



Product Evaluation

MU36 | 0317

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-36 **Effective Date:** March 1, 2017
Re-evaluation Date: February 2021

Product Name: A-Series Reinforced Mullions for A-Series Windows and Doors, Impact Resistant and Non-impact Resistant

Manufacturer: Andersen Corporation
100 Fourth Avenue North
Bayport, MN 55003
(651) 264-5150

General Description:

- This evaluation report is for A-Series mullioned windows and doors using reinforced mullions manufactured by Andersen Corporation.
- The windows and doors are mullioned together using fiberglass joining plates.
- The mullioned window and door assemblies evaluated in this report are for impact resistant and non-impact resistant windows and doors manufactured by Andersen Corporation and are currently listed in TDI product evaluation reports.

Mullion Components:

- **4-9/16" Joining Plate:** Manufactured from fiberglass; secured to frames; the dimensions are shown on the approved drawings.
- **6-9/16" Joining Plate:** Manufactured from fiberglass; secured to frames; the dimensions are shown on the approved drawings.
- **Mullion Joining Plate End Plug:** Manufactured from glass filled nylon; inserted into the ends of mullions; the dimensions are shown on the approved drawings.
- **Intersecting Bracket:** Manufactured from galvanized steel; secured to mullion joining plate end plug; the dimensions are shown on the approved drawings.

Mullion Components (continued):

- **Universal Gusset, Straight, 18:** Manufactured from 14-gauge galvanized steel; secured to mullion joining plate end plug, frames and wall framing; the dimensions are shown on the approved drawings.
- **Half Gusset, LS Sill, RS Head:** Manufactured from 14-gauge galvanized steel; secured to mullion joining plate end plug, frames and wall framing; the dimensions are shown on the approved drawings.
- **Half Gusset, RS Sill, RS Head:** Manufactured from 14-gauge galvanized steel; secured to mullion joining plate end plug, frames and wall framing; the dimensions are shown on the approved drawings.

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 of the following design drawings based on the configuration of the mulled assembly:
 - Drawing No. AWD099; sheets 1 through 20 of 20; titled “Andersen Corporation A Series Reinforced Mullion Assembly;” dated October 20, 2015; signed and sealed by Hermes F. Norero, P.E. on April 24, 2016.
- 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 and Door 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 and the dimensions of the individual windows and doors in the mulled assembly, and the design pressure rating for the individual windows and doors 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 assembly:
 1. Determine the tributary width or height and the mullion span for the mulled assembly. Refer to the mullion configuration drawings in the approved drawings 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 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 and door of the mulled assembly.
4. If the design pressure rating for each individual window and door 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.
5. If the design pressure rating for any of the individual windows and doors 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 and door in the assembly.

Impact Resistance:

- Use the mullions with either non-impact resistant or impact resistant windows and doors.
- If using mullions with non-impact resistant windows and doors, then protect the mulled window and door assemblies with an impact protective system when installing the product in areas that require windborne debris protection.
- If using mullions with impact resistant windows and doors, then the mulled window and door assemblies will not require protection with an impact protective system.
- Refer to the TDI evaluation reports for each of the windows and doors in the mulled assembly to determine the locations where the mulled window and door assemblies can be used (example Inland I zone only or Inland I and Seaward zones).

Product Identification:

- Each individual window and door of the mulled assembly will have an attached certification program label.
- Refer to each individual window's and door'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 and doors 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 and door frames to the mullions (joining plates) with fasteners and spacing as shown in the approved drawings.
- **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 the mullion as a point of reference for locating fasteners at window and door corners.

Installation Instructions (Continued):

- **Attachment of Mullions to Wall Framing:** Secure the mullions to the wall framing with the universal gusset plate and the half gusset plates. The gusset plates are secured to the mullion joining plate end plugs, to the window and door frames, and to the wall framing; refer to the approved drawings for installation requirements.
- **Attachment of Mullions to Mullions:** Two way 'X' or 'T' configurations are secured together using intersecting brackets that are secured to mullion joining plate end plugs; refer to the approved drawings for installation requirements.

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.