

March 23, 2012

## **VIA E-MAIL**

Mo Madani, CBO, Technical Unit Manager Building Code and Standards Florida Department of Community Affairs 2555 Shumard Oak Blvd. Tallahassee, FL 32399-2100

RE: RECA Comments on DS 2012-021, Regarding the Applicability of the 2010 Florida Building Code, Energy Conservation to Replacement Fenestration

Dear Mr. Madani,

The Responsible Energy Codes Alliance submits these comments on the Petition for Declaratory Statement DS 2012-021, filed March 5, 2012 (Petition), and the Staff Analysis of the Petition filed March 15, 2012 (Staff Analysis). RECA was involved in the Florida Building Commission's recent efforts to implement the provisions of the 2009 IECC into the Florida Building Code, Energy Conservation (FBC-EC), and we believe that the 2010 FBC-EC represents a significant improvement in energy efficiency.

We are concerned, however, that if the Commission grants the requested Declaratory Statement, current and future efforts to improve energy efficiency in existing buildings could be significantly reduced. Moreover, we believe that the Petition proposes to unnecessarily limit the Commission's authority to establish energy efficiency standards. As a result, we disagree with the Petition and recommend that it be denied.

# **Summary of the Issue**

The key issue is whether replacement windows are considered a "system or component" for which the Florida Building Commission is authorized to set thermal efficiency standards under Florida Statutes in existing buildings without regard to the 30% threshold for renovated buildings.

#### **Summary of RECA's Position**

We believe that Section 553.903 of Florida Statutes gives the Florida Building Commission broad authority to set thermal efficiency standards for the installation or replacement of building systems and components with new products, and these requirements are not subject to the 30% threshold that applies to renovated buildings.



Replacement windows are clearly "building systems or components," and the Commission has set specific thermal efficiency requirements for replacement windows under Section 402.3.6 of the 2010 FBC-EC. As a result, replacement windows installed in any existing building must meet Section 402.3.6 efficiency standards. The effect of the Petition would be to limit the Commission's authority granted by Florida law and should be rejected.

## **Discussion**

1. The Florida Legislature granted the Commission the authority to set thermal efficiency standards for the installation or replacement of building systems and components with new products, including replacement windows, in existing buildings that do not meet the 30% threshold for "renovated buildings."

The entire debate about the applicability of the 2010 FBC-EC to replacement windows revolves around the interpretation of the Applicability section of the Florida Thermal Efficiency Code statute.<sup>1</sup> Section 553.903 Applicability sets the scope of the Commission's authority to set thermal efficiency standards as follows:

**"553.903 Applicability.** – This part shall apply to all new and renovated buildings in the state, except exempted buildings, for which building permits are obtained after March 15, 1979, and to the installation or replacement of building systems and components with new products for which thermal efficiency standards are set by the Florida Energy Efficiency Code for Building Construction. The provisions of this part shall constitute a statewide uniform code."

(Emphasis added.) The statute establishes three categories for which the Commission is authorized to set thermal efficiency standards: 1) New buildings; 2) Renovated buildings; and 3) Installation or replacement of building systems and components with new products.

The Petition did not reference this key section of the statute, but instead focused on the definition of "renovated building" and the applicability of the 30% threshold to renovated buildings. However, that category of regulation (renovated buildings) has no bearing on whether the Commission may set specific efficiency standards for systems or components that are installed or replaced in existing buildings.

The Staff Analysis actually concedes that "some notable exceptions (building systems)" apply to the "renovations clause," but does not fully consider and address the language of Section 553.903. The Legislature has empowered the Commission to set

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<sup>&</sup>lt;sup>1</sup> We note that this is an unusual topic for a Declaratory Statement, because the application of the 2010 FBC-EC replacement window requirements is fundamentally a legal interpretation of the Commission's statutory authority, and not simply an opinion as to the "applicability of a statutory provision, or of any rule or order of the agency, as it applies to the petitioner's particular set of circumstances." Fla. Stat. 120.565(1). The remedy sought by the Petition – a Declaratory Statement that would eliminate the Commission's authority to set efficiency standards for replacement windows and other systems and components outside the context of a substantial renovation project – would impact many more parties than those represented in this process.



thermal efficiency standards for the installation or replacement of building systems and components with new products, and the 30% threshold that applies to "renovated buildings" does not remove the Commission's authority to regulate these important systems and components. This reading of the statute actually solves the apparent conflict alleged in the Petition and the Staff Analysis.

It seems to us that the applicability of the FBC-EC to replacement projects in existing buildings can be summarized as follows:

- If a "renovated building" undergoes alterations that exceed 30% of the assessed value, the entire renovation, including any systems or components, must comply with the FBC-EC.
- If an existing building does not exceed the 30% threshold, those systems and components that are replaced or installed in the project, *and for which the Commission has set specific thermal efficiency standards*, must meet the efficiency standards set by the Commission, regardless of the cost of the overall project.
- If the Commission has not set a specific standard or requirement for a system or component, and if the project does not exceed the 30% threshold, then the FBC-EC requirements do not apply to the installation or replacement of that system or component.
- 2. Replacement windows are clearly "building systems or components" under Florida Statutes, and the Commission has set specific thermal efficiency requirements for replacement windows under Section 402.3.6 of the 2010 FBC-EC.

If the Legislature authorizes the Commission to set efficiency standards for "systems and components," as the statute above clearly does, then the only issue is whether replacement windows qualify as "building systems and components." If windows do not fit under either category, then the Commission cannot apply thermal efficiency standards to replacement windows outside of a renovation that meets the 30% threshold.

Again, the analysis of the Commission's authority must begin with Florida Statutes. Part V of the Florida Building Constructions Standards, 553.901 (Thermal Efficiency Code) does not define either system or component. However, Part I, 553.36 (Manufactured Buildings), defines system and component as follows:

- "(6) 'Component' means any assembly, subassembly, or combination of parts for use as a part of a building, which may include structural, electrical, mechanical, and fire protection systems and other systems affecting health and safety..."
- "(18) 'System' means structural plumbing, mechanical, heating, electrical, or ventilating elements, materials, or components combined for use in a building."

Although contained in a different part of the Building Construction Standards, these definitions offer insight into the intent of the Legislature in specifically listing "building systems and components" in Part V. If these definitions were applied to the Thermal



Efficiency Code, replacement windows would certainly be considered either a system or a component (or both).<sup>2</sup> Moreover, a window or other fenestration product fits clearly within the plain meaning of the term "building component" in that a window is a component (or part) of a building. There is no indication that the Legislature intended to restrict systems and components to lighting and mechanical and to exclude windows.

The final question is whether the Commission, under its authority to set thermal efficiency standards for systems and components, actually set specific requirements for replacement windows. The 2010 FBC-EC is very specific in its requirements for Replacement Fenestration:

**"402.3.6 Replacement Fenestration.** Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor and SHGC in Table 402.1.1."

(Emphasis added.) This language is identical to the 2009 IECC requirement for replacement fenestration, and it is new to the FBC-EC in 2010. Whether the Commission set standards for replacement windows or any other building system or component in previous editions of the code is irrelevant here – the Commission acted to exercise its specific statutory authority to regulate replacement windows in the 2010 FBC-EC.

This action reflects an important modification to the Florida Building Construction Standards adopted by the Legislature in 2008. The Florida Legislature amended the Standards to require the Commission to adopt the IECC as its foundational code:

The commission shall select the most current version of the International Energy Conservation Code (IECC) as a foundation code; however, the IECC shall be modified by the commission to maintain the efficiencies of the Florida Energy Efficiency Code for Building Construction adopted and amended pursuant to s. 553.901.

Fla. Stat. ch. 553.71(7)(a). Consistent with the Legislature's directive to begin with the 2009 IECC as its foundation code, the Commission retained the language of the 2009 IECC setting specific requirements for replacement windows (FBC-EC Section 402.3.6). This section is a fundamental element of the IECC – it has been contained in every edition of the IECC since 2000, and it has been successfully applied in many states. However, to our knowledge, replacement window requirements have never been so specifically outlined in previous editions of the code. Thus, any determinations made, or guidance issued on earlier editions of the FBC-EC should not apply to the new language adopted by the Commission in the 2010 FBC-EC.

creates a conflict. As has been noted elsewhere, the law trumps the code. If replacement windows do not fall under the FBC-EC definition of system, they would certainly be considered components.

<sup>&</sup>lt;sup>2</sup> The 2010 FBC-EC (the code) does not define component, but it defines system as follows: "A combination of equipment and auxiliary devices (e.g., controls, accessories, interconnecting means, and terminal elements) by which energy is transformed so it performs a specific function such as HVAC, service water heating, or lighting." While this definition is narrower than the statutory definition of system, we do not believe that it



As conceded by both the Petition and the Staff Analysis, statutory requirements trump any conflicting provisions in the 2010 FBC-EC. The Petition and the Staff Analysis cite Section 101.4.7 and Table 101.4.1 as evidence that the Commission did not intend to regulate replacement windows. We disagree with that conclusion. Section 101.4.7 and Table 101.4.1 both list a few general categories of "building systems" for which the Commission sets thermal efficiency requirements, including HVAC, water heating, pool heating, and lighting systems – but the table does not list the specific requirements for all systems regulated by the FBC-EC. The requirements for these systems are detailed in later, more specific sections of the code, including Section 402.3.6 (replacement windows).

The Petition acknowledges that where there is a potential conflict between two code sections, the 2010 FBC-EC should be resolved in favor of the most specific, and most restrictive (stringent) requirement:

**101.4 Applicability**. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

As outlined above, there is no conflict here – replacement windows are separately and specifically regulated as building systems and components. Statutes and rules should be read in a way that gives effect to each provision. We believe the Commission adopted the new language related to replacement fenestration for a reason, and we believe that a rational reading of the statute reaffirms the Commission's ability to and decision to regulate replacement windows.<sup>3</sup>

3. We are concerned about the potential unintended consequences of applying the 30% threshold to replacement components or systems, and encourage the Commission to take advantage of a historic opportunity to apply the FBC-EC in a manner that promotes energy efficiency in existing buildings.

There are at least two potential negative consequences to applying the 30% threshold to replacement components or systems, as suggested in the Petition. First, this could limit the ability of the Commission to regulate window efficiency to only those renovations with a cost of 30% of the assessed value of the structure – rendering the replacement window provisions just included in the code virtually useless. Only in relatively few cases could replacement window projects qualify – basically when part of a very broad and expensive renovation project. This all but eliminates the potential impact of the 2010 FBC-EC on one of the biggest opportunities to save energy – replacement windows. The potential energy savings cannot be understated – we estimate that over half of all windows sold in the state of Florida are used in existing buildings.

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<sup>&</sup>lt;sup>3</sup> The Petition lists a number of reasons why one stakeholder believes replacement windows should not be regulated outside of a 30% renovation, but these arguments cannot change the plain language of the statute or the 2010 FBC-EC.



Second, the Petition's narrow interpretation could be used to further limit the Commission's authority to regulate all systems or components that are installed or replaced in existing buildings. In its attempt to apply the 30% threshold to systems and components (such as replacement windows), the Petition may unwittingly limit the Commission's ability to regulate all systems under that category, including heating and cooling systems, hot water heating systems, lighting, motors, and all other systems or components of the building that may not be part of a 30% renovation. It could also prevent the Commission from addressing other measures in existing buildings with specific efficiency requirements in the future. We do not believe the Commission intended to or should limit its own authority to set standards for these crucial building systems and components.

We find that the most logical interpretation of the statute—and the interpretation that preserves the Commission's broad authority to set efficiency standards for crucial systems and components—is the interpretation we outlined above.

# Conclusion

The Florida Building Commission has considerable freedom to pursue energy efficiency improvements in both new and existing buildings, subject to the restrictions of Florida Statutes. Where there is an opportunity to substantially improve the efficiency of existing buildings – as is the case with replacement windows – we urge the Commission not to read the statute in a manner that would limit its authority to do so.

Sincerely,

Eric Lacey Chairman

The Responsible Energy Codes Alliance is a broad coalition of energy efficiency professionals, regional organizations, product and equipment manufacturers, trade associations, and environmental organizations that promote the adoption and implementation of improved building energy codes and, in particular, the most recent version of the IECC nationwide. RECA members have been involved in the development of the IRC and IECC, and the implementation of these codes in jurisdictions across the country for two decades. For more information about RECA, see www.reca-codes.com.