



# Product Evaluation

MU41 | 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-41 **Effective Date:** June 1, 2017  
**Re-evaluation Date:** June 2021

**Product Name:** Muller Assemblies for Windows and Doors using 5902 Structural Mullions with 5951 Anchor Brackets, Impact Resistant and Non-impact Resistant

**Manufacturer:** NT Window, Inc.  
4949 Rendon Road  
Fort Worth, TX 76140  
800-969-8830

## General Description:

- This evaluation report is for muller windows and doors using 5902 structural mullions with 5951 anchor brackets manufactured by NT Window, Inc.
- Mull the windows and doors together using the mullions oriented either vertically or horizontally.
- The muller assemblies evaluated in this report are for impact resistant and non-impact resistant windows and doors manufactured by NT Window, Inc. and are currently listed in TDI product evaluation reports.

## Mullion Components:

- **Mullion:** 5902 1/2" structural mullion; manufactured from 6005-T5 aluminum; the dimensions are shown on the approved drawing.
- **Anchor Bracket:** 5951 anchor bracket; manufactured from 6063-T5 aluminum; the dimensions are shown on the approved drawing.

**Fabrication and Assembly:** The mulled assembly must be mulled together at the job site.

**Design Drawings:**

- Construct and install the mulled assembly in accordance with the following design drawing based on the configuration of the mulled assembly:
  - Drawing titled “5902: 1/2" Structural Mullion 5951: Anchor Bracket;” Project 1705015-1; sheet NT-1.0 and sheet NT-2.0; dated February 22, 2017; signed and sealed by Robert A. Warr, P.E. on May 01, 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 and door in the mulled assembly must not exceed the maximum allowable height and width specified on the certification program labels for the individual windows and doors.
- The maximum allowable dimensions for windows and doors 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 average mullion spacing, and the substrate 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 the tributary width or height and the mullion span for the mulled assembly. Refer to the mullion configuration drawing on sheet NT-2.0 of the approved drawing for the mullion span and the tributary width or height. **NOTE:** The maximum allowable dimensions of the individual windows and doors 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 drawing, select the appropriate table based on substrate. Locate the column with the tributary width or height. Move down the column until you reach the span of the mullion in the assembly. Select the mullion span that is closest to (equal to or greater) than the actual span in the assembly. Read the design pressure rating for the mullion at the column on the left that corresponds to the mullion span in the table.
  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 design pressure rating for the mullions determined from the approved drawing, then the design pressure rating of the mulled assembly is the design pressure capacity determined from the table in the approved drawing.
  5. If the design pressure rating for any of the individual windows or doors is less than the design pressure rating determined from the approved drawing, then the design pressure rating of the mulled assembly must be the design pressure rating of the lowest rated individual window or door 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 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 specified in the approved drawings. Fasteners must penetrate through the mullion and the window frames as shown in the approved drawing.
- **Attachment of Mulled Assembly to Wall Framing:** The TDI evaluation reports must specify the requirements for the wall framing for the individual windows and doors 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 and doors. Where a window or door unit joins with a mullion, use as a point of reference for locating fasteners at window and door corners.
- **Attachment of Mullions to Wall Framing:** Secure the mullions to the wall framing with the 5951 Anchor Bracket. The anchor bracket slides into the end of the 5902 structural mullion. The anchor bracket is secured to the substrate with fasteners. Refer to the approved drawing for the attachment of the anchor bracket to the wall framing.

**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.