

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1488

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 **April 2012**.

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 Magnum Aluminum Clad Wood Single Hung Window with Studio, Non-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 single hung windows with studio evaluated in this report are non-impact resistant windows. This product evaluation report is for aluminum clad wood single hung windows with studio based on the following tested constructions:

### General Description:

System	Description	Rating	Hallmark Certification
1	Ultra Magnum Single Hung with Studio; High Performance	LC-PG50 115x90-H H-LC50 115 x 90	413-H-997.00 413-H-997.01

### Product Dimensions:

**Overall Size:** 115  $\frac{1}{8}$ " x 90  $\frac{1}{16}$ "

### Double Hung Window:

Single Hung Size	Top Sash Size	Bottom Sash Size	Glass Size
48 $\frac{9}{16}$ " x 90 $\frac{1}{16}$ "	44 $\frac{1}{8}$ " x 43 $\frac{5}{16}$ "	44 $\frac{1}{8}$ " x 44 $\frac{3}{8}$ "	40" x 40"

### Fixed Studio Window:

Studio Overall Size	Studio Sash Size	Studio Glass Size
66 $\frac{5}{8}$ " x 90 $\frac{1}{16}$ "	64 $\frac{1}{8}$ " x 86 $\frac{1}{16}$ "	60" x 81 $\frac{1}{2}$ "

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**Glazing Description:**

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glazing construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

IG-1: The single hung window is glazed with sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites separated by a desiccant filled stainless steel spacer system. The studio window is glazed with an insulating glass unit that is comprised of two  $\frac{1}{4}$ " annealed glass lites separated by a desiccant filled stainless steel spacer system. The glass thickness and type used in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-02.

**Glazing Method Key:**

GM-1: The insulating glass units are set against silicone sealant. Along the interior, wood glazing stops are secured with brads.

**Single Hung and Studio Frame Construction:** The frame members consist of molded pine. The frame corners are rabbeted, butted, sealed with silicone, and secured with fasteners. **Aluminum Cladding:** Extruded aluminum is used at the head, sill, and side jambs and snap-fit onto the wood frame members. The aluminum corners are joined with a corner key and fasteners. Interior wood stops are secured at the head and side jambs with fasteners.

**Single Hung Sash Construction:** The sash members consist of molded pine sections. The sash corners are mortise and tenon construction and are secured with fasteners. **Aluminum Cladding:** The roll-formed aluminum cladding is snap-fit onto the wood sash members.

**Studio Sash Construction:** The sash members consist of molded pine sections. The sash corners are mortise and tenon construction and are secured with fasteners. **Aluminum Cladding:** The roll-formed aluminum cladding is snap-fit onto the wood sash members. The sash is set against the aluminum frame with silicone and secured to the sill with fasteners.

**Mull Construction:** The side jamb of the double hung window and the side jamb of the fixed window are secured together with two rows fasteners. Corrugated nails are fastened across each end of the head and sill. An aluminum mull cover is snap-fit over the outside seam.

**Hardware:**

- Vinyl jamb liners w/ sash balances; Two (2) required; Located on the side jambs.
- Metal tilt/pivot pins; Two (2) required; Located on the bottom corners of the bottom sash
- Metal cam locks with angle screw; Two (2) required; Located on the meeting rails

**Product Identification:** A certification program label (WDMA) 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 and AAMA/WDMA/CSA 101/I.S.2/A440-08.

## LIMITATIONS

### Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	115 $\frac{1}{8}$	90 $\frac{1}{16}$	$\pm 50$

**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:** 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 drawings are available from the manufacturer.

The windows shall be fastened to minimum Southern Yellow Pine dimensional lumber. All fasteners shall be long enough to penetrate a minimum of 1  $\frac{1}{2}$  inches into the wall framing.

**Nailing flange:** The nailing flange is nailed around the perimeter to the wall framing with minimum 12 gauge smooth shank roofing nails spaced approximately 7 inches on center through the nailing flange.

**Option 1:** The unit is secured to the wall framing using galvanized steel installation clips (1  $\frac{5}{8}$ " x 10  $\frac{1}{16}$ " x 0.04"). Along the head of the single hung, the clips are spaced approximately 16  $\frac{3}{16}$  inches from each corner and on center. Along the head of the studio, the clips are spaced approximately 16  $\frac{5}{8}$  inches from each corner and on center. Along the side jambs of the single hung and the studio, the clips are spaced approximately 15 inches from each corner and on center. Each clip is attached to the window with two (2) No. 8 x  $\frac{3}{4}$ " and to the wall framing with one (1) No. 8 screw.

**Option 2:** The unit is attached to the wall framing using No. 10 x 2  $\frac{1}{2}$ " screws. Along the head of the single hung, the fasteners are spaced approximately 16  $\frac{3}{16}$  inches from each corner and on center. Along the head of the studio, the fasteners are spaced approximately 16  $\frac{5}{8}$  inches from each corner and on center. Along the side jambs of the single hung and the studio, the fasteners are spaced approximately 15 inches from each corner and on center.

**Mullion:** The mullion is anchored on each end with Gemini installation clips which are secured with two (2) No. 8 x 2  $\frac{1}{4}$ " screws per clip. Each clip is attached to the wall framing with two (2) No. 8 screws.

**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.