

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-978

Effective November 1, 2008

*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 **October 2010**.*

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.

Windquest V707 Vinyl Tilt Double Hung Windows, Individual, Impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc.
1323 South Eleventh Avenue
Wausau, WI 54401
(715) 842 - 5666

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 Windquest V707 window is a vinyl tilt double hung window. The vinyl double hung windows evaluated in this report are individual, impact resistant windows. This product evaluation report is for vinyl double hung windows based on the following tested construction:

General Description:

System	Description	Label Rating	Hallmark Certification
1	Windquest V707 Vinyl Tilt Double Hung Window; Individual; X/X	H-LC60 44 x 77	416-H-619.00 416-H-619.01

Product Dimensions:

System	Overall Size	Upper Sash Size	Lower Sash Size
1	44" x 77"	40 $\frac{3}{16}$ " x 37 $\frac{1}{2}$ "	41 $\frac{5}{16}$ " x 37 $\frac{7}{8}$ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	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 sealed insulating glass units. The sealed insulating glass unit in the tested assembly is comprised of a double strength ($\frac{1}{8}$ ") annealed glass lite and a laminated glass unit separated by a desiccant-filled steel spacer system. The laminated glass unit is comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites with a 0.090" Dupont Butacite PVB interlayer.

Glazing Method Key:

GM-1: The insulating glass units are set from the interior against silicone sealant backbedding. Snap-fit two leaf dual durometer rigid vinyl glazing beads secure 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.

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

Reinforcement: An extruded aluminum contour-shaped reinforcement bar is located in each of the sash members. Extruded aluminum reinforcement is located in the meeting rails. The reinforcement extends the length of the members.

Hardware:

- Coils spring balances with locking tilt shoes; Four (4) required; Located in each interior jamb track.
- Spring loaded snap-type lock; Two (2) required; Located 8 inches from each end of the interior meeting rail.
- Metal keepers; Two (2) required; Located on the exterior meeting rail, opposite the locks.
- Interlocking metal tilt latch; Two (2) required; Located at each end of the top rail and the interior meeting rail.
- L-shaped die-cast pivot bar; Two (2) required; Located at each end of the exterior meeting rail and the bottom rail.

Product Identification: A certification program label (WDMA Hallmark Certified) will be affixed to the window. The certification program label includes the manufacturer's name; product name (**Windquest V707 Tilt Double Hung – Impact**); performance characteristics; and approved inspection agency to indicate compliance with the requirements of AAMA/WDMA/CSA 101/I.S.2/A440-05 and ASTM E 1886-05 and ASTM E 1996-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	44	77	± 60

Impact Resistance: These window assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris. The window assemblies passed Missile Level D specified in ASTM E 1996-05 and may be installed in the **Inland I** and **Seaward** zones. The window assembly may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These assemblies will not need to be protected with an impact protective system.

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 installation instructions and drawings are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The window shall be mounted to the wood wall framing members using the steel installation clips (4.201" x 1" x 0.059"). The installation clips are snap-fit to the window frame. Each installation clip is secured to the wall framing with one (1) minimum No. 8 screw. The installation clips shall be spaced approximately 8 inches from each corner and approximately 8 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of 1 ½" into the wall framing members.

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.