

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1070

Effective May 1, 2009

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 May 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 07 Aluminum Clad Wood Double Hung Talon Transom Windows, Impact Resistant,
manufactured by:

Eagle Window and Door
2045 Kerper Blvd
Dubuque, IA 52001
563-556-2270
www.eaglewindow.com

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 aluminum clad double hung transom windows are extruded aluminum clad wood double hung windows. The aluminum clad wood double hung transom windows evaluated in this report are individual, impact resistant windows based on the following tested constructions.

General Description:

System	Description	Label Rating	Hallmark Certification
1	Aluminum Clad Wood Double Hung Transom Window	FW-R55 (48 x 24)	099-H-692.00 099-H-692.01
2	Aluminum Clad Wood Double Hung Transom Window	FW-R55 (48 x 24)	099-H-693.00 099-H-693.01

Product Dimensions:

System	Overall Frame Size	Sash Size
1	48" x 24"	45 $\frac{1}{16}$ " x 21 $\frac{13}{16}$ "
2	48" x 24"	45 $\frac{1}{16}$ " x 21 $\frac{13}{16}$ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	SG-1	GM-1
2	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:

SG-1: The window contains a laminated glass unit. The laminated glass unit is comprised of two sheets of double strength ($\frac{1}{8}$ ") annealed glass lites and a 0.090" PVB interlayer. 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.

IG-1: Sealed insulating glass unit. The sealed insulating glass unit is comprised of a laminated glass unit and a $\frac{5}{32}$ " heat-strengthened lite separated by a desiccant-filled stainless steel spacer system. The laminated glass unit is comprised of two sheets of double strength ($\frac{1}{8}$ ") annealed glass with a 0.090" PVB interlayer. 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 unit is set from the interior against InstantGlaze II silicone sealant. Wood glazing stops secure the insulating glass units in place from the interior. The wood glazing stops are secured to the frame with brads spaced 1 inch from each corner and 6 to 8 inches on center.

Frame Construction (Systems 1 and 2): The head frame has corners that are coped, butted, sealed with silicone and secure with three staples per corner. Sill frame corners are coped, butted, sealed with a corner gasket and silicone, and secured with two (2) No. 8 x $1\frac{3}{4}$ " screws. Sill corners are coped, butted, sealed with a corner gasket and silicone, and secured with one (1) No. 7 x $1\frac{1}{4}$ " screws and one (1) No. 6 x $\frac{7}{16}$ " screw.

Aluminum Cladding: The extruded aluminum cladding is slip-fit over the wood frame members with the corners miter cut, silicone sealed, nylon corner keyed, and secured with two (2) No. 6 x $\frac{7}{16}$ " screws per corner.

Sash Construction (Systems 1 and 2): The lower sash and upper sash, top rail and stiles are composed of molded pine. The lower sash meeting rail is laminated veneer lumber. Upper sash corners are mortise and tenon construction and are fastened with glue and two (2) No. 8 x $1\frac{1}{2}$ " screws at each corner. Lower sash corners are mortise and tenon construction and are secured with glue and one (1) No. 8 x $2\frac{1}{4}$ " screw per corner and one (1) No. 8 x $1\frac{1}{2}$ " screw at each corner.

Aluminum Cladding: Extruded aluminum cladding is slip-fit over the upper wood sash members with the corners coped, silicone sealed with a nylon corner key and two (2) No. 4 x $\frac{1}{2}$ " screws per corner. Extruded aluminum cladding was slip-fit over the lower wood sash members with the corners coped, butted and sealed with butyl.

Hardware Description: No hardware is utilized.

Product Identification:

Systems 1-2: A certification program label (WDMA Hallmark Certified) will be affixed to the window. The certification program label includes the manufacturer's name; product name; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05, ASTM E-1886-02, and ASTM E-1996-02.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	48	24	+55/-65
2	48	24	+55/-65

Impact Resistance: These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland II zone** and the **Seaward zone**. The window assemblies passed Missile Level D specified in ASTM E 1996-02. The window assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These window assemblies will not need to be protected with an impact protective system.

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

Tested Higher Negative Design Pressure: The WDMA label indicates that the product was tested to a higher negative pressure. The higher negative design pressure is specified in the table above and on the WDMA label.

INSTALLATION INSTRUCTIONS

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

Installation:

Systems 1-2: The wall framing shall be minimum Southern Yellow Pine dimension lumber. The window is installed with installation clips (1 1/2" x 6 1/2" x 0.05" galvanized steel) that are secured to the window with two (2) No. 8 x 3/8" screws and to the framing with two (2) No. 8 screws that are placed 12 inches from corners on all four sides and at the midspan of the head and sill. The fasteners shall be long enough to penetrate a minimum of 1 1/2" into the wall framing.

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.