

Product Evaluation

WIN824 | 0322

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-824

Effective Date: March 1, 2022

Re-evaluation Date: March 2025

Product Name: Series 450/455/460/465 Vinyl Double Hung Windows, Fin and Frame Installation, Non-Impact Resistant

Manufacturer: Atrium Windows & Doors
300 Welcome Center Blvd.
Welcome, NC 27374
(800) 542-9118 ext. 413596

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series 450/455/460/465 Vinyl Double Hung Windows; X/X	LC-PG30 48 x 78 - H	+30 / -30 psf
2	Series 450/455/460/465 Vinyl Double Hung Windows; X/X	LC-PG35 36 x 74 - H	+35 / -35 psf
3	Series 450/455/460/465 Vinyl Double Hung Windows; X/X	LC-PG50 36 x 74 - H	+50 / -50 psf
4	Series 450/455/460/465 Vinyl Double Hung Windows; CHS, Triple X/X.X/X.X/X	LC-PG35 108 x 74 - H	+35 / -35 psf

General Description:

System	Description	Label Rating	Design Pressure Rating
5	Series 450/455/460/465 Vinyl Double Hung Windows; CHS, Triple X/X.X/X.X/X	LC-PG50 108 x 74 - H	+50 / -50 psf
6	Series 450/455/460/465 Vinyl Double Hung Windows; CHS, Triple X/X.X/X.X/X	LC-PG35 109 x 74 - H	+35 / -35 psf
7	Series 450/455/460/465 Vinyl Double Hung Windows; CHS, Triple X/X.X/X.X/X	LC-PG50 109 x 74 - H	+50 / -50 psf
8	Series 450/455/460/465 Vinyl Twin Double Hung with Transom; OX/X.X/X	LC-PG35 73 x 111 - H	+35 / -35 psf

Product Dimensions:

System	Overall Size	Top Sash Size	Bottom Sash Size	Transom Sash Size
1	48" x 78"	44" x 37-3/4"	44-7/8" x 38-9/16"	N/A
2-3	36" x 74"	32" x 35-3/4"	32-15/16" x 36-9/16"	N/A
4-5	108" x 74"	31-3/4" x 35-3/4"	32-9/16" x 36-1/2"	N/A
6-7	109" x 74"	32" x 35-11/16"	32-7/8" x 36-1/2"	N/A
8	72-1/2" x 111"	32" x 35-11/16"	32-7/8" x 36-1/2"	72-1/2" x 35-1/4"

Product Identification (Certification Label on Window):

System		
1-3	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Atrium Companies
	Product Name	450/455/460/465 Vinyl Double Hung Window w/Fin Installation
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08/05
4-5	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Atrium Companies
	Product Name	450/455/460/465 Triple Vinyl Double Hung Window w/Fin Installation
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08/05
6-7	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Atrium Companies
	Product Name	450/455/460/465 Muller Triple Vinyl Double Hung Window w/Fin Installation
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08/05

Product Identification (Certification Label on Window):

System		
8	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Atrium Companies
	Product Name	450/455/460/465 Mulled Twin Vinyl Double Hung Window w/Transom & Fin Installation
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08/05

Impact Resistance:

System	Impact Resistant	Requirement
1-8	No	Provide an impact protective system when installing the product in areas that require windborne debris protection.

Installation:

System		
1-4, 6, 8	Type of Installation	Fin Installation
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 8
	Fastener Location/Spacing	Located approximately 2" from each corner and 8" on center along the perimeter
	Fastener Penetration	Minimum 1-1/2" into the wall framing
5, 7	Type of Installation	Frame Installation
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 8 screws
	Fastener Location/Spacing	Minimum No. 8 screws located approximately 2" from each corner and 8" on center along the perimeter of the window. Minimum 2" x 2-1/2" x 1/8" aluminum mullion clip inserted into the top and the bottom of each mullion and secured at the head and the sill with two No. 8 x 2-1/2" screws.
	Fastener Penetration	Frame Installation

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