

FILED

Department of Business and Professional Regulation
Deputy Agency Clerk

CLERK Brandon Nichols

Date 9/13/2012

File #

W. W. Schaefer Engineering & Consulting, P.A. (CA #6809)

7480 150th Court North
Palm Beach Gardens, FL 33418

September 13, 2012

DS 2012-076

Re: Request for DEC statement from the Florida Building Commission.

As a structural engineer guiding window & door manufacturers through product approval testing requirements and evaluating products for state approval, I find uncertainty with what is stated in the 2010 FBC sections 2411.1 11 & 2411.3.3.7. This uncertainty is hampering my ability to properly establish test criteria for window & door manufacturers and to evaluate their products for state approval.

Sections 2411.1.11 & 2411.3.3.7 state: "Exterior lite of glass in an insulated glass unit shall be safety glazed. **Exceptions:** 1. Large missile impact-resistant glazed assemblies. 2. Non-missile impact units protected with shutters."

If taken as written, sections 2411.1.11 & 2411.3.3.7 seemingly state that a window or door with IG glass, that is large missile impact resistant, is not required to have safety rated glass as the exterior pane. There are no special considerations in these code sections that mention or imply otherwise.

I have been approached by a manufacturer to guide them through the testing and evaluation process for their casement windows, fixed windows and swing doors. Please consider the 3 cases shown below and answer the corresponding questions. The answers to these questions should clear up the uncertainties I have as the evaluating engineer, allowing me to correctly specify what is to be tested and what is to be included in their approvals.

Case 1. Large missile impact approved exterior Casement window being installed into an opening at the 10th floor of a building located in Miami-Dade County (HVHZ). Window has large missile impact rated IG glass that consists of laminated interior glass and single pane annealed exterior glass. Windows located in the below floors are potentially small missile rated products. My question is as follows:

1. Is this large missile impact rated window, with IG impact glass consisting of non-safety rated glass as the exterior pane, acceptable for installation into the 10th floor of the building mentioned above or must the casement windows exterior single pane of glass be tempered/safety glazed?

Case 2: Large missile impact approved exterior fixed window being installed directly next to an entry door of a building located in Miami-Dade County (HVHZ). Window height is that of the door, its day light opening width is at least 36", the window sill extends to floor level, and the window has large missile impact rated IG glass that consists of laminated interior glass and single pane annealed exterior glass. My question is as follows

1. Is this large missile impact rated window, with IG impact glass consisting of non-safety rated glass as the exterior pane, acceptable for installation next to the door as described above or must the windows exterior single pane of glass be tempered/safety glazed?

Case 3: Large missile impact approved exterior out-swing French full light glass door being installed as a main entry door into a building located in Miami-Dade County (HVHZ). Door has large missile impact rated IG glass that consists of laminated interior glass and single pane annealed exterior glass. My question is as follows:

1. Is this large missile impact rated door, with IG impact glass consisting of non-safety rated glass as the exterior pane, acceptable for installation into the building described above or must the doors exterior single pane of glass be tempered/safety glazed?

Please issue a DEC statement answering the questions posed here-in.

Thank you,

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