TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective August 1, 2012
MU-14

*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 shall be subject to reevaluation **March 2015**.*

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.

Mulled Window Assemblies for V707 Vinyl Windows, Impact Resistant, manufactured by:

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

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

This evaluation report is for mulled window assemblies using vinyl windows manufactured by Kolbe & Kolbe Millwork Co., Inc. The mulled window assemblies evaluated in this report are for impact resistant windows.

The mulled assembly consists of individual window units that are secured to the mullions described in this evaluation report. The mullions can be installed vertically (for side by side units) or horizontally (for stacked units). The mullion is secured directly to the rough opening of the window and can be attached to wood, concrete, masonry, aluminum, or steel substrates.

- Wood – minimum Spruce-Pine-Fir dimension lumber
- Concrete – minimum 3,192 psi compressive strength
- Masonry – Conforms to ASTM C-90, Grade N, Type 1 or greater
- Steel – minimum 18 gauge, 33 ksi
- Aluminum – minimum 6063-T5, 0.125" thick

The frames of the individual window units are secured to the extruded aluminum mullion tube using minimum No. 8 self-drilling tapping screws. Extruded aluminum mullion connector clips are used to secure the aluminum mullion tube to the wall framing.

This evaluation report contains mulled window assemblies using individual vinyl window products manufactured by Kolbe & Kolbe Millwork Co., Inc. that are currently listed in Texas Department of Insurance (TDI) product evaluation reports.

LIMITATIONS

Design Drawings: The mulled window assembly shall be constructed and installed in accordance with the following design drawing:

- Drawing No. 08-01343, sheets 1 through 5 of 5, titled "Windquest V707 Impact Mullion 77" Span," dated May 15, 2007, signed and sealed by Luis R. Lomas, PE on September 12, 2011. The stated drawings will be referred to as "Approved Drawings" in this evaluation report. A copy of the approved drawings shall be available at the job site.

Design Pressure Rating: The design pressure rating for the mulled window assembly is dependant on the mullion rating and the design pressure rating for the individual windows in the mulled assembly. The design pressure rating for the mullions is $\pm$ 70 psf. The mulled window assembly will bear a WDMA label that indicates the design pressure rating for the mulled assembly based upon the lowest common design pressure amongst the windows and mullions that are a part of the mulled window assembly.

Maximum Sizes: The height and width of each individual window in the mulled window assembly shall not exceed the maximum allowable height and width specified on the certification program labels for the individual windows. The maximum allowable dimensions for windows in the mulled window assembly shall be as specified on Sheet 1 of 5 of the approved drawings.

Impact Resistance: The mullions are used with impact resistant windows. The mulled window assemblies will not need to be protected with an impact protective system. Refer to the TDI evaluation reports for each of the windows in the mulled assembly to determine the locations where the mulled window assemblies can be used (ex. Inland I zone only or Inland I and Seaward zones).

Product Identification: A certification program label (WDMA) will be affixed to each individual window of the mulled window assembly. Refer to the TDI evaluation report for each individual window in the mulled window assembly for the information that must be specified on the certification program label. These certification program labels are for the performance characteristics of the individual windows in the mulled window assembly. A separate, single, WDMA label will be attached to the mulled window assembly that indicates the design pressure rating for the mulled window assembly. The design pressure rating for the mulled window assembly is based upon the lowest common design pressure amongst the windows and mullions that are a part of the mulled window assembly.

INSTALLATION INSTRUCTIONS

General: The mulled window assembly shall be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this evaluation report. Detailed drawings and installation instructions are available from the manufacturer.

Attachment of Window Frames to Mullions: The window frames shall be anchored to the aluminum mullions with minimum No. 8 SMS self-drilling tapping screws. The fasteners shall be of sufficient length to penetrate a minimum of three threads beyond the aluminum mullion wall. The spacing of the fasteners shall be as specified on Sheet 1 of 5 of the approved drawings. Refer to the detail shown on Sheet 2 of 5 of the approved drawings for the attachment of the windows to the mullions.

Attachment of Mulled Assembly to Wall Framing: The requirements for the wall framing shall be as specified in the TDI evaluation reports for the individual windows and as specified on Sheet 1 of 5 of the Approved Drawings. The mulled window assembly shall be secured to the wall framing using the type, size, quantity, and spacing of fasteners as specified in the TDI evaluation reports for the individual windows. As a point of reference for locating fasteners at window corners, where a window unit joins with a mullion shall be considered a corner location for a window.

Attachment of Mullions to Wall Framing: The mullions shall be secured to the wall framing using the mullion connector clips as shown in the approved drawings. The mullion connector clips shall be secured to the mullion and to the wall framing as specified on Sheets 2 of 5 through 4 of 5 of the approved drawings.

Note: The manufacturer's installation instructions shall be available on the job site during installation. The approved drawings 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.