



WINDOWS & DOORS

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Department of Business and Professional Regulation Deputy Agency Clerk	
CLERK	Brandon Nichols
Date	7/2/2013
File #	

Via Email Transmission: Mo.Madani@dbpr.state.fl.us

7/2/13

Mr. Mo Madani
Florida Building Commission
c/o Florida Department of Business & Professional Regulation
1940 N. Monroe St
Tallahassee, FL 32399

DS 2013-053

Subject: Petition for a Declaratory Statement before the Florida Building Commission

Referenced Code & Sections:
Residential Ch3 – R301.2(2)
Residential Ch3 – R301.2.1.7
Residential Ch6 – R612.5
Building Ch16 – 1609.1.5
ASCE/SEI 7-10

Mr Madani,

Please let this letter serve as a Petition for a Declaratory Statement before the Florida Building Commission. Pella Corporation is a manufacturer of windows and doors, and distributes Florida Approved products through retail locations in the state of Florida. I am employed by Pella Corporation as a Territory Representative, and I am responsible for the sale of Pella products through retail locations. The scenario in which the Declaratory Statement is sought involves a customer of one of Pella's distributors. The contractor has purchased a Florida Approved Single-Hung window; and as with all of Pella's products, this window has a design pressure that has been tested to and is based on allowable/nominal design loads. As indicated by ASCE/SEI 7-10, the testing requirements for fenestration products based on allowable stress design loads has not changed. However, the calculations used to determine a home's design pressures now results in pressures based on strength design loads; thus, a conversion must be made to the home's pressures in order to properly compare the product to the structure. According to Building Code Section 1609.1.5, this section states that since the product has been tested for wind load resistance based on allowable or nominal wind loads; the design loads for the structure that are determined in accordance with ASCE/SEI 7-10 and are based on strength design loads must be multiplied by a factor of 0.6 for appropriate product to structure comparison.

QUESTION #1: Since the window has a design pressure that has been tested and is based on allowable/nominal wind loads, and this product is being installed in a structure with pressures determined in accordance with ASCE/SEI 7-10 based on strength design loads; is the correct course of action to multiply the building's strength design loads by 0.6 as indicated by 1609.1.5 to allow for appropriate design pressure comparison to the window's design pressure?

This next question inquires as to the correct method for determining a home's design pressure using the table from the Residential Code R301.2(2). This question assumes the home is residential single-family, occupancy category 2, fully enclosed, exposure category B, and a mean roof height less than 30 feet. The design wind speed and wall zone can be variable for this scenario. The contractor has a Florida Approved Pella single-hung window that has a design pressure based on allowable stress design. This window is being installed in a residential home opening that has a design pressure that has been determined in accordance with ASCE/SEI 7-10; the pressure is based on strength design loads. Utilizing the table from the Residential Code Section R301.2(2) for this opening, and following the rows/columns for design wind speed, wall zone,



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and effective wind area; you are provided with a design pressure that is based on an ultimate design wind load. Per R301.2.1.7 and R612.5, this strength based design load is to be multiplied by 0.6 to convert to an allowable stress design load. This then allows appropriate comparison to the window's pressure that is based on allowable stress design.

QUESTION #2: Is the intent of table R301.2(2) meant to be interpreted as listing strength based design pressures based on ultimate wind speeds, thus requiring a conversion using the 0.6 multiplier as indicated in sections R612.5 and R301.2.1.7 to allow for a proper comparison to the allowable pressures that the window has been tested to?

I thank you for your time and consideration, and look forward to the Commission's response. Please reach out to me via email or phone if there are any questions, or if further clarification is needed.

Regards,

A handwritten signature in black ink, appearing to read "Jared Cejka", followed by the date "7/2/13".

Jared Cejka
Pella Windows & Doors

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