# Product Evaluation



*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-217

**Effective Date:** December 1, 2015
**Re-evaluation Date:** December 2019

**Product Name:** Metal Edge Steel Opaque Inswing and Outswing Hinged Doors with Two-Piece Adjustable Frame, Impact Resistant and Non-Impact Resistant

**Manufacturer:** Masonite Exterior Door Products
One Premdor Drive
Dickson, Tennessee 37055
(800) 663-3667

**General Description (Impact Doors):**

| System | Description | Design Pressure |
|---|---|---|
| 1 | Opaque Inswing Hinged Double Doors 6'8"; XX | +50.5 / -50.5 psf |
| 2 | Opaque Outswing Hinged Double Doors 6'8"; XX | +50.5 / -50.5 psf |
| 3 | Opaque Inswing Hinged Double Doors 6'8"; XX; Surface Bolts | +45.3 / -55.0 psf |
| 4 | Opaque Inswing Hinged Single Doors 8'0"; X | +65.0 / -65.0 psf |
| 5 | Opaque Outswing Hinged Single Doors 8'0"; X | +65.0 / -65.0 psf |
| 6 | Opaque Inswing Hinged Single Doors 8'0"; X; Sill Optional | +55.0 / -55.0 psf |
| 7 | Opaque Outswing Hinged Single Doors 8'0"; X; Sill Optional | +55.0 / -55.0 psf |

**General Description (Non-Impact Doors):**

| System | Description | Design Pressure |
|---|---|---|
| 8 | Opaque Inswing Hinged Doors 6'8"; X; Mortise Card Lock | +44.0 / -66.0 psf |

**Product Dimensions:**

| System | Overall Size | Active Panel Size | Passive Panel Size |
|---|---|---|---|
| 1 | 75-5/8" x 82-5/16" | 35-3/34" x 79-5/16" | 35-3/4" x 79-5/16" |
| 2 | 75-5/8" x 81-13/16" | 35-3/34" x 79-5/16" | 35-3/4" x 79-5/16" |
| 3 | 75-5/8" x 82-5/16" | 35-3/34" x 79-5/16" | 35-3/4" x 79-5/16" |
| 4 | 39-1/8" x 98-5/16" | 35-3/34" x 95-5/16" | N/A |
| 5 | 39-1/8" x 97-13/16" | 35-3/34" x 95-5/16" | N/A |
| 6 | 39-1/8" x 98-5/16" | 35-3/34" x 95-5/16" | N/A |
| 7 | 39-1/8" x 97-13/16" | 35-3/34" x 95-5/16" | N/A |
| 8 | 39-1/8" x 82-5/16" | 35-3/34" x 79-5/16" | N/A |

**Hardware - Hinges:**

**Systems 1 through 3:**

- Hinges; six required (three per door panel); Secured to the door panel with four No. 10 x 1/2" flat head machine screws. Secured to the door jamb with three, No. 10 x 1/2" flat head machine screws and one, No. 8 x 2" flat head wood screw.

**Systems 4 through 8:**

- Hinges; four required; Secured to the door panel with four No. 10 x 1/2" flat head machine screws. Secured to the door jamb with three, No. 10 x 1/2" flat head machine screws and one, No. 8 x 2" flat head wood screw.

**Hardware – Deadbolts and Locksets:**

**Systems 1 through 7:**

- Schlage B-Series Deadbolt; Located on the active door panel.

- Schlage F-Series Lockset; Located on the active door panel.

**System 8:**

- Ving Card Lock System, LCU 3300 XC Classic Mag; Located on the active door panel.

**Hardware – Astragal Retainer Bolts:**

**Systems 1 through 3:**

- Located at the astragal on the passive door panel at the top and bottom.

**Hardware – Surface Bolts:**

**System 3:**

- Two required; Located on the passive door panel.

**Hardware – Strike Plates:**

**Systems 1 through 3:**

- Strike plate – Lockset; One required; Located on the door astragal; Secured with two, No. 8 x 2" PFH screws.

- Strike plate – Deadbolt; One required; Located on the door astragal; Secured with two, No. 8 x 2" PFH screws.

**Hardware – Strike Plates (Continued):**

**Systems 1 through 3:**

- Strike plate – Astragal Retainer Bolt; One required; Located at the door frame head; Secured with two, No. 8 x 2" PFH screws.

- Strike plate – Surface Bolt (System 3); One Required: Located at the door frame head; Secured with two, No. 8 x 2" screws.

- 8" Ives Model 453 Surface Bolts; two required; Located at the top and bottom of the active lock stile. Each secured to the door panel with four 1/4-20 x 1" screws.

**Hardware – Strike Plates:**

**Systems 4 through 8:**

- Strike plate – Lockset; One required; Located on the door jamb; Secured with two, No. 8 x 1/2" flat head machine screws.

- Strike plate – Deadbolt; One required; Located on the door astragal; Secured with two, No. 8 x 2" PFH screws.

**Thresholds:**

- 1.25" high aluminum inswing threshold (System 1, 3, 4, 8)
- 1.25" high aluminum outswing threshold (System 2, 5)
- Optional threshold (System 6, 7)

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

| System | | |
|---|---|---|
| 1, 2 | Manufacturer's Name | Masonite |
| | Product Name | Opaque Metal-Edge Steel Door Adjustable Steel Frame Inswing or Outswing Config: XX |
| | Maximum Size Tested | 6'-0" x 6'-8" |
| | Test Standards | TAS 201, ASTM E330, TAS 203 |
| 3 | Manufacturer's Name | Masonite |
| | Product Name | Opaque Metal-Edge Steel Door Adjustable Steel Frame Inswing (Fire Z-Astragal) Config: XX |
| | Maximum Size Tested | 6'-0" x 6'-8" |
| | Test Standards | TAS 201, ASTM E 330, TAS 203 |

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

| System | | |
|---|---|---|
| 4, 5 | Manufacturer's Name | Masonite |
| | Product Name | Opaque Metal-Edge Steel Door Adjustable Steel Frame Inswing or Outswing Config: X |
| | Maximum Size Tested | 3'-0" x 8'-0" |
| | Test Standards | TAS 201, ASTM E 330, TAS 203 |
| 6, 7 | Manufacturer's Name | Masonite |
| | Product Name | Opaque Metal-Edge Steel Door Adjustable Steel Frame Inswing or Outswing (Sill Optional) Config: X |
| | Maximum Size Tested | 3'-0" x 8'-0" |
| | Test Standards | TAS 201, ASTM E 330, TAS 203 |
| 8 | Manufacturer's Name | Masonite |
| | Product Name | Opaque Metal-Edge Steel Door Adjustable Steel Frame Inswing Mortise Card Lock Config: X |
| | Maximum Size Tested | 3'-0" x 8'-0" |
| | Test Standards | ASTM E 330 |

**Impact Resistance:**

| System | Impact Resistant | Requirement |
|---|---|---|
| 1-7 | 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. |
| 8 | No | Provide an impact protective system when installing the product in areas that require windborne debris. |

**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:**
The door assembly must be fastened to minimum Southern Yellow Pine dimension lumber wall framing. The door assembly must be secured to the wall framing as follows:

**Head:**

**Systems 1, 2, 3:** Minimum No. 8 x 1-1/4" PFH screws; Located approximately 2-1/2" from each end and four additional screws evenly spaced between; Fastener required at the interior and the exterior.

**Systems 4, 5, 6, 7, 8:** Minimum No. 8 x 1-1/4" PFH screws; Located approximately 9" from each end and one at the mid span. Fastener required at the interior and the exterior.

**Sill:**

**Systems 1, 2, 3:** Minimum No. 10 x 2" PFH screws (Inswing) and No. 10 x 2-1/2" (Outswing); Located approximately 2-1/2" from each end and two fastener at the mid span; Fasteners located through the sill and into the wall framing.

**Systems 4, 5, 6, 7, 8:** Minimum No. 10 x 2" PFH screws (Inswing) and No. 10 x 2-1/2" (Outswing); Located approximately 9" from each end; Fasteners located through the sill and into the wall framing.

**Side Jambs:**

**Systems 1, 2, 3, 5, 6, 7, 8:** Minimum No. 8 x 1-1/4" PFH screws; Located approximately 3" from each end and four additional screws evenly spaced between; Fastener required at the interior and the exterior.

**NOTE:** All fasteners must be long enough to penetrate a minimum of 1-1/4" into the wood framing. If the frame sill is secured to concrete rather than wood framing members, then a 3/16" diameter concrete anchor may be substituted for the No. 10 screws noted above. The concrete anchor must have a minimum embedment of 1-1/4" into the concrete.

**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.