

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1272

Effective April 1, 2010

*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 **May 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 500 Vinyl Casement Windows, Individual, Impact Resistant, manufactured by**

**Showcase Custom Vinyl Windows and Doors**  
**A product of ENLIGHT Industries, LLC**  
**4902 Gulf Freeway**  
**Houston, Texas 77023**  
**Telephone: (713) 926-8500**

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 500 window is a vinyl casement window. The vinyl casement window evaluated in this report is an individual, impact resistant window. This product evaluation report is for a vinyl casement window based on the following tested construction:

### General Description:

System	Description	Label Rating
1	Series 500 Vinyl Casement Window; (X)	C-C60 36 x 72 (I(NS LAM GL) AAMA 506-06

### Product Dimensions:

System	Overall Size	Operable Sash Size
1	36" x 72"	34 1/2" x 69 15/16"

### 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 sash contains a sealed insulating glass unit. The sealed insulating glass unit is comprised of a laminated glass unit and a  $\frac{3}{16}$ " annealed glass lite separated by a Swiggle Strip spacer system. The laminated glass unit is comprised of two double strength ( $\frac{1}{8}$ " annealed glass lites with a 0.090" interlayer. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

**Glazing Method Key:**

GM-1: The insulating glass unit is set from the interior against Sika 556 polyurethane backbedding compound. The compound is also applied at the exterior and at the heel of the insulating glass unit, full perimeter. A rigid vinyl 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.

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

**Reinforcement:** Custom shaped steel reinforcement is utilized in all of the sash members. The reinforcement extends the length of the members.

**Hardware:**

- Four point lock mechanism with keepers; One (1) required; Located on the sash stile, 14 inches from the bottom and at 14 inch centers.
- Rotary operator; One (1) required; Located at the sash bottom rail.
- Friction hinge; One (1) required; Located at the sash top rail.
- Snubbers; Three (3) pairs; Located on the sash stile, at the mid-span and at 17 inches from the top and the bottom.

**Product Identification:** A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**SHO-1**); product name: **Series 500 Casement**; performance characteristics; the approved inspection agency (AAMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05 and AAMA 506-06.

**LIMITATIONS**

**Design pressures:**

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	36	72	± 60

**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 1996-05. The window assemblies may be installed at any height on the structure as long as the design pressure rating for the assembly 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. Detail drawings and installation instructions are available from the manufacturer.

**Installation:** The wall framing 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. 8 screws. The fasteners shall be located approximately  $4\frac{1}{2}$  inches from each corner and approximately  $4\frac{1}{2}$  inches on center along the perimeter of the window frame. The fasteners shall be long enough to penetrate a minimum of  $1\frac{1}{2}$  inches into the wall framing members.

**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.