



Product Evaluation

WIN2082 | 0416

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-2082 **Effective Date:** April 1, 2016
Re-evaluation Date: October 2016

Product Name: Series 1650 Vinyl Double Hung Windows, Fin and Frame Installation, Non-impact Resistant

Manufacturer: MI Windows and Doors, Inc.
650 West Market Street
Gratz, PA 17030-0370
(717) 365-3300

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series 1650 Vinyl Double Hung Windows; Slide-In Fin; X/X	R-PG25 38 x 77-H	+25 / -30 psf
2	Series 1650 Vinyl Double Hung Windows; Slide-In Fin; X/X	R-PG35 36 x 60-H	+35 / -50 psf
3	Series 1650 Vinyl Double Hung Windows; Integral Fin; X/X	R-PG35 36 x 60-H	+35 / -50 psf
4	Series 1650 Vinyl Double Hung Windows; X/X	R-PG25 38 x 77-H	+25 / -30 psf
5	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG25 52 x 60-H	+25 / -25 psf
6	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG30 44 x 72-H	+30 / -35 psf
7	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG30 48 x 60-H	+30 / -30 psf

General Description (continued):

System	Description	Label Rating	Design Pressure Rating
8	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG35 24 x 80-H	+35 / -35 psf
9	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG35 40 x 72-H	+35 / -50 psf
10	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG40 36 x 60-H	+40 / -55 psf
11	Series 1650 Vinyl Double Hung Windows; Finless; X/X	R-PG40 36 x 74-H	+40 / -50 psf

Product Dimensions:

System	Overall Size	Exterior Sash Size	Interior Sash Size
1	38" x 77"	33-7/8" x 37"	34-5/8" x 37-5/8"
2	36" x 60"	31-7/8" x 28-5/8"	32-1/2" x 29-1/4"
3	36" x 60"	31-7/8" x 28-5/8"	32-5/8" x 29-1/4"
4	38" x 77"	33-7/8" x 37-1/8"	34-1/2" x 37-11/16"
5	52" x 60"	47-7/8" x 28-5/8"	48-5/8" x 29-1/4"
6	44" x 72"	39-7/8" x 34-5/8"	40-5/8" x 35-3/8"
7	48" x 60"	43-7/8" x 28-5/8"	44-5/8" x 29-3/8"
8	24" x 80"	20" x 38-5/8"	20-5/8" x 39-1/4"
9	40" x 72"	36-1/2" x 34-1/2"	35-3/4" x 33-1/2"
10	36" x 60"	32" x 28-5/8"	32-5/8" x 29-3/16"
11	36" x 74"	31-15/16" x 35-9/16"	32-9/16" x 36-3/16"

Product Identification (Certification Agency Label on Window):

System		
1-11	Certification Agency	AAMA
	Manufacturer's Name or Code Name	MTL-12
	Product Name	DH 1650
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08

Impact Resistance:

System	Impact Resistant	Requirement
1-11	No	Provide an impact protective system when installing the product in areas that require windborne debris protection.

Installation:

System		
1, 2	Type of Installation	Mounting Fin
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 6 x 1-5/8" screws
	Fastener Location/Spacing	Approximately 3" from each corner and approximately 7" on center along the perimeter.
	Fastener Penetration	Minimum 1-1/2" into the wall framing

Installation (Continued):

System		
3, 4 ¹	Type of Installation	Mounting Fin
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 6 x 1-5/8" screws
	Fastener Location/Spacing	Approximately 3" from each corner and approximately 8" to 10" on center along the perimeter.
	Fastener Penetration	Minimum 1-1/2" into the wall framing
4 ¹ , 9	Type of Installation	Frame
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 8 x 2" pan head screws
	Fastener Location/Spacing	Side Jambs: Approximately 3" from each corner and one at the midspan
	Fastener Penetration	Minimum 1-1/2" into the wall framing
5, 6, 7, 8	Type of Installation	Frame
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 8 x 2" pan head screws
	Fastener Location/Spacing	Side Jambs: Approximately 3-1/2" from each corner
	Fastener Penetration	Minimum 1-1/2" into the wall framing
10, 11	Type of Installation	Frame
	Wall Framing	Spruce-Pine-Fir dimension lumber
	Fasteners	Minimum No. 8 x 2" pan head screws
	Fastener Location/Spacing	Side Jambs: Approximately 4" from each corner and one at the midspan
	Fastener Penetration	Minimum 1-1/2" into the wall framing

Note: ¹System 4 can be installed either as a fin mount or as a frame mount.

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