

December 2, 2016

Mo Madani Florida Department of Business and Professional Regulation Florida Building Codes and Standards 2601 Blair Stone Road Tallahassee, FL 32399

Mr. Madani,

I would like to request the following modifications to the exceptions in Section 1709.5.1 of the Florida Building Supplement to the 2015 International Building Code and Section R609.3 of the Florida Residential Supplement to the 2015 International Residential Code for inclusion in the 6<sup>th</sup> Edition of the Florida Building Code (2017):

- Add a fourth exception to Section 1709.5.1 stating that "Pass-through windows for serving from a single-family kitchen, where protected by a roof overhang of 5 feet (1.5 m) or more shall be exempted from the requirements of the water infiltration test".
- 2. Add a fourth exception to Section R609.3 stating that "Pass-through windows for serving from a single-family kitchen, where protected by a roof overhang of 5 feet (1.5 m) or more shall be exempted from the requirements of the water infiltration test".

#### Rationale:

- 1. This exact language is already included in Exception #3 of Section 2411.3.2.1 for the HVHZ and should therefore be acceptable for use throughout the remainder of the state.
- Pass-through windows are a product that is unique to Florida and they are commonly used for kitchen access from outdoor covered patio areas in single-family residences. Since these windows typically do not include a frame sill which is required to pass water infiltration tests, this exemption is necessary to allow the usage of these products.

#### Current Verbiage in Chapter 17 of the Florida Building Supplement to the 2015 International Building Code (with <u>proposed</u> fourth exception highlighted in yellow):

#### 1709.5.1 Exterior windows and doors.

Exterior windows and sliding doors shall be tested and *labeled* as conforming to AAMA/WDMA/CSA101/I.S.2/A440<u>or TAS 202 (HVHZ shall comply with TAS 202 and ASTM E</u> <u>1300 or Section 2404)</u>. .-The *label* shall state the name of the manufacturer, the *approved labeling agency and the product designation as specified in AAMA/WDMA/CSA101/I.S.2/A440*. Exterior side-hinged doors shall be tested and *labeled* as conforming to AAMA/WDMA/CSA101/I.S.2/A440 or comply with Section 1709.5.2. Products tested and *labeled* as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 shall not be subject to the requirements of Sections 2403.2 and 2403.3. Exterior windows and doors shall be labeled with a permanent label, marking, or etching providing traceability to the manufacturer and product. The following shall also be required either on a permanent label or on a temporary supplemental *label applied by the manufacturer: information identifying the manufacturer, the product* model/series number, positive and negative design pressure rating, product maximum size tested, impact resistant rating if applicable, Florida Product Approval number or Miami-Dade Product Approval number, applicable test standard(s), and approved product certification agency, testing laboratory, evaluation entity or Miami-Dade product approval.



The labels are limited to one design pressure rating per referenced standard. The temporary supplemental label shall remain on the window or door until final approval by the building official.

Exceptions:

1. Door assemblies installed in nonhabitable areas where the door assembly and area are designed to accept water infiltration need not be tested for water infiltration.

2. Door assemblies installed where the overhang (OH) ratio is equal to or more than 1 need not be tested for water infiltration. The overhang ratio shall be calculated by the following equation:

OH ratio = OH Length/OH Height

Where:

<u>OH length = The horizontal measure of how far an overhang over a door projects out from door surface.</u>

# <u>OH height = The vertical measure of the distance from the door sill to the bottom of the overhang over a door.</u>

<u>3. Exception:</u> Structural wind load design pressures for window <u>and door assemblies other units</u> <del>smaller</del> than the size tested in accordance with Section 1709.5.1 or <u>1709.5.2</u> shall be permitted to be <u>different higher</u> than the design value of the tested <u>assembly unit</u> provided such <u>different higher</u> pressures are determined by accepted engineering analysis. All components of the <u>alternate size assembly small unit</u> shall be the same as the tested <u>or labeled assembly; unit.</u> however, lineal components shall be permitted to vary in length compared to the tested or <u>labeled assembly.</u> Where such calculated design pressures are used, they shall be validated by an additional test of the window unit having the highest allowable design pressure.

i. Operable windows and doors rated in this manner shall comply with the following:

1. For windows and doors (other than sliding or bi-fold), the frame area of the

alternate size unit shall not exceed the frame area of the tested approved unit. 2. For sliding or bi-fold doors, the panel area of the alternate size unit shall not exceed the panel area of the tested approved unit.

3. Shall vary from the tested approved unit only in width, height or load requirements.

4. Shall not exceed 100 percent of the proportional deflection and fiber stress of the intermediate members of the approved unit.

5. Shall not exceed 100 percent of the concentrated load at the juncture of the intermediate members and the frame of the approved unit.

6. Shall not exceed the air and water infiltration resistance of the tested approved unit.

7. Shall not exceed the maximum cyclic pressure of the tested approved unit when tested per TAS 201 and TAS 203 or ASTM E 1886 and ASTM E 1996 where applicable.

ii. Non-operable windows and doors rated in this manner shall comply with the following:

<u>1. The frame area of the alternate size unit shall not exceed the frame area of the tested approved unit.</u>

2. Shall vary from the tested approved unit only in width, height or load requirements.

3. The maximum uniform load distribution (ULD) of any side shall be equal to the uniform load carried by the side divided by the length of the side.



4. The ULD of any member shall not exceed the ULD of the corresponding member of the tested approved unit.

5. The ULD of each member shall be calculated in accordance with standard engineering analysis.

6. Shall not exceed the air and water infiltration resistance of the tested approved unit.

7. Shall not exceed the maximum cyclic pressure of the tested approved unit when tested per TAS 201 and TAS 203 or ASTM E 1886 and ASTM E 1996 where applicable.

4. Pass-through windows for serving from a single-family kitchen, where protected by a roof overhang of 5 feet (1.5 m) or more shall be exempted from the requirements of the water infiltration test.

## Current Verbiage in Chapter 6 of the Florida Residential Supplement to the 2015 International Residential Code (with <u>proposed</u> fourth exception highlighted in yellow):

# R609.3 Testing and labeling.

Exterior windows and sliding doors shall be tested by an *approved* independent laboratory, and bear a *label* identifying manufacturer, performance characteristics and *approved* inspection agency to indicate compliance with AAMA/WDMA/CSA 101/I.S.2/A440 or TAS 202 (HVHZ shall comply with TAS 202 and ASTM E 1300). Exterior side-hinged doors shall be tested and *labeled* as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 or AMD 100 ANSI/WMA 100, or comply with Section R609.5. Exterior windows and doors shall be labeled with a permanent label, marking, or etching providing traceability to the manufacturer and product. The following shall also be required either on a permanent label or on a temporary supplemental label applied by the manufacturer: information identifying the manufacturer, the product model/series number, positive and negative design pressure rating, product maximum size tested, impact-resistance rating if applicable, Florida Product Approval number or Miami-Dade Product Approval number, evaluation entity or Miami-Dade Product Approval.

The labels are limited to one design pressure rating per reference standard. The temporary supplemental label shall remain on the window or door until final approval by the building official.

## Exceptions:

1. Door assemblies installed in nonhabitable areas where the door assembly and area are designed to accept water infiltration need not be tested for water infiltration.

2. Door assemblies installed where the overhang (OH) ratio is equal to or more than 1 need not be tested for water infiltration. The overhang ratio shall be calculated by the following equation:

OH ratio = OH Length/OH Height

Where:

<u>OH length = The horizontal measure of how far an overhang over a door projects out</u> from door surface.

OH height = The vertical measure of the distance from the door sill to the bottom of the overhang over a door.

3. Decorative glazed openings.

4. Pass-through windows for serving from a single-family kitchen, where protected by a roof overhang of 5 feet (1.5 m) or more shall be exempted from the requirements of the water infiltration test.



## Current Verbiage in Chapter 24 of the Florida Building Supplement to the 2015 International Building Code (with <u>existing</u> third exception highlighted in yellow):

**2411.3.2.1** Operative window and door assemblies shall be tested in accordance with the requirements of this section, TAS 202 and provisions from <u>ANSI/AAMA/MWWDA 101/IS 2</u> <u>AAMA/WDMA/CSA 101/I.S.2/A440</u> and the forced entry prevention requirements of the American Architectural Manufacturers Association (AAMA) Sections 1302.5 and 1303.5.

#### **Exceptions:**

1. Door assemblies installed in nonhabitable areas where the door assembly and area are designed to accept water infiltration, need not be tested for water infiltration.

2. Door assemblies installed where the overhang (OH) ratio is equal to or more than 1 need not

be tested for water infiltration. The overhang ratio shall be calculated by the following equation:

OH ratio = OH Length/OH Height

where:

OH length = The horizontal measure of how far an overhang over a door projects out from door's surface.

OH height = The vertical measure of the distance from the door's sill to the bottom of the overhang over a door.

 Pass-through windows for serving from a single-family kitchen, where protected by a roof overhang of 5 feet (1.5 m) or more shall be exempted from the requirements of the water infiltration test.

Please contact me should you have any questions regarding this proposal.

Sincerely,

a. Lynn Millen

Anthony Lynn Miller, P.E. Senior Code Compliance Engineer PGT Industries, Inc. 1070 Technology Drive North Venice, FL 34275 (941) 480-1600