

## Product Evaluation

WIN494 | 0423

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-494

**Effective Date:** April 1, 2023

**Re-evaluation Date:** June 2025

**Product Name:** Series 200/220/275 Vinyl Tilt Single Hung Windows, Fin and Frame Installation, Non-Impact Resistant

**Manufacturer:** Krestmark Windows  
3950 Bastille Road, Suite 100  
Dallas, TX 75212  
(214) 237-5055

### General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series 220 Single Hung Window	R-PG50 (44 x 72)-H	+50 / -50 psf
2	Series 220 Twin Single Hung Window	R-PG50 (72 x 72)-H	+50 / -50 psf
3	Series 220 Single Hung Window	R-PG50 (36 x 84)-H	+50 / -50 psf
4	Series 200/275 Single Hung Window	R-PG55 (36 x 84)-H	+55 / -55 psf
5	Series 200/275 Single Hung Window	R-PG40 (36 x 84)-H	+40 / -40 psf
6	Series 200/275 Single Hung Window	R-PG35 (48 x 84)-H	+35 / -35 psf
7	Series 200/275 Single Hung Window	R-PG30 (48 x 84)-H	+30 / -30 psf
8	Series 200/275 Single Hung Window	R-PG50 (48 x 60)-H	+50 / -50 psf
9	Series 200/275 Single Hung Window w/ Sill Extender	R-PG50 (44 x 72)-H	+50 / -50 psf
10	Series 200/220/275 Single Hung Window	R-PG45 (48 x 72)-H	+45 / -45 psf

**General Description (Continued):**

System	Description	Label Rating	Design Pressure Rating
11	Series 200/275 Single Hung Window	R-PG45 (48 x 72)-H	+45 / -45 psf
12	Series 200/275 Twin Single Hung Window	R-PG50 (72 x 72)-H	+50 / -50 psf
13	Series 200/275 Twin Single Hung Window	R-PG40 (88 x 72)-H	+40 / -40 psf
14	Series 200/275 Triple Single Hung Window; CHS	R-PG50 (108 x 72)-H	+50 / -50 psf
15	Series 200/275 Single Hung Windows w/ Transom	R-PG50 (44 x 96)-H	+50 / -50 psf
16	Series 200/275 Twin Single Hung Windows w/ Transom	R-PG50 (72 x 96)-H	+50 / -50 psf
17	Series 200/275 Triple Single Hung Windows w/ Transom	R-PG50 (96 x 84)-H	+50 / -50 psf

**Product Dimensions:**

System	Overall Size	Operable Sash Size	Fixed Sash Daylight Opening Size
1	43-1/2" x 71-1/2"	42-3/8" x 34-5/8"	38-3/4" x 32"
2	71" x 71-1/2"	33-3/8" x 34-3/4"	30-11/16" x 31-7/8"
3	35-1/2" x 83-1/2"	33-1/2" x 28-11/16"	30-3/4" x 50"
4	35-1/2" x 83-1/2"	33-7/16" x 28-11/16"	30-3/4" x 49-7/8"
5	35-1/2" x 83-1/2"	33-3/8" x 40-15/16"	30-3/4" x 37-7/8"
6	47-1/2" x 83-1/2"	45-3/8" x 28-15/16"	42-3/4" x 49-7/8"
7	47-1/2" x 83-1/2"	45-3/8" x 41-13/16"	42-3/4" x 36-3/4"
8	47-1/2" x 59-1/2"	45-3/8" x 28-5/8"	42-9/16" x 25-15-16"
9	43-1/2" x 71-1/2"	41-1/2" x 34-3/4"	38-1/2" x 31-5/8"
10-11	47-1/2" x 71-1/2"	45-1/2" x 34-3/4"	42-1/2" x 31-7/8"
12	71" x 71-1/2"	33-7/16" x 34-3/4"	30-3/4" x 31-7/8"
13	87" x 71-1/2"	41-7/16" x 34-3/4"	38-3/4" x 31-7/8"
14	106-1/2" x 71-1/2"	33-7/16" x 34-11/16"	30-13/16" x 32"
15	43-1/2" x 95-1/2"	41-3/8" x 34-5/8"	Single Hung: 38-3/4" x 32" Transom: 38-3/4" x 18-3/4"
16	71" x 95-1/2"	33-7/16" x 34-11/16"	Single Hung: 30-11/16" x 31-15/16" Transom: 66-1/8" x 18-3/4"
17	94-1/2" x 84"	29-7/16" x 34-11/16"	Single Hung: 26-11/16" x 32" Transom: 89-3/4" x 6-3/4"

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

<b>System</b>		
1	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	220 SH (FINLESS) TILT
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
2	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	220 TWIN TILT SH (FINLESS)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
3	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	220 SH (FINLESS)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
4, 9	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TILT SH (FIN)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
5-8, 11	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TILT SH
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
10	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/220/275 TILT SH (FINLESS)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
12-13	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TWIN TILT SH (FIN)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
14	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TRIPLE TILT SH (FIN)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
15	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TILT SH w/ TRANSOM
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08
16	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TWIN TILT SH w/ TRANSOM
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 AAMA 450

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

System		
17	Certification Agency	AAMA
	Manufacturer's Name or Code Name	KR-1
	Product Name	200/275 TRIPLE TILT SH w/ TRANSOM
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08

**Compliance:** The products comply with AAMA/WDMA/CSA 101/I.S.2/A440-17 as referenced in the 2018 IRC and 2018 IBC.

**Impact Resistance:**

System	Impact Resistant	Requirement
1-17	No	These products have not been tested for windborne debris resistance. An impact protection system is required when installing this product in areas where windborne debris protection is required.

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

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 x 1-5/8" screws. Locate the screws approximately 5" from each corner and 20" on center along the side jambs; 5" from each corner and at the midpoint along the head and sill. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 2):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 truss head screws. Locate the screws approximately 5" from each corner and 20" on center along the side jambs and head. The sill is secured to the wall framing using one (1) aluminum mullion bracket located at the bottom of the vertical mullion. The bracket must be minimum 4.255" long, 1.25" wide, and 0.060" thick. The bracket is secured to the wall framing using two (2) minimum No. 8 truss head screws. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 3):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 truss head screws. Locate the screws approximately 5" from each corner and 20-1/2" on center along the perimeter. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Nail Fin Installation (System 4-7):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using a nailing fin. The nailing fin is secured to

the wall framing using minimum No. 8 pan head screws. Locate the screws approximately 1-1/2" from each end and 12" on center along the perimeter. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Nail Fin Installation (System 8-9, 11-13):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using a nailing fin. The nailing fin is secured to the wall framing using minimum No. 8 screws. Locate the screws approximately 2" from each end and 12" on center along the perimeter. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 10):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 pan head screws. Locate the screws approximately 5" from each corner and 20" on center along the head and side jambs. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 14):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 truss head screws. Locate the screws approximately 2" from each corner and 12" on center along the side jambs, head, and sill. Secure aluminum mullion brackets at each end of the vertical mullion. The bracket must be minimum 4.255" long, 1.25" wide, and 0.060" thick. The bracket is secured to the wall framing using two (2) minimum No. 8 pan head screws. Brackets are attached to the vertical mullion through the head with three (3) assembly screws and one (1) assembly screw at the sill. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 15):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 truss head screws spaced approximately 2" from each end and 12" on center along the perimeter. Secure aluminum mullion brackets at each end of the horizontal mullion. The bracket must be minimum 4.255" long, 1.25" wide, and 0.060" thick. Secure the bracket to the horizontal mullion using one (1) minimum No. 8 hex head screw and to the wall framing using two (2) minimum No. 8 pan head screws. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

**Frame Installation (System 16-17):**

The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The window assembly is secured to the wall framing using minimum No. 8 truss head screws spaced approximately 2" from each end and 12" on center along the perimeter. Secure aluminum mullion brackets at each end of the horizontal mullion and at the sill end of the vertical mullion. The bracket must be minimum 4.255" long, 1.25" wide, and 0.060" thick. Secure the bracket to the horizontal and vertical mullion using one (1) minimum No. 8 pan head screw and to the wall

framing using two (2) minimum No. 8 pan head screws. 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.