

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION
WIN-1562

Effective Date: March 1, 2012 (Revised April 1, 2013)
Reevaluation Date: **April 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.

Ultra Aluminum Clad Wood Pushout Casement Windows, 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	Hallmark Certification
1	Ultra Aluminum Clad Wood Pushout Casement Windows	CW-PG75 36 x 72-C C-C75 36 x 72 Missile Level D; Wind Zone 3	± 75	413-H-1145.00 413-H-1145.01 413-H-1145.02 413-H-1145.03
2	Ultra Aluminum Clad Wood Pushout Casement Windows	CW-PG85 36 x 72-C C-C85 36 x 72 Missile Level D; Wind Zone 4	± 75	413-H-1142.00 413-H-1142.01 413-H-1142.02 413-H-1142.03 413-H-1142.04 413-H-1142.05 413-H-1142.06 413-H-1142.07
3	Ultra Aluminum Clad Wood Pushout Casement Windows	R-PG85 36 x 90-C C-R85 36 x 90 Missile Level D; Wind Zone 4	± 85	413-H-1165.00 413-H-1165.01 413-H-1165.02 413-H-1165.03
4	Ultra Aluminum Clad Wood Pushout Casement Windows Segment Head	CW-PG85 36 x 72-C C-C85 36 x 72 Missile Level D; Wind Zone 4	± 85	413-H-1147.04 413-H-1147.05 413-H-1147.06 413-H-1147.07
5	Ultra Aluminum Clad Wood Pushout Casement Windows 1/2 Circle	CW-PG65 36 x 72-C C-C65 36 x 72 Missile Level D; Wind Zone 4	± 65	413-H-1147.08 413-H-1147.09 413-H-1147.10 413-H-1147.11

General Description (continued):

System	Description	Label Rating	Design Pressure Rating	Hallmark Certification
6	Ultra Aluminum Clad Wood Pushout Casement Windows 1/4 Circle	LC-PG70 36 x 72-C C-C70 36 x 72 Missile Level D; Wind Zone 4	± 70	413-H-1147.00 413-H-1147.01 413-H-1147.02 413-H-1147.03
7	Ultra Aluminum Clad Wood Pushout Casement Windows Segment Head	CW-PG85 36 x 72-C C-C85 36 x 72 Missile Level D; Wind Zone 4	± 85	413-H-1151.04 413-H-1151.05 413-H-1151.06 413-H-1151.07
8	Ultra Aluminum Clad Wood Pushout Casement Windows 1/2 Circle	LC-PG70 36 x 72-C C-C70 36 x 72 Missile Level D; Wind Zone 4	± 70	413-H-1151.08 413-H-1151.09 413-H-1151.10 413-H-1151.11
9	Ultra Aluminum Clad Wood Pushout Casement Windows 1/4 Circle	LC-PG70 36 x 72-C C-C70 36 x 72 Missile Level D; Wind Zone 4	± 70	413-H-1151.00 413-H-1151.01 413-H-1151.02 413-H-1151.03

Product Dimensions:

System	Overall Size	Sash Size
1, 2, 4-9	36" x 72"	34 1/8" x 70 1/8"
3	36: x 90"	34 1/8" x 88 1/8"

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	Ultra Pushout Casement; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4
2	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement; IPD3
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 3
3	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement Operator; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4

Product Identification (Certification Agency Label on Window) - continued:

System		
4	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement-Segment Head; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4
5	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement-1/2 Circle; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4
6	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement-1/4 Circle; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4
7	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement Operator-Segment Head; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4
8	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement Operator-1/2 Circle; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4
9	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
	Product Name	Ultra Pushout Casement Operator-1/4 Circle; IPD4
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886 / 1996; Missile Level D; Wind Zone 4

Impact Resistance:

Impact Resistant	Requirement
Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the Inland I and Seaward zone . The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.

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)
1-2	Head/Sill: 18" Side Jambs: 12"	None	None	12"
3	Head/Sill: 18" Side Jambs: 15"	None	None	15"
4, 5, 6, 7, 8, 9	Head/Sill: 18" Side Jambs: 14 $\frac{3}{8}$ "	None	None	14 $\frac{3}{8}$ "

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:

System	Distance From Each Corner	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1-2, 4, 5, 6, 7	Head/Sill: 12" Side Jambs: 9"	12	12	9"
3	Head/Sill: 12" Side Jambs: 11 $\frac{1}{4}$ "	12	12	11 $\frac{1}{4}$ "
8, 9	Head/Sill: 12" Side Jambs: 10 $\frac{5}{16}$ "	12	12	10 $\frac{5}{16}$ "

Nailing Fin (all units): The nailing fin of the window assembly is secured to the wall framing with minimum 12 gauge smooth shank roofing nails. The fasteners are spaced approximately 7 inches from each corner and approximately 7 inches on center along the perimeter of the window.

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.