

## Product Evaluation

DR756 | 1121

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-756

**Effective Date:** November 1, 2021

**Re-evaluation Date:** November 2025

**Product Name:** AF-220 3070 Fiberglass Opaque Outswing Side Hinged Doors, Impact Resistant

**Manufacturer:** Special-Lite, Inc.  
860 S. Williams Street  
Decatur, MI 49045  
(269) 487-7391

### General Description:

System	Description	Design Pressure Rating
1	AF-220 3070 Fiberglass Opaque Outswing Side Hinged Door	+75 / -75 psf Missile Level D

### Product Dimensions:

System	Overall Size	Panel Size	Glass Daylight Opening Size
1	40" x 86"	35-3/4" x 83-3/8"	N/A

**Hardware:**

- **Hinges;** three (3) required; secured to the door panel with five (5) No. 12 x 1" screws; secured to the door frame with five (5) No. 12 x 1" screws.
- **Mortise Lock;** Schlage L9453P-03A-626; one (1) required.
- **Strike Plate;** Mortise Lock; one (1) required; secured to the door jamb with two (2) No. 12 x 1-1/2" SS wood screws.
- **Deadbolt;** Schlage B660L-626; one (1) required.
- **Strike Plate;** Deadbolt; one (1) required; secured to the door jamb with two (2) No. 12 x 1-1/2" SS wood screws.

**Threshold:** standard saddle threshold; 1/2" high; fiberglass.

**Product Identification (Manufacturer Label on Door):**

System		
1	Manufacturer's Name or Code Name	Special-Lite, Inc.
	Product Name	Model AF-220 Door 3' x 7' DO
	Test Standards	ASTM E 330-02, ASTM E 1886-05, ASTM E 1996-05; Missile Level D

**Compliance:** The door assemblies passed test criteria equivalent to ASTM E 330-14, ASTM E 1886-13a, and ASTM E 1996-14a.

**Acceptance of Smaller Assemblies:** Doors with dimensions equal to or smaller than those specified in this evaluation report are acceptable within the limitations specified in this evaluation report.

**Impact Resistance:**

System	Impact Resistant	Requirement
1	Yes	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:**

**Wall Framing Construction:** The doors may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete: pre-cast or cast-in-place (minimum compressive strength: 3,000 psi).
- Wood: dimension lumber (minimum Spruce-Pine-Fir,  $G \geq 0.42$ ).
- Masonry: CMU (ASTM C-90, fully grouted).
- Steel: 18 gauge, minimum 33 ksi.

**Fastener Requirements:**

Substrate	Fastener	Minimum Embedment	Minimum Edge Distance
Wood	1/4" x 1-1/2" Creteflex Anchor	1-1/2"	1/2"
Concrete/CMU	3/16" Powers Tapper+	1-3/4"	4"
18 GA 33 ksi	No. 12 TEKS screw	Full engagement	1/2"

**Anchorage:**

The door is secured to the side jambs with fasteners located approximately 12" from the corners and approximately 32" on center (minimum 3 fasteners per side jamb).

**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.