**Fire Technical Advisory Committee (TAC) – Comments**

**8th Edition (2023) Florida Building Code, Building**

**CHAPTER 10 MEANS OF EGRESS**

**F-B-Ch.10 – Comment #1 [New Subject]**

By: John Barrios, CBO, Hillsborough County

Revise Section 1015.8 of the FBC-B as follows:

**1015.8 Window openings.** Windows in Group R-2 and R-3 buildings including *dwelling units*, where the top of the sill of an operable window opening is located less than ~~24~~ 36 inches above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

1. Operable windows where the top of the sill of the opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F2006.

2. Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.

3. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.

4. Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.

Reason:

In the current edition of the IBC and previous editions of the FBC-Building volume, section 1015.8 required fall protection for windows with a sill height of **36”** or below in R-2 occupancies when the window is located more than 72” above the ground or other surface on the outside. This was presumably to prevent small children from falling out of windows. FBC-EB (Existing Buildings), section 505.2 stipulated the same.

In the current 7th edition of the FBC-B, section 1015.8 was amended by Code Mod F7213 to change to a sill height of **24”** or below for R-2 occupancies but there was no corresponding change to the same provision in the FBC-EB section 505.2 for existing apartment buildings. The net result is a situation where a brand new apartment building that is completed today that has windows with a sill height below 36” would automatically be in violation of the FBC-EB regarding fall protection. We don’t believe this was the intent of the Florida Building Commission.

We checked the last few editions of the IBC and IEBC codes, and the fall protection provisions in both codes are consistent…. fall protection is required when the window sill height is 36” or below in new and existing R-2 occupancies. The following is an excerpt from the IBC Code Commentary for section 1015.8:

*The window limitations specified here are intended for Group R-2 and R-3 units. These facilities have the highest potential for infants and toddlers being present for an extended period of time. The requirement is intended to provide a level of protection to children and to help limit the chances of them falling through window openings. In most cases, these provisions are not applicable to first-floor windows. Typically, the 72 inches (1829 mm) to finished grade would make these provisions applicable for windows starting at the second floor. For windows in bedrooms that may also be required to serve as emergency escape and rescue openings, see Section 1030.*

*There are basically five options offered:*

*One option is to locate the window so that any opening is at least 36 inches (915 mm) above the*

*floor. By raising the lowest operable portion of a window to 36 inches (915 mm) or more, the sill height is above the center of gravity of smaller children. The National Ornamental & Miscellaneous Metals Association (NOMMA) commissioned a paper on child safety related to falls. The report indicates that the standing center of gravity of children aged 2 to 3.5 years is 24.1 inches (612 mm) [50th percentile is 22.2 inches (564 mm)] and of children aged 3.5 to 4.5*

*years is 25.2 inches (640 mm) [50th percentile is 23.6 inches (599 mm)].* ***The 36-inch (915 mm) sill height was chosen to reduce the ability of a child to climb onto the sill, enabling the fall through the opening.*** *Windows that are also to serve as emergency escape windows must also comply with Section 10309.3 sill height requirements for 44 inches (1118 mm) maximum.*

*Note that Section R312.2 of the IRC requires a minimum sill height of 24 inches (610 mm).*

The balance of the code commentary explains the 4 other options for providing window fall protection, which is not germane to this issue. In summary, we don’t believe it was the intent to create an internal conflict between the FBC -B and FBC-EB volumes of the Code and by restoring the 36” height above the finish floor criteria, the entire FBC will be in sync within itself and the IBC.

**TAC Recommendation:**

**Commission Action:**

**8th Edition (2023) Florida Building Code, Residential**

**CHAPTER 2 DEFINITIONS**

**F-R-Ch.2 – Comment #1 [New Subject]**

By: John Barrios, CBO, Hillsborough County

Revise Definition in the FBC-R 202 as follows

**~~[RB] TOWNHOUSE.~~** ~~A single-family~~ *~~dwelling unit~~* ~~not exceeding three stories in height constructed in a group of two or more attached units with property lines separating such units in which each unit extends from foundation to roof and with a~~ *~~yard~~* ~~or public way on not less than two sides~~.

**[RB] TOWNHOUSE.** A building that contains three or more attached townhouse units.

**[RB] TOWNHOUSE UNIT.** A single-family *dwelling unit* in a townhouse that extends from foundation to roof and that has a *yard* or public way on not less than two sides.

Revise Definition in the FBC-B 202 as follows

**~~[A] TOWNHOUSE.~~** ~~A single-family~~ *~~dwelling unit~~* ~~not exceeding three stories in height constructed in a group of two or more attached units with property lines separating such units in which each unit extends from foundation to roof and with a~~ *~~yard~~* ~~or public way on not less than two sides~~.

**[A] TOWNHOUSE.** A building that contains three or more attached townhouse units.

**[A] TOWNHOUSE UNIT.** A single-family *dwelling unit* in a townhouse that extends from foundation to roof and that has a *yard* or public way on not less than two sides.

Reason:

To update the FBC-R and FBC-B townhouse definition with the current IRC and IBC definition. The I-Codes have moved away from defining townhomes in relation to a property line and focused on establishment of a 2-hour fire barrier that totally separates dwelling units from the ground through the roof. The I-Codes recognize that ownership of the dwelling units is not relevant to building and fire safety in this instance.

This change will enable Homebuilders and Developers to build townhouse projects without requiring them to subdivide properties into individual lots which will save considerable time and money in the development process. Requiring Homebuilders and Developers to go through any local subdivision process is a complex time consuming process that ultimately does not afford any higher level of building or fire safety for the occupants of a townhome. The 2-hr fire barrier (party wall) that extends from the grade to the roof in the manner prescribed in the Code is what provides the highest degree of occupant and property protection. For this reason, we believe the ICC Codes have eliminated the need for establishing properly lines between townhomes.

There is a similar but different townhouse definition in FS 481.203, which supports the Architect’s practice act, and some may contend this establishes a conflict with the proposed building code modification. We contend the language in FS 481 is meant to provide Architects with the authority to design townhomes and the definition used in the Statute is outdated language brought forward from a much older Building Code. We would profess that the 2 definitions are not technically in conflict since the FS481 version is intended to define what an Architect can design whereas the FBC proposed code definition is intended to define the building type for building code safety purposes in an effort to be consistent with the current editions of the IRC and the IBC.

**TAC Recommendation:**

**Commission Action:**

**8th Edition (2023) Florida Building Code, Existing Building**

**CHAPTER 5 PRESCRIPTIVE COMPLIANCE METHOD**

**From:** Jennifer Hatfield [mailto:jen@jhatfieldandassociates.com]
**Sent:** Tuesday, January 31, 2023 5:34 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Subject:** FGIA comment on FBC supplement

Mo – please find attached the Fenestration & Glazing Industry Alliance’s comment for consideration by the appropriate TAC and Commission.

Fenestration & Glazing Industry Alliance (FGIA) Comment on Florida Supplement to the 7th edition, for the 8th edition Florida Building Code

**Revise the following Florida Existing Building Code sections as follows:**

**505.2 Window fall prevention ~~opening control devices~~ on replacement windows.** In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential,* window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

**702.4 Window fall prevention ~~opening control devices~~ on replacement windows.** In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential,* window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

**Reasoning:**

The current supplement to the 2020 Florida Existing Building Code has a discrepancy in that 702.4 does not include the words “fall prevention devices” but 505.2 does. Both sections are about fall prevention, and window opening control devices (WOCDs) are one of several options in addressing fall prevention. Therefore, in addition to ensuring the wording in both sections align, we are suggesting the titles of sections 505.2 and 702.4 be updated to more accurately reflect that these sections are addressing fall prevention in replacement windows and not just specifically WOCDs. Then within the body of each section the comment clarifies that WOCDs or other type of fall prevention devices complying with ASTM F2090 must be installed during replacement when all the following existing code language applies.

Nothing in this comment changes the current requirements but simply provides clarity and consistency, a similar proposal was adopted by the ICC for what will be in the 2024 IEBC (EB74-22) and FGIA believes these same fixes would be of benefit in the Florida Existing Building Code. In addition, this language aligns with the following modifications already adopted by the Commission in the current code development cycle:

F10414 – AS

**R310.1.1 Operational constraints and opening control devices.**

Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys, tools or special knowledge. Window opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as a required emergency escape and rescue opening.

S10428 – AS

**AJ102.4.3 Replacement windows for e~~E~~mergency escape and rescue openings.**

Where windows are required to provide emergency escape and rescue openings, replacement windows shall be exempt from ~~the maximum sill height requirements of Section R310.1 and the requirements of~~ Sections ~~R310.1.1, R310.1.2, R310.1.3 and~~ R310.2.1 and R310.2.2 provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer’s largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
2. Where t~~T~~he replacement window is not part of a change of occupancy.

**~~3.~~**Window opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as required ~~to provide~~ emergency escape and rescue openings.

**AJ102.4.3.1 Control devices**

Emergency escape and rescue openings with window opening control devices or fall prevention devices complying with ASTM F2090, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

**AJ102.4.4 Window control devices.**

~~Where window fall prevention devices complying with ASTM F2090 are not provided,~~W~~w~~indow opening control devices or fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

F10415 – AS

* 1. **Operational constraints.**

*Emergency escape and rescue openings* shall be operational from the inside of the room without the use of keys or tools. Window-opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as a required *emergency escape and rescue opening*. Bars, grilles, grates or similar devices are permitted to be placed over *emergency escape and rescue openings* provided the minimum net clear opening size complies with Section 1030.2 and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the *emergency escape and rescue opening*. Where such bars, grilles, grates or similar devices are installed in existing buildings, *smoke alarms* shall be installed in accordance with Section 907.2.11 regardless of the valuation of the *alteration*.

**TAC Recommendation:**

**Commission Action:**