

Product Evaluation

WIN2052 | 0519

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-2052

Effective Date: May 1, 2019

Re-evaluation Date: December 2021

Product Name: HR-5510 Vinyl Horizontal Rolling Windows, Fin and Frame Installation, Single and Double Operable Sashes, Impact Resistant

Manufacturer: PGT Industries
1070 Technology Drive
North Venice, FL 34275
(941) 486-0100

General Description:

System	Description	Label Rating	Design Pressure Rating
1	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (XO)	LC-PG65 (75 X 63)-HS Missile Level D	+65 / -70 psf

General Description (Continued):

System	Description	Label Rating	Design Pressure Rating
2	HR-5510 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (XO)	LC-PG65 (75 X 63)-HS Missile Level D	+65 / -70 psf
3	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of one 1/8" annealed glass section on the exterior; one 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (XO)	LC-PG60 75 X 63-HS Missile Level D	+60 / -60 psf
4	HR-5510 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of one 1/8" annealed glass section on the exterior; one 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (XO)	LC-PG60 75 X 63-HS Missile Level D	+60 / -60 psf
5	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R3 aluminum reinforcement (XO)	LC-PG50 75 X 63-HS Missile Level D	+50 / -50 psf
6	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R3 aluminum reinforcement (XO)	LC-PG50 75 X 63-HS Missile Level D	+50 / -50 psf

General Description (Continued):

System	Description	Label Rating	Design Pressure Rating
7	HR-5410 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (XO)	LC-PG50 75 X 72-HS Missile Level D	+50 / -50 psf
8	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (XO)	LC-PG50 75 X 72-HS Missile Level D	+50 / -50 psf
9	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of one 3/16" annealed or tempered glass section on the exterior; one 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (X0X)	LC-PG65 120 X 63-HS Missile Level D	+65 / -70 psf
10	HR-5510 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of one 3/16" annealed or tempered glass section on the exterior; one 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (X0X)	LC-PG65 120 X 63-HS Missile Level D	+65 / -70 psf
11	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of one 3/16" annealed glass section on the exterior; one 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (X0X)	LC-PG65 120 X 63-HS Missile Level D	+65 / -65 psf

General Description (Continued):

System	Description	Label Rating	Design Pressure Rating
12	HR-5510 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of one 3/16" annealed glass section on the exterior; one 5/16" laminated glass section on the interior; and R4 aluminum reinforcement (X0X)	LC-PG65 120 X 63-HS Missile Level D	+65 / -65 psf
13	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R3 aluminum reinforcement (X0X)	LC-PG50 120 X 63-HS Missile Level D	+50 / -50 psf
14	HR-5510 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of an annealed or tempered glass section on the exterior and a 5/16" laminated glass section on the interior; and R3 aluminum reinforcement (X0X)	LC-PG50 120 X 63-HS Missile Level D	+50 / -50 psf
15	HR-5510 Vinyl Horizontal Rolling Windows, fin-mounted, with 7/8" nominal insulated glass lites composed of one 1/8" annealed glass section on the exterior and a 5/16" laminated glass section on the interior; and R3 aluminum reinforcement (X0X)	LC-PG45 120 X 63-HS Missile Level D	+45 / -45 psf
16	HR-5510 Vinyl Horizontal Rolling Windows, replacement, with 7/8" nominal insulated glass lites composed of one 1/8" annealed glass section on the exterior and a 5/16" laminated glass section on the interior; and R3 aluminum reinforcement (X0X)	LC-PG45 120 X 63-HS Missile Level D	+45 / -45 psf

Product Dimensions:

System	Overall Size	Fixed Glass Daylight Opening Size	Operating Sash Glass Daylight Opening Size
1	77-3/4" x 65-3/4"	33-1/4" x 58"	33-1/4" x 55-3/4"
2	75" x 63"	34-5/8" x 59-1/4"	33-1/16" x 55-9/16"
3	77-3/4" x 65-3/4"	33-1/4" x 58"	33-1/4" x 55-3/4"
4	75" x 63"	34-5/8" x 59-1/4"	33-1/16" x 55-9/16"
5	77-3/4" x 65-3/4"	33-1/4" x 58"	33-1/4" x 55-3/4"
6	75" x 63"	33-1/4" x 58"	33-1/4" x 55-3/4"
7	77-3/4" x 74-3/4"	33-1/4" x 67"	33-1/4" x 64-3/4"
8	75" x 72"	33-1/4" x 67"	33-1/4" x 64-3/4"
9	122-3/4" x 65-3/4"	54-5/8" x 58"	26-5/8" x 55-3/4"
10	120" x 63"	54-5/8" x 58"	26-5/8" x 55-9/16"
11	122-3/4" x 65-3/4"	54-5/8" x 58"	26-5/8" x 55-3/4"
12	120" x 63"	54-5/8" x 58"	26-5/8" x 55-9/16"
13	122-3/4" x 65-3/4"	54-5/8" x 58"	26-5/8" x 55-3/4"
14	120" x 63"	54-5/8" x 58"	26-3/4" x 55-3/4"
15	122-3/4" x 65-3/4"	54-5/8" x 58"	26-5/8" x 55-3/4"
16	120" x 63"	54-5/8" x 58"	26-3/4" x 55-3/4"

Product Identification (Certification Label on Window):

System		
1, 2	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1047; CAR # 190-291
	Product Name	HR5510 PVC Impact Horizontal Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D
3, 4	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1074; CAR # 190-290
	Product Name	HR5510 PVC Impact Horizontal Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D

Product Identification (Certification Label on Window) - Continued:

System		
5, 6	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1048; CAR # 190-292
	Product Name	HR5510 PVC Impact Horizontal Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D
7, 8	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1046; CAR # 190-289
	Product Name	HR5510 PVC Impact Horizontal Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D
9, 10	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1052; CAR # 190-296
	Product Name	HR5510 PVC 1/4-1/2-1/4 Impact Horiz Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D
11, 12	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1051; CAR # 190-295
	Product Name	HR5510 PVC 1/4-1/2-1/4 Impact Horiz Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D
13, 14	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1054; CAR # 190-298
	Product Name	HR5510 PVC 1/4-1/2-1/4 Impact Horiz Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D
15, 16	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR #190-1053; CAR # 190-297
	Product Name	HR5510 PVC 1/4-1/2-1/4 Impact Horiz Slider
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11 ASTM E 1886-05; ASTM E 1996-12; Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1-16	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the assemblies at a height on the structure that does not exceed the assemblies' design pressure rating.

Installation:

System		
1-16	Type of Installation	Install in accordance with PGT Drawing No. TDI-HR5510.1; titled "Vinyl HR Window TDI (IMP.-RESIST.);" sheets 1 through 4 of 4; dated March 17, 2015; signed and sealed by Anthony Lynn Miller, P.E., on March 17, 2015
	Wall Framing	
	Fasteners	
	Fastener Location/Spacing	
	Fastener Penetration	

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.