TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective April 1, 2010
WIN-1274

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC). This product shall be subject to reevaluation January 2011.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.

Series 700C Aluminum Double Hung Windows, Non-impact Resistant, manufactured by:

Thermal Windows, Inc.
12805 East 31st Street
Tulsa, OK 74146-2310
(918) 663-7580

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 700C window is an aluminum double hung window. The aluminum double hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for aluminum double hung windows based on the following tested construction:

General Description:

System	Description	Label Rating
1	Series 700C Aluminum Double Hung Window; (X/X)	H-C60 56 x 91

Product Dimensions:

System	Overall Size	Top Sash Size	Bottom Sash
1	56" x 91"	$53\frac{5}{16}$" x 45"	53" x $44\frac{7}{8}$"

Glazing Description:

System	Glass Construction [1]	Glazing Method [2]
1	IG-1	GM-1

Note: [1] See the "Glass Construction Key" for the glazing construction.
[2] See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:
IG-1: Both operable sashes contain sealed insulating glass units. The sealed insulating glass units are comprised of two lites of $\frac{3}{16}$" thick annealed glass separated by a desiccant-filled aluminum spacer system. The glass thickness and type used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:
GM-1: The insulating glass units are wrap around vinyl channel glazed.

Frame Construction: The frame members are manufactured from extruded aluminum. The frame corners are coped, butted, and secured with screws. The frame has a high sill and a heavy duty bottom sash interlock rail. The frame members are thermally broken with polyurethane.

Sash Construction: The sash members are manufactured from extruded aluminum. The sash corners are coped, butted, and secured with screws. The sash members are thermally broken with polyurethane.

Reinforcement: None.

Hardware:
- Spiral balances; Four (4) required; Two (2) in each side jamb.
- Spring latches; Two (2) required; Located at the top rail of the top sash and the bottom rail of the bottom sash.
- Metal pivot bar; Four (4) required; Located at each end of the bottom sash bottom rail.
- Plastic tilt latches; Four (4) required; Located at each end of the top sash and the top rail.
- Metal sweep locks; Two (2) required; Located at the bottom sash interlock rail, approximately 9 $\frac{3}{4}$ inches from each end.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**TWI-1**); product name: **Series 700-C**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	56	91	$\pm$ 60

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Spruce-Pine-Fir dimension lumber. The frame head and side jambs are secured to the wood framing with No. 8 x 2" long screws. Along the head, minimum two (2) fasteners are required, evenly spaced. Along each side jamb, minimum three (3) fasteners are required, evenly spaced. The interior and exterior of the window frame is secured with minimum ½" x 1" wood stops secured with No. 8 screws located at each corner and spaced approximately 12 inches on center along the perimeter of the window.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.