

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1363

Effective February 1, 2011

*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 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 2310 and Series HR-2310 Vinyl Horizontal Sliding Windows, Non-impact Resistant,
manufactured by

PGT Industries
1070 Technology Drive
Nokomis, Florida 34275
Telephone: (800) 282-6019

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 2310 and Series HR-2310 horizontal sliding windows are vinyl horizontal sliding windows. The vinyl horizontal sliding windows evaluated in this report are individual, non-impact resistant, windows. This product evaluation report is for vinyl horizontal sliding windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Series 2310 Vinyl Horizontal Sliding Window; (XX)	HS-LC35 72 x 60
2	Series 2310 Vinyl Horizontal Sliding Window; (XX)	HS-LC50 72 x 54
3	Series HR2310 Vinyl Horizontal Slider Window (XOX)	HS-LC40 108 x 60
4	Series HR2310 Vinyl Horizontal Slider Window (XOX)	HS-LC50 108 x 54
5	Series HR2310 Vinyl Horizontal Slider Window (XOX)	HS-LC35 108 x 60
6	Series HR2310 Vinyl Horizontal Slider Window (XOX)	HS-LC50 108 x 54

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Sash Size
1	72" x 60"	Two: 35" x 56 1/2"	N/A
2	72" x 54"	Two: 35" x 50 1/2"	N/A
3	108" x 60"	Two: 35 1/2" x 56 1/4"	One: 35 1/2" x 56 1/4"
4	108" x 54"	Two: 35 1/2" x 50 1/2"	One: 35 1/2" x 50 1/2"

Product Dimensions (continued):

System	Overall Size	Operable Sash Size	Fixed Sash Size
5	108" x 60"	Two: 26" x 56 1/4"	One: 52 7/8" x 56 1/4"
6	108" x 54"	Two: 26" x 50 1/2"	One: 54 7/8" x 50 1/2"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1
2	IG-1	GM-1
3	IG-1	GM-2
4	IG-1	GM-2
5	IG-2	GM-2
6	IG-2	GM-2

Note: ¹ See the "Glass Construction 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 sash contain a sealed insulating glass unit. The sealed insulating glass unit in the tested assembly is comprised of two double strength (1/8") annealed glass lites separated by a butyl 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.

IG-2: The fixed and operable sash contain a sealed insulating glass unit. The sealed insulating glass units in the operable sashes are comprised of two double strength (1/8") annealed glass lites separated by a butyl spacer system. The sealed insulating glass unit in the fixed sash is comprised of two 5/32" annealed glass lites separated by a butyl 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 with hot melt sealant. The insulating glass units are secured in place with vinyl glazing beads.

GM-2: The insulating glass units are exterior glazed with structural silicone sealant. The insulating glass units are secured in place with vinyl glazing beads.

Frame Construction: The frame members are manufactured from extruded vinyl (PVC). The frame corners are mitered and welded construction. The head utilized a snap on head extender secured with silicone around the exterior perimeter.

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

Hardware:

- Metal cam locks with keepers; Two (2) required; Located at the lock rail, 9 inches from each end.
- Roller assembly; Two (2) required per active sash; Located at the sash bottom rails, 2 1/2 inches from each end.

Reinforcement: Extruded steel reinforcement is located in the meeting stiles. The reinforcement extends the length of the members.

Product Identification: A certification program label (Keystone) will be affixed to the window. The certification program label includes the performance characteristics and approved inspection agency to indicate compliance with the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-05. The certification program label contains a Certification Authorization Report (CAR) number located on the top right side of the label and a model name for the window. The following CAR numbers and model names are located on the labels:

Label Identification:

System	Model	Certification Authorization Report (CAR) number
1	2310 PVC Horizontal Slider	199-480
2	2310 PVC Horizontal Slider	190-481
3	HR2310 PVC Equal Lite Horizontal Slider	199-482
4	HR2310 PVC Equal Lite Horizontal Slider	199-483
5	HR2310 PVC Horizontal Slider (1/4-1/2-1/4)	199-484
6	HR2310 PVC Horizontal Slider (1/4-1/2-1/4)	199-485

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	72	60	± 35
2	72	54	± 50
3	108	60	± 40
4	108	54	± 50
5	108	60	± 35
6	108	54	± 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: Windows 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:

System 1: The window frame shall be fastened to minimum Southern Yellow Pine dimension lumber. The window is secured to the wall framing using the window frame with minimum No. 8 x 2" screws. The fasteners are required along the frame head and the frame side jambs. Along the head, the fasteners shall be located approximately 26 inches from each corner. Along each side jamb, the fasteners shall be located approximately 20 inches from the head and from the sill. In addition, the window is secured in place with minimum 1/2" x 1/2" wood blind stops located along the head and

side jambs at the interior and the exterior. The blind stops are secured to the wall framing with minimum No. 6 x 2" screws located 3 inches from each corner and approximately 16 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

System 2: The window frame shall be fastened to minimum Southern Yellow Pine dimension lumber. The window is secured to the wall framing using the window frame with minimum No. 8 x 2" screws. The fasteners are required along the frame head and the frame side jambs. Along the head, the fasteners shall be located approximately 26 inches from each corner. Along each side jamb, the fasteners shall be located approximately 18 inches from the head and from the sill. In addition, the window is secured in place with minimum ½" x ½" wood blind stops located along the head and side jambs at the interior and the exterior. The blind stops are secured to the wall framing with minimum No. 6 x 2" screws located 3 inches from each corner and approximately 16 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

Systems 3 and 5: The window frame shall be fastened to minimum Southern Yellow Pine dimension lumber. The window is secured to the wall framing using the window frame with minimum No. 8 x 2" screws. The fasteners are required along the frame head and the frame side jambs. Along the head, the fasteners shall be located approximately 10 inches on either side of each meeting rail. Along each side jamb, the fasteners shall be located approximately 20 inches from the head and from the sill. In addition, the window is secured in place with minimum ½" x ½" wood blind stops located along the head and side jambs at the interior and the exterior. The blind stops are secured to the wall framing with minimum No. 6 x 2" screws located 3 inches from each corner and approximately 16 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

Systems 4 and 6: The window frame shall be fastened to minimum Southern Yellow Pine dimension lumber. The window is secured to the wall framing using the window frame with minimum No. 8 x 2" screws. The fasteners are required along the frame head and the frame side jambs. Along the head, the fasteners shall be located approximately 10 inches on either side of each meeting rail. Along each side jamb, the fasteners shall be located approximately 18 inches from the head and from the sill. In addition, the window is secured in place with minimum ½" x ½" wood blind stops located along the head and side jambs at the interior and the exterior. The blind stops are secured to the wall framing with minimum No. 6 x 2" screws located 3 inches from each corner and approximately 16 inches on center. 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.