

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-1370

Effective February 1, 2011

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 **December 2013**.

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 V100 Vinyl Dual Action Tilt and Turn Windows, Non-impact Resistant, manufactured by

WinDoor Incorporated
7500 Amsterdam Drive
Orlando, Florida 32832
Telephone: (407) 481-8400
www.windowinc.com

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 V100 window is a vinyl dual action tilt and turn window. The vinyl tilt and turn windows evaluated in this report are non-impact resistant windows. This product evaluation report is for vinyl tilt and turn windows based on the following tested construction:

General Description:

System	Description	Label Rating
1	Series V100 Vinyl Tilt and Turn Windows; (X)	DAW-C90 54 x 80 Neg DP=150

Product Dimensions:

System	Overall Size	Sash Size	Daylight Opening Size
1	54" x 80"	50" x 76"	43 ⁵ / ₈ " x 69 ⁵ / ₈ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	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 window contains an insulating glass unit. The insulating glass unit is comprised of two ³/₁₆" heat strengthened glass lites separated by a desiccant filled spacer system. The glass thickness used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are exterior glazed with a glazing bead. There is a glazing gasket on the exterior and a glazing leg adaptor on the interior.

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

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

Reinforcement: Steel reinforcement is utilized in all the sash members and in all the frame members.. The reinforcement extends the length of the members.

Product Identification: A certification program label (Keystone) will be affixed to the window. The certification program label includes the performance characteristics and approved inspection agency to indicate compliance with the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-05. The certification program label contains a Certification Authorization Report (CAR) number located on the top right side of the label and a model name for the window. The following CAR number and model name is located on the label:

Label Identification:

		Certification Authorization Report (CAR) number
System	Model	Label with AAMA/WDMA/CSA 101/I.S.2/A440-05
1	V100 uPVC Tilt Turn	167-418

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	54	80	+90/-150

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.

Tested to Higher Negative Design Pressure: The Keystone label indicates that the product was tested to a higher negative design pressure rating. The higher negative design pressure rating is specified in the table above.

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. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

Wall Framing Construction: The windows may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,192 psi)
- Hollow concrete block (ASTM C-90, Grade N, Type 1 or greater)
- Wood dimension lumber (minimum Spruce-Pine-Fir)
- Wood backed (minimum Spruce-Pine-Fir) minimum 20 gauge steel

Fasteners:

- Concrete and hollow concrete block wall framing; Minimum $\frac{1}{4}$ " diameter ITW Tapcons; Minimum $1\frac{1}{4}$ " embedment; Minimum $2\frac{1}{2}$ " edge distance.
- Wood and wood backed steel wall framing; Minimum No. 14 screw; Minimum $1\frac{3}{4}$ " embedment

Fastener Spacing: The fasteners shall be installed through the window frame and into the wall framing. Along the head and the sill, the fasteners shall be spaced approximately 6 inches from each corner and approximately 14 inches on center on center along the perimeter of the window assembly. Along the side jambs, the fasteners shall be spaced approximately 6 inches from each corner and approximately 11 inches on center on center along the perimeter of the window assembly

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.