

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-1358

Effective February 1, 2011
Revised August 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 **November 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.

ES5000PW Vinyl Fixed Windows, Non-impact Resistant, manufactured by

Four Seasons Solar Products LLC
5005 Veterans Memorial Highway
Holbrook, New York 11741
Telephone: (631) 563-4000

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 ES5000PW fixed windows are vinyl fixed windows. The vinyl fixed windows evaluated in this report are individual, non-impact resistant, windows. This product evaluation report is for vinyl fixed windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	ES5000PW Vinyl Fixed Window; (O)	FW-R70 48 x 72
2	ES5000PW Vinyl Fixed Window; (O)	FW-HC50 79 x 79

Product Dimensions:

System	Overall Size	Fixed Daylight Opening Size
1	48" x 72"	41" x 65"
2	78 $\frac{3}{4}$ " x 78 $\frac{3}{4}$ "	71 $\frac{3}{8}$ " x 71 $\frac{3}{8}$ "

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: The window contains a sealed insulating glass unit. The sealed insulating glass unit in the tested assembly is comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites separated by an aluminum box 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: The window contains a sealed insulating glass unit. The sealed insulating glass unit in the tested assembly is comprised of two $\frac{1}{4}$ " fully tempered glass lites separated by an aluminum box 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 unit is interior glazed against co-extruded vinyl fins and silicone sealant. The insulating glass unit is secured in place with vinyl snap-in glazing beads.

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

Sash Construction: N/A

Hardware: None.

Reinforcement:

System 1: Roll formed steel reinforcement is utilized in all of the frame members. The reinforcement extends the length of the members.

System 2: None.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**FS-1**); product name: **ES5000PW**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	48	72	± 70
2	$78 \frac{3}{4}$	$78 \frac{3}{4}$	± 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 protection is required.

Window Orientation: The maximum height and maximum width of the window assembly may be switched so that the window assembly can be oriented horizontally or vertically.

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 and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

System 1: The window frame shall be fastened to minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using the window frame with minimum No 10 screws. The fasteners are required along the frame head and the frame side jambs. The fasteners shall be spaced approximately 5 inches from each corner and approximately 14 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

System 2: The window frame shall be fastened to minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using the nailing fin of the window with minimum No 8 screws. The fasteners shall be spaced approximately 1 inch from each corner and approximately 4 ¼ inches on center. In addition, the window is secured with vinyl "L" clips located 24 inches from each corner and at the head, sill, and side jambs. Each clip is secured to the window frame with one (1) No. 10 x 5/8" screw and secured to the wall framing with one (1) No. 10 screw. All fasteners shall be long enough to penetrate a minimum of 1 ½ 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.