

Product Evaluation

MU18 | 0919

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-18

Effective Date: September 1, 2019

Re-evaluation Date: September 2023

Product Name: 9020 Aluminum Field Mullion for Aluminum Windows, Impact Resistant

Manufacturer: WinDoor Incorporated
7500 Amsterdam Drive
Orlando, FL 32832
(407) 481-8400

General Description:

This evaluation report is for mulled window and door assemblies using a 9020 aluminum field mullion manufactured by WinDoor Incorporated. The mulled window and door assemblies evaluated in this report are impact resistant.

The mulled assembly may consist of windows mulled together and windows and doors mulled together. The mullions may be used horizontally or vertically. The mullion may be used as long as the dimensions indicated on the approved drawings of the windows and doors are not exceeded. The mullions are secured directly to the rough opening and can be attached to wood, concrete, masonry, steel, or aluminum substrates.

The frames of the individual window and door units are secured to the extruded aluminum mullion using minimum No. 10 self-drilling screws. Extruded aluminum mullion T-clips are used to secure the aluminum mullions to the wall framing.

This evaluation report contains mullied assemblies using individual window and door products manufactured by WinDoor Incorporated that are currently listed in Texas Department of Insurance (TDI) product evaluation reports.

Mullion Components:

Mullion: Manufactured from 6063-T6 aluminum. The outside dimensions are shown on the approved drawings.

Mullion T-Clips: Manufactured from 6063-T6 aluminum. The dimensions are shown in the approved drawings. The mullion T-clip is used to secure the aluminum mullion to the wall framing.

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 drawing:

Drawing No. 08-01682; sheets 1 through 4 of 4; titled "9020 Field Mullion LMI and SMI Wind Zone 3 120" Span;" dated July 19, 2012; signed and sealed by Luis R. Lomas, P.E. on July 24, 2012.

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 and door in the mullied assembly must not exceed the maximum allowable height and width specified on the certification program labels for the individual windows and doors. In addition, the maximum allowable dimensions for windows and doors in the mullied assembly shall 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 and doors in the mullied assembly, and the design pressure rating for the individual windows and doors 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 shall the maximum allowable dimensions of the individual windows and doors, 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 and door 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 impact resistant windows and doors. The mullied assemblies will not need to be protected with an impact protective system

Refer to the TDI evaluation reports for each of the windows and doors in the mullied assembly to determine the locations where the mullied assemblies can be used (ex. Inland I zone only or Inland I and Seaward zones).

Product Identification:

A certification program label will be affixed to each individual window and door of the mullied assembly. Refer to the TDI evaluation report for each individual window and door in the mullied 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 mullied assembly and not for the mullied assembly. The Design Pressure Rating section of this evaluation report specifies how the design pressure rating for the mullied assembly is determined.

Installation Instructions:

General: Install the mullied assembly in accordance with the manufacturer's installation instructions, the approved drawings, and this evaluation report.

Attachment of Window and Door Frames to Mullions: The window and door frames must be anchored to the aluminum mullions with minimum No. 10 self-drilling screws. The fasteners must be of sufficient length to penetrate a minimum of three threads beyond the aluminum mullion wall. The fasteners must be located a maximum of 6" from each mullion end and a maximum of 24" on center. Refer to the details shown in the approved drawings for the attachment of the windows and doors to the mullions.

Attachment of Mullied Assembly to Wall Framing: The requirements for the wall framing must be as specified in the TDI evaluation reports for the individual windows and doors and as specified in the approved drawings. The mullied 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 and doors. As a point of reference for locating fasteners at window and door corners, where a window or door unit joins with a mullion must be considered a corner location for a window or door.

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

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