



Product Evaluation

DR352 | 1014

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-352

Effective Date: October 1, 2014

Re-evaluation Date: September 2018

Product Name: Reliabilt 6'-8" and 8'-0" Wood Edge Steel Glazed and Opaque Inswing and Outswing Hinged Doors with Sidelites, Impact Resistant and Non-Impact Resistant

Manufacturer: Lowe's Companies, Inc.
1000 Lowes Blvd
 Mooresville, NC 28115
(704) 758-3459

General Description:

System	Description	Design Pressure Rating	Impact Resistant
1	8'-0" Opaque Outswing Single Door; X	+70.0 / -70.0 psf	Yes
2	8'-0" Opaque Inswing Single Door; X	+70.0 / -70.0 psf	Yes
3	8'-0" Glazed Inswing Double Door With Sidelites; OXXO	+40.0 / -45.0 psf	No
4	8'-0" Glazed Outswing Double Door With Sidelites; OXXO	+45.0 / -45.0 psf	No
5	8'-0" Opaque Inswing Double Door With Sidelites; OXXO	+45.0 / -50.0 psf	Yes (Doors Only)
6	8'-0" Opaque Outswing Double Door With Sidelites; OXXO	+50.0 / -45.0 psf	Yes (Doors Only)
7	6'-8" Glazed Inswing Single Door With Sidelite; XO	+60 / -50 psf	No
8	6'-8" Opaque Outswing Double Door With Sidelites; OXXO	+55.0 / -55.0 psf	Yes (Doors Only)

General Description (continued):

System	Description	Design Pressure Rating	Impact Resistant
9	6'-8" Opaque Inswing Double Door With Sidelites; OXXO	+55.0 / -55.0 psf	Yes (Doors Only)

Product Dimensions – Overall Size:

System	Overall Size
1	37.75" x 96.75"
2	37.75" x 97.75"
3	150.00" x 97.88"
4	150.00" x 96.63"
5	150.00" x 97.88"
6	150.00" x 96.63"
7	75.00" x 81.75"
8	105.00" x 80.75"
9	105.00" x 81.75"

Product Dimensions – Doors:

System	Active Panel Size	Passive Panel Size	Daylight Opening Size
1	35.75" x 95.31"	N/A	N/A
2	35.75" x 95.31"	N/A	N/A
3	35.75" x 95.25"	36.38" x 95.25"	21.00" x 79.00"
4	35.75" x 95.25"	36.38" x 95.25"	21.00" x 79.00"
5	35.75" x 95.25"	36.38" x 95.25"	N/A
6	35.75" x 95.25"	36.38" x 95.25"	N/A
7	35.75" x 79.25"	N/A	N/A
8, 9	35.75" x 79.25"	36.38" x 79.25"	N/A

Product Dimensions - Sidelites:

System	Sidelite Panel Size	Daylight Opening Size
1	N/A	N/A
2	N/A	N/A
3	35.75" x 95.25"	21.00" x 79.00"
4	35.75" x 95.25"	21.00" x 79.00"
5	35.75" x 95.25"	21.00" x 79.00"
6	35.75" x 95.25"	21.00" x 79.00"
7	35.75" x 79.25"	21.00" x 63.00"
8, 9	14.00" x 79.25"	5.88" x 63.00"

Hardware (Systems 1 and 2):

- **Hinges:** four required; secure to the door panel with four (4), No. 10 x 1" screws; secure to the doorjamb with three (3), No. 10 x 5/8" screws and one (1), No. 10 x 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 doorjamb; secure with two (2), No. 8 x 2" screws
- **Strike plate – Deadbolt:** one required; locate on the doorjamb; (System 1) secure with two (2), No. 10 x 2" screws; (System 2) secure with two (2), No. 8 x 2" screws and two (2), No. 10 x 2" screws

Hardware (Systems 3 through 6 and 8 through 9):

- **Hinges:** six required (three per door panel); secure to the door panel with two (2), No. 10 x 3/4" screws and two (2), No. 10 x 1-1/4" screws; secure to the doorjamb with two (2), No. 10 x 3/4" screws and two (2), No. 10 x 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 astragal; secure with two (2), No. 8 x 2-1/2" screws
- **Strike plate – Deadbolt:** one required; locate on the door astragal; secure with two (2), No. 8 x 2-1/2" screws
- **Astragal strike – strike plate at head:** secure with two (2), No. 8 x 2-1/2" screws
- **Astragal strike – sill retainer hole:** drill hole through sill deep enough for a 1-3/8" screws extension bolt throw

Hardware (System 7):

- **Hinges:** three required; secure to the door panel with four (4), No. 10 x 3/4" screws: secure to the doorjamb with two (2), No. 10 x 3/4" screws and two (2), No. 10 x 2-1/2" screws
- **Schlage F-Series Lockset:** locate on the active door panel
- **Schlage B-Series deadbolt:** locate on the active door panel
- **Strike plate – Lockset:** one required; locate on the door side jamb/mullion; secure with two (2), No. 8 x 2-1/2" screws
- **Strike plate – Deadbolt:** one required; locate on the door side jamb/mullion; secure with two (2), No. 8 x 2-1/2" screws

Thresholds:

- 0.962" high aluminum adjustable threshold (System 1, 4, 6, 8)
- 1.375" high aluminum adjustable threshold (System 2, 3, 5, 7, 9)

Product Identification (Manufacturer Produced Label on Door):

System		
1, 2	Manufacturer	Lowe's Companies
	Product Name	Reliabilite Opaque or Glazed Inswing and Outswing Steel Door w/ or w/o Non-impact Rated Sidelites
	Test Standards	ASTM E 330 ASTM E 1886, ASTM E 1996
3, 4	Manufacturer	Lowe's Companies
	Product Name	Reliabilite Opaque or Glazed Inswing and Outswing Steel Door w/ or w/o Non-impact Rated Sidelites
	Test Standards	ASTM E 330
7	Manufacturer	Lowe's Companies
	Product Name	Reliabilite Opaque or Glazed Inswing and Outswing Steel Door w/ or w/o Non-impact Rated Sidelites
	Test Standards	ASTM E 330
5, 6, 8, 9	Manufacturer	Lowe's Companies
	Product Name	Reliabilite Opaque or Glazed Inswing and Outswing Steel Door w/ or w/o Non-impact Rated Sidelites
	Test Standards	ASTM E 330 ASTM E 1886, ASTM E 1996

Impact Resistance:

System	Impact Resistant	Requirement
1, 2	Yes	The doors satisfy TDI's windborne debris protection criteria in the Inland I and Seaward zone. Install the doors at a height on the structure that does not exceed design pressure rating for the assemblies.

Impact Resistance:

System	Impact Resistant	Requirement
3, 4, 7	No	Provide an impact protective system when installing the product in areas that require windborne debris protection.

Impact Resistance:

System	Impact Resistant	Requirement
5, 6, 8, 9	Yes (Doors Only)	The doors only satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the doors at any height on the structure that does not exceed the design pressure rating for the assemblies. The sidelites do not satisfy TDI's criteria for windborne debris protection. Install an impact protective system in areas that require windborne debris protection.

- **Acceptance of Smaller Assemblies:** Door assemblies with dimensions equal to or less than those specified are acceptable within the limitations specified in this report.
- **Sidelites:** Only use sidelites with doors. Do not install sidelites individually.

Installation:**Systems 1 and 2 (Single Doors)****Wall Framing:** Minimum Spruce-Pine-Fir dimension lumber.**Frame:**

- **Jambs:** Locate No. 10 x 2-1/2" long wood screws 6" from each corner and space evenly thereafter for a total of six screws each side jamb.
- **Head:** Locate No. 10 x 2-1/2" long wood screws 6" from each corner.

Systems 1 and 2 (Single Doors) - Continued

- **Sill:** Locate No. 8 x 2" long wood screws 6" from each corner.

NOTE: Penetrate fasteners into wood wall framing a minimum of 1-1/2". If the frame attaches to concrete rather than wood framing members, you may substitute a 3/16" diameter flat concrete anchor. Embed the concrete anchor a minimum of 1-1/4" into the concrete.

Systems 3 through 6, and 8 through 9 (Double Doors with Sidelites)**System 7 (Single Door with Sidelite)****Wall Framing:** Minimum Spruce-Pine-Fir dimension lumber.**Frame:**

- **Jambs:** Locate No. 10 x 2-1/2" long wood screws 6" from each corner and space evenly thereafter for six screws each jamb.
- **Head:** No. 10 x 2-1/2" long wood screws in the following locations:
 - one at 3" 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.
- **Sill:** No. 10 x 2-1/2" long wood screws in the following locations:
 - one at 3" 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.

NOTE: Penetrate fasteners into wood wall framing a minimum of 1-1/2". If the frame attaches to concrete rather than wood framing members, you may substitute a 3/16" diameter flat concrete anchor. Embed the concrete anchor a minimum of 1-1/4" into the concrete.

Note: The manufacturer's installation instructions must be available on the job site during installation. All fasteners must be corrosion resistant as specified in the IRC, the IBC, and the Texas Revisions.