

Product Evaluation

DR346 | 0621

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-346

Effective Date: June 1, 2021

Re-evaluation Date: June 2025

Product Name: Steel Edge Steel Glazed Inswing and Outswing Side Hinged Doors, with or without Sidelites, Frame Installation, Impact and Non-Impact Resistant

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

General Description:

System	Description	Design Pressure Rating	Impact Rated
1	6'-8" Steel Edge Steel Full Lite Glazed Inswing Door with Sidelites; OXXO	+40 / -45 psf	No
2	6'-8" Steel Edge Steel Full Lite Glazed Outswing Door with Sidelites; OXXO	+45 / -40 psf	No
3	6'-8" Steel Edge Steel (22" x 48") Glazed Inswing Doors with Sidelites; OXXO	+50 / -50 psf	No
4	6'-8" Steel Edge Steel (22" x 48") Glazed Outswing Door with Sidelites; OXXO	+50 / -50 psf	No
5	8'-0" Steel Edge Steel Full Lite Glazed Inswing Door with Sidelites; OXXO	+40 / -45 psf	No

General Description:

System	Description	Design Pressure Rating	Impact Rated
6	8'-0" Steel Edge Steel Full Lite Glazed Outswing Door with Sidelites; OXXO	+45 / -40 psf	No
7	6'-8" Steel Edge Steel Impact Glazed Inswing Door with Sidelites; OXXO	+40 / -45 psf	Yes
8	6'-8" Steel Edge Steel Impact Glazed Outswing Door with Sidelites; OXXO	+45 / -40 psf	Yes
9	8'-0" Steel Edge Steel Impact Glazed Inswing Door with Sidelites; OXXO	+40 / -40 psf	Yes
10	8'-0" Steel Edge Steel Impact Glazed Outswing Door with Sidelites; OXXO	+40 / -40 psf	Yes

Product Dimensions:

System	Overall Size	Maximum Panel Size	Panel Daylight Opening Size
1, 7	150" x 81-3/4"	36-3/4" x 79-1/4"	Door & Sidelite: 21" x 63"
2, 8	150" x 80-3/4"	36-3/4" x 79-1/4"	Door & Sidelite: 21" x 63"
3	150" x 81-3/4"	36-3/4" x 79-1/4"	Door: 21" x 47" Sidelite: 21" x 63"
4	150" x 80-3/4"	36-3/4" x 79-1/4"	Door: 21" x 47" Sidelite: 21" x 63"
5, 9	150" x 97-3/4"	36-3/4" x 95-1/4"	Door & Sidelite: 21" x 79"
6, 10	150" x 96-3/4"	36-3/4" x 95-1/4"	Door & Sidelite: 21" x 79"

Components and Hardware:**Systems 1-4:**

- **Hinges:** three required; secured to the door panel with four No. 10 x 1/2" screws; secured to the door jamb with three No. 10 x 5/8" screws and one No. 10 x 2-1/2" screws.
- **Lockset:** minimum grade 3 rating as defined by ANSI/BHMA A156.2; located on the active door panel
- **Deadbolt:** grade 1 rating as defined by ANSI/BHMA A156.36; located on the active door panel
- **Strike plate – Lockset:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Strike plate – Deadbolt:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.

- **Astragal strike – strike plate at head:** Secure with two No. 8 x 2" screws
- **Astragal strike – sill retainer hole:** drill hole through sill deep enough for a 1-3/8" extension bolt throw.

Systems 5-6:

- **Hinges:** four required; secured to the door panel with four No. 10 x 1/2" screws; secured to the door jamb with three No. 10 x 5/8" screws and one No. 10 x 2-1/2" screws.
- **Lockset:** minimum grade 3 rating as defined by ANSI/BHMA A156.2; located on the active door panel
- **Deadbolt:** grade 1 rating as defined by ANSI/BHMA A156.36; located on the active door panel
- **Strike plate – Lockset:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Strike plate – Deadbolt:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Astragal strike – strike plate at head:** Secure with two No. 8 x 2" screws
- **Astragal strike – sill retainer hole:** drill hole through sill deep enough for a 1-3/8" extension bolt throw.

Systems 7-8:

- **Hinges:** three required; secured to the door panel with four No. 10 x 1/2" screws; secured to the door jamb with three No. 10 x 5/8" screws and one No. 10 x 2-1/2" screws.
- **Kwikset Series 400 Lockset:** locate on the active door panel.
- **Kwikset Series 980 deadbolt:** locate on the active door panel.
- **Strike plate – Lockset:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Strike plate – Deadbolt:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Astragal strike – strike plate at head:** Secure with two No. 8 x 2" screws
- **Astragal strike – sill retainer hole:** drill hole through sill deep enough for a 1-3/8" extension bolt throw.

Systems 9-10:

- **Hinges:** four required; secured to the door panel with four No. 10 x 1/2" screws; secured to the door jamb with three No. 10 x 5/8" screws and one No. 10 x 2-1/2" screws.
- **Kwikset Series 400 Lockset:** locate on the active door panel.
- **Kwikset Series 980 deadbolt:** locate on the active door panel.
- **Strike plate – Lockset:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Strike plate – Deadbolt:** one required; locate on the door jamb; secured with two No. 8 x 2" screws.
- **Astragal strike – strike plate at head:** Secure with two No. 8 x 2" screws

- **Astragal strike – sill retainer hole:** drill hole through sill deep enough for a 1-3/8" extension bolt throw.

Thresholds:

- Outswing: 0.962" high aluminum adjustable threshold (Systems 2, 4, 6, 8, 10)
- Outswing: 1.482" high Endura Z Series High Dam aluminum threshold (Systems 2, 4, 6, 8, 10)
- Outswing: 1.730" high DLP High Dam aluminum bumper threshold (Systems 2, 4, 6, 8, 10)
- Inswing: 1.375" high aluminum adjustable threshold (Systems 1, 3, 5, 7, 9)

Product Identification (Manufacturer Label on Door):

System		
1-2	Manufacturer's name	Masonite
	Product name	Steel Edge Steel Glazed Door Unit with or without Sidelites Full Lite Glazed Inswing or Outswing Config: X, XX, OX, XO, OXO, OXXO Max Nominal Size: 12'0" x 6'8"
	Test standards	ASTM E330-02
3-4	Manufacturer's name	Masonite
	Product name	Steel Edge Steel Glazed Door Unit with or without Sidelites Glazed 22x48 Inswing or Outswing Config: X, XX, OX, XO, OXO, OXXO Max Nominal Size: 12'0" x 6'8"
	Test standards	ASTM E330-02
5-6	Manufacturer's name	Masonite
	Product name	Steel Edge Steel Glazed Door Unit with or without Sidelites Full Lite Glazed Inswing or Outswing Config: X, XX, OX, XO, OXO, OXXO Max Nominal Size: 12'0" x 8'0"
	Test standards	ASTM E330-02

Product Identification (Manufacturer Label on Door)-continued:

System		
7-8	Manufacturer's name	Masonite
	Product name	Steel Edge Steel Glazed Door Unit with or without Sidelites Full Lite Glazed Inswing or Outswing Config: X, XX, OX, XO, OXO, OXXO Max Nominal Size: 12'0" x 6'8"
	Test standards	ASTM E330-02 TAS-201, 202, 203; Large Missile
9-10	Manufacturer's name	Masonite
	Product name	Steel Edge Steel Glazed Door Unit with or without Sidelites Full Lite Glazed Inswing or Outswing Config: X, XX, OX, XO, OXO, OXXO Max Nominal Size: 12'0" x 8'0"
	Test standards	ASTM E330-02 TAS-201, 202, 203; Large Missile

Compliance: The products comply with ASTM E 330-14 as reference in the 2018 IRC and 2018 IBC.

Impact Resistance:

System	Impact Resistant	Requirement
1-6	No	Provide an impact protective system when installing the product in areas that require windborne debris.
7-10	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.

Sidelites: Only use sidelites with doors. Do not install sidelites individually.

Installation:

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly must be secured to the wall framing using minimum No. 10 x 2-1/2" PFH screws. Along the head and sill, the fasteners must be located approximately 6" from each outside corner, one

at 3" and 6" on each side of the mullion, one at 3" and 6" on each side of the astragal, and one at the centerline of each door panel. Along the side jambs, locate the fasteners approximately 6" from each corner and space evenly thereafter for six screws along each side jamb. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing.

Concrete framing: If the frame is attached to concrete, substitute, minimum 3/16" diameter flat head concrete anchors. Embed the anchor a minimum 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." Rev. 050217. 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.