

Product Evaluation

MU16 | 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: MU-16

Effective Date: September 1, 2019

Re-evaluation Date: September 2023

Product Name: Series V-100 Aluminum Field Mullion for Vinyl Windows, Impact and Non-Impact Resistant

Manufacturer: WinDoor Incorporated
7500 Amsterdam Drive
Orlando, FL 32832
(407) 481-8400

General Description:

This evaluation report is for mulled window assemblies using vinyl windows manufactured by WinDoor Incorporated. The mulled window assemblies evaluated in this report are for non-impact resistant and 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 the mullion may be used in horizontal applications as long as the dimensions indicated on the approved drawings are not exceeded. The mullions are secured directly to the rough opening of the window and can be attached to wood, concrete or steel substrates.

The frames of the individual window units are secured to the extruded aluminum mullion tube using No. 14 self-tapping screws. Extruded aluminum wall T-clips are used to secure the aluminum mullion tubes to the wall framing.

This evaluation report contains mullied window assemblies using individual vinyl window products manufactured by WinDoor Incorporated that are currently listed in Texas Department of Insurance (TDI) product evaluation reports.

Mullion Components:

Mullion: Manufactured from 6005-T61 aluminum. The outside dimensions are shown on the approved drawings.

Wall T-Clips: Manufactured from 6105-T5 aluminum. The dimensions are shown in the approved drawings.

Fabrication and Assembly: The mullied assembly may be mullied together at the factory and shipped as a complete assembly or they may be mullied together at the job site.

Design Drawings:

Construct and install the mullied assembly in accordance with the following drawing:

Drawing No. 08-01698; sheets 1 through 3 of 3; titled "Series V-100 Aluminum Field Mullion Wind Zone 3 Impact Resistant;" dated July 19, 2012; signed and sealed by Luis R. Lomas, P.E. on July 24, 2012.

This evaluation report will refer to the stated drawings as "Approved Drawings."

Maintain a copy of the approved drawings at the job site.

Maximum Window Sizes:

The height and width of each individual window in the mullied assembly must 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 mullied assembly must be as specified on the approved drawings.

Design Pressure Rating:

The design pressure rating for the mullied window assembly is dependent on the mullion load rating based on the mullion span and the dimensions of the individual windows in the mullied assembly, and the design pressure rating for the individual windows in the mullied assembly. Refer to the approved drawings to determine the mullion load rating for the mullied assembly based on the configuration of the mullied assembly.

The following procedure should be used to determine the design pressure rating for the mullied window assembly:

1. Determine the tributary height or width and the mullion span (height or width) for the mulled window assembly. Refer to the mullion configuration sketches on the approved drawings for the mullion span (height or width) and the tributary height or width determination. **NOTE:** In no case must the maximum allowable dimensions of the individual windows, as specified on the certification program labels and in the TDI product evaluation reports, exceed the window dimensions in the approved drawings.
2. Using the approved drawings, select the appropriate table. Locate the row or column with the mullion span (height or width). Locate the row or column with the tributary height or width. At the intersection of the row or column containing the mullion span and the row or column containing the tributary height or width, read the mullion load rating (in PSF).
3. Review the design pressure rating on the certification program label and in the TDI product evaluation report for each individual window of the mulled assembly.
4. If the design pressure rating for each individual window of the mulled assembly is greater than the mullion load rating determined from the table in the approved drawings, then the design pressure rating of the mulled assembly is the design pressure capacity determined from the table in the approved drawings.
5. If the design pressure rating for any of the individual windows is less than the mullion load rating determined from the table in the approved drawings, then the design pressure rating of the mulled assembly must be the design pressure rating of the lowest rated individual window in the assembly.

Impact Resistance:

Use the mullions with either non-impact resistant or impact resistant windows.

If using mullions with non-impact resistant windows, then protect the mulled window assemblies with an impact protective system when installing the product in areas that require windborne debris protection.

If using mullions with impact resistant windows, then the mulled window assemblies will not require protection 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 (example Inland I zone only or Inland I and Seaward zones).

Product Identification:

Each individual window of the mulled assembly will have an attached certification program label. Refer to each individual window's TDI evaluation report for the information the certification program label must include.

NOTE: The certification program label is for the performance characteristics of the individual windows in the mulled assembly and not for the mulled assembly. The Design Pressure Rating section of this evaluation report specifies how the design pressure rating for the mulled assembly is determined.

Installation Instructions:

General: Install the mulled assembly in accordance with the manufacturer's installation instructions, the approved drawings, and this evaluation report.

Attachment of Window Frames to Mullions: Anchor the window frames to the aluminum mullion with fasteners as specified in the approved drawings. The spacing and required penetration into the mullions of the fasteners is as specified in the approved drawings.

Attachment of Mulled Assembly to Wall Framing: Wall framing requirements are as specified on either the TDI product evaluation reports for the windows or the approved drawings. Secure the mulled assembly to the wall framing using the type, size, quantity, and spacing of fasteners as specified in the TDI evaluation reports for the individual windows. Where a window unit joins with a mullion, use the window corners as a point of reference for locating fasteners.

Attachment of Mullions to Wall Framing: Secure the mullions to the wall framing with the wall T-clip as shown on the approved drawings. Refer to the approved drawings for the attachment of the mullions to the wall framing.

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.