

TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION WIN-553

December 1, 2005

*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 3 years after the effective date.*

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 9000 Vinyl Single Hung Windows, Non-impact Resistant, manufactured by:

**Modern Window and Doors, Inc.
2200 Spring Street
Hot Springs, Arkansas 71901
(800) 835-8998**

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 9000 window is a vinyl single hung window. The single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for vinyl single hung windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Series 9000; Individual Single Hung Window; Without Sash Retainers; (OX)	H-R40 54 x 74
2	Series 9000; Individual Single Hung Window; With Sash Retainers; (OX)	H-R55 54 x 74 (MODIF)
3	Series 9000; Individual Single Hung Window; Without Sash Retainers; (OX)	H-R40 44 x 84
4	Series 9000; Individual Single Hung Window; With Sash Retainers; (OX)	H-R65 44 x 84 (MODIF)

Product Dimensions:

System	Overall Size	Sash Size	Fixed Daylight Opening Size
1	53 1/2" x 74"	50 3/4" x 36 7/8"	49 1/4" x 33"
2	53 1/2" x 74"	50 3/4" x 36 7/8"	49 1/4" x 33"
3	44" x 84"	41 5/16" x 41 13/16"	38 3/4" x 38"
4	44" x 84"	41 5/16" x 41 13/16"	38 3/4" x 38"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1
2	IG-1	GM-1
3	IG-1	GM-2
4	IG-1	GM-2

Note: ¹ See the "Glass Description Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glazing Description Key:

IG-1: The fixed lite 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 a Truseal Swiggle strip spacer system.

Glazing Method Key:

GM-1: The insulating glass units are set from the interior with acrylic backbedding at the exterior and the heel of the insulating glass unit, along the full perimeter. A dual durometer snap-in glazing bead secures the insulating glass unit from the interior.

Frame Construction: The frame members are manufactured from extruded vinyl (PVC). The frame corners are mitered and welded construction. There are snap-in pocket covers located at the frame head and sill sash pockets. There are snap-in frame center and interior legs at the frame jamb.

Sill Extender: A sill extender, manufactured from extruded vinyl (PVC), is snap-fit to the interior of the frame sill.

Sash Construction: The sash members are manufactured from extruded vinyl (PVC). The sash corners are mitered and welded construction.

Sash Retainer (Systems 2 and 4): A sash retainer is snap-fit onto the interior of the sash jambs.

Reinforcement:

Systems 1 and 2: Extruded steel C-channel reinforcement is located in the sash members and in the frame members. The reinforcement extends the length of the members.

Systems 3 and 4: Extruded steel C-channel reinforcement is located in the sash members, the fixed interlock, and in the frame members. The reinforcement extends the length of the members.

Hardware:

<u>Description</u>	<u>Location</u>
Cam action locks	Each end of sash top rail
Keepers	Attached to fixed interlock with screws
Block and tackle balance	Each sash stile
Pivot bar	Sash bottom rails, attached with screws
Tilt latch	Sash bottom rails, attached with screws

Product Identification: A certification program label will be affixed to the window. The certification program label includes the manufacturer's name, performance characteristics and approved inspection agency to indicate compliance with the requirements of AAMA/NWWDA 101/I.S.2.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	53 ½	74	± 40
2	53 ½	74	± 55
3	44	84	± 40
4	44	84	± 65

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 protection 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. The wood wall framing members shall be minimum Southern Yellow Pine lumber.

Installation: The window assembly shall be installed with using the frame of the window with minimum No. 8 screws. The fasteners shall be located approximately 6 inches from each corner and are spaced a maximum of 15 inches on center along the perimeter of the window frame. The fastener shall be long enough to penetrate a minimum of 1 ½" into the wall framing.

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.