

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1197

Effective November 1, 2009

*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 2010**.*

*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 8400 Vinyl Casement Windows, Impact Resistant, manufactured by:**

**Custom Window Systems  
1900 SW 44<sup>th</sup> Avenue  
Ocala, FL. 34474  
(352) 368-6922**

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 8400 window is a vinyl casement window. The vinyl casement windows evaluated in this report are impact resistant windows. This product evaluation report is for vinyl casement windows based on the following tested constructions:

### General Description:

System	Description	Label Rating	Certification Authorization Report (CAR) number
1	Series 8400 Vinyl Casement Window; Individual; (X)	C-C65 36 x 72 AAMA/WDMA/CSA 101/IS2/A440-05 and ASTM E1886-02/E1996-02	138-486.0 138-207

### Product Dimensions:

System	Overall Size	Sash Size
1	36" x 72"	35" x 70"

### Glazing Description:

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glazing construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

IG-1: The operable sash contains a sealed insulating glass unit. The sealed insulating glass units is comprised of a laminated glass unit and a double strength ( $\frac{1}{8}$ " ) annealed glass lite separated by an aluminum spacer system. The laminated glass unit is comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites with a 0.090" Solutia or DuPont PVB interlayer. The glass type and thickness 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 unit is exterior glazed set onto a silicone back bedding and is held in place with a rigid vinyl snap-in glazing bead.

**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:** Four aluminum bars are inserted into the hollows of the active sash and one 31  $\frac{1}{4}$ " long bars are inserted into the top and bottom sash rails, and one 57  $\frac{1}{4}$ " long bars are inserted into both sash stiles.

**Product Identification:** A certification program labels (Keystone) will be affixed to the window. The certification program label includes the Certification Authorization Report (CAR) number located on the top right side of the label and a model number for the window; performance characteristics; the approved inspection agency (Keystone); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05 and ASTM E1886-02/E1996-02.

**LIMITATIONS**

**Design pressures:**

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	36	72	$\pm 65$

**Impact Resistance:** These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I zone** and the **Seaward zone**. The window assemblies passed Missile Level D specified in ASTM E 1996-02. The window assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These window assemblies will not need to be protected with an impact protective system.

**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:** The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The window shall be secured to the wall framing with minimum No. 10 x 1  $\frac{1}{2}$ " long screws. Along each side jamb, six (6) fasteners are required, located approximately 6 inches from each end and spaced 12"

o.c. thereafter. Along the head and the sill, three (3) fasteners are required, located approximately 6 inches from each end and one at the mid-span. The fasteners shall be long enough to penetrate 1 ½ inches 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.