

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1236

Effective December 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 **January 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 525 Thermally Broken Aluminum Horizontal Slider Windows, Individual, Non-impact Resistant**, manufactured by

**Thermal Windows, Inc.**  
**12805 East 31<sup>st</sup> Street**  
**Tulsa, Oklahoma 74146-2310**  
**Telephone: (918) 663-7580**

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 525 windows are thermally broken aluminum horizontal slider windows. The aluminum horizontal slider windows evaluated in this report are individual, non-impact resistant windows. The aluminum horizontal slider windows evaluated in this report are based on the following tested construction:

### General Description:

System	Description	Label Rating
1	Series 525 Thermally Broken Aluminum Horizontal Slider Windows; OX	HS-C40 72 x 60

### Product Dimensions:

System	Overall Size	Sash Size	Fixed Daylight Opening Size
1	72" x 60"	36" x 57 $\frac{3}{8}$ "	32 $\frac{7}{8}$ " x 55 $\frac{3}{8}$ "

### 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 and the fixed 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 roll formed aluminum spacer system. 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 in the fixed sash is interior glazed using silicone adhesive backbedding compound. The insulating glass unit is held in place with a vinyl snap-in glazing bead. The insulating glass unit in the operable sash is wrap around vinyl channel glazed.

**Frame Construction:** The frame is manufactured of extruded aluminum. The frame members are thermally broken. The frame corners are secured together with three (3) screws at each corner. The fixed interlock stile is secured to the frame with two (2) screws at each end. A rigid vinyl insert is located at the head and the sill.

**Sash Construction:** The operable and fixed sash are manufactured of extruded aluminum. The sash members are thermally broken. The sash corners are secured together with two (2) screws per corner.

**Hardware:**

- Spring latch; One (1) required; Located at the midpoint of the sash jamb stile.
- Metal sweep lock; One (1) required; Located at the midpoint of the sash interlock stile.
- Tandem metal rollers with a plastic housing; Two (2) required; Located at each end of the sash bottom rail.

**Reinforcement:** None.

**Product Identification:** A certification program label (AAMA) will be affixed to the window. The certification program label shall include the manufacturer's name code name (TWI-1); product name: Series 525 HS; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

**LIMITATIONS**

**Design pressures:**

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	72	60	±40

**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 if installed in areas where windborne debris protection is required.

**Acceptance of Smaller Assemblies:** Windows 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 drawings and installation instructions are available from the manufacturer.

**Installation:** The wood framing members shall be minimum Spruce-Pine-Fir lumber. The windows shall be secured to the wall framing utilizing the frame of the window with minimum No. 8 x 2: screws. Along the head, a minimum of three (3) fasteners are required, evenly spaced. Along each side jamb, a minimum of four (4) fasteners are required, evenly spaced. Minimum  $\frac{1}{2}$ " x 1" wood furring strips are required along the interior and exterior perimeter of the window. The furring strips are secured to the wall framing with minimum No. 8 x  $1\frac{1}{2}$ " screws spaced approximately 12 inches on center. All fasteners shall be long enough to penetrate a minimum of  $1\frac{1}{2}$  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.