CA8211) /(I-Code)

**1401.2.5 Accessibility requirements.**

Accessibility shall be provided in accordance with Section 410,~~or~~ 705, 806, 906, 1105,1201.4 and ~~1205.15~~ as applicable.

(CA 8375)

**1401.6 Evaluation process.**

The evaluation process specified herein shall be followed in its entirety to evaluate *existing buildings* in Groups A, B, E, F, M, R, S and U. For existing buildings in Group I-2, the evaluation process specified herein shall be followed and applied to each and every individual smoke compartment. Table 1401.7 shall be utilized for tabulating the results of the evaluation. References to other sections of this code or other codes indicate that compliance with those sections is required in order to gain credit in the evaluation herein outlined. In applying this section to a building with mixed occupancies, where the separation between the mixed occupancies does not qualify for any category indicated in Section 1401.6.16, the score for each occupancy shall be determined, and the lower score determined for each section of the evaluation process shall apply to the entire building, or to each smoke compartment for Group I-2 occupancies.

Where the separation between the mixed occupancies qualifies for any category indicated in Section 1401.6.16, the score for each occupancy shall apply to each portion, or smoke compartment of the building based on the occupancy of the space.

(F8376) /(I-Code)

**1401.6.6 Vertical openings.**

Evaluate the fire-resistance rating of interior exit stairways or ramps, hoistways, escalator openings, and other shaft enclosures within the building, and openings between two or more floors. Table 1401.6.6(1) contains the appropriate protection values. Multiply that value by the construction-type factor found in Table 1401.6.6(2). Enter the vertical opening value and its sign (positive or negative) in Table 1401.7 under Safety Parameter 1401.6.6, Vertical Openings, for fire safety, means of egress, and general safety. If the structure is a one-story building or if all the unenclosed vertical openings within the building conform to the requirements of Section 713 of the Florida Building Code, Building, enter a value of 2. The maximum positive value for this requirement (VO) shall be 2.

**1401.6.6.1 Vertical opening formula.**

The following formula shall be used in computing vertical opening value.

(F8379)

**where:**

**VO = Vertical opening value. The calculated value shall not be greater than positive 2.0.**

**PV = Protection value from Table 1401.6.6.(1).**

**CF = Construction-type factor from Table 1401.6.6.(2).**

(F8379) /(I-Code)

**TABLE 1401.6.8**

**AUTOMATIC FIRE DETECTION VALUES**

|  |  |
| --- | --- |
| **OCCUPANCY** | **CATEGORIES** |
| **a** | **b** | **c** | **d** | **e** | **f** |
| A-1, A-3, F, M, R, S-1 | -10 | -5 | 0 | 2 | 6 | ~~—~~ NA |
| A-2 | -25 | -5 | 0 | 5 | 9 | ~~—~~ NA |
| A-4, B, E, S-2 | -4 | -2 | 0 | 4 | 8 | ~~—~~ NA |
| I-2 | NP | NP | NP | 4 | 5 | 2 |

NA=Not Applicable

(F8382) /(I-Code)

**CHAPTER 15 CONSTRUCTION SAFEGUARDS**

No change

**Chapter 16 REFERENCED STANDARDS**

**See attached**

**CHAPTER 17 RETROFITTING**

No change

**APPENDIX A Guidelines for the Seismic Retrofit of Existing Buildings**

**Delete without substitution:**

**CHAPTER PART ~~A5-EARTHQUAKE HAZARD REDUCTION IN EXISTING CONCRETE BUILDINGS~~**

**~~SECTION A501~~**

**~~PURPOSE~~**

**~~SECTION A502~~**

**~~SCOPE~~**

**~~SECTION A503~~**

**~~GENERAL REQUIREMENTS~~**

**~~SECTION A504~~**

**~~SITE GROUND MOTION~~**

**~~SECTIONS A505~~**

**~~TIER 1 ANALYSIS PROCEDURE~~**

**~~SECTION A506~~**

**~~TIER 2 ANALYSIS PROCEDURE~~**

**~~SECTION A507~~**

**~~TIER 3 ANALYSIS PROCEDURE~~**

(S8178) /(I-Code)