

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-1337

Effective April 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 **April 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.*

### **Contractor Series 2000 Vinyl Double Hung Windows, Replacement Construction, Non-impact Resistant**, manufactured by:

**Ply Gem Windows**  
**433 North Main Street**  
**Rocky Mount, Virginia 24151**  
**Telephone: (800) 999-8400**

and distributed under the following brand names:

**Mastic 3000**  
**Home Craftsman 8150**

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 Contractor Series 2000 window is a vinyl double hung window. The vinyl double hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for vinyl double hung windows based on the following tested constructions:

### General Description:

System	Description	Label Rating
1	Contractor Series 2000 Vinyl Double Hung Window; (XX)	H-R25 54 x 63 (DP +25/-25 psf)
2	Contractor Series 2000 Vinyl Double Hung Window; (XX)	H-R35 40 x 63 (DP +25/-40 psf)

### Product Dimensions:

System	Overall Size	Top Sash Size	Bottom Sash
1	53 <sup>15</sup> / <sub>16</sub> " x 63"	50 <sup>1</sup> / <sub>4</sub> " x 30 <sup>3</sup> / <sub>8</sub> "	51" x 31"
2	40" x 63"	36 <sup>1</sup> / <sub>4</sub> " x 30 <sup>1</sup> / <sub>4</sub> "	37" x 31"

**Glazing Description:**

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1
2	IG-2	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: Both operable sashes contain sealed insulating glass units. The sealed insulating glass units are comprised of two single double strength ( $\frac{1}{8}$ " ) annealed glass lites separated by a U-shaped steel spacer system. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-2: Both operable sashes contain sealed insulating glass units. The sealed insulating glass units are comprised of two single strength ( $\frac{3}{32}$ " ) annealed glass lites separated by a U-shaped steel spacer system. The glass thickness and type 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 with wet glazing. A vinyl snap-in glazing bead secures 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:** None

**Hardware:**

- Constant force balance; Two (2) required; Located in each side jamb track.
- Metal cam-type sweep lock; Two (2) required; Located at each end of the interior sash meeting rail.
- Keeper; Two (2) required; Located at each end of the exterior meeting rail.
- Plastic latch; Four (4) required; Located at each end of the top rail and the interior meeting rail.
- Metal pivot bar; Four (4) required; Located at each end of the bottom rail and the exterior meeting rail.
- Plastic spring-loaded stop; Two (2) required; Located on the sash top stiles.

**Product Identification:** A certification program label (NAMI) will be affixed to the window. The certification program label includes the manufacturer's code name (PWG-M-155); product name: **Contractor 2000 Double Hung**; performance characteristics; the approved inspection agency (NAMI); and the following applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

**LIMITATIONS**

**Design pressures:**

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	53 $\frac{15}{16}$	63	± 25
2	40	63	+35/-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.

**Tested to Higher Negative Design Pressure:** The NAMI 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:** 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 drawings and installation instructions are available from the manufacturer.

### Installation:

**Wood Construction:** The wall framing members shall be minimum Southern Yellow Pine dimension lumber. The window assemblies shall be secured to the wall framing using the frame of the window with minimum No. 8 x 2" screws. Along the side jambs, the fasteners shall be located approximately 4 inches from each corner. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

**Concrete/Masonry Construction:** The wall framing members shall be precast concrete, cast-in-place concrete or hollow or grout-filled concrete masonry units. The window assemblies shall be secured to the wall framing using the frame of the window with minimum 3/16" diameter Tapcons. Along the head and sill, the fasteners shall be located approximately 4 inches from each corner and approximately 24 inches on center. Along the side jambs, the fasteners shall be located approximately 4 inches from each corner and approximately 18 ½ inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ¼ inches into the wall framing and located a minimum of 2 ½ inches from the edge.

**Steel Construction:** The wall framing members shall be minimum 20 gauge steel. The window assemblies shall be secured to the wall framing using the frame of the window with minimum No. 10 self tapping screws. Along the head and sill, the fasteners shall be located approximately 4 inches from each corner and approximately 24 inches (16 inches for System 2) on center. Along the side jambs, the fasteners shall be located approximately 4 inches from each corner and approximately 18 ½ inches (14 inches for System 2) on center. The fasteners shall be long enough to penetrate a minimum of three threads through 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.