

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

WIN-412

Effective Date: July 1, 2011 (Revised July 1, 2013)

Reevaluation Date: **July 2014**

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.

Heritage Traditional Wood Operating Circle Top Casement Windows, Individual Windows and Mulled Assemblies, Non-impact Resistant, manufactured by

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

General Description:

System	Description	Rating	Design Pressure Rating	Hallmark Certification
1	Heritage Traditional Operating Casement Quarter Circle Mulled; (XX)	C-R60 72 x 72 R-PG60 72x72-H	+60 / -60 psf	413-H-1108.00 413-H-1108.01

Product Dimensions:

System	Overall Size	Sash Size(s)	Glass Size(s)
1	72 1/4" x 72"	Two: 34 1/16" x 70 1/16"	Two: 31 1/4" x 67 1/4"

Product Identification (Certification Agency Label on Window):

System		
1	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork, Co., Inc.
	Product Name	Heritage Casement Quarter Circle Mulled
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05; 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:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1	18"	18" along radius	18"	18"

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:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1	Side Jambs: 12" Head/Sill: 18"	12" along radius	18"	12"

Vertical Mullion (System 1): The vertical mullion is secured to the wall framing with a 3S anchor that is secured to a steel anchor plate and an 18 gauge steel anchor clip at each end of the mullion. The anchor plate is interlocked with the mullion stiffeners. The anchor clips are secured to the window sill with six (6) No. 8 x $\frac{3}{4}$ " screws and with four (4) No. 8 x 2 $\frac{1}{4}$ " screws. The anchor clips are secured to the wall framing with eight (8) No. 8 x 1 $\frac{1}{4}$ " screws. At the head, a strip anchor is secured to the wall framing with four (4) No. 12 x 1 $\frac{3}{4}$ " screws. The strip anchor is secured to the vertical mullion with a stainless steel pin.

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.