Product Evaluation

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-1957

Effective Date: December 1, 2014
Re-evaluation Date: December 2018

Product Name: Series 250 Vinyl Single Hung Windows, New and Replacement Construction, Non-Impact Resistant

Manufacturer: Pella Corporation
102 Main Street
Pella, IA 50219
(641) 621-1000

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series 250 Vinyl Single Hung Windows; New Construction	R-PG50 29.5x84-H	+50 / -50 psf
2	Series 250 Vinyl Single Hung Windows; Replacement Construction	R-PG50 29.5x84-H	+50 / -50 psf
3	Series 250 Vinyl Single Hung Windows; New Construction	R-PG35 40x63-H	+35 / -35 psf
4	Series 250 Vinyl Single Hung Windows; New Construction	LC-PG35 48x84-H	+35 / -35 psf
5	Series 250 Vinyl Single Hung Windows; Replacement Construction	LC-PG35 48x84-H	+35 / -35 psf
6	Series 250 Vinyl Single Hung Windows; New Construction	LC-PG35 48x84-H	+35 / -35 psf
7	Series 250 Vinyl Single Hung Windows; Replacement Construction	LC-PG35 48x84-H	+35 / -35 psf
8	Series 250 Vinyl Single Hung Windows; New Construction	R-PG50 48x72-H	+50 / -50 psf
9	Series 250 Vinyl Single Hung Windows; Replacement Construction	R-PG50 48x72-H	+50 / -50 psf

General Description (Continued):

System	Description	Label Rating	Design Pressure Rating
10	Series 250 Vinyl Single Hung Windows; New Construction	R-PG50 54x66-H	+50 / -50 psf
11	Series 250 Vinyl Single Hung Windows; Replacement Construction	R-PG50 54x66-H	+50 / -50 psf
12	Series 250 Vinyl Single Hung Windows; Two-Wide; New Construction	R-PG50 72x65.5-H	+50 / -50 psf
13	Series 250 Vinyl Single Hung Windows; Two-Wide; Replacement Construction	R-PG50 72x65.5-H	+50 / -50 psf
14	Series 250 Vinyl Single Hung Windows; Two-Wide; New Construction	R-PG35 96x72-H	+35 / -35 psf
15	Series 250 Vinyl Single Hung Windows; Two-Wide; Replacement Construction	R-PG35 96x72-H	+35 / -35 psf
16	Series 250 Vinyl Single Hung Windows; Three-Wide; New Construction	R-PG35 109x63-H	+35 / -35 psf
17	Series 250 Vinyl Single Hung Windows; Three-Wide; Replacement Construction	R-PG35 109x63-H	+35 / -35 psf
18	Series 250 Vinyl Single Hung Window With Transom; New Construction	R-PG35 48x84-H	+35 / -35 psf
19	Series 250 Vinyl Single Hung Window With Transom; Replacement Construction	R-PG35 48x84-H	+35 / -35 psf

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Glass Daylight Opening Size
1-2	29-1/2” x 84”	26-3/4” x 38-3/4”	25-1/4” x 41-3/4”
3	40” x 63”	37-1/4” x 31-1/2”	35-3/4” x 28”
4-5	48” x 84”	45-1/4” x 23-3/4”	43-3/4” x 56-3/4”
6-7	48” x 84”	45-1/4” x 39"	43-3/4” x 41-1/2”
8-9	48" x 72"	45-1/4" x 36"	43-3/4" x 32-1/2"
10-11	54" x 66"	51-1/4" x 33"	49-3/4" x 29-1/2"
12-13	72" x 66"	Two (2): 33" x 32-1/4"	Two (2): 31-1/2" x 29-1/4"
14-15	96" x 72"	Two (2): 45" x 36"	Two (2): 43-1/2" x 32-1/2"
16-17	109" x 63"	Three (3): 33-1/4" x 31-1/2"	Three (3): 31-3/4" x 28"
18-19	48" x 84"	45-1/4" x 32-3/4"	Single Hung: 43-3/4" x 29-1/4" Transom: 43-3/4" x 13-3/4"

Product Identification (Certification Label on Window):

System		
1-19	Certification Agency	WDMA
	Manufacturer’s Name or Code Name	Pella
	Product Name	250 Series – Single Hung
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 AAMA/WDMA/CSA 101/I.S.2/A440-11

Impact Resistance:

System	Impact Resistant	Requirement
1-19	No	Provide an impact protective system when installing the product in areas that require windborne debris protection.

Installation:

System		
1, 3, 4, 6	Type of Installation	New Construction – Nailing Fin
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	11-gauge smooth shank roofing nails
	Fastener Location/Spacing	Approximately 9" on center and beginning at each corner along the perimeter of the window. Five nails located 2"apart at each end of the meeting rail.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
2, 7	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2” pan head screws
	Fastener Location/Spacing	Jamb: Approximately 4" from each end, 6" one either side of the meeting rail, one at the midpoint of the sash and the fixed lite.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
5	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2” pan head screws
	Fastener Location/Spacing	Jamb: Approximately 4" from each end, 6" one either side of the meeting rail, one at the midpoint of the fixed sash.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
8, 10	Type of Installation	New Construction – Nailing Fin
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	11-gauge smooth shank roofing nails
	Fastener Location/Spacing	Approximately 4-1/2" on center and beginning at each corner along the perimeter of the window. Five (5) nails located 2"apart at each end of the meeting rail.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
9, 11	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2” pan head screws
	Fastener Location/Spacing	Jamb: Approximately 4" from each end, 6" one either side of the meeting rail, one at the midpoint of the sash and the fixed lite. A spacer is located in the frame recess at the screw locations.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members

Installation (Continued):

System		
12	Type of Installation	New Construction – Nailing Fin
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	11-gauge smooth shank roofing nails
	Fastener Location/Spacing	Approximately 4-1/2" on center and beginning at each corner along the perimeter of the window and a five (5) nail cluster located at each end of the meeting rail spaced 2" on center. Three (3) No. 10 x 2" pan head screws located 2"apart at each end of each meeting rail
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
13	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2” pan head screws
	Fastener Location/Spacing	Head: Approximately 4" from each corner, 3" and 6" from each side of the mullion, one at the midpoint of each fixed lite. Jamb: Approximately 4" from each end, 6" above and below the meeting rail, one at midpoint of the sash and the fixed lite. Sill: PVC clips (3"x1.35"x0.066"), located 4" from each end, 4" and 8" on either side of the mullion, one at the midpoint of each sash.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
14, 16, 18	Type of Installation	New Construction – Nailing Fin
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	11-gauge smooth shank roofing nails
	Fastener Location/Spacing	Approximately 9" on center and beginning at each corner along the perimeter of the window and a five (5) nail cluster located at each end of the meeting rail spaced 2" on center. Three (3) No. 10 x 2" pan head screws located 2"apart at each end of each meeting rail
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
15	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2" pan head screws
	Fastener Location/Spacing	Head: Approximately 4" from each corner, 3" and 6" from each side of the mullion, two equally spaced between each fixed lite. Jamb: Approximately 4" from each end, 6" above and below the meeting rail, one at midpoint of the sash and fixed lite. Sill: PVC clips (3"x1.35"x0.066"), located 4" from each end, 4" and 8" on either side of the mullion, two equally spaced between each sash.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members

Installation (Continued):

System		
17	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2” pan head screws
	Fastener Location/Spacing	Head: Approximately 4" from each end, 3" and 6" from each side of each mullion, one at the midpoint of each fixed lite. Jamb: Approximately 4" from each corner, 6" from each side of the meeting rail, one at the midpoint of the sash and the fixed lite. Sill: PVC clips (3"x1.35"x0.066"), located 4" and 8" on either side of each mullion.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members
19	Type of Installation	Replacement Construction – Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	No. 10 x 2" pan head screws
	Fastener Location/Spacing	Jamb: Approximately 4" from each end, 3" and 6" from each side of the mullion, one 6" above and below the meeting rail and one at the midpoint of the sash and the fixed lite.
	Fastener Penetration	Minimum 1-1/2" into the wall framing members

Note: The manufacturer’s installation instructions must be available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.