

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1482

Effective December 1, 2011

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 **August 2014**.

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.

Ultra Aluminum Clad Wood Ogee Direct Set Fixed Window, Impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc.
1323 South Eleventh Avenue
Wausau, WI 54401
(715) 842 - 5666

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 wood ogee direct set fixed window evaluated in this report is an impact resistant window. This product evaluation report is for an aluminum clad wood ogee direct set fixed window based on the following tested construction:

General Description:

System	Description	Label Rating	Hallmark Certification
1	Ultra Aluminum Clad Wood Ogee Direct Set; Missile Level D, Wind Zone 4	CW-PG85 80x72-FW FW-C85 80 x 72 ASTM E 1886 / ASTM E 1996	413-H-1120.00 413-H-1120.01 413-H-1120.02 413-H-1120.03

Product Dimensions:

System	Overall Size	Fixed Sash Size	Glass Size
1	80" x 72"	N/A	77 ⁵ / ₈ " x 69 ⁵ / 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: Sealed insulating glass unit. The sealed insulating glass unit is comprised of a laminated glass unit and a 1/4" fully tempered monolithic glass lite separated by a desiccant-filled stainless steel spacer system. The laminated glass unit is comprised of two 1/4" annealed glass lites with a 0.090" SGP interlayer. The glass thickness used in 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 onto a bed of silicone sealant backbedding. Another interior bead of structural silicone sealant is applied at the interior edge of the insulating glass unit along the perimeter. Wood interior glazing stops are secured with staples spaced 2 inches from the each corner and 6-8 inches on center.

Frame Construction: The frame members consist of molded pine. The frame corners are rabbeted, butted, sealed with silicone, and secured with staples and screws. **Aluminum cladding:** The extruded aluminum cladding corners are mitered, joined with a corner key, sealed with silicone, and secured with screws. The extruded aluminum cladding is secured to the head, sill, and side jamb frame members with screws.

Fixed Sash Construction: N/A

Product Identification: 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; and approved inspection agency to indicate compliance with AAMA/WDMA/CSA 101/I.S.2/A440-05, AAMA/WDMA/CSA 101/I.S.2/A440-08, and with ASTM E 1886-05 and ASTM E 1996-06.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	80	72	± 85

Impact Resistance: These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I** and **Seaward** zones. These window assemblies have passed Missile Level D specified in ASTM E 1996-06. These window assemblies may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded. These window assemblies will not need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

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.

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:

Option 1: The window assembly shall be fastened to minimum Southern Yellow Pine lumber. The window assembly is secured to the wall framing using Kolbe & Kolbe metal installation clips. The installation clips (1 $\frac{5}{8}$ " x 10 $\frac{1}{16}$ " x 0.04") are secured to the window frame side jambs, head, and sill. The clips are secured to the window frame with two (2) No. 8 x $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x 1 $\frac{3}{4}$ " screw. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ " into the wall framing. The spacing of the clips is specified in the table below.

Installation Clip Spacing:

System	Head and Sill (distance from each end)	Head and Sill (on center spacing)	Side Jambs (distance from each end)	Side Jambs (on center spacing)
1	10"	10"	10 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "

Option 2: The window assembly shall be fastened to minimum Southern Yellow Pine lumber. The window assembly is secured to the wall framing using the window frame with minimum No. 10x2 $\frac{1}{2}$ " screws. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ " into the wall framing. The spacing of the fasteners is specified in the table below.

Fastener Spacing:

System	Head and Sill (distance from each end)	Head and Sill (on center spacing)	Side Jambs (distance from each end)	Side Jambs (on center spacing)
1	8"	6 $\frac{3}{8}$ "	8"	8"

Nailing Flange (both options): The perimeter of the window is secured with minimum 12 gauge smooth shank roofing nails spaced 12 inches on center penetrating through the nailing flange.

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.