**Structural Technical Advisory Committee – Comments**

**7th Edition (2020) Florida Building Code – Building/Residential**

**S-FBC-B-Ch. 16 - Comment #1**

**Comment on the 7th Edition (2020) Florida Building Code, Building Draft**

Submitted by T. Eric Stafford representing IBHS

**1. Delete Section 1609.8 in it’ entirety:**

**~~1609.8 Rooftop equipment.~~** ~~Sections 29.5 and 29.5.1 of ASCE 7 shall be modified as follows:~~

**~~29.5 Design wind loads: Other structures.~~**

~~The design wind force for other structures (chimneys, tanks, similar structures, open signs, lattice frameworks and trussed towers) whether ground- or roof-mounted, shall be determined by the following equation:~~

*~~F = q~~~~z~~~~GC~~~~f~~~~A~~~~f~~*~~(lb)(N) (29.4-1)~~

~~where:~~

*~~q~~~~z~~*~~= velocity pressure evaluated at height~~ *~~z~~* ~~as defined in Section 29.3, of the centroid of area~~ *~~A~~~~f~~*~~;~~

*~~G~~* ~~= gust-effect factor from Section 26.9;~~

*~~C~~~~f~~*~~= force coefficients from Figures 29.5-1 through 29.5-3; and~~

*~~A~~~~f~~*~~= projected area normal to the wind except where~~ *~~C~~~~f~~*~~is specified for the actual surface area, in square feet (m~~~~2~~~~).~~

**~~29.5.1 Rooftop structures and equipment for buildings.~~** ~~The lateral force,~~ *~~F~~~~h~~*~~for rooftop structures and equipment shall be determined as specified below.~~

*~~F~~~~h~~ ~~= q~~~~h~~*~~(~~*~~GC~~~~r~~*~~)~~*~~A~~~~f~~*~~(lb)(N)~~

~~where:~~

~~GC~~~~r~~ ~~= 1.9 for rooftop structures and equipment with~~ *~~A~~~~f~~*~~less than (0.1~~*~~Bh~~*~~). (~~*~~GC~~~~r~~*~~) shall be permitted to be reduced linearly from 1.9 to 1.0 as the value of~~ *~~A~~~~f~~*~~is increased from (0.1~~*~~Bh~~*~~) to (~~*~~Bh~~*~~);~~

*~~q~~~~h~~ ~~=~~* ~~velocity pressure evaluated at mean roof height of the building; and~~

*~~A~~~~f~~ ~~=~~* ~~vertical projected area of the rooftop structure or equipment on a plane normal to the direction of wind, in square feet (m~~~~2~~~~).~~

~~The vertical uplift force,~~ *~~F~~~~v~~*~~, on rooftop structures and equipment shall be determined from Equation (29.5-3).~~

*~~F~~~~v~~ ~~= q~~~~h~~*~~(~~*~~GC~~~~r~~*~~)~~*~~A~~~~r~~*~~(lb)(N)~~

~~where:~~

~~(~~*~~GC~~~~r~~*~~) = 1.5 for rooftop structures and equipment with~~ *~~A~~~~r~~*~~less than (0.1~~*~~BL~~*~~). (~~*~~GCr~~*~~) shall be permitted to be reduced linearly from 1.5 to 1.0 as the value of~~ *~~A~~~~r~~*~~is increased from (0.1~~*~~BL~~*~~) to (~~*~~BL~~*~~);~~

*~~q~~~~h~~*~~= velocity pressure evaluated at the mean roof height of the building; and~~

*~~A~~~~r~~*~~= horizontal projected area of rooftop structure or equipment, in ft~~~~2~~ ~~(m~~~~2~~~~).~~

**2.Revise Section 1620.6 as follows:**

**1620.6 Rooftop equipment and structures.** Wind loads on rooftop equipment and other structures shall be in accordance with Chapter 29 of ASCE 7.~~Sections 29.5 and 29.5.1 of ASCE 7 shall be modified as follows:~~

**~~29.5 Design wind loads: other structures.~~** ~~The design wind force for other structures (chimneys, tanks, similar structures, open signs, lattice frameworks and trussed towers) whether ground or roof mounted, shall be determined by the following equation:~~

*~~F~~* ~~=~~ *~~q~~~~z~~~~GC~~~~f~~~~A~~~~f~~*~~(lb)(N) (29.4-1)~~

~~where:~~

*~~q~~~~z~~*~~= velocity pressure evaluated at height~~ *~~z~~* ~~as defined in Section 29.3, of the centroid of area~~ *~~A~~~~f~~*~~;~~

*~~G~~* ~~= gust-effect factor from Section 26.9;~~

~~C~~*~~f~~*~~= force coefficients from Figures 29.5-1 through 29.5-3; and~~

*~~A~~~~f~~*~~= projected area normal to the wind except where~~ *~~C~~~~f~~*~~is specified for the actual surface area, in square feet (m~~~~2~~~~).~~

**~~29.5.1 Rooftop structures and equipment for buildings.~~** ~~The lateral force,~~ *~~F~~~~h~~*~~for rooftop structures and equipment shall be determined as specified below.~~

*~~F~~~~h~~*~~=~~ *~~q~~~~h~~~~(GC~~~~r~~~~)A~~~~f~~*~~(lb)(N)~~

~~where:~~

*~~GC~~~~r~~*~~= 1.9 for rooftop structures and equipment with~~ *~~A~~~~f~~*~~less than (0.1Bh). (~~*~~GC~~~~r~~*~~) shall be permitted to be reduced linearly from 1.9 to 1.0 as the value of~~ *~~A~~~~f~~*~~is increased from (0.1Bh) to (Bh);~~

*~~q~~~~h~~*~~= velocity pressure evaluated at mean roof height of the building; and~~

*~~A~~~~f~~*~~= vertical projected area of the rooftop structure or equipment on a plane normal to the direction of wind, in square feet (m~~~~2~~~~).~~

~~The vertical uplift force,~~ *~~F~~~~v~~*~~, on rooftop structures and equipment shall be determined from Equation (29.5-3).~~

*~~F~~~~v~~*~~=~~ *~~q~~~~h~~~~(GC~~~~r~~~~)A~~~~r~~*~~(lb)(N)~~

~~where:~~

~~(~~*~~GC~~~~r~~*~~)=1.5 for rooftop structures and equipment with~~ *~~A~~~~r~~*~~less than (0.1BL). (~~*~~GC~~~~r~~*~~) shall be permitted to be reduced linearly from 1.5 to 1.0 as the value of~~ *~~A~~~~r~~*~~is increased from (0.1BL) to (BL);~~

*~~q~~~~h~~*~~= velocity pressure evaluated at the mean roof height of the building; and~~

*~~A~~~~r~~*~~= horizontal projected area of rooftop structure or equipment, in square feet (m~~~~2~~~~).~~

**Exception:** Exposed mechanical equipment or appliances fastened to a roof or installed on the ground in compliance with the code using rated stands, platforms, curbs, slabs, walls, or other means are deemed to comply with the wind-resistance requirements of the 2007 *Florida Building Code*, as amended. Further support or enclosure of such mechanical equipment or appliances is not required by a state or local official having authority to enforce the *Florida Building Code*.

**Reason:** This is essentially a correlation with ASCE 7-16. These sections were added to the 6th Edition (2017) FBCB to correct an error in the HVHZ provisions and to take advantage of new wind loading requirements for rooftop equipment in ASCE 7-16. Since the 6th Edition (2017) FBCB referenced ASCE 7-10, the code sections were shown as modifications to the relevant sections of ASCE 7-10. However, the 7th Edition references ASCE 7-16 and this language is no longer needed. Additionally, these sections as written essentially conflict with ASCE 7-16 as wind loads on rooftop equipment are addressed in Section 29.4 of ASCE 7-16.

**TAC Recommendation: AS**

**Commission Action: AS**

**S-FBC- B – Ch. 16 - Comment #2**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Friday, January 31, 2020 7:19 AM
**To:** Madani, Mo
**Cc:** Dipietro, James; Goolsby, Michael L. (RER); Gascon, Jaime (RER)
**Subject:** Comments for FBC 2020

Hello Mo,

During our ongoing review of the FBC 2020 changes, we have come upon another section that requires a change to correlate current requirements with new ASCE 7-16 requirements.

Below is Section 1620 Wind Load requirements which currently indicates the same wind speed requirements for Category III and IV buildings.  Since ASCE 7-16 now includes separate wind speed maps for Risk Category III and IV Buildings, the FBC 2020 Edition should indicate separate design requirements for each category.

**SECTION 1620**

**HIGH-VELOCITY HURRICANE ZONES—**

**WIND LOADS**

**1620.1** Buildings and structures, and every portion thereof,

shall be designed and constructed to meet the requirements of

Chapters 26 through 31 of ASCE 7.

**Exception:** Exposed mechanical equipment or appliances

fastened to a roof or installed on the ground in compliance

with the code using rated stands, platforms, curbs, slabs,

walls, or other means are deemed to comply with the wind

resistance requirements of the 2007 Florida Building

Code, as amended. Further support or enclosure of such

mechanical equipment or appliances is not required by a

state or local official having authority to enforce the *Florida*

*Building Code*.

**1620.2** Wind velocity (3-second gust) used in structural calculations

shall be as follows:

**Miami-Dade County**

Risk Category I Buildings and Structures: 165 mph

Risk Category II Buildings and Structures: 175 mph

Risk Category III ~~and IV~~ Buildings and Structures: 186 mph

Risk Category IV Buildings and Structures: 195 mph

**Broward County**

Risk Category I Buildings and Structures: 156 mph

Risk Category II Buildings and Structures: 170 mph

Risk Category III ~~and IV~~ Buildings and Structures: 180 mph

Risk Category IV Buildings and Structures: 185 mph

Thank You, for these opportunities to address last minute changes.

**TAC Recommendation: AS**

**Commission Action: AS**

**S- FBC-B/R- Ch. 35/46 - Comment #3**

**Proposed Modification to the Florida Building Code**

**Modification #: Section 553.73, Fla Stat**

**Name: Joseph D. Belcher**

**Representing: Masonry Association of Florida and Florida Independent Concrete and Associated Products Industry**

**Address: 41 Oak Village Blvd. Homosassa, FL 34446-5632**

**E-mail: Joe@jdbcodeservices.com**

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**Code: Florida Building Code-Building and Florida Building Code-Residential**

**Section #: Chapter 35 and Chapter 46**

**Modification to the Florida Building Code.]:**

**FBC-B Chapter 35**



**C476—~~02~~ 19 Standard Specification for Grout for Masonry . . . . . . . . 2122.8.2**

**FBC-R Chapter 46**



**C476—~~10~~ 19 Specification for Grout for Masonry. . . . . . . . . . . . .. .606.2.~~11~~12**

**Rationale: The proposal updates to the latest edition of the ASTM Standard Specification for Grout for Masonry and corrects the title in the FBC-B.**

**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: There will be no impact to local enforcements as this is an update to a standard.**

**B. Impact to building and property owners relative to cost of compliance with code: There will be no impact to building and property owners as this is an update to a standard.**

**C. Impact to industry relative to cost of compliance with code: There will be no impact on the industry as this is an update to a standard.**

**D. Impact to small business: There will be no impact on small businesses as this is an update to a standard.**

**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 proposal is connected to the health, safety, and welfare of the public because it updates the code to adopt the latest edition of the ASTM Specification for Grout for Masonry.**

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2. **Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction: The proposal strengthens the code because it updates the code to adopt the latest edition of the ASTM Specification for Grout for Masonry.**

3. **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities: The change does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.**

4. **Does not degrade the effectiveness of the code: The proposed change does not degrade the effectiveness of the code and improves the effectiveness of the code.**

**TAC Recommendation: AS**

**Commission Action: AS**

**S-FBC-B/R-- Comment #4**

**From:** fpages@buildingaffordable.com [mailto:fpages@buildingaffordable.com]
**Sent:** Monday, March 2, 2020 2:28 PM
**To:** Madani, Mo
**Subject:** 2020 Florida Building Codes correction: updated ASTM standards for all polymeric cladding AND testing references for polypropylene sidings.
**Importance:** High

Dear Mr. Madani, per our conversation, I am sending the two code modifications requested, the first to update ASTM standards from the 2013 version to the latest 2017 version. And the second to correct language in the polypropylene testing references.

**ONE: please modify the 2020 Florida Residential and Building Codes to reflect more stringent and current ASTM standards for polypropylene and insulated sidings as follows:**

**Proposed correction to modification**:

ASTM D7254-17~~13~~ Specification for Polypropylene Siding in the residential and building codes.

ASTM D7793-17~~13~~ Specification for Insulated Vinyl Siding in the residential code, R703.11

These are the specific code numbers that require update:

Correction to ASTM standards for polymeric cladding materials.

Modify S7252

**Code Change Cycle**2020 Triennial Original Modification 11/02/2018 - 12/15/2018
**Code Version**2020
**Sub Code**Residential
**Chapter & Topic**Chapter 46 - Reference Standards
**Section**46

Approved modification reads:

ASTM D3679—17~~13~~ Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . R703.11

**Proposed correction to modification**:

ASTM D3679—17~~13~~ Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding; ASTM D7254-17~~13~~ Specification for Polypropylene Siding; ASTM D7793-17~~13~~ Specification for Insulated Vinyl Siding . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . R703.11

**Modify Florida Building Code 2020**

**Code Change Cycle**2020

**Code Version**2020
**Sub Code**Building
**Chapter & Topic**Chapter 14 - EXTERIOR WALLS
**Section** 1409.9Vinyl Siding

Vinyl siding shall be certified and labeled as conforming to the requirements of ASTM D3679**-17** by an approved quality control agency.

**Modify Florida Building Code 2020**

**Code Change Cycle**2020

**Code Version**2020
**Sub Code**Building
**Chapter & Topic**Chapter 14 - EXTERIOR WALLS
**Section** 1409.13Polypropylene Siding

Polypropylene siding shall be certified and labeled as conforming to the requirements of ASTM D7254**-17** and those of section 1404.12.1 or 1404.12.2 by an approved quality control agency. Polypropylene siding shall be installed in accordance with the requirements of Section 1405.18 and in accordance with manufacturer’s instructions. Polypropylene siding shall be secured to the building so as to provide weather protection for the exterior walls of the building.

**Modify Florida Building Code 2020**

**Code Change Cycle**

**Code Version**2020
**Sub Code**Building
**Chapter & Topic**Chapter 35 – REFRENCED STANDARDS
**Section** ASTM

D3679-**17**~~-11~~ Specification for Rigid Poly (Vinyl Chloride) (PVC) siding.

**Modify Florida Building Code 2020**

**Code Change Cycle**

**Code Version**2020
**Sub Code**Building
**Chapter & Topic**Chapter 35 – REFRENCED STANDARDS
**Section** ASTM

D7254-**17**~~-07~~ Specification for polypropylene (PP) siding.

I attach the updated standards as requested.

**TWO: Revise section R703.14**

This change corrects missing testing reference and brings the Florida code into line with the 2018 I-Codes.

Revise section R703.14 as follows:

**R703.14 Polypropylene siding.**

R703.14 Polypropylene siding. Polypropylene siding shall be certified and labeled as conforming to the requirements of ASTM D7254 and those of **Section** **R703.14.2** **or** Section R703.14.3,by an approved quality control agency and shall conform to the fire separation distance requirements of Section R703.14.2.

Thank you,

Fernando Pages

Consultant to the Vinyl Siding Institute

**TAC Recommendation: AS -** with the understanding that the revisions discussed by Mr. Stafford and Mr. Dobson are to be provided to the Commission at the April 7, 2020 meeting for their consideration.

**Additional revisions received– post TAC**

**From:** Matt Dobson [mailto:mdobson@vinylsiding.org]
**Sent:** Thursday, March 26, 2020 2:32 PM
**To:** Madani, Mo
**Cc:** Stafford, Eric; Fernando Pages Ruiz
**Subject:** Polypropylene Siding Further Modifications.docx

Hi Mo,

Thanks for the additional input earlier, I believe these revisions are consistent with the current draft language while modifying to improve the intent and clarity that Eric Stafford suggested.

Please let me know if you agree, and again we’ll briefly present, if necessary, on April 7.

Matt

**IRC**

R703.14 Polypropylene siding. Polypropylene siding shall be certified and labeled as conforming to the requirements of ASTM D7254 ~~and those of section R703.14.3~~ by an approved quality control agency. In addition, polypropylene siding ~~and~~ shall conform to the fire separation distance requirements of Section R703.14.2 or R703.14.3 (F7711).

**IBC**

1404.12 Polypropylene siding. Polypropylene siding shall be certified and labeled as conforming to the requirements of ASTM D7254 ~~and those of Section 1404.12.1 or 1404.12.2~~ by an approved quality control agency. In addition, polypropylene siding shall conform to the fire separation distance requirements of Section 1404.12.1 or 1404.12.2. …. [balance of section remains the same]

**Commission Action: AM (See additional comment with TAC support)**