

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1161

Effective August 1, 2009

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 shall be subject to reevaluation **April 2013**.

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.

Series 400/475 Vinyl Single Hung Windows, Non-impact Resistant, manufactured by:

Krestmark Windows
3702 La Reunion Parkway
Dallas, Texas 75212
(214) 237-5055

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 400/475 window is a vinyl single hung window. The vinyl single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for vinyl single hung windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Series 400/475 Vinyl Single Hung Windows; (O/X)	H-R30 48 x 72
2	Series 400/475; Vinyl Single Hung Window; (O/X)	H-R50 48 x 72 (MODIF)

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Daylight Opening Size
1	47 1/2" x 71 1/2"	45 5/8" x 35 3/8"	44 7/8" x 33"
2	47 1/2" x 71 1/2"	45 5/8" x 35 3/8"	44 7/8" x 33"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1
2	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glazing Construction Key:

IG-1: The fixed and operable sashes contain sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") annealed glass lite separated by a Swiggle Strip spacer system. The glass thickness and type used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are exterior glazed using a silicone backbedding compound. A vinyl (PVC) snap-in glazing bead secures the insulating glass units in place.

Frame Construction: The frame members are manufactured from extruded vinyl (PVC). The frame corners are mitered and welded construction. The fixed interlock is secured to the frame with screws.

Sash Construction: The sash members are manufactured from extruded vinyl (PVC). The sash corners are mitered and welded construction.

Reinforcement:

System 1: Extruded aluminum reinforcement is utilized in the fixed interlock and in the sash top rail. The reinforcement extends the length of the members.

System 2: Extruded aluminum reinforcement is utilized in the fixed interlock, in the sash top rail, and in the sash stiles. The reinforcement extends the length of the members.

Hardware:

- Plastic cam action lock; Two (2) required; Located on the sash meeting rail, 4 inches from each end.
- Keeper groove; Two (2) required; Located on the fixed interlock rail.
- Block and tackle balance; Two (2) required; Located in each frame jamb.
- Pivot bar; Two (2) required; Located on the sash bottom rail.
- Tilt latch; Two (2) required; Located at each end of the sash top rail.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**KR-1**); **Series 400/475 SH TILT**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	47 ½	71 ½	± 30
2	47 ½	71 ½	± 50

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Spruce-Pine-Fir dimension lumber. The window shall be secured to the wall framing using the nailing fin of the window with minimum No. 8 screws. The fasteners shall be spaced approximately 2 inches from each corner and approximately 12 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.