

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
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PRODUCT EVALUATION
WIN-1664

Effective Date: November 1, 2012 (Revised May 1, 2014)
Reevaluation Date: **January 2016**

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.

Model V-470 Vinyl Horizontal Slider, Impact Resistant, manufactured by

WinDoor Incorporated
7500 Amsterdam Drive
Orlando, Florida 32832
Telephone: (407) 481-8400
www.windowinc.com

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Model V-470 Vinyl Impact Horizontal Slider; (XX)	LC-PG65 73 x 62 Type HS; Missile Level D	± 65 psf
2	Model V-470 Vinyl Impact Horizontal Slider; (XX)	R-PG80 74 x 64 Type HS; Missile Level D	± 80 psf
3	Model V-470 Vinyl Impact Horizontal Slider; (XOX)	R-PG80 112 x 64 Type HS; Missile Level D	± 80 psf
4	Model V-470 Vinyl Impact Horizontal Slider; (XOX)	R-PG80 136 x 64 Type HS; Missile Level D	± 80 psf

Product Dimensions:

System	Overall Size	Sash Size
1	73.00" x 61.75"	Active (2): 35.75" x 57.00"
2	74.00" x 64.00"	Active (2): 36.25" x 59.00"
3	112.00" x 64.00"	Active (2): 28.00" x 59.00" Fixed (1): 56.00" x 59.00"
4	136.00" x 24.00"	Active (2): 34.63" x 18.88" Fixed (1): 64.81" x 18.88"

Product Identification (Certification Agency Label on Window):

System		
1	Certification Agency	Keystone
	Manufacturer's Name or Code Name	Two Labels: CAR 167-297; CAR 167-744
	Product Name	Model V-470 PVC Horizontal Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08; ASTM E1886-05; ASTM E1996-05 Missile Level D
2	Certification Agency	Keystone
	Manufacturer's Name or Code Name	Two Labels: CAR 167-1030; CAR 167-543
	Product Name	Model V-470 PVC Imp Horizontal Roller XX
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08; ASTM E1886-05; ASTM E1996-05 Missile Level D
3	Certification Agency	Keystone
	Manufacturer's Name or Code Name	Two Labels: CAR 167-1031; CAR 167-544
	Product Name	Model V-470 PVC Imp Horizontal Roller XOX
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08; ASTM E1886-05; ASTM E1996-05 Missile Level D
4	Certification Agency	Keystone
	Manufacturer's Name or Code Name	Two Labels: CAR 167-1044; CAR 167-550
	Product Name	Model V-470 PVC Imp Horizontal Roller XOX
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08; ASTM E1886-05; ASTM E1996-05 Missile Level D

Impact Resistance:

Impact Resistant	Requirement
Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the Inland I and Seaward zone . The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.

Installation:

Design Drawings:

System 1: Drawing No. 08-01651, titled "V-470 PVC Horizontal Sliding Window 73 x 62 Reinforced Impact," sheets 1 through 4 of 4, dated June 26, 2012, signed and sealed by Luis R. Lomas., P.E on June 26, 2012. The stated drawings will be referred to as the approved drawings in this evaluation report.

Systems 2 and 3: Drawing No. 08-02100, titled "V-470 PVC Horizontal Sliding Window Reinforced Impact," sheets 1 through 8 of 8, dated June 28, 2013, signed and sealed by Luis R. Lomas., P.E on June 28, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

System 4: Drawing No. 08-01961, titled "V-470 PVC Horizontal Sliding Window 136 x 24 Reinforced Impact," sheets 1 through 6 of 6, dated April 22, 2013, signed and sealed by Luis R. Lomas., P.E on June 18, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

Wall Framing Construction: The doors may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,1920 psi)
- Hollow concrete block; ASTM C-90, Grade N, Type 1 (or greater)
- Wood dimension lumber (minimum Spruce-Pine-Fir)
- Steel (minimum 18 gauge, 33 ksi)
- Aluminum (6063-T5, minimum 0.125")

Installation:

- Refer to the approved drawings for the for installation details.
- The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

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.