TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective July 1, 2010
WIN-1301

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 shall be subject to reevaluation April 2011.

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.

Series 455 Aluminum Single Hung Windows, Individual, Non-Impact Resistant, manufactured by

MI Windows and Doors, Inc.
650 West Market Street
Gratz, PA 17030-0370
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will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 455 window is an aluminum single hung window. The aluminum single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for aluminum single hung windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Series 455 Aluminum Single Hung Window; (O/X)	H-C35 55 x 91
2	Series 455 Aluminum Single Hung Window; (O/X)	H-C45 48 x 84
3	Series 455 Aluminum Single Hung Window; (O/X)	H-C50 36 x 74

Product Dimensions:

System	Overall Size	Sash Size	Fixed Daylight Opening Size
1	55 1/4" x 90 11/16"	52 5/8" x 45 1/8"	50" x 42"
2	48" x 84"	45 7/16" x 41 3/4"	42 1/2" x 38 3/4"
3	36" x 74"	33 3/8" x 36 11/16"	30 1/2" x 33 3/4"

Glazing Description:

System	Glass Construction [1]	Glazing Method [2]
1-3	IG-1	GM-1

Note: [1] See the "Glass Construction Key" for the glazing construction.
[2] See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:
IG-1: The fixed sash and the operable sash contain sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$") annealed glass lites separated by an aluminum reinforced butyl spacer system. The glass thickness and type used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:
GM-1: The insulating glass units are set from the interior against a bed of silicone sealant. A snap-in vinyl (PVC) glazing bead secures the insulating glass units in place.

Frame Construction: The frame members are manufactured from poured and debridged thermally improved extruded aluminum. The frame corners are coped, butted, sealed with silicone, and secured with screws. The fixed meeting rail utilizes a PVC bracket that is secured to the frame and to the fixed meeting rail with screws.

Sash Construction: The sash members are manufactured from poured and debridged thermally improved extruded aluminum. The sash corners are coped, butted, and secured with screws.

Reinforcement: N/A.

Hardware:

- Metal sweep locks with keepers; Two (2) required; Located 8 inches from each end of the interior meeting rail.
- Block and tackle balance; Two (2) required; One (1) located in each side jamb.
- Plastic tilt latches; Two (2) required; Located at each end of the interior meeting rail.
- Metal pivot bars; Two (2) required; Located at each end of the bottom rail.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**MTL-2**); product name: **455 SH (FIN)**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	$55\frac{1}{4}$	$90\frac{11}{16}$	$\pm$ 35
2	48	84	$\pm$ 45
3	36	74	$\pm$ 50

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions and this evaluation report. Detailed drawings and installation instructions are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Spruce-Pine-Fir dimension lumber. The window shall be mounted to the wood wall framing members using the nailing fin of the window with minimum No. 6 screws. The frame head, sill, and side jambs are secured to the wall framing. The fasteners shall be spaced approximately 3 inches from each corner and approximately 12 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{2}$ inches into the wall framing members. The window shall be set in a bed of silicone.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.