

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-1402

Effective April 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 **March 2012**.

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 SH54, SH400, SH500 Vinyl Single Hung Windows, Non-impact Resistant, manufactured by:

Wincore Windows and Doors
250 Staunton Turnpike
Parkersburg, WV 26104
Telephone: (304) 485-7460

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 SH54, SH400, and SH500 windows vinyl single hung windows. The vinyl single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for vinyl single hung windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	SH54, SH400, SH500 Vinyl Single Hung Window; (O/X)	H-LC50 36 x 80
2	SH54, SH400, SH500 Vinyl Single Hung Window; (O/X)	H-LC50 48 x 72

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Daylight Opening Size
1	36" x 80"	33 $\frac{7}{8}$ " x 38 $\frac{15}{16}$ "	31 $\frac{1}{2}$ " x 36 $\frac{3}{4}$ "
2	48" x 72"	45 $\frac{7}{8}$ " x 34 $\frac{15}{16}$ "	43 $\frac{1}{2}$ " x 32 $\frac{3}{4}$ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1
2	IG-2	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: Both sashes contain sealed insulating glass units. The sealed insulating glass units are comprised of two single strength ($\frac{3}{32}$ ") annealed glass lites separated by a U-shaped stainless steel spacer system. 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.

IG-2: Both sashes 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 U-shaped stainless steel spacer system. 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 units in the operable sash are exterior glazed. The insulating glass units in the fixed sash are interior glazed. The insulating glass units are set against double-sided adhesive foam tape. A rigid vinyl snap-in glazing bead secures the insulating glass units in place.

Frame Construction: The frame members are manufactured from extruded vinyl (PVC). The frame corners are mitered and welded construction. The fixed meeting rail is coped and secured to the side jambs with screws.

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

Hardware:

- Cam lock; Two (2) required; 11 inches from outside corners of the operable sash meeting rail.
- Metal keeper; Two (2) required; Located opposite the locks on the fixed meeting rail.
- Plastic tilt latches; Two (2) required; Located on the operable sash, one at each top corner.
- Metal sash tilt pin; Two (2) required; Located on the operable sash, one at each top corner.
- Constant force balance; Two (2) required; Located in each side jamb

Reinforcement: The lock rail, the bottom rail, the sash stiles, and the fixed meeting rail utilize extruded aluminum reinforcement. The reinforcement shall be of sufficient length to support each member.

Product Identification: A certification program label (Keystone) will be affixed to the window. The certification program label includes the manufacturer's name; product name; performance characteristics; the approved inspection agency (Keystone); and the following applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

Label Identification:

System	Model	Certification Authorization Report (CAR) number
1	SH54, SH400, SH500	456-158.0
2	SH54, SH400, SH500	456-159.0

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	36	80	± 50
2	48	72	± 50

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 is required.

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 drawings and installation instructions are available from the manufacturer.

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: 2,000 psi)
- Hollow concrete block; ASTM C-90, Grade N, Type 1 (or greater)
- Wood dimension lumber (minimum Spruce-Pine-Fir)

Frame Installation: The window shall be fastened to the wall framing using the frame of the window. Along the head and side jambs, the fasteners shall be spaced approximately 6 inches from each corner and approximately 8 inches on center. For wood wall framing, the fasteners shall be minimum No. 8 screws. The fasteners shall be long enough to penetrate a minimum of $1\frac{3}{16}$ inches into the wall framing. For concrete or concrete block wall framing, the fasteners shall be minimum $\frac{3}{16}$ inch diameter ITW Tapcons. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{4}$ inches into the wall framing members. The minimum edge distance shall be $2\frac{5}{8}$ inches. The sill shall be set in silicone.

Fin Installation: The window shall be fastened to wood wall framing using the nailing fin of the window. Along the head, sill, and the side jambs, the fasteners shall be spaced approximately 6 inches from each corner and approximately 8 inches on center. The fasteners shall be minimum No. 8 screws. The 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.