

TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

Effective July 1, 2011

WIN-1429

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 **January 2015**.

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 Tilt Windows with a Fixed Transom, Non-impact Resistant, manufactured by

Krestmark Windows
3950 Bastille Road
Suite 100
Dallas, Texas 75212
Telephone: (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

This evaluation report is for a Series 400/475 vinyl single hung tilt window with a fixed transom. The window assembly evaluated in this report is a non-impact resistant window assembly. This evaluation report includes a Series 400/475 vinyl single hung tilt window with a fixed transom based on the following tested configuration:

General Description:

System	Description	Label Rating
1	Series 400/475 Vinyl Single Hung Tilt Window with a Fixed Transom	H-R50 48 x 96 (MULL)

Product Dimension:

System	Overall Size	Single Hung Frame Size (Each)	Single Hung Operable Sash Size (Each)	Single Hung Fixed Daylight Opening Size (Each)
1	47 1/2" x 95 1/2"	47 1/2" x 72"	45 1/2" x 35 3/8"	45" x 33 1/16"

System	Transom Frame Size
1	47 1/2" x 23 1/2"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	Single Hung:IG-1 Transom: IG-1	Single Hung: GM-1 Transom: GM-1

Note: ¹ See the “Glass Description Key” for the glazing construction.

² See the “Glazing Method Key” for the glazing method description.

Glass Construction Key:

IG-1: The fixed and operable sashes contain a sealed insulating glass unit. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ”) annealed glass lites separated by a Truseal Swiggle strip aluminum spacer system. The glass thickness and type used in 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 with a silicone backbedding at the interior long the full perimeter of the insulating glass unit. The insulating glass units are secured in place with vinyl snap-in glazing beads at the exterior.

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 side jambs with two (2) screws per end and with one (1) screw at each end of the fixed interlock.

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

Mullion: The transom frame sill and the single hung frame head are sealed to the aluminum mull with Nova Guard FSP M150 structural silicone. A PVC mull strip is sealed and snapped into the frame accessory grooves at the horizontal mull full span.

Reinforcement: Extruded aluminum reinforcement is utilized within the fixed interlock, the sash top rail, the sash stiles, and the mullion. The reinforcement extends the length of the members.

Hardware (each single hung window):

- Vinyl sweep locks; Two (2) required; Each located $5\frac{1}{2}$ inches from each end of the sash top rail. Secured to the frame with two (2) screws each.
- Keeper groove; Two (2) required; Located on the fixed interlock rail opposite the sweep lock locations.
- Block and tackle balance; Two (2) required; One located in each frame side jamb.
- Vinyl tilt latch; Two (2) required; Located on 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**); product name: **Series 400/475 SH w/Transom**; performance characteristics; the approved inspection agency (AAMA); and the following 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	95 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 and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

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

Mullion: An aluminum anchor clip (4.225" x 1.25") is secured to each end of the aluminum mullion screw boss with two (2) No. 8 x 1 ¼" screws. The aluminum clip is secured to the wall framing with two (2) No. 8 screws. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

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.