

Florida Existing Building Code 2004 W/2005 Supplement

BRB Code Educators, Inc.

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Florida Existing Building Code BRB Code Educators, Inc.

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- AR.01.1311 (9877339) 4 Hours Core
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Pre Test

The Florida Existing Building Code, 2004

Effective Date

Code: October 1, 2005

Supplement: December 12, 2005

Florida Existing Building Code

- Florida Building Commission directed by Legislature to make recommendations addressing existing buildings
- Assigned to various TAC's
- TACs recommended IEBC as the base for Florida Existing Building Code
- FEBC became effective with the 2004 Florida Building Code October 1, 2005

Definitions

Chapter 2

What is an Existing Building

- **Existing Building.** A building or structure or portion of a building or structure which has been previously legally occupied or used for its intended purpose.
(§202)

Structural Determination (§202)

- Key term for code application
 - Any part, material, or assembly affecting safety supporting dead or live loads
 - Removal could cause, or be expected to cause collapse of all or any portion of building

Work Area (§202)

- Includes portions of building where work taking place
 - Reconfigured elements, systems or spaces
 - Work area defined on construction documents
 - Excludes areas where incidental work must be performed to complete intended work and where work not intended by owner is required by code

Classification of Work

Chapter 3

Chapter 3 is the key it defines the classification of work

- Repairs
- Level 1 Alteration
- Level 2 Alteration
- Level 3 Alteration
- Change in Occupancy
- Additions
- Historic Buildings
- Relocated Buildings



Compliance Alternatives (§301.3)

- Chapter 12 provides system approach to project
- Provides where the building complies with Ch. 12 , Chs. 4 through 10 are not applicable except as specified (§1201.1)
- Proposed work using Chapter 12 required to be investigated and evaluated by architect or engineer (§1201.4)

Designation of Level of Alteration

- Occupancy and use determined in accordance with Chapter 3, FBCB (§301.4)
- Level or levels of alteration selected and designated by design professional or owner (§301.5)

Repairs (§302)

- Patching or restoration
 - Materials
 - Elements
 - Equipment
 - Fixtures
- To maintain in good or sound condition

Alterations Level 1

303.1 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. Level 1 alterations shall not include any removal, replacement, or covering of existing materials, elements, equipment or fixtures undertaken for purpose of repair as defined in Chapter 2 and described in Section 302.

303.2 Application. Level 1 alterations shall comply with the provisions of Chapter 5.

ALTERATION - LEVEL 2

304.1 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.

304.2 Application. Level 2 alterations shall comply with the provisions of Chapter 5 for Level 1 alterations as well as the provisions of Chapter 6.

ALTERATION - LEVEL 3

305.1 Scope. Level 3 alterations apply where the work area exceeds 50% of the aggregate area of the building and made within any 12 month period.

Exception: Work areas in which the alteration work is exclusively plumbing, mechanical, or electrical shall not be included in the computation of total area of all work areas.

305.2 Application. Level 3 alterations shall comply with the provisions of Chapters 5 and 6 for Level 1 and 2 alterations, respectively, as well as the provisions of Chapter 7.

CHANGE OF OCCUPANCY

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

306.2 Application. Changes of occupancy shall comply with the provisions of Chapter 8.

ADDITIONS

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

307.2 Application. Additions to existing buildings shall comply with the provisions of Chapter 9.

HISTORIC BUILDINGS

308.1 Scope. Historic buildings provisions shall apply to buildings classified as historic as defined in Chapter 10.

308.2 Application. Except as specifically provided for in Chapter 10, historic buildings shall comply with applicable provisions of this code for the type of work being performed

RELOCATED BUILDINGS

309.1 Scope. Relocated buildings provisions shall apply to relocated or moved buildings.

309.2 Application. Relocated buildings shall comply with the provisions of Chapter 11.

Historic Structures Evaluations Shall Comply With:

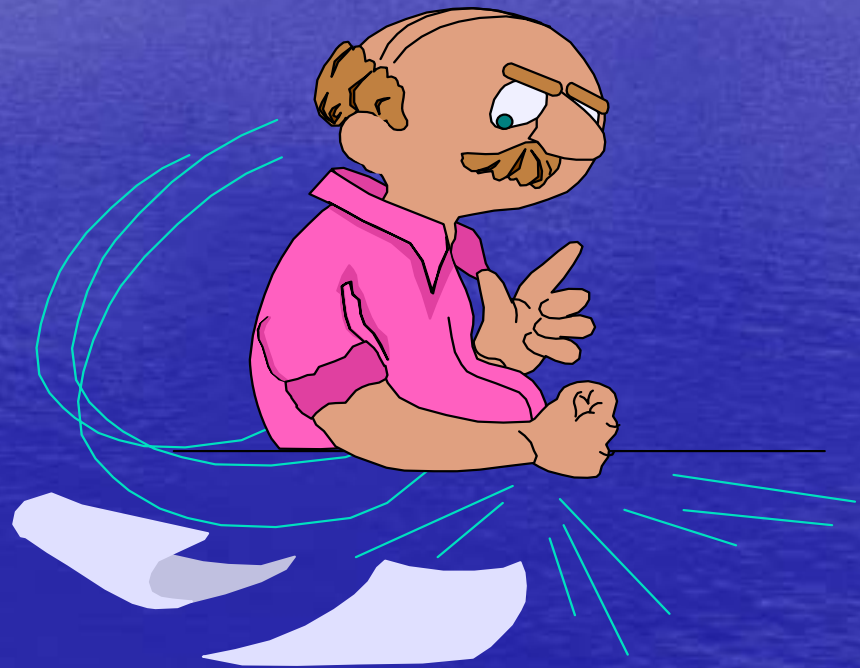
- Prescriptive based provisions of this code
- Compliance alternative based provisions of this code
- Performance based provisions of the National Fire Protection Association 914 Code for Fire Protection of Historic Structures, Chapter 6, latest edition along with a structural evaluation as specified in section 1201.4.1 of this code.

Each Work Classification Chapter is divided into

- General requirements
- Building Elements and Materials
- Fire Protection
- Means of Egress
- Accessibility
- Structural
- Electrical
- Mechanical
- Plumbing
- Energy Conservation

But What If This Still Doesn't Work

- Try chapter 12 Compliance Alternative
- A Matrix Rating System
- Provides for minimum scores in Fire Safety, Means of Egress and General Safety



Compliance Alternative

Chapter 12 may be used as an alternative compliance method on all buildings except for group H or I occupancies.

Lets Get Into the Details

- *We will first look at repairs:*
- Repairs, as defined in Chapter 2, include the patching or restoration of materials, elements, equipment or fixtures for the purpose of maintaining such materials, elements, equipment or fixtures in good or sound condition.
- Must comply with chapter 4.

GENERAL

Chapter 4 (repairs)

- Materials shall be that applicable for new construction
- Or like materials such that no hazard to life, health or property is created.
- Repairs to a historic building shall be permitted using original or like materials
- The work shall not make the building less conforming with the building, plumbing, mechanical, electrical or fire codes of the jurisdiction
- When a historic building is determined as dangerous, no work shall be required except as necessary to correct identified dangerous conditions.

BUILDING ELEMENTS AND MATERIALS

Chapter 4 (repairs)

- In a 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.
- Glazing in hazardous locations shall comply

FIRE PROTECTION

Chapter 4 (repairs)

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

MEANS OF EGRESS

Chapter 4 (repairs)

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

ACCESSIBILITY

Chapter 4 (repairs)

- Repairs shall be done in accordance with Chapter 11 of the *Florida Building Code, Building*

STRUCTURAL

Chapter 4 (repairs)

- Non-structural repairs and alterations exclusive of fixtures and furniture, the cost of which does not exceed 25 percent of the replacement value of the existing building or structure with the approval of the building official may be made of the same material of which the building or structure is constructed.

Structural Continued

Chapter 4 (repairs)

- Wind design of existing buildings shall be in accordance with the building codes in effect when the building was permitted
- Repairs shall not reduce the structural strength or stability of the building

Substantial structural damage

Chapter 4 (repairs)

- **Substantial Structural Damage.** A condition where
- 1. In any story, The vertical elements of the lateral force resisting system in any story, in any direction and taken as a whole, have suffered damage such that the lateral load carrying capacity has been reduced by more than 20 percent from its pre-damaged condition, or
- 2. The vertical load carrying components supporting more than 30 percent of the structure's floor or roof area have suffered a reduction in vertical load carrying capacity to below 75% of the Florida Building Code required strength levels

Substantial structural damage

Chapter 4 (repairs)

- An engineering evaluation and analysis which establishes the structural adequacy of the damaged building shall be prepared by a Florida registered engineer or architect

ELECTRICAL

Chapter 4 (repairs)

- Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material
- 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,
- 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

MECHANICAL

Chapter 4 (repairs)

- Existing mechanical systems undergoing repair shall comply with Section 301.12 of the *Florida Building Code, Mechanical*

PLUMBING

Chapter 4 (repairs)

- When any plumbing fixture is replaced, the replacement plumbing fixture shall comply with the *Florida Building Code, Plumbing*

ALTERATION - LEVEL 1

Chapter 5 (level 1)

- 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.
- Level 1 alterations shall comply with the provisions of Chapter 5

GENERAL

Chapter 5 (level 1)

- An existing building or portion thereof shall not be altered such that the building becomes less safe or energy efficient than its existing condition

BUILDING ELEMENTS AND MATERIALS

Chapter 5 (level 1)

- All newly installed interior finishes shall comply with the flame spread requirements
- New carpeting used as an interior floor finish material shall comply with the radiant flux requirements

FIRE PROTECTION

Chapter 5 (level 1)

- Repairs shall be done in a manner that maintains the level of fire protection provided

MEANS OF EGRESS

Chapter 5 (level 1)

- Door and window dimensions. In residential dwellings and dwelling units, a maximum of 5% reduction in the clear opening dimensions of replacement doors and windows shall be allowed.

ACCESSIBILITY

Chapter 5 (level 1)

- Accessibility shall be in accordance with Chapter 11 of the *Florida Building Code, Building*

STRUCTURAL

Chapter 5 (level 1)

- Non-structural repairs and alterations exclusive of fixtures and furniture, the cost of which does not exceed 25 percent of the value of the existing building or structure with the approval of the building official may be made of the same material of which the building or structure is constructed.

Structural Continued

Chapter 5 (level 1)

- Where replacement of roofing or equipment results in additional dead loads, structural components supporting such re-roofing or equipment shall comply with the vertical load requirements of the *Florida Building Code*.
- **Exceptions :**
 - 1. Structural elements whose stress is not increased by more than 5 percent.

Structural Continued

Chapter 5 (level 1)

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

Replacement of windows and doors

Chapter 5 (level 1)

- replacement of garage doors, exterior doors, skylight, operative and inoperative windows shall be designed and constructed to comply with Chapter 16 of *Florida Building Code, Building*

Replacement of windows and doors

Continued

Chapter 5 (level 1)

- Opening protection exception: For one-and two-family dwellings constructed under codes other than the *Florida Building Code* and located in wind-borne debris regions, the replacement of garage doors and exterior doors with glazing , sliding glass doors, glass patio doors, skylights, and operable and inoperable windows within any 12 month period shall not be required to have opening protection, but shall be designed for wind pressures for enclosed buildings provided the aggregate area of the glazing in the replaced components does not exceed 25% of the aggregate area of the glazed openings in the dwelling or dwelling unit.

Replacement of windows and doors

Continued

Chapter 5 (level 1)

- Openings in sunrooms, enclosed balconies, and enclosed porches constructed under existing roofs or decks are not required to be protected provided the space is separated from the building interior by a wall and all openings in the separating wall are protected in accordance with s. 1609.1.4 of the *Florida Building Code, Building*. Such spaces shall be permitted to be designed as enclosed or partially enclosed.

Electrical

Chapter 5 (level 1)

- Residential R3 Occupancies
- Existing electrical wiring and equipment undergoing repair shall be permitted to be repaired or replaced with like material.

Electrical Continued

Chapter 5 (level 1)

- 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,

Electrical Continued

Chapter 5 (level 1)

- 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

Mechanical

Chapter 5 (level 1)

- Existing mechanical systems undergoing repair shall comply with Section 301.11 of the *Florida Building Code, Mechanical*

Plumbing

Chapter 5 (level 1)

- When any water closet is replaced, the replacement water closet shall comply with the *Florida Building Code, Plumbing*. The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 gallons (6 L) per flushing cycle.

REROOFING

Chapter 5 (level 1)

- General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15 of the Florida Building Code. Roof repairs to existing roofs and roof coverings shall comply with the provisions of this Code,
- EXCEPTION. Reroofing shall not be required to meet the minimum design slope requirement of 1/4:12 in §1508 of *the Florida Building Code, Building* for roofs that provide positive roof drainage

Reroofing Continued

Chapter 5 (level 1)

- Recovering vs. replacement: New roof coverings shall not be installed without first removing existing roof coverings where any of the following conditions occur.
 1. roofing is water-soaked or deteriorated
 2. blisters exist in any roofing
 3. all loose gravel removed
 4. When existing roof is slate or the like.
 5. sheathing or supports are deteriorated
 6. existing roof has two or more applications

Reroofing Continued

Chapter 5 (level 1)

- Flashings shall be reconstructed in accordance with roof covering manufacturer's installation instructions

Energy Conservation

Chapter 5 (level 1)

- Alterations subject to this chapter shall comply with the requirements of Chapter 13 of the *Florida Building Code, Building*

ALTERATIONS - LEVEL 2

Chapter 6

- 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.
- Level 2 alterations shall comply with the provisions of Chapter 5 for Level 1 alterations as well as the provisions of Chapter 6.

GENERAL

Chapter 6 (level 2)

- All new construction elements, components and systems and spaces shall comply with the requirements of the *Florida Building Code*.

SPECIAL OCCUPANCY

Chapter 6 (level 2)

- Alteration of buildings, classified as *public education facilities and state licensed facilities* as described in the *Florida Building Code, Building, Chapter 4*, shall comply with the requirements of *Chapter 4, Florida Building Code, Building*

BUILDING ELEMENTS AND MATERIALS

Chapter 6 (level 2)

- **Scope**
- The requirements of this section are limited to work areas in which Level 2 alterations are being performed, and shall apply beyond the work area where specified.
- All existing interior vertical openings connecting two or more floors shall comply with the appropriate sections of the Florida Fire Prevention Code.

Vertical openings and shafts

Chapter 6 (level 2)

- Where the work area on any floor exceeds 50 percent of that floor area, the enclosure requirements of Section 603.2 shall apply to vertical openings other than stairways throughout the floor
- **Exception:** Vertical openings located in tenant spaces that are entirely outside the work area

Vertical openings and shafts

Chapter 6 (level 2)

- Where the work area on any floor exceeds 50 percent of that floor area, stairways that are part of the means of egress serving the work area shall at a minimum be enclosed with smoke tight construction on the highest work area floor and all floors below.
- Smoke barriers in Group I-2 shall be installed where required by Sections 603.3.1 and 603.3.2.

Interior finish

Chapter 6 (level 2)

- The interior finish of walls and ceilings in exits and corridors in any work area shall comply with the requirements of the *Florida Building Code*.
- **Exception:** Existing interior finish materials which do not comply with the interior finish requirements of the *Florida Building Code* shall be permitted to be treated with an approved fire retardant coating in accordance with the manufacturer's instructions to achieve the required rating.

Supplemental interior finish requirements

Chapter 6 (level 2)

- Where the work area on any floor exceeds 50 percent of the floor area, Section 603.4 shall also apply to the interior finish in exits and corridors serving the work area throughout the floor
- **Exception:** Interior finish within tenant spaces that are entirely outside the work area

Guardrails

Chapter 6 (level 2)

- Every portion of a floor, such as a balcony or a loading dock that is more than 30 inches above the floor or grade below and not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards.
- *Exception: Where existing guards are replaced, the design may match the existing design*

FIRE PROTECTION

Chapter 6 (level 2)

- The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located, or otherwise beyond the work area.

High rise buildings

Chapter 6 (level 2)

- See S. 403 of the *Florida Building Code, Building.*

Windowless stories

Chapter 6 (level 2)

- shall be sprinklered where the work area would be required to be sprinklered under the provisions of the *Florida Building Code* as a newly constructed building

Other required suppression systems

Chapter 6 (level 2)

- In buildings and areas indicated in section 903.2.13 of the *Florida Building Code, Building*, or the *Florida Fire Prevention Code*, work areas include exits or corridors shared by more than one tenant or serving an occupant load greater than 30 shall be provided with sprinkler protection where the following conditions occur:
 - The work area would be required to be provided with automatic sprinkler protection in accordance with the *Florida Building Code* applicable to new construction

Supervision

Chapter 6 (level 2)

- Fire sprinkler systems required by this Section shall be supervised

Standpipes

Chapter 6 (level 2)

- Where the work area includes exits or corridors shared by more than one tenant and is located more than 50 feet (15240 mm) above or below the lowest level of fire department access, a standpipe system shall be provided.

Fire alarm and detection

Chapter 6 (level 2)

- An approved fire alarm system shall comply with the appropriate sections of the Florida Fire Prevention Code for existing buildings

Smoke Alarms

Chapter 6 (level 2)

- Individual guestrooms and individual dwelling units in any work area in Group R1, R2, R3, R4 and I shall be provided with smoke alarms in accordance with the *Florida Fire Prevention Code*.
- **Exception:** Interconnection of smoke alarms outside of the rehabilitation work area shall not be required.

MEANS OF EGRESS

Chapter 6 (level 2)

- The requirements of this section shall be limited to work areas that include exits or corridors shared by more than one tenant within the work area in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located, or otherwise beyond the work area.

MEANS OF EGRESS

Chapter 6 (level 2)

- Means of egress conforming to the requirements of the *Florida Building Code and the Florida Fire Prevention Code* under which the building was constructed shall be considered as complying
- The number of exits shall be in accordance with the appropriate sections of the Florida Fire Prevention Code .

Number of exits

Chapter 6 (level 2)

- The number of exits shall be in accordance with the appropriate sections of the Florida Fire Prevention Code
- Group R3 Occupancies shall comply with the Florida Building Code

Fire escapes

Chapter 6 (level 2)

- Fire escapes shall comply with the appropriate sections of the Florida Fire Prevention Code

Mezzanines

Chapter 6 (level 2)

- Travel distance for mezzanines shall comply with Chapter 10 of the *Florida Building Code, Building.*

Main entrance - Group A

Chapter 6 (level 2)

- All buildings of Group A with an occupant load of 100 or more shall be provided with a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load

Egress doorways

Chapter 6 (level 2)

- all rooms and spaces having an occupant load greater than 50 or in which the travel distance exceeds 75 feet shall have a minimum of two egress doorways
- In buildings of Group I Occupancy, any patient sleeping room or suite of patient rooms greater than 1,000 square feet within the work area shall have a minimum of two egress doorways.

Door swing

Chapter 6 (level 2)

- In the work area and in the egress path from any work area to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel
- Where work area exceeds 50 percent of the floor area, door swing shall comply with Section 605.4.2 throughout the floor.

Supplemental requirements for door closing

Chapter 6 (level 2)

- In any work area, all doors opening onto an exit passageway at grade or exit stair shall be self-closing or automatically closing by listed closing devices.
- Where work area exceeds 50 percent of the floor area, doors shall comply with Section 605.4.3 throughout the exit stair from the work area to the level of exit discharge.

Panic hardware

Chapter 6 (level 2)

- In any work area, and in the egress path from any work area to the exit discharge, in buildings or portions thereof of Group A assembly occupancies with an occupant load greater than 100, all required exit doors equipped with latching devices shall be equipped with approved panic hardware

Supplemental requirements for panic hardware.

Chapter 6 (level 2)

- Where work area exceeds 50 percent of
the floor area, panic hardware shall
comply with Section 605.4.4 throughout
the floor

Emergency power source in Group I-3

Chapter 6 (level 2)

- Work areas in buildings of Group I- 3 Occupancy having remote power unlocking capability for more than 10 locks shall be provided with an emergency power source for such locks. Power shall be arranged to automatically operate upon failure of normal power within 10 seconds and for a duration of not less than one 1 1/2 hour.

Corridor doors

Chapter 6 (level 2)

- Corridor doors in the work area shall not be constructed of hollow core wood and shall not contain louvers.
- All replacement doors shall be 1 $\frac{3}{4}$ inch solid bonded wood core or approved equal, unless the existing frame will accommodate only a 1 inch door

Corridor doors continued

Chapter 6 (level 2)

- All dwelling units, guest room or rooming unit corridor doors in work areas in buildings of Groups R1, R2, and I-I R4 shall be at least 1-3/8 inch (35 mm) solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wired glass or other approved glazing material in metal frames. All dwelling units, guest room or rooming unit corridor doors in work areas in buildings of Groups R1, R2, and R4 doors shall be equipped with approved door closures.

Transoms

Chapter 6 (level 2)

- Group I, R1 and R2 Occupancy all transoms in corridor walls in work areas shall be either glazed with ¼-inch wired glass set in metal frames or other glazing assemblies having a fire protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

Other corridor openings

Chapter 6 (level 2)

- In any work area, any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air, shall be sealed with materials consistent with the corridor construction

Supplemental requirements for corridor openings

Chapter 6 (level 2)

- Where the work area on any floor exceeds 50 percent of the floor area, this section shall be applicable to all corridor windows, grills, sash and other openings on the floor

Dead end corridors

Chapter 6 (level 2)

- Dead end corridors in any work area shall comply with the requirements of Table 1004 of the *Florida Building Code, Building*

Means of egress lighting

Chapter 6 (level 2)

- Means of egress in all work areas shall be provided with artificial lighting in accordance with the requirements of the *Florida Building Code*
- Where the work area on any floor exceeds 50 percent of that floor area, means of egress *lighting* throughout the floor shall comply

Exit signs

Chapter 6 (level 2)

- Means of egress in all work areas shall be provided with exit signs in accordance with the requirements of the *Florida Building Code*.
- Where the work area on any floor exceeds 50 percent of that floor area, means of egress *existing signs* throughout the floor are required.

Handrails

Chapter 6 (level 2)

- The handrail requirements shall apply to handrails from work area floor to the level of exit discharge
- Every required exit stairway that is part of the means of egress for any work area and that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways with a required egress width of more than 66 inches shall have handrails on both sides

Guardrails

Chapter 6 (level 2)

- Similar requirements to handrails

ACCESSIBILITY

Chapter 6 (level 2)

- A building, facility or element that is altered shall comply Chapter 11 of the *Florida Building Code, Building*

STRUCTURAL

Chapter 6 (level 2)

- Alterations shall not reduce the structural strength or stability of the building, structure or any individual member thereof
- New structural members in alterations, including connections and anchorage, shall comply with the *Florida Building Code*.

Existing structural members

Chapter 6 (level 2)

- Existing structural elements supporting any additional gravity loads as a result of additional equipment or space reconfiguration shall comply with the *Florida Building Code*

ELECTRICAL

Chapter 6 (level 2)

- All newly-installed electrical equipment and wiring relating to work done in any work area shall comply with the materials and methods requirements of Chapter 27 of the *Florida Building Code, Building*
- *Existing wiring in all work areas in Use Groups A1, A2, H, and I shall be upgraded*

Residential Electrical

Chapter 6 (level 2)

- All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas, utility areas, storage areas and bathrooms shall have a minimum of two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall type lighting outlet
- Kitchen areas shall have a minimum of two duplex receptacle outlets
- Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment
- At least one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power, and to illuminate outdoor entrances and exits.
- At least one lighting outlet shall be provided in utility rooms and basements

Single Family Dwelling (Electrical)

Chapter 6 (level 2)

- Existing electrical wiring and equipment undergoing repair or replacement shall be permitted to be repaired or replaced with like material.
- 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
- 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

MECHANICAL

Chapter 6 (level 2)

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

PLUMBING

Chapter 6 (level 2)

- Where the occupant load of the story is increased by more than 20 percent, plumbing fixtures for the story shall be provided in quantities specified in the *Florida Building Code, Plumbing*

Energy Conservation

Chapter 6 (level 2)

- Alterations subject to this Chapter shall comply with the requirements of Chapter 13 of the *Florida Building Code, Building*

ALTERATIONS - LEVEL 3

Chapter 7 (level 3)

- Level 3 alterations apply where the work area exceeds 50% of the aggregate area of the building and made within any 12 month period
- In addition to the provisions in chapter 7 work shall comply with all the requirements of Chapters 5 and 6.

SPECIAL OCCUPANCY

Chapter 7 (level 3)

High rise buildings

Chapter 7 (level 3)

- When a floor is served by a re-circulating air or exhaust system with a capacity greater than 15,000 cfm, that system shall be equipped with approved smoke and heat detection device
- Where there is an elevator or elevators for use by the public, at least one elevator serving the work area shall comply with the Florida Prevention Code. All elevator lobbies shall comply with 403 of the Florida Building Code, Building.

Boiler and Furnace equipment rooms

Chapter 7 (level 3)

- Boiler and furnace equipment rooms adjacent to or within the following facilities shall be enclosed by one-hour fire rated construction: day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of 2-½ years, or which are classified as Group I-2 Occupancy, shelter facilities, residences for the developmentally disabled, group homes, teaching family homes, transitional living homes, rooming and boarding houses, hotels and multiple dwellings.

Boiler Controls

Chapter 7 (level 3)

- Emergency controls for boilers and furnace equipment shall be provided in accordance with the *Florida Mechanical Building Code, Mechanical* in all buildings classified as day nurseries, children's shelter facilities, residential child care facilities and similar facilities with children below the age of 2-½ years, or which are classified as Group I-2 Occupancy, and in group homes, teaching family homes, and supervised transitional living homes

BUILDING ELEMENTS AND MATERIALS

Chapter 7 (level 3)

- Existing stairways that are part of the means of egress shall comply with the appropriate sections of the Florida Fire Prevention Code
- Walls separating the *dwelling* units which are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. All work shall be performed on the side of the wall of the *dwelling* unit that is part of the work area

FIRE PROTECTION

Chapter 7 (level 3)

- Automatic sprinkler systems shall be provided in all work areas in accordance with the Florida Building Code
- In high rise buildings, work areas shall be provided with automatic sprinkler protection. Where the work area exceeds 50 percent of floor area, sprinklers shall be provided in the entire floor

Rubbish and linen chutes

Chapter 7 (level 3)

- Provide sprinklered protection where protection of the rubbish and linen chute would be required under the provisions of the *Florida Building Code* for new construction,

Fire alarm and detection

Chapter 7 (level 3)

- Fire alarm and detection systems shall comply with the appropriate sections of the Florida Fire Prevention Code

MEANS OF EGRESS

Chapter 7 (level 3)

- Means of egress from the highest work area floor to the floor of exit discharge shall be provided with artificial lighting within the exit enclosure
- Means of egress from the highest work area floor to the floor of exit discharge shall be provided with exit signs

ACCESSIBILITY

Chapter 7 (level 3)

- A building, facility, or element that is altered shall comply with Chapter 11 of the *Florida Building Code, Building*.

STRUCTURAL

Chapter 7 (level 3)

- Alterations shall not reduce the structural strength or stability of the building, structure, or any individual member thereof.
- All new structural member must comply with the Florida Building Code

Evaluation and analysis

Chapter 7 (level 3)

- An engineering evaluation and analysis that establishes the structural adequacy of the altered structure shall be prepared by a registered architect or engineer and submitted to the building code official. Where more than 30 percent of the total sum of floor and roof areas of the building or structure has been or is proposed to be involved in structural alteration within a 12-month period

Limited structural alteration

Chapter 7 (level 3)

- Where not more than 30 percent of the total floor and roof areas of the building is involved in structural alteration within a 12-month period, the evaluation and analysis shall demonstrate that the altered building or structure complies with the loads applicable at the time the building was constructed.

Additional loads

Chapter 7 (level 3)

- Where gravity loading is increased on the roof or floor of a building or structure, all structural members affected by such increase shall meet the gravity load requirements of the *Florida Building Code*.

ENERGY CONSERVATION

Chapter 7 (level 3)

- Alterations subject to this chapter shall comply with the requirements of Chapter 13 of the *Florida Building Code, Building*.

Question and Answers



CHANGE OF OCCUPANCY

Chapter 8

GENERAL

- Any repair or alteration work undertaken in connection with a change of sub-occupancy that does not involve a change of occupancy classification as described in the *Florida Building Code* shall conform to the applicable requirements for the work as classified in Chapter 3 and to the requirements of Sections 802 through 811.
- Where a portion of an existing building is changed to a new occupancy group, Section 812 shall apply.
- A certificate of occupancy shall be issued where a change of occupancy occurs that results in a different occupancy classification as determined by the *Florida Building Code*.

SPECIAL OCCUPANCY

Chapter 8 (change of occupancy)

- Changes of special occupancy buildings as outlined in chapter 4 shall comply to the Florida Building Code.

BUILDING ELEMENTS AND MATERIALS

- Building elements and materials in portions of buildings undergoing a change of occupancy classification shall comply with Section 812.

FIRE PROTECTION

- Fire protection requirements of Section 812 shall apply where a building or portions thereof undergo a change of occupancy classification.

MEANS OF EGRESS

- Means of egress in portions of buildings undergoing a change of occupancy classification shall comply with Section 812.

ACCESSIBILITY

Chapter 8 Change of Occupancy

- Accessibility in portions of buildings undergoing a change of occupancy classification shall comply with Chapter 11 of the *Florida Building Code, Building*.

STRUCTURAL

Chapter 8 Change of Occupancy

- **Gravity loads.** Buildings or portions thereof subject to a change of occupancy where such change in the nature of occupancy results in higher uniform or concentrated loads based on *Florida Building Code*, shall comply with the gravity load provisions of the *Florida Building Code*.
- **Wind loads.** Buildings and structures subject to a change of occupancy where such change in the nature of occupancy results in higher wind importance factors based on *Florida Building Code*, *Building* shall be analyzed and shall comply with the applicable wind load provisions of the *Florida Building Code*.

ELECTRICAL

Chapter 8 Change of Occupancy

- Where the occupancy of an existing building or part of an existing building is changed to one of the following special occupancies as described in Chapter 27 of the *Florida Building Code, Building*, the electrical wiring and equipment of the building or portion thereof that contains the proposed occupancy shall comply with the applicable requirements of the *Florida Building Code* whether or not a change of occupancy group is involved:

Electrical Continued

Chapter 8 Change of Occupancy

- **Unsafe conditions.** Where the occupancy of an existing building or part of an existing building is changed, all unsafe conditions shall be corrected without requiring that all parts of the electrical system be brought up to the current edition of Chapter 27 of the *Florida Building Code, Building*.

Service upgrade

Chapter 8 Change of Occupancy

- Where the occupancy of an existing building or part of an existing building is changed, the electrical service shall be upgraded to meet the requirements of Chapter 27 of the *Florida Building Code, Building*, for the new occupancy.

Number of electrical outlets

Chapter 8 Change of Occupancy

- Where the occupancy of an existing building or part of an existing building is changed, the number of electrical outlets shall comply with Chapter 27 of the *Florida Building Code, Building* for the new occupancy.

MECHANICAL

Chapter 8 Change of Occupancy

- Where the occupancy of an existing building or part of an existing building is changed such that the new occupancy is subject to different kitchen exhaust requirements or to increased mechanical ventilation requirements in accordance with the *Florida Building Code, Mechanical*, the intent of the respective *Florida Building Code, Mechanical* provisions shall be complied with.

PLUMBING

Chapter 8 Change of Occupancy

Increased demand

Chapter 8 Change of Occupancy

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

Interceptor required

Chapter 8 Change of Occupancy

- If the new occupancy will produce grease or oil-laden wastes, interceptors shall be provided as required in the *Florida Building Code, Plumbing*.

Chemical wastes

Chapter 8 Change of Occupancy

- 1. If the existing piping is not compatible with the chemical waste, the waste shall be neutralized prior to entering the drainage system, or the piping shall be changed to a compatible material.
- 2. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.

CHANGE OF OCCUPANCY CLASSIFICATION

- The occupancy classification of an existing building may be changed, provided the building meets all the requirements of Chapter 7 applied throughout the building for the new occupancy group, and complies with the requirements of Sections 802 through 812.

Change of occupancy group without separation

- Where a portion of an existing building is changed to a new occupancy group, and that portion is not separated from the remainder of the building with fire rated barriers wall/ceiling having a fire resistance rating as required in the Florida Building Code for the separate occupancy, the entire building shall comply with all of the requirements of Chapter 7 applied throughout the building for the most restrictive Use Group in the building

Change of occupancy group with separation

- A portion of an existing building that is changed to a new occupancy group, and is separated from the remainder of the building with fire barriers rated wall/ceiling having a fire resistance rating as required in the *Florida Building Code* for the separate occupancy shall comply with all the requirements of Chapter 7 for the new occupancy group, and with the requirements of Chapter 8.

Hazard category classifications

Chapter 8 Change of Occupancy

- The relative degree of hazard between different occupancy groups shall be as set forth in the hazard category classifications specified in Tables 812.4.1, 812.4.3 and 812.4.4 of Sections 812.4.1, 812.4.3, and 812.4.4.

Relative Hazard for Life Safety

**TABLE 812.4.1
HAZARD CATEGORIES AND CLASSIFICATIONS:
LIFE SAFETY AND EXITS**

RELATIVE HAZARD	OCCUPANCY CLASSIFICATION
1 (Highest Hazard)	H
2	I-2, I-3, I-4
3	A, E, I-1, M, R-1, R-2, R-4, <u>D</u>
4	B, F-1, R-3, S-1
5 (Lowest Hazard)	F-2, S-2

||

Relative Hazard for Height and Area

**TABLE 012.4.2
HAZARD CATEGORIES AND CLASSIFICATIONS:
HEIGHTS AND AREAS**

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

Relative Hazard for Exterior Walls

**TABLE 812.4.3
HAZARD CATEGORIES AND CLASSIFICATIONS:
EXPOSURE OF EXTERIOR WALLS**

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

Change of occupancy classification to an equal or lesser hazard

Chapter 8 Change of Occupancy

- An existing building or portion thereof may have its use changed to an occupancy group within the same hazard classification category or to an occupancy group within a lesser hazard classification category (higher number) in all hazard category classifications, provided it complies with the provisions of Chapter 7 for the new occupancy group,

Change of occupancy classification to a Higher Hazard

Chapter 8 Change of Occupancy

- An existing building shall comply with all of the applicable requirements of this chapter when a change in occupancy group places it in a higher hazard category or when the occupancy group is changed within Group H

Change of occupancy classification to an equal or lesser hazard in all three hazard classifications

Chapter 8 change of occupancy section 812.3

- A change of use to an occupancy group within the same hazard classification category or to an occupancy group within a lesser hazard classification category (higher number) in the three hazard category classifications addressed by Tables 812.4.1, 812.4.3, and 812.4.4 shall be permitted in an existing building or portion thereof, provided the provisions of Sections 812.3.1 through 812.3.5 are met.

Minimum requirements

Chapter 8 change of occupancy section 812.3.1

- 1. The capacity of the means of egress shall comply with *Florida Building Code*.
- 2. The interior finish of walls and ceilings shall comply with the requirements of the *Florida Building Code* for the new occupancy group.
- 3. Compliance with the *Florida Fire Prevention Code*.

Groups I-1, R-1, R-2 or R-4

Chapter 8 change of occupancy section 812.3.2

- 1. Corridor doors and transoms shall comply with the requirements of Sections 605.5.1 and 605.5.2.
- 2. Automatic sprinkler systems shall comply with the requirements of Section 604.2.
- 3. Fire alarm and detection systems shall comply with the requirements of Section 604.4.

Group I-2

Chapter 8 change of occupancy section 812.3.3

- 1. Egress doorways from patient sleeping rooms and from suites of rooms shall comply with the requirements of Section 605.4.1.2.
- 2. Shaft enclosures shall comply with the requirements of Section 703.1.
- 3. Smoke barriers shall comply with the requirements of Section 603.3.
- 4. Automatic sprinkler systems shall comply with the requirements of Section 604.2.
- 5. Fire alarm and detection systems shall comply with the requirements of Section 604.4.

Group R-3

Chapter 8 change of occupancy section 812.3.5

- 1. Dwelling unit separation shall comply with the requirements of Section 703.2.1.
- 2. The smoke alarm requirements of Section 604.4.3 shall be met.

Fire and life safety

Chapter 8 change of occupancy section 812.4

- The fire and life safety provisions of this section shall be applicable to buildings or portions of buildings undergoing a change of occupancy classification.

**TABLE 812.4.1
HAZARD CATEGORIES AND CLASSIFICATIONS:
LIFE SAFETY AND EXITS**

RELATIVE HAZARD	OCCUPANCY CLASSIFICATION
1 (Highest Hazard)	H
2	I-2, I-3, I-4
3	A, E, I-1, M, R-1, R-2, R-4, <u>D</u>
4	B, F-1, R-3, S-1
5 (Lowest Hazard)	F-2, S-2

Means of egress for change to higher hazard category

Chapter 8 change of occupancy section 812.4.1.1

- When a change of occupancy group is made to a higher hazard category (lower number) as shown in Table 812.4.1, the means of egress shall comply with the requirements of Chapter 10 of the *Florida Building Code, Building*.

Means of egress for change of use to equal or lower hazard category

Chapter 8 change of occupancy section 812.4.1.2

- When a change of occupancy group is made to an equal or lesser hazard category (higher number) as shown in Table 812.4.1, existing elements of the means of egress shall comply with the requirements of Section 705 for the new occupancy group. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the *Florida Building Code, Building*

Heights and areas

Chapter 8 change of occupancy section 812.4.2

- Hazard categories in regard to height and area shall be in accordance with Table 812.4.2.

**TABLE 812.4.2
HAZARD CATEGORIES AND CLASSIFICATIONS:
HEIGHTS AND AREAS**

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

Height and area for change to higher hazard category

Chapter 8 change of occupancy section 812.4.2.1

- When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.2, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the *Florida Building Code, Building* for the new occupancy group

Height and area for change to equal or lesser hazard category

Chapter 8 change of occupancy section 812.4.2.2

- When a change of occupancy group is made to an equal or lesser hazard category as shown in Table 812.4.2, the height and area of the existing building shall be deemed acceptable.

Fire rated wall/ceiling

Chapter 8 change of occupancy section 812.4.2.3

- When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.2, fire rated wall/ceiling in separated mixed-use buildings shall comply with the fire resistance requirements of the *Florida Building Code*.

Exterior wall fire-resistance ratings

Chapter 8 change of occupancy section 812.4.3

- Hazard categories in regard to fire-resistance ratings of exterior walls shall be in accordance with Table 812.4.3.

**TABLE 812.4.3
HAZARD CATEGORIES AND CLASSIFICATIONS:
EXPOSURE OF EXTERIOR WALLS**

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

Exterior wall rating for change of occupancy classification to a higher hazard category

Chapter 8 change of occupancy section 812.4.3.1

- When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.3, exterior walls shall have fire resistance and exterior opening protectives as required by the *Florida Building Code, Building*. This provision shall not apply to walls at right angles to the property line.

Exterior wall rating for change of occupancy classification to an equal or lesser hazard category

Chapter 8 change of occupancy section 812.4.3.2

- When a change of occupancy group is made to an equal or lesser hazard category as shown in Table 812.4.3, existing exterior walls, including openings, shall be accepted.

Opening protectives

Chapter 8 change of occupancy section 812.4.3.3

- walls shall be protected as required by the *Florida Building Code*. Where openings in the exterior walls are required to be protected because of their distance from the property line, the sum of the area of such openings shall not exceed 50 percent of the total area of the wall in each story.

Enclosure of vertical shafts

Chapter 8 change of occupancy section 812.6

- **812.6.1 Minimum requirements.** Vertical shafts shall be designed to meet the *Florida Building Code* requirements for atriums or the requirements of this section.
- **812.6.2 Stairways.** When a change of occupancy group is made to a higher hazard category as shown in Table 812.4.1, interior stairways shall be enclosed as required by the *Florida Building Code*.
- Interior vertical shafts other than stairways, including but not limited to elevator hoistways and service and utility shafts, shall be enclosed as required by the *Florida Building Code* when there is a change of use to a higher hazard category as specified in Table 812.4.1.

Vertical Shafts Continued

Chapter 8 change of occupancy section 812.6

- All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire-protection rating of not less than 1 hour and shall be maintained self-closing or shall be automatic closing by actuation of a smoke detector

Questions and Answers

Additions

Chapter 9

Scope

Chapter 9 Additions

- An addition to a building or structure shall comply with the building, plumbing, electrical, and mechanical codes, without requiring the existing building or structure to comply with any requirements of those codes or of these provisions.
- An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing, or electrical systems.

Height and Area Limitations

Chapter 9 Additions

- No addition shall increase the height or area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the *Florida Building Code, Building* for new buildings.

Structural

Chapter 9 Additions

- Existing structural elements supporting any additional gravity loads as a result of additions shall comply with the *Florida Building Code*
- **Exceptions:**
 - 1. Structural elements whose stress is not increased by more than 5 percent.

Lateral-force-resisting system

Chapter 9 Additions

- The lateral-force resisting system of existing buildings to which additions are made shall comply with Sections 903.3.1, 903.3.2, and 903.3.3.
- **Exceptions:**
- 1. In Type V construction, Group R occupancies where the lateral-force story shear in any story is not increased by more than 10 percent.
- 2. Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods as defined in Chapter 2.
- 3. Additions where the lateral-force story shear in any story is not increased by more than 5 percent.

Vertical addition

Chapter 9 Additions section 903.3.1

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

Horizontal addition

Chapter 9 Additions section 903.3.2

- Where horizontal additions are structurally connected to an existing structure, all lateral-force-resisting elements of the existing structure affected by such addition shall comply with the lateral load provisions of the *Florida Building Code*.

903.3.3 Voluntary addition of structural elements to improve the lateral-force-resisting system

Chapter 9 Additions section 903.3.3

- The lateral force-resisting system of a building shall comply with Section 707.7

Smoke alarms in existing portions of a building

Chapter 9 Additions section 904.2

- Whenever an addition is made to a building or structure of a Group R-3 or R-4 occupancy, the existing building shall be provided with smoke alarms as required by the *Florida Building Code* as applicable. The smoke alarms in the existing building are not required to be interconnected with smoke alarms in other portions of the base building.

Historic Buildings

Chapter 10

Intent and purpose

Chapter 10 Historic Buildings

- It is the intent of this chapter to provide means for occupant safety, property conservation and use of designated historic buildings while protecting those elements, spaces and features that make these buildings historically or architecturally significant.
- The provisions of this code acknowledge the need to preserve the character of historic buildings and shall apply to the repair, alteration, restoration, change of occupancy, addition and relocation of historic buildings.

What is a Historic building

Chapter 10 Historic Buildings

- 1. Individually listed in the National Register of Historic Places; or
- 2. A contributing property in a National Register of Historic Places listed district; or
- 3. Designated as historic property under an official municipal, county, special district or state designation, law, ordinance or resolution either individually or as a contributing property in a district; or
- 4. Determined eligible by the Florida State Historic Preservation Officer for listing in the National Register of Historic Places, either individually or as a contributing property in a district.

Compliance option.

Chapter 10 Historic Buildings

- 1. Prescriptive based provisions of this code.
- 2. Compliance alternative based provisions of this code.
- 3. Performance based provisions of the National Fire Protection Association *914 Code for Fire Protection of Historic Structures*, Chapter 6, latest edition along with a structural evaluation as specified in section 1201.4.1 of this code.

Conditions specific to compliance options 2 and 3.

Chapter 10 Historic Buildings

- **1. Architect or engineer required.** The evaluation of historic structures utilizing compliance options 2 or 3 shall be completed by a Florida Registered architect or engineer and submitted to the building code official for review.
- **2. Documentation.** Historic buildings that are determined to be code compliant through the use of compliance option 2 or 3 shall have copies of the architect or engineer's report kept on site and available for review by the building official.
- **3. Change of report assumptions.** Any remodeling, modification, renovation, change of use or change in the established assumptions of the report shall require a re-evaluation and re-approval by the building code official.

Conditions specific to compliance options 2 and 3 Continued

Chapter 10 Historic Buildings

- **4. Construction safeguards.** Construction safeguards consistent with Chapter 13 of the *Florida Existing Building Code*, and the National Fire Protection Association *914 Code for Fire Protection of Historic Structures*, latest edition, shall be maintained during periods of repair, alteration, change of occupancy, and addition of historic buildings.
- **5. Maintenance.** In addition to the requirements of section 1004, historic buildings shall be maintained in accordance with chapters 1, 2, 8, 9, 10 and 11 of the National Fire Protection Association *914 Code for Fire Protection of Historic Structures*, latest edition

RELOCATED OR MOVED BUILDINGS

Chapter 11

REQUIREMENTS

Chapter 11 Relocated Buildings

- Residential buildings or structures moved into or within a county or municipality shall not be required to be brought into compliance with the state minimum building code in force at the time the building or structure is moved, provided:

Requirements Continued

Chapter 11 Relocated Buildings

- 1. The building or structure is structurally sound and in occupiable condition for its intended use;
- 2. The occupancy use classification for the building or structure is not changed as a result of the move;
- 3. The building is not substantially remodeled;
- 4. Current fire code requirements for ingress and egress are met

Requirements Continued

Chapter 11 Relocated Buildings

- 5. Electrical, gas and plumbing systems meet the code in force at the time of construction and are operational and safe for reconnection; and
- 6. Foundation plans are sealed by a professional engineer or architect licensed to practice in this state, if required by the *Florida Building Code* for all residential buildings or structures of the same occupancy class.
- 7. Moving of buildings shall be in accordance with the *Florida Building Code*.

Connection to the foundation

Chapter 11 Relocated Buildings

- The connection of the relocated building to the foundation shall comply with the *Florida Building Code*.

Wind loads

Chapter 11 Relocated Buildings

- Buildings shall comply with *Florida Building Code*.
- **Exceptions:**
 - 1. Structural elements whose stress is not increased by more than 5 percent.
 - 2. Manufactured buildings as approved by the Manufactured Buildings Program, Florida Department of Community Affairs.

COMPLIANCE ALTERNATIVES

Chapter 12

Intent

Chapter 12 Compliance Alternative

- 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 4 through 10, except where compliance with other provisions of this code is specifically required in this chapter.

Applicability

Chapter 12 Compliance Alternative

- The provisions of Sections 1201.2.1 through 1201.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, and S. These provisions shall not apply to buildings with occupancies in Group H or Group I.

Change in occupancy

Chapter 12 Compliance Alternative section 1201.2.1

- Where an existing building is changed to a new occupancy classification and this section is applicable, the provisions of this section for the new occupancy shall be used to determine compliance with this code.

Building Alterations

Chapter 12 Compliance Alternative section 1201.2.4

- 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, the alteration or repair reduces the current level of safety or sanitation, the portion altered or repaired shall conform to the requirements of Chapters 2 through 33 of the *Florida Building Code, Building*.

Investigation and evaluation

Chapter 12 Compliance Alternative section 1201.4

- For proposed work covered by this chapter, the building owner shall cause the existing building to be investigated and evaluated by a registered architect or engineer in accordance with the provisions of Sections 1201.4 through 1201.9.

Structural analysis.

Chapter 12 Compliance Alternative section 1201.4.1

- The owner shall have a structural analysis of the existing building made by a registered architect or engineer to determine adequacy of structural systems for the proposed alteration, addition, or change of occupancy. The existing building shall be capable of supporting the minimum load requirements of Chapter 16 of the *Florida Building Code, Building*.

Evaluation

shall be comprised of three categories

Chapter 12 Compliance Alternative section 1201.5

- **Fire safety.** Included within the fire safety category are the structural fire resistance, automatic fire detection, fire alarm, and fire-suppression system features of the facility.
- **Means of egress.** Included within the means of egress category are the configuration, characteristics, and support features for means of egress in the facility.
- **General safety.** Included within the general safety category are the fire safety parameters and the means-of-egress parameters.

Each Building Feature is Evaluated

- 1201.6.1 Building height
- 1201.6.2 Building area.
- 1201.6.3 Compartmentation
- 1201.6.4 Tenant and dwelling unit separations.
- 1201.6.5 Corridor walls
- 1201.6.6 Vertical openings.
- 1201.6.7 HVAC systems.
- 1201.6.8 Automatic fire detection.

Areas of Evaluation Continued

- 1201.6.9 Fire alarm systems.
- 1201.6.10 Smoke control
- 1201.6.11 Means-of-egress capacity and number.
- 1201.6.12 Dead ends.
- 1201.6.13 Maximum exit access travel distance to an exit.
- 1201.6.14 Elevator control.

Areas of Building Evaluation Continued

- 1201.6.15 Means-of-egress and Emergency Lighting
- 1201.6.16 Mixed occupancies.
- 1201.6.17 Automatic Sprinklers.
- 1201.6.18 Standpipes.
- 1201.6.19 Incidental use.

Building score

Chapter 12 Compliance Alternative section 1201.7

- After determining the appropriate data from Section 1201.6, enter those data in Table 1201.7 and total the building score.

Safety scores.

Chapter 12 Compliance Alternative section 1201.8

- The values in Table 1201.8 are the required mandatory safety scores for the evaluation process

Evaluation of building safety.

Chapter 12 Compliance Alternative section 1201.9

- The mandatory safety score in Table 1201.8 shall be subtracted from the building score in Table 1201.7 for each category. Where the final score for any category equals zero or more, the building is in compliance with the requirements of this section for that category. Where the final score for any category is less than zero, the building is not in compliance with the requirements of this section.

Mandatory Scores

**TABLE 1201.8
MANDATORY SAFETY SCORES^a**

OCCUPANCY	FIRE SAFETY (MFS)	MEANS OF EGRESS (MME)	GENERAL SAFETY (MGS)
A-1	20	31	31
A-2	21	32	32
A-3	22	33	33
A-4, E, <u>D</u>	29	40	40
B	30	40	40
F	24	34	34
M	23	40	40
R	21	38	38
S-1	19	29	29
S-2	29	3	39

- a. MFS = Mandatory Fire Safety
 MME = Mandatory Means of Egress
 MGS = Mandatory General Safety

Evaluation Final Score Worksheet

**TABLE 1201.9
EVALUATION FORMULAS^a**

FORMULA	T1201.7	T1201.8	SCORE	PASS	FAIL
FS - MFS > 0	_____ (FS) - _____	(MFS) = _____	_____	_____	_____
ME - MME ≥ 0	_____ (ME) - _____	(MME) = _____	_____	_____	_____
GS - MGS ≥ 0	_____ (GS) - _____	(MGS) = _____	_____	_____	_____

- a. FS = Fire Safety MFS = Mandatory Fire Safety
 ME = Means of Egress MME = Mandatory Means of Egress
 GS = General Safety MGS = Mandatory General Safety

Evaluation Summary Worksheet

**TABLE 1201.7
SUMMARY SHEET—BUILDING CODE**

Existing occupancy _____	Proposed occupancy _____
Year building was constructed _____	Number of stories _____ Height in feet _____
Type of construction _____	Area per floor _____
Percentage of frontage increase _____ %	Percentage of height reduction _____ %
Completely suppressed: Yes _____ No _____	Corridor wall rating _____
Compartmentation: Yes _____ No _____	Required door closers: Yes _____ No _____
Fire-resistance rating of vertical opening enclosures _____	
Type of HVAC system _____	Serving number of floors _____
Automatic fire detection: Yes _____ No _____	Type and location _____
Fire alarm system: Yes _____ No _____	Type _____
Smoke control: Yes _____ No _____	Type _____
Adequate exit routes: Yes _____ No _____	Dead ends: Yes _____ No _____
Maximum exit access travel distance _____	Elevator controls: Yes _____ No _____
Means-of-egress emergency lighting: Yes _____ No _____	Mixed occupancies: Yes _____ No _____

Summary Worksheet Continued

SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
1201.6.1 Building Height 1201.6.2 Building Area 1201.6.3 Compartmentation			
1201.6.4 Tenant and Dwelling Unit Separations 1201.6.5 Corridor Walls 1201.6.6 Vertical Openings			
1201.6.7 HVAC Systems 1201.6.8 Automatic Fire Detection 1201.6.9 Fire Alarm System			
1201.6.10 Smoke Control 1201.6.11 Means-of-Egress Capacity 1201.6.12 Dead Ends	**** **** ****		
1201.6.13 Maximum Exit Access Travel Distance 1201.6.14 Elevator Control 1201.6.15 Means-of-Egress Emergency Lighting	**** ****		
1201.6.16 Mixed Occupancies 1201.6.17 Automatic Sprinklers 1201.6.18 Standpipes 1201.6.19 Incidental Use Area Protection		**** ****	
Building Score—Total Value			

****No applicable value to be inserted

SAFEGUARDS DURING CONSTRUCTION

Chapter 13

- The provisions of this chapter shall govern safety during construction and the protection of adjacent public and private properties.
- Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during remodeling, alterations, repairs or additions to any building or structure.

Pedestrian protection and Means of Egress

Chapter 13 Safeguards

- The work shall not be commenced until pedestrian protection is in place
- A party wall balcony or horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.

Additional Protections

Chapter 13 Safeguards

- Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.
- Service utility connections shall be discontinued and capped
- Excavation and fill for buildings and structures shall be constructed or protected so as not to endanger life or property.

Additional Protections

Chapter 13 Safeguards

- Sanitary facilities shall be provided during construction
- Directional signs shall be provided
- A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the authority having jurisdiction authorizes the sidewalk to be fenced or closed.
- Adjoining public and private property shall be protected from damage during construction

Protections Continued

Chapter 13 Safeguards

- Construction materials and equipment shall not be placed or stored so as to obstruct access to fire hydrants, standpipes, fire or police alarm boxes, catch basins or manholes
- All structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguisher
- Required means of egress shall be maintained at all times during construction,

Continued Safeguards

Chapter 13 Safeguards

- Buildings four stories or more in height shall be provided with not less than one standpipe for use during construction.
- It shall be unlawful to occupy any portion of a building until the automatic sprinkler system installation has been tested and approved

Time for the Post-Test