



Product Evaluation

DR722 | 0615

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-722

Effective Date: June 1, 2015

Re-evaluation Date: July 2017

Product Name: 500 Series Aluminum Clad Wood Glazed Outswing Hinged Doors, Fixed Doors, and Mullered Assemblies, Impact Resistant

Manufacturer: FrontLine Building Products
610 Jensen Drive
Medford, WI 54451
(800) 223-4792

General Description:

System	Description	Label Rating	Design Pressure Rating
1	500 Series Aluminum Clad Wood Glazed Outswing Hinged Doors	LC-PG50 74x96 – SHD Missile Level D	+50 /-50 psf
2	500 Series Aluminum Clad Wood Glazed Outswing Hinged Doors with Integral Mullion	LC-PG50 74x96 – SHD Missile Level D	+50 /-50 psf
3	500 Series Aluminum Clad Wood Glazed Outswing Fixed Doors	LC-PG50 38x96 – FD Missile Level D	+50 /-50 psf
4	500 Series Aluminum Clad Wood Glazed Outswing Hinged Doors with Fixed Door; Side Mull	Operable Doors: LC-PG50 74x96 – SHD Missile Level D Fixed Doors: LC-PG50 38x96 – FD Missile Level D	+50 /-50 psf

General Description (continued):

System	Description	Label Rating	Design Pressure Rating
5	500 Series Aluminum Clad Wood Glazed Outswing Hinged Doors with Integral Mullion; with Fixed Door; Side Mull	Operable Doors: LC-PG50 74x96 – SHD Missile Level D Fixed Doors: LC-PG50 38x96 – FD Missile Level D	+50 /-50 psf

Component Dimensions:

System	Overall Size	Panel Size	Panel Glass Daylight Opening Size
1	73-3/4" x 96"	Active: 35-13/16" x 94-3/16" Passive: 35-13/16" x 94-3/16"	25" x 73-7/8"
2	73-3/4" x 96"	Active (2): 35-13/16" x 94-3/16"	25" x 73-7/8"
3	37-5/8" x 96"	35-13/16" x 94-3/16"	25" x 73-7/8"
4	111-1/8" x 96"	Active: 35-13/16" x 94-3/16" Passive: 35-13/16" x 94-3/16" Fixed Door: 35-13/16" x 94-3/16"	25" x 73-7/8"
5	111-1/8" x 96"	Active (2): 35-13/16" x 94-3/16" Fixed Door: 35-13/16" x 94-3/16"	25" x 73-7/8"

Hardware (Systems 1 and 4):

- **5-point Lock:** Located on the active door panel lock stile. 3 latches into astragal strikes, 2 end shoot bolts into a strike at the head and the sill.
- **3-point Lock:** Located on the passive door panel stile. 2 hand activated shoot bolts into a strike at the head and the sill.
- **Lock Strike Plates:** Two (2) required; locate on passive door panel astragal; secured with two (2) No. 10 x 3" screws (long enough to penetrate a minimum of 1/1/2" into the wall framing).
- **Dead Bolt/Latch Strike Plate:** One (1) required; located on the passive door panel astragal; secured with two (2) No. 12 x 3" screws (long enough to penetrate a minimum of 1/1/2" into the wall framing).
- **Shoot Bolt Strike Plate – Head (for 5-point and 3-point locks);** One (1) required; secured with three (3), No. 7 x 2-1/2" screws (long enough to penetrate a minimum of 1/1/2" into the wall framing).
- **Shoot Bolt Strike Plate – Sill (for 5-point and 3-point locks);** One (1) required; secured with three (3), No. 7 x 2-1/2" screws (long enough to penetrate a minimum of 1/1/2" into the wall framing).

Hardware (Systems 1 and 4) - continued:

- **Hinges:** Four (4) required; secured to the door slab with four (4), No. 12 x 1-1/4" screws; secured to the door jamb with two (2), No. 12-24 x 1/2" screws and two (2) No. 12 x 3" screws (long enough to penetrate a minimum of 1/1/2"into the wall framing).

Hardware (Systems 2 and 5):

- **Rim Exit Device** Von Duprin; required on both active panels.
- **2-point lock:** Sill and head shoot bolts; Located on both active panels.
- **Strike Plates (Rim Exit Device):** One required for each device; each located on the integral mullion; Secured with two (2) No. 8 x 3/4" PPH screws.
- **Shoot Bolt Strike Plate – Head (for 2-point locks);** Two (2) required; each secured with two (2), No. 8 screws (long enough to penetrate a minimum of 1-1/2"into the wall framing).
- **Shoot Bolt Strike Plate – Sill (for 2-point locks);** Two (2) required; each secured with two (2), No. 8 screws (long enough to penetrate a minimum of 1-1/2"into the wall framing).
- **Hinges:** Four (4) required; secured to the door slab with four (4), No. 12 x 1-1/4" screws; secured to the door jamb with two (2), No. 12-24 x 1/2" screws and two (2) No. 12 x 3" screws (long enough to penetrate a minimum of 1/1/2"into the wall framing).

Sill: Extruded aluminum; 0.619"height
 ADA sill (Optional); extruded aluminum; 0.500: height

Product Identification (Certification Agency Label on Door):

System		
1, 2	Certification Agency	WDMA
	Manufacturer’s Name or Code Name	FrontLine Bldg. Products Inc.
	Product Name	500 Series Clad Outswing IP
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05, ASTM E 1996-12, Missile Level D
3	Certification Agency	WDMA
	Manufacturer’s Name or Code Name	FrontLine Bldg. Products Inc.
	Product Name	500 Series Clad Outswing IP – Fixed Door
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05, ASTM E 1996-12, Missile Level D
4, 5	The operable doors will bear the label described in Systems 1 and 2 The fixed doors will bear the label described in System 3	

Impact Resistance:

System	Impact Resistant	Requirement
1, 2, 3, 4, 5	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:

System 1, 3, 4: Fasten door assembly to minimum Southern Yellow Pine dimension lumber. Secure the door assembly to the wall framing using the nailing fin with minimum No. 7 x 2" screws. Along the head and side jambs, the fasteners are spaced approximately 4" from each corner and 10" on center. The sill is secured to the wall framing through the frame with minimum No. 12 x 3" screws located approximately 12" on center. At the sill, a minimum No. 12 x 3" fastener is located approximately 4" on either side of the side mull (between the operable doors and the fixed door). Use fasteners long enough to penetrate a minimum of 1-1/2" into the framing.

System 2, 5: Fasten door assembly to minimum Southern Yellow Pine dimension lumber. Secure the door assembly to the wall framing using the nailing fin with minimum No. 7 x 2" screws. Along the head and side jambs, the fasteners are spaced approximately 4" from each corner and 10" on center. The sill is secured to the wall framing through the frame with minimum No. 10 screws located approximately 11-3/4" on center and located 2-3/8" outboard of the interior surface of the sill. At the sill, a minimum No. 12 x 3" fastener is located approximately 4" on either side of the side mull (between the operable doors and the fixed door). Use fasteners long enough to penetrate a minimum of 1-1/2" into the framing.

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