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Product Evaluation

MU56 | 0620 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-56

Effective Date: June 1, 2020
Re-evaluation Date: June 2024

Product Name: Mulled Window Assemblies for Vinyl Windows using M-2285 Aluminum Mullions, Impact and Non-Impact Resistant

Manufacturer: MI Windows and Doors, LLC
650 West Market Street
Gratz, PA 17030-0370
(717) 365-3300

General Description:
This evaluation report is for mulled windows using M-2285 aluminum mullions manufactured by MI Windows and Doors.

The mulled window assemblies evaluated in this report are for impact resistant and non-impact resistant windows manufactured by MI Windows and Doors

Mullion Configurations:
This evaluation report includes the following mullion configurations:

- **Vertical Mullions**. M-2285 aluminum mullions. Used for mulling together windows vertically (windows side-by-side). May also be used for horizontal applications.

- **Horizontal Mullions**. M-2285 aluminum mullions. Used for mulling together single or mulled windows with transoms.

Mullion Components:
M-2285 Mullion: Manufactured from 6063-T5 aluminum; the dimensions are shown on the approved drawing.

SECT5796 Clip: Manufactured from 6063-T5 aluminum; the dimensions are shown on the approved drawing.

MT00022 Clip: Manufactured from 16-gauge galvanized steel; alternative to the SECT5796 clip; the dimensions are shown on the approved drawing.

Limitations:
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 one or more of the design drawings based on the configuration of the mulled assembly:

- Drawing No. 08-03263; sheets 1 through 4 of 4; titled "M-2285 Vertical Mullion 84" Mullion Span;" dated June 4, 2018; signed and sealed by Luis R. Lomas, P.E. on May 11, 2020.

- Drawing No. 08-03262; sheets 1 through 5 of 5; titled "M-2285 Horizontal Mullion Single, Twin and Triple with Transom;" dated June 4, 2018; signed and sealed by Luis R. Lomas, P.E. on May 11, 2020.

This evaluation report will refer to the stated drawings to 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 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 mulled assembly is dependent on the mullion load rating based on the mullion span, the dimensions of the individual windows in the mulled assembly, and the design pressure rating for the individual windows in the mulled assembly.

Refer to the approved drawings to determine the mullion load rating for the mulled assembly based on the configuration of the mulled assembly.

Use the following procedure to determine the design pressure rating for the mulled window assembly:

1. Determine design pressure rating for the mullion using the Design Pressure Rating charts in the approved drawings. **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. 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.

3. If the design pressure rating for each individual window of the mulled assembly is greater than the design pressure rating for the mullions determined from 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.

4. If the design pressure rating for any of the individual windows is less than the design pressure rating determined from 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.

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 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 for the mulled assembly is as specified in the Limitations Section of this evaluation report.

Installation:
General: Install the mulled assembly 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 Mullion Clips to Mullions: The mullion clips are secured to the mullions with friction. The clips slip into the ends of the hollow mullion. No fasteners are required.

Attachment of Mullion Clips to Wall Framing: The mullion clips are anchored to the wall framing with fasteners. Anchor the mullion clips to the wall framing as specified on the approved drawings.

Attachment of Window Frames to Mullions: Anchor the window frames to the mullions with fasteners. Refer to the Anchoring Notes of the approved drawings.

Attachment of Horizontal Mullions to Vertical Mullions: Vertical Mullions are anchored to horizontal mullions with screws as shown on Sheet 4 of 5 of drawing 08-3262.

Attachment of Mulled Assembly to Wall Framing: The TDI evaluation reports specify the requirements for the wall framing for the individual windows and as specified in 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 mullion location as a point of reference for locating fasteners at window corners.

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