



# Product Evaluation

DR756 | 0516

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:** May 1, 2016

**Re-evaluation Date:** May 2020

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

**Manufacturer:** Special-Lite, Inc.  
88448 County Road 668  
Decatur, MI 49045  
(800) 821-6531

### 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 required; Secured to the door panel with five No. 12 x 1" screws; Secured to the door frame with five No. 12 x 1" screws.
- Mortise Lock; Schlage L9453P-03A-626; one required.
- Strike Plate; Mortise Lock; one required; secured to the door jamb with two No. 12 x 1-1/2" SS wood screws.
- Deadbolt; Schlage B660L-626; one required.
- Strike Plate; Deadbolt; one required; secured to the door jamb with two 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, ASTM E 1886-05, ASTM E 1996-05

**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 in the Inland I and Seaward zone. 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<sub>0.42</sub>).
- 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"

**Installation:**

The door is secured to the side jambs with fasteners located 12" from the corners and 32" on center (minimum 3 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, the IBC, and the Texas Revisions.