



# Product Evaluation

WIN935 | 0716

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-935

**Effective Date:** July 1, 2016

**Re-evaluation Date:** November 2018

**Product Name:** HS-510 Vinyl Horizontal Slider Windows, Impact Resistant

**Manufacturer:** PGT Industries  
1070 Technology Drive  
North Venice, FL 34275  
(941) 480-1600

### General Description:

System	Description	Label Rating	Design Pressure Rating
1	HS-510 Vinyl Horizontal Slider Windows; XO or OX	HS-LC60 73 x 62 Missile Level D; DP=+60/-65	+60 / -65 psf
2	HS-510 Vinyl Horizontal Slider Windows; XO or OX	R-PG60 73 x 54-Type HS Missile Level D; DP=+60/-70	+60 / -70 psf
3	HS-510 Vinyl Horizontal Slider Windows; XOX	HS-R60 111 x 54 Missile Level D; DP=+60/-65	+60 / -65 psf

### Product Dimensions:

System	Overall Window Size	Operating Sash Size	Fixed Sash Daylight Opening Size
1	73.00" x 62.00"	36.00" x 58.00"	32.56" x 57.25"
2	73.00" x 54.00"	35.94" x 50.00"	32.50" x 49.19"
3	110.69" x 54.00"	Two: 31.75" x 50.13"	43.13" x 49.25"

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

System		
1	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 190-702 / CAR 190-233
	Product Name	510 Vinyl Impact Horizontal Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 ASTM E 1886-05; ASTM E 1996-05; Missile Level D
2	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 190-798 / CAR 190-269
	Product Name	510 Vinyl Fin/Equal Leg Impact HS
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-06; ASTM E 1996-05; AAMA 506-08; Missile Level D
3	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 190-768 / CAR 190-262
	Product Name	510 Vinyl Fin/Equal Leg Impact Horizontal Slider XOX
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05 ASTM E 1886-06; ASTM E 1996-05; AAMA 506-08; Missile Level D

**Impact Resistance:**

System	Impact Resistant	Requirement
1-3	Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the <b>Inland I</b> and <b>Seaward zone</b> . 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:** Drawing No. TDI-HS510.1 titled "Horizontal Slider Installation," sheets 1 through 3 of 3, dated September 9, 2013, signed and sealed by Anthony Lynn Miller, PE on September 9, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

**Wall Framing Construction:** The windows may be mounted to several types of wall framing construction. The types of wall framing construction allowed, as specified on the approved drawings, include:

- Concrete (minimum compressive strength: 2,700 psi)
- Hollow concrete block; ASTM C-90
- Wood dimension lumber (minimum Southern Yellow Pine)
- Steel (20 gauge, 33 ksi)
- Steel (A36, minimum 0.125")
- Aluminum (6063-T5, minimum 0.125")

**Installation:** Refer to Sheet 1 of 3 through 3 of 3 of the approved drawings for the installation details.

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.