

Product Evaluation

DR797 | 1221

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-797

Effective Date: December 1, 2021

Re-evaluation Date: December 2025

Product Name: Model AF-220 Inswing and Outswing Fiberglass Side Hinged Entrance Doors, Impact Resistant

Manufacturer: Special-Lite, Inc.
860 South Williams Street
Decatur, MI 49045
(800) 821-6531

General Description: This evaluation report is for AF-220 fiberglass side hinged entrance doors. This evaluation report includes the following hinged door assemblies:

- Inswing Single Door Assembly, X
- Outswing Single Door Assembly, X

Product Identification: A Special-Lite, Inc. label will be affixed to the door.

Products Installed in Accordance with Drawing No. TA16-02: The label includes the manufacturer's name (Special-Lite, Inc.); the product name (Model AF-220 Inswing Door); that the design pressure and size are per drawing TA16-02; and that the product complies with TAS-201, TAS-202, TAS-203, Large Missile.

Products Installed in Accordance with Drawing No. TA16-01: The label includes the manufacturer's name (Special-Lite, Inc.); the product name (Model AF-220 Outswing Door); that the design pressure and size are per drawing TA16-01; and that the product complies with TAS-201, TAS-202, TAS-203, Large Missile.

Limitations:

Design Drawings:

Door assemblies must comply with and be installed in accordance with the following drawing:

Drawing No. TA16-02, titled "AF220 Fiberglass Inswing Door (LMI & SMI)," Sheets 1 thru 5 of 5, drawing dated November 19, 2021, signed and sealed by Yiping Wang, P.E on November 19, 2021. The stated drawings will be referred to as the approved drawings in this evaluation report.

Drawing No. TA16-01, titled "AF220 3070 Fiberglass Outswing Door (LMI & SMI)," Sheets 1 thru 4 of 4, drawing dated November 3, 2021, signed and sealed by Yiping Wang, P.E on November 4, 2021. The stated drawings will be referred to as the approved drawings in this evaluation report.

Fabrication and Assembly: Special-Lite, Inc. door systems are fabricated and assembled in the factory and glazed at the jobsite. The approved drawings referenced in this evaluation report indicate the options for the glazing construction.

Design pressure (DP):

The door assemblies have a maximum design pressure rating +75/-75 psf. Refer to approved drawings for specific design pressure requirements.

Impact Resistance:

These products satisfy TDI's criteria for protection from windborne debris. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

Installation Instructions:

General: Prepare and install the assembly in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from Special-Lite, Inc.

Installation:

Wall Framing Construction: Mount the door assembly to several types of wall framing construction. The types of wall framing construction allowed include:

- concrete (minimum compressive strength: 3,000 psi)
- wood (dimension lumber; minimum Southern Yellow Pine)
- steel studs (minimum 1/8" thick, A36), and
- masonry (grout-filled, minimum compressive strength: 1,500 psi)

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 installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.