TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective April 1, 2010
WIN-1117

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 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 9910 Vinyl Single Hung Windows, Impact Resistant, manufactured by:

Builders FirstSource
5525 Brittmoore Rd.
Houston, Texas 77041
(713) 849-2110

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 9910 windows are vinyl (PVC) single hung windows. The vinyl single hung windows evaluated in this report are individual, 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	Series 9910 Vinyl Single Hung Window; (O/X)	H-R25 47 x 83; AAMA 506-06
2	Series 9910 HP Vinyl Single Hung Window; (O/X)	H-R50 36 x 66; AAMA 506-06
3	Series 9910 HP Vinyl Single Hung Window; (O/X)	H-R50 36 x 72; AAMA 506-06

Product Dimensions:

System	Overall Size	Sash Size	Fixed Daylight Opening Size
1	47 3/8" x 83 3/8"	45 1/2" x 28 3/4"	42 3/4" x 50"
2	35 1/2" x 66"	33 1/2" x 32"	31" x 29"
3	35 1/2" x 71 1/2"	33 1/2" x 28 3/4"	30 3/4" x 38"

Glazing Description:

System	Glass Construction [1]	Glazing Method [2]
1	IG-1	GM-1
2	IG-1	GM-1
3	IG-1	GM-1

Note: [1] See the "Glass Construction Key" for the glazing construction.
[2] See the "Glazing Method Description Key" for the glazing method description.

Glass Construction Key:

IG-1: The window contains a sealed insulating glass unit. The sealed insulating glass unit is comprised of a laminated glass unit and a double strength ($\frac{1}{8}$") annealed glass lite separated by a box aluminum 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 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 Description Key:

GM-1: The fixed sash insulated glass unit is interior glazed using a backbedding compound. A rigid vinyl snap-in glazing bead secures the insulating glass unit at the interior. The operable sash is exterior glazed with backbedding on the interior and a rigid vinyl snap-in glazing bead on the exterior.

Frame Construction: The frame members are constructed of extruded vinyl (PVC). The frame corners are mitered and welded construction. The fixed interlock is secured using a No. 8 x 3" screw at each end.

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

Reinforcement: Extruded aluminum stiffeners are used in the fixed interlock, the sash top rail, the sill, and the sash stiles. The reinforcement extends the full length of the members.

Hardware:

- Metal cam lock with keepers; Two (2) required; Located on the lock stile; 10 inches from each end.
- Plastic tilt latches; Two (2) required; Located on the top rail.
- Drop in balance; Two (2) required; Located in each side jamb.
- Sash pivot bar; Two (2) required; Located on the bottom rail at the corners.
- Weep covers; Two (2) required; Located 3 $\frac{1}{2}$ inches from jamb.

Product Identification:

System 1: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**FSH-1**); product name: **Series 9910 SH**; performance characteristics; the approved inspection agency (AAMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05, and AAMA 506-06.

Systems 2 and 3: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**FSH-1**); product name: **Series 9910 HP SH**; 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 (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	47 $\frac{3}{8}$	83 $\frac{3}{8}$	$\pm$ 25
2	35 $\frac{1}{2}$	66	$\pm$ 50
3	35 $\frac{1}{2}$	71 $\frac{1}{2}$	$\pm$ 50

Impact Resistance: These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I zone** 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: 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 prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The wall framing shall be minimum Southern Yellow Pine framing lumber. The window is secured to the wall framing members using the nailing fin with minimum No. 6 x $1\frac{5}{8}$" screws. The fasteners shall be located approximately 3 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.

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.