**Roofing Technical Advisory Committee – Comment**

**6th Edition (2017) Florida Building Code, Existing Building**

S/R – Comment #1

**6th Edition (2017) FBC, Existing Building Section 707.3.2**

**Proposed revision**

**Submitted by: Lisa Pate, FRSA**

**706.3.2 Roof diaphragms resisting wind loads in high-wind regions.**   
Where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building and where reroofing is a substantial improvement (see definition Chapter 2, section 202 General Definition, B) located where the ultimate design wind speed, V*ult*, is greater than 115 mph, as defined in Section 1609 (the HVHZ shall comply with Section 1620) of the *Florida Building Code, Building*, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *Florida Building Code, Building*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *Florida Building Code, Building*.

\* new language

**[B] SUBSTANTIAL IMPROVEMENT.**Any *repair,*reconstruction, rehabilitation, alteration, *addition*or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or *repair*is started. If the structure has sustained *substantial damage,* any repairs are considered substantial improvement regardless of the actual *repair*work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the *building official*and that is the minimum necessary to ensure safe living conditions; or

2. Any *alteration*of a historic structure, provided that the *alteration*will not preclude the structure’s continued designation as a historic structure.

**Reason:** This section as written requires a simple roof covering replacement to be the trigger mechanism for a complete structural evaluation and possible retrofitting of the roof diaphragm. The burden that this places on the building owner is substantial. Many buildings that were built in compliance with the building code at the time of their construction, cannot meet these requirements without complete replacement of the roof deck (diaphragm). In many cases, it would be more economical to demolished an otherwise perfectly functional building. On many other buildings, the cost for retrofitting the deck will be substantially more expensive than the roof covering replacement. Many building owners may decide to forgo replacement due to these extensive costs. In other cases, they may decide to add an additional roof covering over their existing roof covering (recover), which will eliminate the opportunity to inspect and repair any type of deficiencies with the deck. 

A thorough review of the process of adopting this section shows that the substantial financial ramifications of its implementation have never been evaluated.

This suggested change will limit the application of this section to buildings undergoing an alteration (roof covering replacement) that is considered a "substantial improvement" based on the value of the structure.

**See also Attachment #1**

**TAC Recommendation:**

**Commission Action:**

S/R – Comment #2

**6th Edition (2017) FBC, Existing Building Section 707.3.2**

**Proposed revision**

**Submitted by: Lisa Pate, FRSA**

**707.3.2 Roof diaphragms resisting wind loads in high-wind regions.**

Where ~~roofing materials are removed from~~ more than ~~50~~ 25 percent of the roof diaphragm ~~or section~~ ~~of~~ is replaced or repaired on a building located where the ultimate design wind speed, V*ult*, is greater than 115 mph, as defined in Section 1609 (the HVHZ shall comply with Section 1620) of the *Florida Building Code, Building*, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *Florida Building Code, Building*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *Florida Building Code, Building*.

**Reason:** This section as written requires a simple roof covering replacement to be the trigger mechanism for a complete structural evaluation and possible retrofitting of the roof diaphragm. The burden that this places on the building owner is substantial. Many buildings that were built in compliance with the building code at the time of their construction, cannot meet these requirements without complete replacement of the roof deck (diaphragm). In many cases, it would be more economical to demolished an otherwise perfectly functional building. On many other buildings, the cost for retrofitting the deck will be substantially more expensive than the roof covering replacement. Many building owners may decide to forgo replacement due to these extensive costs. In other cases, they may decide to add an additional roof covering over their existing roof covering (recover), which will eliminate the opportunity to inspect and repair any type of deficiencies with the deck.

A thorough review of the process of adopting this section shows that the substantial financial ramifications of its implementation have never been evaluated.

This suggested change will replace the current trigger mechanism with one more appropriate for the structural section in which it appears. It uses a similar approach to that used in section 706.1.1 which states: (Not more than 25 percent of the total roof area or roof section of any existing building or structure shall be repaired, replaced or recovered in any 12 month period unless the entire existing roofing system or roof section is replaced to conform to the requirements of this code). As with 706.1.1 it uses the repair or replacement of the diaphragm (as opposed to the roof covering replacement) as the trigger.

**See also Attachment #1**

**TAC Recommendation:**

**Commission Action:**

R – Comment #3

**6th Edition (2017) FBC, Building**

**Proposed revision**

**Submitted by: T. Eric Stafford**

**6th Edition (2017) Florida Building Code, Building**

**Roofing Correlation Issues**

**Item 1**

**Table 1507.1.1**

**Underlayment Table**

*(table and notes 1 and 2 not shown for brevity)*

**3. Roof slopes from two units vertical in 12 units horizontal (17-percent slope), and greater**. The entire roof deck shall be covered with an approved self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 installed in accordance with both the underlayment manufacturer’s and roof covering manufacturer’s installation instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed.

**Exception:**As an alternate, a minimum 4-inch-wide (102 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D 1970, installed in accordance with the manufacturer’s instructions for the deck material, shall be permitted to be applied over all joints in the roof decking. An approved underlayment in accordance with Table 1507.1.1 for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) membrane strips.

**Reason:** Clarification that the exception pertains to Note 3. Improves sentence structure. Similar to wording in the 5th Edition (2014) FBCB.

**Item 2**

**1507.2.7 Attachment.** Asphalt shingles shall have the minimum number of fasteners required by the manufacturer~~, but~~ and Section 1504.1. Asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle ~~or two fasteners per strip shingle~~ or two fasteners per individual shingle. Where the roof slope exceeds 21 units vertical in 12 units horizontal (21:12), asphalt shingles shall be installed in accordance with the manufacturer's printed installation instructions for steep-slope roof applications.

**Reason:** Corrects a typographical error on Mod 6643.

**Item 3**

**1507.2.7.1 Wind resistance of asphalt shingles.** Asphalt shingles shall be classified in accordance with ASTM D 3161, ASTM D 7158 or TAS 107. Shingles classified as ASTM D 3161 Class D or ASTM D 7158 Class G are acceptable for use where Vasd is equal to or less than ~~in the~~ 100-mph ~~windzone~~. Shingles classified as ASTM D 3161 Class F, ASTM D 7158~~(2011)~~ Class H or TAS 107 are acceptable for use for ~~in~~ all wind speeds ~~zones~~. Asphalt shingle wrappers shall indicate compliance with one of the required classifications, as shown in Table 1507.2.7.1.

**Reason:** Clarification. The 100 mph limit is based on Vasd. The reference to “windzone” is deleted as we don’t have “zones” and clarifies that those classifications are permitted where the Vasd is less than 100 mph.

**Item 4**

**1508.1 General.** The use of above-deck thermal insulation shall be permitted provided such insulation is covered with an *approved* roof covering and passes the tests of UL 1256 or ~~and~~ NFPA 276 when tested as an assembly.

**Reason:** Corrects a typographical error in Mod 6655. The intent is that tests are performed in accordance with UL 1256 “or” NFPA 276. This is also consistent with the base code.

**Item 5**

**1510.7.2 Fire classification.** Rooftop-mounted photovoltaic systems shall have the same fire classification as required for the roof assembly ~~required~~ by Section 1505.

**Reason:** Improves wording for clarification.

**TAC Recommendation:**

**Commission Action:**

R – Comment #4

**6th Edition (2017) FBC, Residential**

**Proposed revision**

**Submitted by: T. Eric Stafford**

**6th Edition (2017) Florida Building Code, Residential**

**Roofing Correlation Issues**

**Item 1**

**Table R905.1.1**

**Underlayment Table**

*(table and notes 1 and 2 not shown for brevity)*

**3. Roof slopes from two units vertical in 12 units horizontal (17-percent slope), and greater**. The entire roof deck shall be covered with an approved self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 installed in accordance with both the underlayment manufacturer’s and roof covering manufacturer’s installation instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed.

**Exception:**As an alternate, a minimum 4-inch-wide (102 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D 1970, installed in accordance with the manufacturer’s instructions for the deck material, shall be permitted to be applied over all joints in the roof decking. An approved underlayment in accordance with Table R905.1.1 ~~1507.1.1~~ for the applicable roof covering shall be applied over the entire roof over the 4-inch-wide (102 mm) membrane strips.

**Reason:** Clarification that the exception pertains to Note 3. Improves sentence structure. Similar to wording in the 5th Edition (2014) FBCB.

**Item 2**

**R905.2.6.1 Wind resistance of asphalt shingles.** Asphalt shingles shall be classified in accordance with ASTM D 3161, ASTM D 7158 or TAS 107. Shingles classified as ASTM D 3161 Class D or ASTM D 7158 Class G are acceptable for use where Vasd is equal to or less than ~~in the~~ 100-mph ~~windzone~~. Shingles classified as ASTM D 3161 Class F, ASTM D 7158~~(2011)~~ Class H or TAS 107 are acceptable for use for ~~in~~ all wind speeds ~~zones~~. Asphalt shingle wrappers shall indicate compliance with one of the required classifications, as shown in Table R905.2.6.1.

**Reason:** Clarification. The 100 mph limit is based on Vasd. The reference to “windzone” is deleted as we don’t have “zones” and clarifies that those classifications are permitted where the Vasd is less than 100 mph.

**Item 3**

**R905.17.2 Fire classification**. Rooftop mounted photovoltaic systems shall have the same fire classification as required for the roof assembly ~~required~~ by Section R902.

**Reason:** Improves wording for clarification.

**TAC Recommendation:**

**Commission Action:**

R – Comment #5

**6th Edition (2017) Florida Building Code, Test Protocols for HVHZ**

**From:** Acebo, Jorge L. (RER) [mailto:ACEBO@miamidade.gov]   
**Sent:** Monday, February 13, 2017 12:50 PM  
**To:** Madani, Mo; Bigelow, Joe  
**Cc:** Fischer, Mike (MFischer@kellencompany.com)  
**Subject:** FW: 6th Edition (2017) Update to the Florida Building Code (FBC) Rule Development Workshop - Accepting Written Comments   
**Importance:** High

Gentlemen,

Attached please find Public Comments submitted on behalf of Miami-Dade and ARMA for the Rule Development Workshop identified below. These are editorial changes to address unintended omissions/changes as previously discussed. Please let me know if these two changes are appropriately formatted. Thank you for your assistance.

Regards,

**Jorge L. Acebo,** Roofing Product Control Examiner  
**Miami-Dade County Department of Regulatory and Economic Resources**  
786-315-2588 Office

Florida Building Commission

Submitted on behalf of ARMA and Miami-Dade

**Proposed Modification: TAS 111(C)**

Section 3.1 ~~- “; and/or the RCI Glossary of Terms”~~

Reason: During this cycle, the term and the reference was deleted because it is not a consensus standard and not relevant content for the FBC. While the RCI materials provide an excellent resource material, they are not appropriate for code reference.

**Proposed Modification: TAS 114 Appendix J**

7.3 A 2:1 margin of safety shall be applied to the passing uplift pressure prior to inclusion in the system manufacturer’s Product Approval.

Reason: This section was not modified during the original proposal phase, but an editorial error during the public comment phase resulted in an inadvertent striking of the requirement. It was not the intent of the proponents to remove the safety factor.

**TAC Recommendation:**

**Commission Action:**