



Product Evaluation

MU40 | 0617

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-40 **Effective Date:** June 1, 2017
Re-evaluation Date: July 2021

Product Name: Series 130 1.25" Tube Mullions for Windows, Non-impact Resistant

Manufacturer: Atrium Windows & Doors
9001 Ambassador Row
Dallas, TX 75247
214-637-2696

General Description:

- This evaluation report is for mullied windows using extruded aluminum mullions manufactured by Atrium Windows & Doors.
- Mull the windows together using either vertical or horizontal aluminum mullions.
- The mullied window assemblies evaluated in this report are for non-impact resistant windows manufactured by Atrium Windows & Doors and are currently listed in TDI product evaluation reports.

Mullion Components:

- **Mullion:** Manufactured from 6063-T6 aluminum; the dimensions are shown in the approved drawings.
- **U-Clip:** Manufactured from 6063-T6 aluminum; the dimensions are shown in the approved drawings.
- **Standard End Clip:** Manufactured from 6063-T6 aluminum, the dimensions are shown in the approved drawings.
- **Offset End Clip:** Manufactured from 6063-T6 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 design drawing based on the configuration of the mullied assembly:
 - Drawing No. ATR093; sheets 1 through 9 of 9; titled “130 1.25" Tube Mullion (Non-Impact Rated);” dated January 29, 2016; signed and sealed by Hermes F. Norero, P.E. on May 05, 2017.
- 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 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 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.
- Use the following procedure to determine the design pressure rating for the mullied window assembly:
 1. Determine the tributary width or height and the mullion span for the mullied assembly. Refer to the mullion configuration drawings on the approved drawings for the mullion span and the tributary width or height. **NOTE:** The maximum allowable dimensions of the individual windows must not exceed the dimensions in the approved drawings as specified on the certification program labels and in the TDI product evaluation reports.
 2. Using the approved drawings, locate the row with the mullion span. Locate the column with the tributary width or height. Read the mullion load rating (psf) at the intersection of these rows.
 3. Review the design pressure rating on the certification program label and in the TDI product evaluation report for each individual window of the mullied assembly.
 4. If the design pressure rating for each individual window of the mullied assembly is greater than the design pressure rating for the mullions determined from 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 is less than the design pressure rating determined from the approved drawings, then the design pressure rating of the mullied assembly must be the design pressure rating of the lowest rated individual window in the assembly.

Impact Resistance:

- Use the mullions with non-impact resistant windows.
- Protect the mulled window assemblies with an impact protective system when installing the product in areas that require windborne debris protection.
- 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 that the certification program label should 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 the design pressure rating for the mulled assembly.

Installation Instructions:

- **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 Window Frames to Mullions:** Anchor the window frames to the aluminum mullion with fasteners and spacing as shown in the approved drawings. The fasteners must be long enough to penetrate a minimum of three threads through the mullion wall.
- **Attachment of Mulled Assembly to Wall Framing:** The TDI evaluation reports must 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 as a point of reference for locating fasteners at window corners.
- **Attachment of Mullions to Wall Framing:** Secure the mullions to the wall framing with the appropriate end clip as shown on the approved drawings. Refer to the approved drawings for the attachment of the mullions to the wall framing.
- **Attachment of Mullions to Mullions:** Secure the horizontal mullions to the vertical mullions using the U clip and fasteners as shown on the approved drawings.

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