

Product Evaluation

DR1052 | 0322

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: DR-1052

Effective Date: March 1, 2022

Re-evaluation Date: March 2026

Product Name: Series 351X Aluminum Glazed Outswing Oversized Side Hinged Doors, Impact Resistant

Manufacturer: Trulite Glass and Aluminum Solutions
403 West Park Court
Suite 201
Peachtree City, GA 30269
(800) 432-8132

General Description:

The Series 351X doors are aluminum frame glazed outswing oversized side hinged doors used for commercial installations. This evaluation report includes the following door configurations:

- Outswing Double Doors
- Outswing Single Doors
- Outswing Double Door with Transom
- Outswing Single Door with Transom
- Outswing Door with or without Transom and Sidelites

Sidelites and Transoms: Sidelites and transoms referenced in this product evaluation report are not part of this product evaluation report. The sidelites and transoms used with these assemblies must be listed in separate TDI product evaluation reports.

Product Identification: A Trulite label will be affixed to the assembly. The label includes the manufacturer's name: (Trulite Glass & Aluminum Solutions); the product name: (351X Series Aluminum Outswing Door); the test standards (TAS 201-94, TAS 202-94, TAS 203-94, Large Missile Impact Rated); and Installation and Design Pressure Per TDI Drawing TA18-03.

Limitations:

Design Drawings:

The door assemblies must comply with and be installed in accordance with the following design drawing:

Drawing No. TA18-03; titled "351X Series Outswing Oversized Entrance Doors;" Sheets 1 thru 23 of 23; dated January 28, 2022; signed and sealed by Yiping Wang, P.E on January 28,2022. This evaluation report refers to the stated drawings as the approved drawings.

Fabrication and Assembly: Trulite Glass & Aluminum Solutions door systems are fabricated in the factory. The aluminum door systems are assembled and glazed at the jobsite. The approved drawing referenced in this evaluation report indicates the options for the glazing construction.

Design pressure (DP):

The aluminum door systems have a maximum design pressure rating of +85/-85 psf. Refer to approved drawing for specific design pressure requirements.

Hardware: Requirements for door hardware are specified on the approved drawing.

Impact Resistance:

These assemblies satisfy TDI's criteria for protection from windborne debris. These assemblies have passed an impact criteria equivalent to Missile Level D specified in ASTM E 1996-14a. Install these assemblies at any height on the structure that does not exceed the design pressure rating for the assembly. For essential facilities, the assembly may not be installed below a height of 30 feet in Wind Zone 3 and may be installed at all heights in Wind Zone 2 as defined in ASTM E 1996-14a.

Acceptance of Other Assemblies:

Sidelites and transoms used with the door assemblies must be listed in separate TDI product evaluation reports.

Installation:

General: Prepare and install the assembly in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available in the approved drawings.

Wall Framing Construction: The aluminum door system may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,000 psi)
- Wood: Minimum specific gravity of 0.55
- Masonry: Hollow or Grout Filled Block Per ASTM C90 with $f'm = 2,000$ psi minimum.
- Steel (minimum 1/8 thick, FY=36 ksi)
- Aluminum (minimum 1/8" thick, 6063-T5)

Fastener Requirements:

Refer to the approved drawings for the anchor layout and notes.

Refer to the approved drawings for the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

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