

Product Evaluation

DR1210 | 1121

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-1210

Effective Date: November 1, 2021

Re-evaluation Date: November 2025

Product Name: Ultimate Aluminum Clad Wood Hinged Inswing Doors and French Doors G2, with or without Sidelites, Non-Impact Resistant

Manufacturer: Marvin
P.O. Box 100
Highway 11 West
Warroad, MN 56763
(218) 386-4021

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Ultimate Clad Wood Inswing French Door, G2; OXXO	LC-PG30 (167 x 98)	+30 / -30 psf
2	Ultimate Clad Wood Inswing French Door, G2; OXXO	LC-PG40 (143 x 98)	+40 / -40 psf
3	2-1/4" Ultimate Clad Wood Inswing Door; X	LC-PG50 (43.43 x 122)	+50 / -50 psf
4	2-1/4" Ultimate Clad Wood Inswing French Door, G2; X	LC-PG50 (43.43 x 122)	+50 / -50 psf

General Description:

System	Description	Label Rating	Design Pressure Rating
5	2-1/4" Ultimate Clad Wood Inswing French Door, G2; XX	LC-PG50 (72.62 x 122)	+50 / -50 psf
6	2-1/4" Ultimate Clad Wood Inswing Door; OXXO	LC-PG30 (143 x 98)	+30 / -40 psf
7	2-1/4" Ultimate Clad Wood Inswing French Door, G2; OXXO	LC-PG30 (143 x 98)	+30 / -40 psf
8	2-1/4" Ultimate Clad Wood Inswing Door; OXXO	LC-PG30 (167 x 122)	+30 / -30 psf
9	2-1/4" Ultimate Clad Wood Inswing French Door, G2; OXXO	LC-PG30 (167 x 122)	+30 / -30 psf

Product Dimensions:

System	Overall Size	Operable Panel Size	Panel Daylight Opening Size
1	167" x 98"	41-1/16" x 95-1/8"	31-9/16" x 85-5/8"
2	143" x 98"	35-1/16" x 95-1/8"	25-9/16" x 85-5/8"
3-4	43-7/16" x 122"	41-1/16" x 119-1/8"	35-3/32" x 113-1/8"
5	72-5/8" x 122"	35-1/16" x 119-1/8"	29-9/16" x 109-5/8"
6-7	143" x 98"	35-1/16" x 95-1/8"	29-3/32" x 89-1/8"
8-9	167" x 122"	41-1/16" x 119-1/8"	35-3/32" x 113-1/8"

Components and Hardware:**Systems 1-2, 6-9:**

- **Hinges:** three (3) per jamb required; secure to the door panel with four (4) No. 10 x 1-1/2" screws and to the door jamb with five (5) No. 10 x 1" screws.
- **Multipoint Lock with Deadbolt (2-point):** one required; located on the locking stile
- **Passive Lock Box:** one (1) required; located on the locking stile of the passive panel
- **Stile End Plate:** four (4) required; located on the top and bottom of each locking stile
- **Stationary Stile End Plate:** four (4) required; located on the top and bottom of each fixed panel hinge stile
- **Stationary Bolt:** four (4) required; located on the top and bottom of each fixed panel hinge stile
- **Sill Strike:** two (2) required; located at the center of the sill; secured with five No. 10 x 3" screws
- **Header Strike and Retainer:** two (2) required; located at the center of the head jamb; secured with two No. 10 x 3" screws.
- **Strike Plate Panel:** one (1) required; located on the passive panel

Systems 3-5:

- **Hinges:** three (3) per jamb required; secure to the door panel with four (4) No. 10 x 1-1/2" screws and to the door jamb with five (5) No. 10 x 1" screws.
- **Multipoint Lock with Deadbolt (2-point):** one (1) required; located on the locking stile
- **Stile End Plate:** two (2) required; located on the top and bottom of each locking stile
- **Multipoint Strike Plate:** one (1) required; located on the locking jamb

Product Identification (Certification Label on Door):

System		
1-2	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL INS FRDR G2
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17
3, 6, 8	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL INS DR 2.25
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17
4-5, 7, 9	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL INS FRDR 2.25 G2
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17

Impact Resistance:

System	Impact Resistant	Requirement
1-9	No	Provide an impact protective system when installing the product in areas that require windborne debris.

Installation:**Systems 1-2, 6-9:**

Screw Thru frame: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 8 x 3" screws. Along the head and side jambs, locate the screws approximately 6" from each corner and 15" on center. Along the sill, use No. 8 x 1-1/2" screws spaced 15" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Structural Brackets: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with structural brackets (1.238" x 0.969" x 0.125" aluminum). Along the head and side jambs, locate the brackets approximately 6" from each corner and 15" on center. Along the sill, use No. 8 x 1-1/2" screws spaced 15" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Systems 3-4:

Screw Thru Frame: The wood wall framing member must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 8 x 3" screws. Along the head and side jambs, locate the screws approximately 6" from each corner and 15" on center. Use two No. 10 x 3" screws per header strike. One No. 8 x 3" screw per jamb strike plate. Secure the sill with No. 8 x 1-1/2" screws spaced 15" on center. Use five (5) No. 10 x 3" screws per sill reinforcement. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

System 5:

Screw Thru Frame: The wood wall framing member must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 8 x 3" screws. Along the head and side jambs, locate the screws approximately 6" from each corner and 15" on center. Use two No. 10 x 3" screws per header strike. Secure the sill with No. 8 x 1-1/2" screws spaced 15" on center. Use five (5) No. 10 x 3" screws per sill reinforcement. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

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.