

Product Evaluation

DR258 | 0523

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-258

Effective Date: May 1, 2023

Re-evaluation Date: May 2027

Product Name: Glazed and Opaque, Fiberglass Side Hinged Entry Doors, Inswing and Outswing, with or without Sidelites, Impact Resistant

Manufacturer: Masonite International
1955 Powis Road
West Chicago, IL 60185
(630) 584-6330

General Description:

System	Description	Design Pressure Rating	Impact Resistant
1	6'-8" Glazed Inswing Double Doors w/ Sidelites; OXXO	+50 / -50 psf	Yes
2	6'-8" Glazed Outswing Double Doors w/ Sidelites; OXXO	+50 / -50 psf	Yes
3	8'-0" Glazed Inswing Double Doors w/ Sidelites; OXXO	+40 / -45 psf	Yes
4	8'-0" Glazed Outswing Double Doors w/ Sidelites; OXXO	+45 / -40 psf	Yes
5	8'-0" Opaque Inswing Double Doors w/ Sidelites; OXXO	+50 / -50 psf	Yes Doors Only

General Description:

System	Description	Design Pressure Rating	Impact Resistant
6	8'-0" Opaque Outswing Double Doors w/ Sidelites; OXXO	+50 / -50 psf	Yes Doors Only
7	6'-8" Opaque Inswing Double Doors w/ Sidelites; OXXO	+50 / -50 psf	Yes Doors Only
8	6'-8" Opaque Outswing Double Doors w/ Sidelites; OXXO	+50 / -50 psf	Yes Doors Only
9	8'-0" Opaque Inswing Single Door, Adjustable Inswing Sill; X	+70 / -70 psf	Yes
10	8'-0" Opaque Inswing Single Door, ADA Inswing Sill; X	+62 / -62 psf	Yes
11	8'-0" Opaque Outswing Single Door, Standard Outswing Sill; X	+70 / -70 psf	Yes

Product Dimensions:

System	Overall Size	Panel Size	Panel Daylight Opening Size
1	148-3/4" x 81-3/4"	35-3/4" x 79-1/4"	Door & Sidelite: 21" x 63"
2	148-3/4" x 80-5/8"	35-3/4" x 79-1/4"	Door & Sidelite: 21" x 63"
3	148-7/8" x 97-3/4"	35-3/4" x 95-1/4"	Door & Sidelite: 21" x 79"
4	148-7/8" x 96-5/8"	35-3/4" x 95-1/4"	Door & Sidelite: 21" x 79"
5	148-3/4" x 97-3/4"	35-3/4" x 95-1/4"	Door: N/A Sidelite: 21" x 79"
6	148-3/4" x 96-3/4"	35-3/4" x 95-1/4"	Door: N/A Sidelite: 21" x 79"
7	147-3/4" x 81-3/4"	35-3/4" x 79-1/4"	Door: N/A Sidelite: 21" x 63"
8	147-3/4" x 80-3/4"	35-3/4" x 79-1/4"	Door: N/A Sidelite: 21" x 63"
9-10	37-1/2" x 97-3/4"	35-3/4" x 95-1/4"	N/A
11	37-1/2" x 96-7/8"	35-3/4" x 95-1/4"	N/A

Components and Hardware:

Hinges

- **Systems 1-2, 7-8**
 - Six required, three per door panel; secured to the door panel with four No. 10 x 1" PFH screws, and to the door jamb with three No. 10 x 5/8" PFH screws and one No. 10 x 2-1/2" PFH screw.
- **Systems 3-6**
 - Eight required, four per door panel; secured to the door panel with four No. 10 x 1" PFH screws, and to the door jamb with three No. 10 x 5/8" PFH screws and one No. 10 x 2-1/2" PFH screw.
- **Systems 9-11**
 - Four required; secured to the door panel with four No. 10 x 1" PFH screws, and to the door jamb with three No. 10 x 5/8" PFH screws and one No. 10 x 2-1/2" PFH screw.

Locksets and Deadbolts

- Kwikset Series 400 Lockset: one required; located on the active door panel
- Kwikset Series 980 Deadbolt: one required; located on the active door panel

Astragal Retainer Bolts (Systems 1-8): located at the top and bottom of the passive door astragal

Strike Plates

- **Systems 1-8**
 - Lockset and Deadbolt strike plates: one each required; located on the passive door astragal, secured with two No. 8 x 2" PFH screws
 - Astragal strike plate: secured to the door frame head with two No. 8 x 2" PFH screws
- **Systems 9-11**
 - Lockset and Deadbolt strike plates: one each required; located on the door jamb, secure with two No. 8 x 2" PFH screws

Astragal Retainer Bolt Hole (System 1-8): Hole must be drilled through the threshold and into the wall framing deep enough for a 1-3/8" throw.

Thresholds:

- 1.375" high aluminum inswing adjustable threshold (Systems 1, 3, 5, 7, 9)
- 0.962" high aluminum outswing bumper threshold (Systems 2, 4, 6, 8, 11)
- 0.50" high aluminum inswing bumper threshold; ADA Sill (System 10)

Product Identification (Manufacturer Label on Door):

System		
1-2	Manufacturer's name	Masonite
	Product name	Fiberglass Glazed Entry Doors w/ or w/o Sidelites Inswing/Outswing Config: X, XX, OX, XO, OXO, OXXO Max. Nominal Size: 12'0" x 6'8"
	Test standards	ASTM E330-02/E1886-05/E1996-09 Missile Level D
3-4	Manufacturer's name	Masonite
	Product name	Fiberglass Glazed Entry Doors w/ or w/o Sidelites Inswing/Outswing Config: X, XX, OX, XO, OXO, OXXO Max. Nominal Size: 12'0" x 8'0"
	Test standards	ASTM E330-02/E1886-05/E1996-09 Missile Level D
5-6	Manufacturer's name	Masonite
	Product name	Fiberglass Opaque Entry Doors w/ or w/o Sidelites Inswing/Outswing Config: X, XX, OX, XO, OXO, OXXO Max. Nominal Size: 12'0" x 8'0"
	Test standards	ASTM E330-02/E1886-05/E1996-09 Missile Level D
7-8	Manufacturer's name	Masonite
	Product name	Fiberglass Opaque Entry Doors w/ or w/o Sidelites Inswing/Outswing Config: X, XX, OX, XO, OXO, OXXO Max. Nominal Size: 12'0" x 6'8"
	Test standards	ASTM E330-02/E1886-05/E1996-09 Missile Level D
9-11	Manufacturer's name	Masonite
	Product name	Fiberglass Opaque Entry Doors w/ or w/o Sidelites Inswing/Outswing Config: X Max. Nominal Size: 3'0" x 8'0"
	Test standards	ASTM E330-02/E1886-05/E1996-09 Missile Level D

Compliance: The products comply with ASTM E330-14, ASTM E 1886-13a, and ASTM E 1996-14a as referenced in the 2018 IRC and 2018 IBC.

Impact Resistance:

System	Impact Resistant	Requirement
1-4, 9-11	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.
5-8 Doors Only	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.

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

Installation:**Systems 1-8**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 10 x 2-1/2" PFH screws along the head and side jambs and No. 10 x 2" PFH screws (inswing) or No. 10 x 2-1/2" PFH screws (outswing) along the sill. Along the head, locate the screws approximately 6" from each corner, 3" and 6" on each side of the mullion and the astragal, and one screw at the centerline of each door panel. Along the side jambs, locate the screws approximately 6" from each corner and four screws evenly spaced thereafter. Along the sill, locate the screws approximately 6" from each corner, and 3" and 6" on each side of the mullion and the astragal.

Systems 9-11

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 10 x 2-1/2" PFH screws. Along the head and sill, locate the screw approximately 6" from each corner. Along the side jambs, locate the screws approximately 6" from each corner and four screws evenly spaced thereafter.

NOTE: All fasteners must be long enough to penetrate a minimum of 1-1/2" into the wood framing members. If the frame sill is secured to concrete, a 3/16" diameter concrete anchor may be substituted for the screws noted above. The concrete anchor must have a minimum embedment of 1-1/4" into the concrete.

NOTE: An illustration of anchor location along the perimeter of the assembly is provided in drawing "Structural Performance Anchor Detail." An illustration of anchor placement on the frame and sill members is provided in drawing "Anchor Placement Detail."

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.