PO Box 149104 | Austin, TX 78714 | 1-800-578-4677 | tdi.texas.gov

## Product Evaluation

WIN2407 | 0919
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-2407
Effective Date: September 1, 2019
Re-evaluation Date: September 2023

Product Name: Ultra Sterling Aluminum Clad Wood Double Hung Windows, Frame Installation, Non-Impact Resistant

Manufacturer: Kolbe \& Kolbe Millwork Co.
1323 South $11^{\text {th }}$ Avenue
Wausau, WI 54401
(715) 842-5666

General Description:

| System | Description | Label Rating | Design Pressure <br> Rating |
| :---: | :---: | :---: | :---: |
| 1 | Ultra Sterling Double Hung <br> Windows w/ Aligned Checkrail | LC-PG50 (46 x 80)-H | $+50 /-50 \mathrm{psf}$ |
| 2 | Ultra Sterling Double Hung <br> Windows w/ Aligned Check rail HP | LC-PG65 (46 $\times 79.88)-\mathrm{H}$ | $+65 /-65 \mathrm{psf}$ |
| 3 | Ultra Sterling Double Hung <br> Windows w/ Double Hung <br> Transom | LC-PG65 (46 $\times 80)-\mathrm{H}$ | $+65 /-65 \mathrm{psf}$ |
| 4 | Ultra Sterling Double Hung <br> Windows | LC-PG50 (46.50 $\times 96)-\mathrm{H}$ | $+50 /-50 \mathrm{psf}$ |

## Product Dimensions:

| System | Overall Size | Top Sash Size | Bottom Sash Size | Transom Sash |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $45-1 / 2^{\prime \prime} \times 79-7 / 8^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 38-3 / 4^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 40 "$ | $\mathrm{~N} / \mathrm{A}$ |
| 2 | $45-1 / 2^{\prime \prime} \times 79-7 / 8^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 38-3 / 8^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 40-1 / 8^{\prime \prime}$ | $\mathrm{N} / \mathrm{A}$ |
| 3 | $45-1 / 2^{\prime \prime} \times 109-15 / 16^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 38-3 / 8^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 40-1 / 8^{\prime \prime}$ | $43-7 / 8^{\prime \prime} \times 27-7 / 8^{\prime \prime}$ <br> DLO: $39 " \times 23 "$ |
| 4 | $46-1 / 2^{\prime \prime} \times 96^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 46^{\prime \prime}$ | $42-1 / 4^{\prime \prime} \times 47-7 / 8^{\prime \prime}$ | $\mathrm{N} / \mathrm{A}$ |

## Product Identification (Certification Label on Window):

| System |  |  |
| :---: | :---: | :---: |
| 1 | Certification Agency | WDMA |
|  | Manufacturer's Name or Code Name | Kolbe \& Kolbe Millwork Co., Inc. |
|  | Product Name | Ultra Sterling Double Hung w/ Aligned Checkrail |
|  | Test Standards | AAMA/WDMA/CSA 101/I.S.2/A440-08,11 |
| 2 | Certification Agency | WDMA |
|  | Manufacturer's Name or Code Name | Kolbe \& Kolbe Millwork Co., Inc. |
|  | Product Name | Ultra Sterling Double Hung w/ Aligned Checkrail HP |
|  | Test Standards | AAMA/WDMA/CSA 101/I.S.2/A440-08 |
| 3 | Certification Agency | WDMA |
|  | Manufacturer's Name or Code Name | Kolbe \& Kolbe Millwork Co., Inc. |
|  | Product Name | Ultra Sterling Double Hung w/ Ultra Double Hung Transom |
|  | Test Standards | AAMA/WDMA/CSA 101/I.S.2/A440-08,11 |
| 4 | Certification Agency | WDMA |
|  | Manufacturer's Name or Code Name | Kolbe \& Kolbe Millwork Co., Inc. |
|  | Product Name | Ultra Sterling Double Hung |
|  | Test Standards | AAMA/WDMA/CSA 101/I.S.2/A440-08,11,17 |

## Impact Resistance:

| System | Impact Resistant | Requirement |
| :---: | :---: | :--- |
| $1-4$ | No | Provide an impact protective system when installing the <br> product in areas that require windborne debris protection. |

## Installation (One of the Following):

Frame- Clip Installation (System 1): The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using Kolbe $\&$ Kolbe installation clips. Clips must be minimum 10-1/16" long, 1-5/8" wide, 20-gauge, and made of galvanized steel. Secure the clips to the window frame using two minimum No. 8 PFH screws and to the wall framing using one minimum No. $8 \times 1-3 / 4$ " screw. Locate the clips approximately $16 "$ from each end and on center along the side jambs and 15 " from the corners along the head. No clips were used at the sill. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Frame Installation (System 1): The wood wall framing members must be minimum Spruce-PineFir dimension lumber. The window assembly is secured to the wall framing using minimum No. $10 \times 2-1 / 2^{\prime \prime}$ PFH screws spaced approximately $11-1 / 2^{\prime \prime}$ from each end and on center along the side jambs and $15 "$ from the corners along the head. No screws were used at the sill. Fasteners must be long enough to penetrate a minimum of $1-1 / 2^{\prime \prime}$ into the wall framing members.

Frame- Clip Installation (System 2): The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using Kolbe \& Kolbe installation clips. Clips must be minimum 10-1/16" long, 1-5/8" wide, 20-gauge, and made of galvanized steel. Secure the clips to the window frame using two minimum No. 8 PFH screws and to the wall framing using one minimum No. $8 \times 1-3 / 4$ " screw. Locate the clips approximately 11.5 " from each end and on center along the side jambs and 15 " from the corners along the head. No clips were used at the sill. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Frame Installation (System 2): The wood wall framing members must be minimum Spruce-PineFir dimension lumber. The window assembly is secured to the wall framing using minimum No. $10 \times 2-1 / 2^{" ~ P F H ~ s c r e w s ~ s p a c e d ~ a p p r o x i m a t e l y ~} 8-7 / 8 "$ from each end and on center along the side jambs and $11-3 / 8 "$ from the corners along the head. No screws were used at the sill. Fasteners must be long enough to penetrate a minimum of $1-1 / 2^{\prime \prime}$ into the wall framing members.

Frame- Clip Installation (System 3): The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using Kolbe \& Kolbe installation clips. Clips must be minimum $10-1 / 16^{\prime \prime}$ long, $1-5 / 8$ " wide, and made of galvanized steel. Secure the clips to the window frame using two minimum No. 8 PFH screws and to the wall framing using one minimum No. $8 \times 1-3 / 4$ " screw. Locate the clips approximately $11.5^{\prime \prime}$ from each end and on center along the side jambs of the double hung windows. Locate the transom clips approximately 14.75 " from the corner of the side jambs and 15.17" from each corner and on center along the head. No clips were used the sill. Fasteners must be long enough to penetrate a minimum of $1-1 / 2^{\prime \prime}$ into the wall framing members.

Frame Installation (System 3): The wood wall framing members must be minimum Spruce-PineFir dimension lumber. The window assembly is secured to the wall framing using minimum No. $10 \times 2-1 / 2^{\prime \prime}$ PFH screws spaced approximately $9 "$ from each end and on center along the side jambs of the double hung window. For the transom, locate the screws approximately 14-3/4" from the corners of the side jambs and 11-3/8" from each corner and on center at the head. No screws were used at the sill. Fasteners must be long enough to penetrate a minimum of $1-1 / 2$ " into the wall framing members. Secure to Gemini clips at each end of the horizontal mull to the window frame with minimum No. 8 Tel screws and to the wall framing using two minimum No. 8 PFH screws.

Frame- Clip Installation (System 4): The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using Kolbe $\&$ Kolbe installation clips. Clips must be minimum $10-1 / 16^{\prime \prime}$ long, $1-5 / 8$ " wide, and made of
galvanized steel. Secure the clips to the window frame using two minimum No. 8 PFH screws and to the wall framing using one minimum No. $8 \times 1-3 / 4$ " screw. Locate the clips approximately 12" from each end and on center along the side jambs and 15 " from the corners along the head. No clips were used at the sill. Fasteners must be long enough to penetrate a minimum of $1-1 / 2^{\prime \prime}$ into the wall framing members.

Frame Installation (System 4): The wood wall framing members must be minimum Spruce-PineFir dimension lumber. The window assembly is secured to the wall framing using minimum No. $10 \times 2-1 / 2^{\prime \prime}$ PFH screws spaced approximately $8-3 / 4$ " from each end and on center along the side jambs and $11-3 / 8 "$ from the corners along the head. No screws were used at the sill. Fasteners must be long enough to penetrate a minimum of $1-1 / 2^{\prime \prime}$ into the wall framing members.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

