

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION
 WIN-1822

Effective Date: November 1, 2013
 Reevaluation Date: **July 2016**

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 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 Traditional Aluminum Clad Wood Double Hung with Studio, Non-Impact Resistant,
 manufactured by

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

General Description:

System	Description	Label Rating	Design Pressure Rating (psf)	Hallmark Certification
1	Ultra Traditional Aluminum Clad Wood Double Hung with Studio	LC-PG25 123 x 80 - H	+25, -25	413-H-1214.00 413-H-1214.01 413-H-1214.02

Product Dimensions:

Overall Size (System 1): 123.00" x 80.44"

Double Hung Window:

System	Double Hung Window Size	Top Sash Size	Bottom Sash Size
1	45.50" x 80.44"	42.50" x 39.06"	42.50" x 39.94"

Studio Window:

System	Studio Size
1	77.50" x 80.44"

Product Identification (Certification Agency Label on Window):

System	Certification Agency	WDMA
1	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Traditional Double Hung w/Studio
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11
		AAMA/WDMA/CSA 101/I.S.2/A440-08

Impact Resistance:

Impact Resistant	Requirement
No	Impact protective system required when product is installed in areas where windborne debris protection is required

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 (Studio):

System	Distance From Each Corner	Head, Sill (on center spacing)	Side Jambs (on center spacing)
1	Head, Sill: 19 $\frac{3}{8}$ " Side Jambs: 20 $\frac{1}{8}$ "	19 $\frac{3}{8}$ "	20 $\frac{1}{8}$ "

Installation Clip Spacing (Double Hung):

System	Distance From Each Corner	Head (on center spacing)	Side Jambs (on center spacing)
1	Head: 22 $\frac{3}{4}$ " Side Jambs: 20 $\frac{1}{8}$ "	N/A	20 $\frac{1}{8}$ "

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. 10 screws. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing. The spacing of the fasteners is specified in the table below.

Fastener Spacing (Studio):

System	Distance From Each Corner	Head, Sill (on center spacing)	Side Jambs (on center spacing)
1	Head, Sill: 19 $\frac{3}{8}$ " Side Jambs: 16 $\frac{1}{8}$ "	19 $\frac{3}{8}$ "	16 $\frac{1}{8}$ "

Fastener Spacing (Double Hung):

System	Distance From Each Corner	Head (on center spacing)	Side Jambs (on center spacing)
1	Head: 22 $\frac{3}{4}$ " Side Jambs: 16 $\frac{1}{8}$ "	N/A	16 $\frac{1}{8}$ "

Nailing Flange (Options 1 and 2): The nailing flange is secured to the wall framing with minimum 12 gauge smooth shank roofing nails spaced 7 inches on center along the perimeter of the window.

Vertical Mullion Attachment (Options 1 and 2): The mull anchors are two Gemini clips located at the top and bottom mull end. The Gemini clips are secured to the mull with two (2) No. 8 x 2 $\frac{1}{4}$ " screws. The Gemini clips are secured to the wall framing with two (2) No. 8 x 1 $\frac{1}{4}$ " 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.