R301.2.1.2

Protection of Openings in Windborne Debris Regions

CHANGE TYPE: Modification

CHANGE SUMMARY: Windborne debris regions are now defined in a new map. Revisions to the text clarify that protection from windborne debris is required for all exterior glazing in a building, not just windows.

2012 CODE: R301.2.1.2 Protection of Openings. Exterior glazing Windows in buildings located in windborne debris regions shall <u>be</u> have glazed openings protected from windborne debris. Glazed opening protection for windborne debris shall meet the requirements of the Large Missile Test of ASTM E 1996 and ASTM E 1886 referenced therein. <u>The</u> applicable wind zones for establishing missile types in ASTM E 1996 are shown on Figure R301.2(4)C. Garage door glazed opening protection for windborne debris shall meet the requirements of an approved impact resisting standard or ANSI/DASMA 115.

Exception: Wood structural panels with a minimum thickness of 7_{16} inch (11 mm) and a maximum span of 8 feet (2438 mm) shall be permitted for opening protection in one- and two-story buildings. Panels shall be precut and attached to the framing surrounding the opening containing the product with the glazed opening. Panels shall be predrilled as required for the anchorage method and shall be secured with the attachment hardware provided. Attachments shall be designed to resist the component and cladding loads determined in accordance with either Table R301.2(2) or ASCE 7, with the permanent



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corrosion-resistant attachment hardware provided and anchors permanently installed on the building. Attachment in accordance with Table R301.2.1.2 is permitted for buildings with a mean roof height of 33 feet (10 058 mm) or less where <u>located in Wind Zones 1 and 2 in accordance with Figure R301.2(4)C wind speeds do not exceed 130 miles per hour (58 m/s)</u>.

R202 Definition

Windborne Debris Region. Areas within hurricane-prone regions <u>as</u> <u>designated in accordance with Figure R302.1(4)C</u> within one mile of the coastal mean high water line where the basic wind speed is 110 miles per hour (49 m/s) or greater; or where the basic wind speed is equal to or greater than 120 miles per hour (54 m/s); or Hawaii.

CHANGE SIGNIFICANCE: A new map, Figure R301.2(4)C, has been introduced to delineate the various windborne debris regions in the hurricane-prone areas of the Atlantic and Gulf coasts. The definition for windborne debris region also has been revised to delete references to wind speed and proximity to the coast in favor of referencing the new map. Protection of glazing to resist impact from windborne debris must be designed in accordance with the Large Missile Test of ASTM E1996 based on the wind zone shown in Figure R301.2(4)C. The exception allowing the use of 7/16-inch wood structural panels to protect glazed openings remains in place but now references Wind Zones 1 and 2 in the new map and deletes mention of wind speed. Previously, the IRC limited use of this exception to windborne debris regions with wind speeds not greater than 130 mph.