

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1174

Effective August 1, 2009

*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 **December 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.

Clad Ultimate Double Hung Round Top and Polygon Window, Wood Window, 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 report.

PRODUCT DESCRIPTION

The clad ultimate double hung round top and polygon window is an aluminum clad wood double hung round top and polygon window. The aluminum clad wood double hung round top and polygon windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for aluminum clad wood double hung round top and polygon windows based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Clad Ultimate Double Hung Round Top and Polygon Window; (X/X)	H-LC30 45.37 x 87.43
2	Clad Ultimate Double Hung Round Top and Polygon Window; (X/X)	H-LC40 45.37 x 67.43

Product Dimensions:

System	Overall Size	Upper Sash Size	Lower Sash Size
1	45 $\frac{3}{8}$ " x 87 $\frac{7}{16}$ "	42 $\frac{1}{2}$ " x 46"	42 $\frac{1}{2}$ " x 40 $\frac{5}{8}$ "
2	45 $\frac{3}{8}$ " x 67 $\frac{7}{16}$ "	42 $\frac{1}{2}$ " x 36"	42 $\frac{1}{2}$ " x 30 $\frac{5}{8}$ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	Upper Sash: GM-1 Lower Sash: GM-2
2	IG-1	Upper Sash: GM-1 Lower Sash: GM-2

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 a sealed insulating glass unit. The sealed insulating glass unit is comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites separated by a desiccant-filled metal 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 are set from the interior against GE Rapid Strength structural silicone sealant. The insulating glass units are secured in place with wood glazing stops using brad nails spaced approximately 1 inch from each corner and approximately 4 to 6 inches on center.

GM-1: The insulating glass units are set from the exterior against structural silicone sealant. The insulating glass units are secured in place with glazing tape that is applied to the extruded aluminum cladding and attached top the wood frame with a vinyl locking clip.

Frame Construction: The frame head, sill, and side jambs consist of wood members with butt joints. The frame corners are secured with staples. **Aluminum cladding:** The extruded aluminum cladding corners are secured with corner keys and screws. The aluminum cladding is secured to the exterior of the frame by dimpling.

Sash Construction: The sash members consist of wood members with slot and tenon construction at the bottom corners that are secured with brad nails and butt joints at the top corners that are secured with screws. **Aluminum cladding:** The extruded aluminum cladding is secured to the wood members by dimpling and by securing the cladding on the exterior edge of the sash with a fastener that is secured under the cope edge with staples.

Hardware:

- Jamb liners with balance assembly; Two (2) required; One per jamb.
- Metal tilt pins; Four (4) required; Located at the bottom corners of each sash.
- Plastic tilt latch; Two (2) required; Located at the top stiles of the top sash.
- Metal sweep lock with integrated tilt latch; One (1) required; Located at the mid-span of the check rail of the bottom sash; tilt latches at the top corners off the bottom sash.

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 (**Clad Ultimate Double Hung Magnum**); performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA 101/I.S.2/NAFS-02.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	45 $\frac{3}{8}$	87 $\frac{7}{16}$	± 30
2	45 $\frac{3}{8}$	67 $\frac{7}{16}$	± 40

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.

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 manufacturer's recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The window shall be fastened to minimum Southern Yellow Pine dimension lumber using the nailing fin of the window. The window frame head, sill, and side jambs are secured to the wall framing with minimum 12 gauge smooth shank roofing nails. The fasteners shall be spaced approximately 6 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 2 inches 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.