

Product Evaluation

MU27 | 1220

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-27

Effective Date: December 1, 2020

Re-evaluation Date: December 2024

Product Name: Muller Window Assemblies for Vinyl Windows using the TMP-2603 Extruded Aluminum Mullion, Impact Resistant and Non-impact Resistant

Manufacturer: Wincore Window Company, LLC
250 Staunton Avenue
Parkersburg, WV 26104
(304) 485-7460

General Description:

This evaluation report is for muller windows using TMP-2603 extruded aluminum mullions manufactured by Wincore Window Company, LLC.

Mull the windows together using either vertical or horizontal aluminum mullions.

The muller window assemblies evaluated in this report are for impact resistant and non-impact resistant windows manufactured by Wincore and currently listed in TDI product evaluation reports.

Mullion Components:

- **Mullion:** Manufactured from 6063-T6 aluminum; the dimensions are 1" x 3" x 1/8".
- **Wood/Steel Stud Anchor Clip:** Manufactured from 6063-T6 aluminum, the dimensions are 2" x 4-1/2" x 0.12".

Mullion Components continued:

- **Masonry or Wood/Steel Anchor Bracket:** Manufactured from 6061-T6 aluminum (base) and 6063-T6 aluminum U-channel); the dimensions are 2-1/4" x 9-3/4" x 0.12".
- **Masonry or Wood/Steel Offset Anchor Bracket:** Manufactured from 6061-T6 aluminum (base) and 6063-T6 aluminum U-channel); the dimensions are 4" x 9-3/4" x 0.12".
- **Mullion to Mullion Clip:** Manufactured from 6063-T6 aluminum; the dimensions are 3/4" x 2-1/16" x 0.12"

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

Design Drawings:

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

- Drawing No. TX-4386, sheets 1 through 4 of 4, titled "TMP-2603 Extruded Aluminum Vertical Clipped Mullion," dated November 25, 2014, Rev. 2 dated June 11, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on June 11, 2020.
- Drawing No. TX-4387, sheets 1 through 4 of 4, titled "TMP-2603 Extruded Aluminum Vertical Clipped Combination Mullion," dated November 25, 2014, Rev. 2 dated June 11, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on June 11, 2020.
- Drawing No. TX-4388, sheets 1 through 4 of 4, titled "TMP-2603 Extruded Aluminum Horizontal Clipped Mullion," dated November 25, 2014, Rev. 2 dated June 11, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on June 11, 2020.
- Drawing No. TX-4389, sheets 1 through 5 of 5, titled "TMP-2603 Extruded Aluminum Horizontal Clipped Combination Mullion," dated November 25, 2014, Rev. 2 dated June 11, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on June 11, 2020.

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

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

Maximum Sizes:

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

Design Pressure Rating:

The design pressure rating for the mullied 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 mullied 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 dimensions in the approved drawings.
2. Using the approved drawings, locate the row with the mullion span (height or width). Locate the column with the tributary height or width. At the intersection of the row containing the mullion span and the 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 and door of the mullied assembly.
4. If the design pressure rating for each individual window of the mullied assembly is greater than the mullion load rating determined from the table in the approved drawings, then the design pressure rating of the mullied 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 and doors is less than the mullion load rating determined from the table in the approved drawings, then the design pressure rating of the mullied assembly shall be the design pressure rating of the lowest rated individual window and door in the assembly.

Impact Resistance:

The mullions are used with either non-impact resistant or impact resistant windows.

If using mullions with non-impact resistant windows, then the mullied window assemblies must be protected 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 assemblies can be used.

Product Identification:

A certification program label will be affixed to each individual window of the mulled assembly. Refer to the TDI evaluation report for each individual window in the mulled assembly for the information that must be specified on the certification program label.

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:

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: The window frames must be anchored to the aluminum mullions with minimum No. 10-16 self-drilling SMS screws. Refer to the details shown in 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 must be as specified in the TDI evaluation reports for the individual windows and as specified in the approved drawings. The mulled assembly must 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 must be considered a corner location for a window.

Attachment of Mullions to Wall Framing: The mullions must be secured to the wall framing using the appropriate clip. The mullion clip must be secured to the mullion and to the wall framing as specified in the approved drawings.

Attachment of Mullions to Mullions: The mullions must be secured to other mullions using the appropriate clip. The mullions must be secured together as specified in the approved drawing.

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