

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1280

Effective June 1, 2010

*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 **June 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.*

### **H-3 Aluminum Clad Vinyl/Wood Casement Operator/Picture Windows, Non-impact Resistant, manufactured by**

**Hurd Windows and Doors**  
**575 South Whelen Avenue**  
**Medford, Wisconsin 54451**  
**Telephone: (715) 748-1787**

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 H-3 casement operator/picture windows are aluminum clad vinyl/wood combination casement operator and fixed windows. The aluminum clad vinyl/wood combination casement operator/picture windows evaluated in this report are non-impact resistant, windows. This product evaluation report is for aluminum clad vinyl/wood combination casement operator/picture windows based on the following tested constructions:

#### **General Description:**

System	Description	Label Rating
1	H-3 Casement Operator/Picture Window; (XOX)	C-R35 110 x 54
2	H-3 Casement Operator/Picture Window; (XOX)	C-C50 110 x 60
3	H-3 Casement Operator/Picture Window; (XOX)	C-C50 106 x 60

**Product Dimensions:**

System	Overall Size	Sash Size
1	109 ½" x 53 ½"	Operator (2): 26" x 52" Picture (1): 54" x 52"
2	109 ½" x 59 ½"	Operator (2): 26" x 58" Picture (1): 54" x 58"
3	105 ½" x 59 ½"	Operator (2): 34" x 58" Picture (1): 34" x 58"

**Glazing Description:**

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1
2	IG-2	GM-1
3	IG-1	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glazing construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

IG-1: The sash contains a sealed insulating glass unit. The sealed insulating glass units are comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites separated by a steel Intercept spacer system embedded in sealant. 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 fixed and the operating sash contains a sealed insulating glass unit. The sealed insulating glass units in the operating sash are comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites separated by a steel Intercept spacer system embedded in sealant. The sealed insulating glass units in the fixed sash contain two  $\frac{5}{32}$ " annealed glass lites separated by a steel Intercept spacer system embedded in sealant. The glass thickness and type used in the insulating glass units 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 glazing tape and a bead of silicone sealant. Vinyl glazing stops secure the insulating glass units in place.

**Frame Construction:** The frame members consist of extruded vinyl (PVC). The frame corners are mitered and welded construction. Interior wood stops at the head and side jambs are secured to the vinyl frame members with vinyl clips. Wood frame extenders are snap-fit to the vinyl frame.

**Aluminum Cladding:** The exterior extruded aluminum cladding is mitered, silicone sealed, corner keyed, and secured with crimps and snap-fit to the frame.

**Sash Construction:** The sash stiles and rails consist of molded pine. The sash corners are mortise and tenon construction and are secured with staples. The sash is secured to the frame through the wood stops using screws.

**Aluminum Cladding:** The exterior extruded aluminum cladding is miter cut, corner keyed, sealed, and snap-fit to the wood sash members. The corner keys are secured to the sash with nails.

**Mull Post Construction:** The vinyl/wood composite integral mull posts are sealed and secured to the head and to the sill with screws. The interior wood frame extenders are snap-fit to the vinyl frame and secured with staples. A galvanized mull strip anchor is fastened to the head and to the sill with screws used to secure the post to the frame members.

**Aluminum Cladding:** The extruded aluminum mull cladding is square cut, gasket applied, sealed, and snap-fit to the vinyl mull post.

**Reinforcement:** None.

**Hardware (per operating window):**

- Truth dual arm operator; One (1) required; Located at the frame sill/bottom rail.
- 10" metal hinge w/track; Two (2) required; Located on the hinge side head and sill.
- Lock with actuator linkage and tie bar; Two (2) required; Located on the frame side jambs.
- Lock keeper; Two (2) required; Located on the sash, adjacent to the locks.
- Lock keeper (System 3); Three (3) required; Located on the sash, adjacent to the locks.
- Metal snubber (System 1); One (1) required; Located on the hinge side sash and frame.
- Metal snubber (System 3); Three (3) required; Located on the hinge side sash and frame.
- Metal snubbers or locking compression snubbers (System 3); Located on the hinge side sash and frame.

**Product Identification:** A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; product name: **H-3 Casement Operator/Picture Three-Wide Units**; performance characteristics; the approved inspection agency (WDMA); 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	109 ½	53 ½	± 35
2	109 ½	59 ½	+50/-65
3	105 ½	59 ½	+50/-65

**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.

**Tested to Higher Negative Design Pressure:** The WDMA label indicates that the product was tested to a higher negative design pressure rating. The higher negative design pressure rating is specified in the table above.

**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 window shall be fastened to minimum Spruce-Pine-Fir dimension lumber. The window is secured to the wall framing using the applied vinyl nailing fin at the head, sill, and side jambs of the window frame. The nailing fin shall be secured to the wall framing with minimum 2 inch long roofing nails (minimum 11 gauge smooth shank diameter). The fasteners shall be spaced approximately 4 inches from each corner and approximately 4 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members. The nailing flange is silicone sealed to the window frame.

**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.