

Small Renovations and the Building Code

Course Information

Small Renovations and the Building Code

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2



Outline

- Scope and Application
- Repairs
- Prescriptive Compliance
- Classification of Work
- Alterations
- Additions
- Misc. Provisions

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4



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5

Scope and Application

Building Section 101.2

The provisions of this code shall apply to the construction, *alteration*, relocation, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

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Building Section 101.2 Exception 1

Detached one- and two-family *dwellings* and multiple single-family *dwellings* (townhouses) not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with the Florida Building Code, Residential.

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7

Scope and Application

Residential Building R101.2 Scope

The provisions of the *Florida Building Code*, *Residential* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, *equipment*, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

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8

Scope and Application

Residential Section R101.2 Exception 3

Existing buildings undergoing repair, alteration, additions or changes of occupancy shall comply with the *Florida Building Code, Existing Building*.



101.2 Scope. The provisions of the *Florida Building Code, Existing Building* shall apply to the *repair, alteration, change of occupancy, addition* to and relocation of *existing buildings*.

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10

Scope and Application

101.3 Intent. The intent of this code is to **provide flexibility** to permit the use of alternative approaches to achieve compliance with minimum requirements to **safeguard the public** health, safety and welfare insofar as they are affected by the *repair*, *alteration*, *change of occupancy*, *addition* and relocation of *existing buildings*.

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11

Scope and Application
101.4 Applicability. This code shall apply to the <i>repair</i> , <i>alteration</i> , <i>change of occupancy</i> , <i>addition</i> and relocation of <i>existing buildings</i> , regardless of occupancy, subject to the criteria of Sections 101.4.1 and 101.4.2.
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101.4 Applicability. This code shall apply to the *repair*, *alteration*, *change of occupancy*, *addition* and relocation of *existing buildings*, regardless of occupancy, subject to the criteria of Sections 101.4.1 and 101.4.2.

- Buildings not previously occupied
 - Shell buildings
 - Florida Building Code, Building
 - Florida Building Code, Residential

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13

Scope and Application

101.4.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change . . .

• A building does not lose a certificate of occupancy due to an alteration.

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14

Scope and Application

101.4 Applicability

- The Florida Building Code, Existing Building
 - Not a maintenance code
 - Only used when construction occurs
 - Additional flexibility for historic structures

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301.3 Before starting construction of an existing building, you must select ONE method of compliance.

- Prescriptive Compliance Method (Chapter 5)
- Work Area Compliance Method (Chapters 6-13)
 Performance Compliance Method (Chapter 14)

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16

Scope and Application

302 General Provisions

• If there is a conflict with another code, the Existing Building Code takes priority for buildings within scope.

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17

Scope and Application

302.3 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 building official to be unsafe.

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302.4 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 unsafe condition is created. . .

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19

Scope and Application

302.4 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 unsafe condition is created. . .

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20



Repairs

REPAIR. The reconstruction or renewal of any part of an *existing building* for the purpose of its maintenance or to correct damage.

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22

Repairs

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

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23

Repairs

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.

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

Repairs

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

- 403.1 Fire Protection
- 404.1 Means of Egress
- 405.1 Accessibility

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25

Repairs

406 Structural Repairs

- Substantial Structural Damage
 - $_{\circ}$ $\,$ Vertical elements capacity reduced by more than 33% $\,$
 - $_{\circ}$ $\,$ 30% of total area of floor or roof has been reduced to 20% capacity
 - $_{\circ}$ Less than 75% of what is required by new construction
 - Do not confuse with Substantial Damage as related to flood provisions.

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26

Repairs

406 Structural Repairs

• Repairs for less than substantial damage may be returned to original condition.

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Repairs

406 Structural Repairs

- Repairs for substantial structural damage
 - Evaluated by engineer
 - Meet wind load for when building was constructed unless damaged by wind
 - o Gravity load-carrying components repaired to FBC, Building.

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28

Repairs

407 Electrical Repairs

- Like for like permitted
- Points to National Electrical Code for receptacle replacement
 - Tamper resistant
 - · GFCI in locations as required
 - AFCI as required
 - Grounding
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29

Repairs

408 Mechanical

• Repairs shall not be less conforming

- 409 Plumbing
 Materials prohibited by FBC, Plumbing shall not be used.
 Replacement water closets limited to 1.6 gallon/flush

Prescriptive Compliance

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31

Prescriptive Compliance Option

501 Scope

- Alterations
- Repairs
 Addition
- AdditionsChange of Occupancy
- Includes Historic Buildings

The prescriptive method points back to new construction requirements with some exceptions.

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32

Classification of Work

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Classification of Work

Classification of Work is used in

- Chapter 7-Level 1 Alterations
- Chapter 8-Level 2 Alterations
- Chapter 9-Level 3 AlterationsChapter 10-Change of Occupancy
- Chapter 10-Change of C
 Chapter 11-Additions
- Chapter 11-Additions
 Chapter 12-Historic Structures
- Chapter 12-Filstone off detailes
 Chapter 13-Relocated Buildings

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34

Classification of Work

602.1 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.

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35

Classification of Work

603.1 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.

Classification of Work

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

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37

Classification of Work

606.1 Addition. An extension or increase in floor area, number of stories, or height of a building or structure.

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38

Classification of Work

WORK AREA. That portion or portions of a building consisting of all **reconfigured spaces as indicated** on the **construction documents**. Work area **excludes** other portions of the building where **incidental work** entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.



40

Level 1 Alterations

702.5 Replacement Windows

• Exempt from some new construction requirements as it pertains to emergency escape and rescue openings.

- EERO openings may be reduced as long as window openings stay the same.
- Allows for installation of vinyl windows with larger flanges
- $_{\circ}$ $\,$ Does not apply if window is replaced as part of a change of occupancy

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41

Level 1 Alterations

702 Replacement Windows

- Fall protection requirements apply.
- Exempt from some new construction requirements as it pertains to emergency escape and rescue openings.
 - EERO openings may be reduced as long as window openings stay the same.
 - Allows for installation of vinyl windows with larger flanges
 - Does not apply if window is replaced as part of a change of occupancy

Level 1 Alterations

702 Replacement Windows

- HB 267 Effective 01/01/2025
- Engineered drawings not required for window and door change outs
 - Copy of manufacturer's instructions included in permit submittal.
 - Appropriate wind zone
 - Product approval

• Same size and opening

43

Level 2 Alterations

808 Electrical Modifications in Work Area

- Add minimal receptacles for rooms
- Add GFCI protection as required
- Provide lighting in work area
- Allow for adequate working clearance

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44

Level 3 Alterations

907.4.2 Substantial structural alteration. Where work involves a substantial structural 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, Building* for wind loading and with reduced seismic forces.

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Additions

1101.1 Scope. An *addition* to a building or structure shall comply with the *Florida Building Code* as adopted for new construction without requiring the *existing building* or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an *addition* impacts the *existing building* or structure, that portion shall comply with this code.

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46

Additions

Florida Statutes 553.885. A carbon monoxide detector must be added when any of the following are present in the building.

- Fossil fuel burning appliance
- Fireplace
- Attached garage
- Anything that emits carbon as result of combustion

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47



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Performance Compliance

Chapter 14 Performance Compliance

- Engineered method
- Evaluates structure as a wholeSimilar to a points based system

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49

Smoke Alarms

R314.2.2 Alterations, repairs and additions. Where *alterations, repairs* or *additions* requiring a permit occur, or where one or more sleeping rooms are added or created in existing *dwellings*, the individual *dwelling unit* shall be equipped with smoke alarms located as required for new *dwellings*.

Exceptions:

1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, the *addition* or replacement of windows or doors, or the addition of a porch or deck.

2. Installation, alteration or repairs of plumbing or mechanical systems.

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50

Smoke Alarms

R314.3 Power Source. 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.

FBC, Energy Conservation

R501.1 Scope. The provisions of this chapter shall control the *alteration*, repair, addition and change of occupancy of existing buildings and structures.

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52

FBC, Energy Conservation

R101.4.2 Exempt buildings

Existing buildings except:

Renovated Building

 A residential or nonresidential building undergoing alteration that varies or changes insulation, HVAC systems, water heating systems or exterior envelope conditions, provided the estimated cost of renovation exceeds 30 percent of the assessed value of the structure. See FBC Dec. Statement DS2018-072.

Change of occupancy type

Adding comfort conditioning

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53

FBC, Energy Conservation

R502.1 General. Additions to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portion of the existing building or building system to comply with this code.

- Prescriptive for new construction (R402)
- · Simulated performance alternative (R405)
- Energy Rating Index compliance alternative (R406)

FBC, Energy Conservation

R503.1 General. *Alterations* to any building or structure shall comply with the requirements of the code for new construction.

ALTERATION. Any construction, retrofit or renovation to an existing structure other than repair or addition that **requires a permit**. Also, a change in a building, electrical, gas, mechanical or plumbing system that involves an extension, addition or change to the arrangement, type or purpose of the original installation that **requires a permit**.

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55

FBC, Energy Conservation

R503.1 General. *Alterations* to any building or structure shall comply with the requirements of the code for new construction.

- Can't be less conforming
- · Unaltered portions and systems can stay
- · Generally, some items are exempt if energy use is not increased
- · Existing cavities exposed during alteration
- Certain roofing alterations
- · Swimming pool equipment

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56

FBC, Energy Conservation

R503.1 General. *Alterations* to any building or structure shall comply with the requirements of the code for new construction.

R503.1.1.1 Replacement fenestration. Where some or all of an existing fenestration unit is replaced, . . . the replacement fenestration unit shall meet the applicable requirements for *U*-factor and SHGC as provided in Table R402.1.2.

FBC, Energy Conservation

R504.1 General. Buildings, structures and parts thereof shall be **repaired** in compliance with Section R501.3 and this section.

REPAIR. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance or to correct damage.

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58

FBC, Energy Conservation

R504.1 General. Buildings, structures and parts thereof shall be **repaired** in compliance with Section R501.3 and this section.

- Exempt items
- · Work on non-damaged components to facilitate repair
- Routine maintenance
- · Repair and replacement of wear items
- · Repairs that do not require a permit

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