

WINDOW/DOOR REPLACEMENT POLICY

The SC LLR approved wind maps have the city of Goose Creek within the 140mph ultimate wind design zone.

Inclusion in this zone requires that wind borne debris code provisions apply for new and replacement windows and doors. Due to this provision, homeowners are left with two options:

- 1. Installation of impact resistant glass
- 2. Wind borne debris panels or shutters.

If panels are used, the code gives clear guidance on what is required to comply. If impact resistant glass is used, documentation of the testing standards or panel design is required before permits will be issued.

2021 International Existing Building Code

Section 505.1 – Replacement Glass

The installation or replacement of glass shall be as required for new installations.

Section 505.3 – Replacement window emergency escape and rescue openings.

Where windows are required to provide emergency escape and rescue openings in R-3 occupancies and one- and two-family dwellings and townhouses regulated by the International Residential Code, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.4 of the International Building Code and Sections R310.2.1, R310.2.2 and R310.2.3 of the International Residential Code, provided that the replacement window meets the following conditions:

 The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
The replacement of the window is not part of a change of occupancy.

2021 International Residential Code for One- and Two-Family Dwellings

R301.2.1.2 Protection of openings.

Exterior glazing in buildings located in windborne debris regions shall be protected from windborne debris. Glazed opening protection for windborne debris shall meet the requirements of the Large Missile Test of ASTM E1996 and ASTM E1886 as modified in Section 301.2.1.2.1. Garage door glazed opening protection for windborne debris shall meet the requirements of an approved impact-resisting standard or ANSI/DASMA 115.

<u>Exception</u>: Wood structural panels with a thickness of not less than 7/16 inch (11 mm) and a span of not more than 8 feet shall be permitted for opening protection. 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 corrosion-resistant attachment hardware provided and anchors permanently installed on the building.

ENERGY CODE REQUIREMENTS - Max U-Factor = .5 or less Max

Max SHGC = .3 or less

Max U-Factor = .50 or less

Note: Please have window/door stickers or factory affidavit on site for inspection for compliance with U-Factor and SHGC where applicable.

A **WIND BORNE DEBRIS AFFIDAVIT** must be submitted with the application.

For any additional information contact the Building Inspection Bureau at 843.553.8350 ex1407