



Product Evaluation

WIN1483 | 1014

Engineering Services Program

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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID:	WIN-1483	Effective Date:	December 1, 2011
		Revised:	October 1, 2014
		Re-evaluation Date:	May 2015

Product Name: Ultra Aluminum Clad Wood Operating/Fixed Combination Casement Windows, Non-Impact Resistant

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

General Description:

System	Description	Label Rating	Design Pressure Rating	Hallmark Certification
1	Ultra Operating/Fixed Casement Combination	LC-PG70 108 x 72 – C C-C70 108 x 72	+70 / -70 psf	413-H-1103.00 413-H-1103.01
2	Ultra Operating/Fixed Casement Combination	R-PG60 144 x 72 – C C-R60 144 x 72	+60 / -60 psf	413-H-1112.00 413-H-1112.01
3	Ultra Operating/Fixed Casement Combination	LC-PG65 96 x 120-C C-LC65 96 x 120	+65 / -65 psf	413-H-1149.00 413-H-1149.01

Product Dimensions:

System	Overall Size	Fixed Sash Size	Operable Sash Size
1	108" x 72"	(1): 70-1/8" x 70-1/8"	(1): 34-1/8" x 70-1/8"
2	144" x 72"	(2): 34-1/8" x 70-1/8"	(2): 34-1/8" x 70-1/8"
3	96-1/4" x 120-1/4"	(2): 58-1/8" x 58-1/8"	(2): 34-1/8" x 70-1/8"

Product Identification (Certification Agency Label on Window):

System		
1-3	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Operating / Fixed Casements Mullled
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08

Impact Resistance:

System	Impact Resistant	Requirement
1-3	No	Provide an impact protective system when installing the product in areas that require windborne debris protection.

Installation:

- **Option 1:** Fasten window assembly to minimum Southern Yellow Pine lumber. Secure window assembly to the wall framing using Kolbe & Kolbe metal installation clips. Secure installation clips (1-5/8" x 10-1/16" x 0.04") to window frame side jambs, head, and sill with two (2), No. 8 x 3/4" screws. Secure clips to wall framing with one (1), No. 8 x 1-3/4" screw. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing. The table below specifies the clip spacing.

Installation Clip Spacing:

System	Head and Sill (distance from corner)	Head and Sill (on center spacing)	Side Jambs (distance from corner)	Side Jambs (on center spacing)
1	Operating: 18" Fixed: 12"	Operating: None Fixed: 12"	Operating: 14-7/16" Fixed: 12"	Operating: 14-7/16" Fixed: 12"
2	18"	None	14-7/16"	14-7/16"
3	Operating: 18" Fixed: 15"	Operating: None Fixed: 15"	Operating: 15" Fixed: 15"	Operating: 15" Fixed: 15"

- **Option 2:** Fasten window assembly to minimum Southern Yellow Pine lumber. Secure window assembly to the wall framing using the window frame with minimum No. 10 screws. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing. The table below specifies the fastener spacing.

Fastener Spacing:

System	Head and Sill (distance from corner)	Head and Sill (on center spacing)	Side Jamb (distance from corner)	Side Jamb (on center spacing)
1	Operating: 12" Fixed: 9"	Operating: 12" Fixed: 9"	Operating: 10-1/4" Fixed: 9"	Operating: 10- 1/4" Fixed: 9"
2	12"	12"	12"	12"
3	Operating: 12" Fixed: 12"	Operating: 12" Fixed: 12"	Operating: 12' Fixed: 10"	Operating: 12" Fixed: 10"

- **Mullions:** Anchor mullion on each end with Gemini installation clips and secure with two (2), No. 8 x 2-1/4" screws per clip. Attach each clip to the wall framing with two (2), No. 8 screws. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.
- **Nailing Fin (all units):** Secure the window's nailing fin to the wall framing with minimum 12-gauge smooth shank roofing nails. Space fasteners approximately 7" from each corner and 7" on center along the perimeter of the window.

Note: The manufacturer's installation instructions must be available on the job site during installation. Use corrosion resistant fasteners as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.