

## Product Evaluation

WIN1977 | 1023

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:** WIN-1977

**Effective Date:** October 1, 2023

**Re-evaluation Date:** January 2025

**Product Name:** Elevate Fiberglass Clad Wood Double Hung IZ3 Windows, Impact Resistant

**Manufacturer:** Marvin  
1320 9<sup>th</sup> Street NE  
West Fargo, ND 58078  
(800) 587-2712

### General Description:

System	Description	Label Rating	Design Pressure Rating
1	Elevate Fiberglass Clad Wood Double Hung IZ3 Windows	LC-PG55 (29.5 x 67.75)-H Missile Level D	+55 / -65 psf
2	Elevate Fiberglass Clad Wood Double Hung IZ3 Windows	LC-PG55 (29.5 x 75.75)-H Missile Level D	+55 / -65 psf
3	Elevate Fiberglass Clad Wood Double Hung IZ3 Windows	LC-PG55 (41.5 x 67.75)-H Missile Level D	+55 / -65 psf
4	Elevate Fiberglass Clad Wood Double Hung IZ3 Windows	LC-PG55 (41.5 x 75.75)-H Missile Level D	+55 / -65 psf

**Product Dimensions:**

System	Overall Size	Top Sash Size	Bottom Sash Size
1	29-1/2" x 67-3/4"	26-15/16" x 26-15/16"	26-15/16" x 38-15/16"
2	29-1/2" x 75-3/4"	26-15/16" x 36-15/16"	26-15/16" x 36-15/16"
3	41-1/2" x 67-3/4"	38-15/16" x 26-15/16"	38-15/16" x 38-15/16"
4	41-1/2" x 75-3/4"	38-15/16" x 36-15/16"	38-15/16" x 36-15/16"

**Product Identification (Certification Label on Window):**

System		
1-4	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Marvin
	Product Name	Elevate Double Hung IZ3
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E1886-13a/E1996-14a

**Impact Resistance:**

System	Impact Resistant	Requirement
1-4	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.

**Installation:****Frame Installation (System 1, 3):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly must be secured to the wall framing using minimum No. 8 x 3" screws. Locate the screws approximately 4.37" from each jamb on header and 3.90", 31.29", 36.37", and 63.75" down from the header on the side jambs. No screws were used at the sill. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 2, 4):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly must be secured to the wall framing using minimum No. 8 x 3" screws. Locate the screws approximately 4.37" from each jamb on header and 3.90", 35.29", 40.37", and 71.75" down from the header on the side jambs. No screws were used at the sill. The fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame-Nail Fin and Clip Installation (System 3):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly must be secured to the wall framing using the nailing fin and the frame. Secure the nailing fin to the wall framing using minimum 2" long smooth shank roofing nails with a 0.12" (11-gauge) shaft diameter and a 0.39" head spaced approximately 4" from each corner and 7" on center along the perimeter. Install installation clips (4.291" x 1.562" x 0.0478 galvanized steel)

along the head and side jambs. Secure the clips to the wall framing using minimum No. 8 x 1.25" screws. Use two (2) fasteners into the window frame and one (1) fastener into the wall framing. Locate the clips approximately 6", 20.75", and 35.50" from either jamb on header, and approximately 6", 19.94", 33.88", 47.81", and 61.75" down from header on side jambs. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame-Bracket Installation (System 3):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly must be secured to the wall framing using the frame. Install structural brackets (6" or 10" x 1.563" x 0.050 galvanized steel) along the head, sill, and side jambs. Secure the brackets with minimum No. 8 x 1-5/8" screws. Use two (2) fasteners into the window frame and one (1) fastener into the wall framing. Locate brackets approximately 6", 15.83", 25.67", and 35.50" for either jamb on header and sill, approximately 6", 17.15", 28.30", 39.45", 50.60", and 61.75" down from the header on side jambs. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame-Nail Fin and Clip Installation (System 4):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly must be secured to the wall framing using the nailing fin and the frame. Secure the nailing fin to the wall framing using minimum 2" long smooth shank roofing nails with a 0.12" (11-gauge) shaft diameter and a 0.39" head spaced approximately 4" from each corner and 7" on center along the perimeter. Install installation clips (4.291" x 1.562" x 0.0478 galvanized steel) along the head and side jambs. Secure the clips to the wall framing using minimum No. 8 x 1.25" screws. Use two (2) fasteners into the window frame and one (1) fastener into the wall framing. Locate the clips approximately 6", 20.75", and 35.50" from either jamb on header, and approximately 6", 21.94", 37.88", 53.81", and 69.75" down from header on side jambs. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame-Bracket Installation (System 4):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly must be secured to the wall framing using the frame. Install structural brackets (6" or 10" x 1.563" x 0.050 galvanized steel) along the head, sill, and side jambs. Secure the brackets with minimum No. 8 x 1-5/8" screws. Use two (2) fasteners into the window frame and one (1) fastener into the wall framing. Locate brackets approximately 6", 15.83", 25.67", and 35.50" for either jamb on header and sill, approximately 6", 16.63", 27.25", 37.88", 48.50", 59.13", and 69.75" down from the header on side jambs. 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.