

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1472

Effective November 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 **September 2014**.

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 350 Vinyl Fixed Windows, One Wide, New and Replacement Construction, Non-Impact Resistant, manufactured by

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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 350 fixed windows specified in this report are vinyl fixed windows. This evaluation report includes one wide fixed window units. The vinyl fixed windows may be installed as new construction windows or as replacement windows. This report includes non-impact resistant vinyl fixed windows based on the following tested configurations:

General Description:

System	Description	Label Rating
1	Series 350; One Wide Vinyl Fixed Windows; Fin Install; (O)	F-R40 112 x 52
2	Series 350; One Wide Vinyl Fixed Windows; Fin Install; (O)	F-C45 76 x 76
3	Series 350; One Wide Vinyl Fixed Windows; Frame Install; (O)	F-C45 76 x 76
4	Series 350; One Wide Vinyl Fixed Windows; Frame Install; (O)	F-C75 76 x 76
5	Series 350; One Wide Vinyl Fixed Windows; Fin Install; (O)	F-R40 112 x 55
6	Series 350; One Wide Vinyl Fixed Windows; Frame Install; (O)	F-R45 112 x 55
7	Series 350; One Wide Vinyl Fixed Windows; Fin Install; (O)	F-LC30 96 x 66
8	Series 350; One Wide Vinyl Fixed Windows; Frame Install; (O)	F-C40 96 x 66
9	Series 350; One Wide Vinyl Fixed Windows; Frame Install; (O)	F-C60 96 x 66

Product Dimensions:

System	Overall Size
1	112" x 52"
2	76" x 76"
3	76" x 76"
4	76" x 76"

Product Dimensions:

System	Overall Size
5	112" x 54.5"
6	112" x 54.5"
7	96" x 66"
8	96" x 66"
9	96" x 66"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1, 2	IG-1	GM-1
3, 5, 6, 7, 8	IG-2	GM-1
4	IG-3	GM-1
9	IG-4	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: Sealed insulating glass units. The insulating glass units are comprised of two $\frac{3}{16}$ " heat strengthened glass lites separated by a desiccant-filled, stainless steel U-shaped, butyl spacer system. The glass thickness used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-2: Sealed insulating glass units. The insulating glass units are comprised of two $\frac{3}{16}$ " annealed glass lites separated by a desiccant-filled, stainless steel U-shaped, butyl spacer system. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-3: Sealed insulating glass units. The insulating glass units are comprised of two $\frac{3}{16}$ " fully tempered glass lites separated by a desiccant-filled, stainless steel U-shaped, butyl spacer system. The glass thickness used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-4: Sealed insulating glass units. The insulating glass units are comprised of two $\frac{5}{32}$ " heat strengthened glass lites separated by a desiccant-filled, stainless steel U-shaped, butyl spacer system. The glass thickness used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are exterior glazed against polyurethane reactive sealant. The insulating glass units are secured with snap-in vinyl 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

Reinforcement: None

Hardware: None

Product Identification:

Systems 1, and 2: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series Fixed Window Annealed**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

Systems 3, 5, and 6: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series Fixed Window Heat Strengthened**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

System 4: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series Fixed Window Fully Tempered**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

System 7: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series New Construction Fixed Frame/Special Shape Annealed**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

System 8: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series Pocket Fixed Frame/Special Shape Annealed**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

System 9: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series Pocket Fixed Frame/Special Shape Heat Strengthened**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	112	52	± 40
2	76	76	± 45
3	76	76	± 45
4	76	76	± 75
5	112	54.5	± 40
6	112	54.5	± 45
7	96	66	± 30
8	96	66	± 40
9	96	66	± 60

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: 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:

Systems 1, 2, 5, and 7 (Fin Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the nailing fin of the window with minimum 11 gauge galvanized smooth shank roofing nails. The fasteners shall be spaced approximately 6 inches from each corner and approximately 4 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wood wall framing.

Systems 3, 4 (Frame Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the frame of the window with minimum No. 10 x 2" screws. The fasteners shall be spaced approximately 6 inches from each corner and approximately 21 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wood wall framing.

System 6 (Frame Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the frame of the window with minimum No. 10 x 2" screws. The fasteners shall be spaced approximately 6 inches from each corner and approximately 20 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wood wall framing.

System 8 (Frame Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the frame of the window with minimum No. 10 x 2" screws. The fasteners shall be spaced approximately 6 inches from each corner, approximately 16.8 inches on center along the head and the sill, and approximately 27.5 inches on center along the side jambs. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wood wall framing.

System 9 (Frame Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the frame of the window with minimum No. 10 x 2" screws. The fasteners shall be spaced approximately 6 inches from each corner, approximately 10.5 inches on center along the head and the sill, and approximately 13.5 inches on center along the side jambs. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wood 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.