

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-1165

Effective September 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 **August 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 70/270 Vinyl Casement Windows, Individual, Impact Resistant, manufactured by

**Atrium Windows and Doors
9001 Ambassador Row
Dallas, Texas 75247
(214) 637-2696**

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 70/270 window is a vinyl casement window. The vinyl casement windows evaluated in this report are individual, impact resistant windows. This product evaluation report is for vinyl casement windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Series 70/270 Vinyl Casement Window; Individual (X)	C-R55 36 x 72 AAMA 506-06

Product Dimensions:

System	Overall Size	Operable Sash Size(s)
1	36" x 72"	34 1/4" x 70 1/4"

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 operable sash contains a sealed insulating glass unit. The sealed insulating glass unit is comprised of a double strength ($\frac{1}{8}$ ") annealed glass lite and a laminated glass unit separated by a desiccant-filled stainless spacer system. The laminated glass unit is comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites with a 0.090" PVB interlayer. 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 unit is exterior glazed with either Sika-Flex-552 or Tremco S-700 silicone backbedding compound. The insulating glass unit is secured in placed with a snap-on vinyl 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: None.

Hardware:

- Dual arm operator; One (1) required; Located on the sill.
- Multi-point lock and keepers with single actuator; One (1) required; Located on the locking jamb.
- Casement hinges; Two (2) required; Located at the head and the sill.
- Inward acting snubbers; Three (3) required; Located on the hinge jamb with mates on the sash.
- Outward acting snubbers; Three (3) required; Located on the hinge jamb with mates on the sash.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**ADW-1**); product name: **Series 700/720/750/760 Casement**; performance characteristics; the approved inspection agency (AAMA); and the applicable standards: ANSI/AAMA/NWDA 101/I.S.2-97 and AAMA 506-06.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	36	72	± 55

Impact Resistance: These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I** and the **Seaward zone**. The window assemblies passed Missile Level D specified in ASTM E 1996-04. 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:

System 1:

New Construction: The wall framing members shall be minimum Spruce-Pine-Fir lumber. The window shall be mounted to the wood wall framing members using the window frame nailing fin with minimum No. 8 screws. The fasteners shall be located approximately 2 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.

Replacement Windows: The wall framing members shall be minimum Spruce-Pine-Fir lumber. The window shall be mounted to the wood wall framing members using the window frame side jambs with minimum No. 10 x $2\frac{3}{4}$ screws. Along each side jamb, the fasteners shall be located approximately 5 inches from each corner and approximately 20 inches on center. 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.