

# Proposed Modification to the Florida Building Code

**Modification #:**

**Section 553.73, Florida Statute**

**Name:** Eric Lacey, Responsible Energy Codes Alliance

**Address:** 1850 M Street, NW Washington, DC 20036

**E-mail:** eric@reca-codes.com

**Phone:** 202-339-6366

**Fax:** 202-342-0807

**Code:** 2010 Florida Building Code – Energy Conservation

**Section #:** Table 101.4.1 and Chapter 2 Definitions

**Text of Modification [additions underlined; deletions ~~stricken~~]:**

---

**Amend Table 101.4.1 as follows:**

**Table 101.4.1  
NONEXEMPT EXISTING BUILDINGS <sup>a</sup>**

| <b>Date-Related</b>   |   |   |
|---|---|---|
|   | <b>Permitted before<br/>March 1979</b>  | <b>Permitted after<br/>March 1979</b>     |
| Not previously conditioned  | Minimum efficiency levels shall be met for components being changed:<br>Envelope: Section 402 or 502<br>Equipment: Section 403 or 503, 504<br>Lighting: Section 404 or 505  | Considered an addition, meet current code |
| Occupancy type change   | Minimum efficiency levels shall be met for components being changed:<br>Envelope: Section 402 or 502<br>Equipment: Section 403 or 503, 504<br>Lighting: Section 404 or 505  | Meet current code <sup>c</sup>            |
| <b>Not Date-Related</b>   |   |   |
| Addition  | Meet code for addition <sup>b, c</sup>  |   |
| <u>Renovation</u><br><u>Renovated</u><br><u>Building</u> <sup>d</sup>   | Minimum code envelope, equipment and lighting efficiency levels shall be met for components being changed.<br>Envelope: Section 402 or 502<br>Equipment: Section 403 or 503, 504<br>Lighting: Section 404 or 505  |   |
| <u>New Installation or replacement of building systems and components</u> (HVAC, service hot water or pool heating, lighting, motors, <u>fenestration</u> ) | New products installed or replaced in existing buildings shall meet the minimum efficiency allowed for that <u>replacement</u> system <u>or component</u> .<br><u>Fenestration: Section 402.3.6</u><br>Equipment: Section 403 or 503, 504<br>Lighting: Section 404 or 505<br>HVAC indoor and outdoor units ≤ 65,000 Btu/h that are not designed to operate together shall be matched. HVAC equipment sizing is required per Section 403 or 503. |   |

- <sup>a</sup> An existing building or portion thereof shall not be altered such that the building becomes less energy efficient than its existing condition.
- <sup>b</sup> Minimum equipment efficiencies shall be met only when equipment is installed to specifically serve the addition or is being installed in conjunction with the construction of the addition.
- <sup>c</sup> If an existing building is unable to meet one or more current prescriptive code minimum requirements, it may be exempt from those minimum requirements if the entire building is brought into compliance by Section 405 or Section 506, as applicable.
- <sup>d</sup> Buildings undergoing alteration that vary or change insulation, HVAC systems, water heating systems, or exterior envelope provided that the estimated cost exceeds 30 percent of the assessed value of the structure (see Ch. 2, Definitions).

## **Amend Chapter 2 as follows:**

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. Renovation. Any structural repair, reconstruction or restoration to a structure, the costs of which equals or exceeds, over a 1-year period, a cumulative total of 30 percent of the assessed value of the structure when that value is assessed, either:

1. Before the improvement or repair is started; or
2. Before the damage occurred, if the structure has been damaged.

For the purposes of this Code, renovation occurs when the first alteration of any wall, ceiling, floor, or other structural part or mechanical system of the building commences, whether or not that alteration affects the external dimensions of the structure.

---

**Fiscal Impact Statement [Provide documentation of the costs and benefits of the proposed modifications to the code for each of the following entities. Cost data should be accompanied by a list of assumptions and supporting documentation. Explain expected benefits.]:**

### **A. Impact to local entity relative to enforcement of code:**

This proposal will further clarify the application of the 2010 Florida Building Code-Energy Conservation (FBC-EC) to Renovated Buildings and to the installation or replacement of building systems and components, and will apply the exact language of Florida Statutes in the FBC-EC. The additional clarity will ensure that the code is enforced consistently across the state.

### **B. Impact to building and property owners relative to cost of compliance with code:**

This proposal does not establish new requirements. It only serves to clarify the applicability of the 2010 FBC-EC energy conservation requirements for windows. Moreover, the cost-saving and peak-demand reduction benefits of energy-efficient windows are well-documented. The cost-effectiveness of the 2010 FBC-EC requirements, including fenestration efficiency requirements, were

evaluated and accepted during the most recent code change cycle. As a result, there will be no cost impact on building and property owners beyond what was already approved by the Florida Building Commission.

**C. Impact to industry relative to cost of compliance with code:**

Manufacturers of windows in Florida have long known about the improved requirements for replacement windows, and most manufacturers have already invested millions of dollars in order to meet these requirements. In fact, if the code were misinterpreted in a way that would *exempt* replacement windows from meeting the requirements of Table 402.1.1 (as proposed by Staff), the industry would be substantially harmed for having made these investments in reliance upon the published 2010 Florida Building Code-Energy Conservation.

**D. Impact to small business:**

Because the 2010 FBC-EC would apply the same performance criteria to fenestration installed in new buildings, additions, and renovations, fenestration manufacturers will have uniform energy efficiency targets and may streamline production. Retailers will not need to carry different qualities of windows for different types of installation.

**Glitch Criteria:**

If the Commission determines that modifications to Table 101.4.1 are necessary to clarify the code, we recommend that any language in Table 101.4.1 or Chapter 2 that is inconsistent with Florida Statute should be replaced with the exact terms of the statute. Section 553.73(8) of Florida Statutes permits the Commission to amend the code only when certain criteria are met, including “changes to or inconsistencies with federal or state law.” 553.73(8)(e).

Thus, if the Commission determines that the 2010 FBC-EC is inconsistent with statute, the definition of “renovation” should be replaced with the definition of “Renovated Building” as published in Section 553.902 Florida Statutes. Likewise, terminology in Table 101.4.1 such as “New building systems” should be replaced with the language from 553.903, “Installation or replacement of building systems and components.”

**Rationale [Provide an explanation of why you would like this Proposed Modification to the Florida Building Code.]:**

Terminology used in Table 101.4.1 and in Chapter 2 of the 2010 FBC-EC is inconsistent with Florida Statute. This has led to some confusion, particularly in the application of the FBC-EC’s specific requirement in Section 402.3.6 that replacement fenestration meet the same efficiency requirements as fenestration used in new construction. Further complicating matters is a proposal drafted by Commission Staff that would modify Table 101.4.1 in a manner that would make the table even more inconsistent with Florida Statute.

Although we believe FBC-EC Section 402.3.6 is very clear about the requirements for replacement fenestration, we believe that confusion others may have about these requirements results from the misapplication of Florida Statutory requirements in Table 101.4.1 and Chapter 2 of the 2010 FBC-EC. The changes we propose will incorporate the actual statutory terms and language into the FBC-EC, ensuring consistency in interpretation and application

of the code.

**Please explain how the proposed modification meets the following requirements:**

- 1. Has a reasonable and substantial connection with the health, safety, and welfare of the general public:** The Florida Legislature requires the Florida Building Commission to update the FBC-EC at least triennially as part of its comprehensive set of building codes. This modification will ensure that the code is enforced uniformly statewide, providing energy and cost savings to consumers and improving the built environment.
- 2. Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction:** This modification clarifies the intent of the Commission to require replacement windows to meet the same energy conservation requirements as windows used in new construction. To interpret the code in a manner that exempts these windows from regulation outside of a 30% renovation (as Staff has proposed) would significantly weaken the code.
- 3. Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities:** The code applies the same fenestration efficiency requirements to both new and existing buildings. The U-factor and SHGC requirements can be met by windows with metal and non-metal frames. Compliant windows are already manufactured by several local manufacturers for both types of construction, and are available across the state.
- 4. Does not degrade the effectiveness of the code:** This proposal serves to strengthen the effectiveness of the FBC-EC by clarifying the treatment of replacement fenestration and ensuring that consistent, robust requirements apply.
- 5. The provisions contained in the proposed amendment are addressed in the applicable international code.**

The International Energy Conservation Code has required replacement fenestration to meet the same requirements as fenestration used in new construction in every edition of the IECC since 2000. The Florida Legislature has directed the Commission to select the most current version of the IECC as the “foundation code,” and to modify the code only “to maintain the efficiencies of the Florida Energy Efficiency Code for Building Construction.” Section 402.3.6 of the IECC, which sets the requirements for replacement fenestration, has been adopted word for word into the 2010 FBC-EC. There is no Florida-specific reason why this section should not be applied to all replacement fenestration in Florida. In fact, to modify the section in a manner that would exempt fenestration from complying with the code would actually weaken the FBC-EC, violating the statute’s requirement that any modification maintain the efficiencies of the FBC-EC.

- 6. The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code, and why the proposed amendment applies to this state.**

This modification would make the 2010 FBC-EC consistent with both the foundation code (2009 IECC) and Florida Statutes.

- 7. The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process.**

The inconsistencies in the FBC-EC are a result of Florida-specific provisions. There is no need to clarify the IECC. In fact, the replacement fenestration requirement has been adopted in the vast majority of states across the country.