

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION

WIN-1438

Effective August 1, 2011

Revised January 1, 2012

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 2015**.

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 8900 Aluminum Casement Windows, Individual and Muller, Non-impact Resistant,** manufactured by

**Don Young Company, Inc.**

**8181 Ambassador Row**

**Dallas, Texas 75247**

**(214) 630-0934**

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 8900 windows are aluminum casement windows. The aluminum casement windows evaluated in this evaluation report are non-impact resistant windows. This product evaluation report is for aluminum casement windows based on the following tested constructions:

### General Description:

System	Description	Label Rating
1	Series 8900 Aluminum Casement Windows; (X)	C-LC40 36 x 72
2	Series 8900 Aluminum Casement Windows; Twin (X.X) or Triple (X.X.X)	Each Window: C-LC40 36 x 72

### Product Dimensions:

System	Overall Size	Vent Size
1	36" x 72"	33 $\frac{3}{4}$ " x 69 $\frac{5}{8}$ "
2	Each: 36" x 72"	Each: 33 $\frac{3}{4}$ " x 69 $\frac{5}{8}$ "

### Glazing Description:

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1
2	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 vent contains a sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ( $\frac{1}{8}$ " ) annealed glass lites separated by a Truseal Duralite or stainless steel U-shaped 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 set from the interior against a backbedding compound at the exterior. The insulating glass units are secured in place with snap-in aluminum glazing beads with kerf mounted vinyl.

**Frame Construction:** The frame members are manufactured from thermally broken extruded aluminum. The frame corners are coped, butted, sealed, and secured with screws.

**Vent Construction:** The vent members are manufactured from thermally broken extruded aluminum. The vent corners are coped, butted, sealed, and secured with screws.

**Reinforcement:** None.

**Hardware (Each Window):**

- Multi-point lock; One (1); Located on the frame jamb.
- Keeper; Three (3) required for each vent; Located on the frame jamb.
- Dual arm operator; One (1); Located on the frame sill.
- Lock handle; One (1) required; Located on the frame sill.

**Product Identification:**

**System 1:** A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code (DY-1), product name: **8900 casement**, performance characteristics, the approved inspection agency (AAMA); and the following applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

**System 2:** A certification program label (AAMA) will be affixed to each window in the mulled assembly. The certification program label includes the manufacturer's code (DY-1), product name: **8900 casement**, performance characteristics, the approved inspection agency (AAMA); 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	36	72	± 40
2	Each Window: 36	Each Window: 72	± 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 is required.

**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 and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

### Installation:

**System 1 (Replacement Window):** The wood wall framing members shall be minimum Spruce-Pine-Fir dimension lumber. The window shall be secured to the wood wall framing members using the window frame side jambs with minimum No. 8 x 3" screws. The fasteners shall be spaced approximately 3 inches from each corner and approximately 22 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

**System 1 (New Construction Window):** The wood wall framing members shall be minimum Spruce-Pine-Fir dimension lumber. The window shall be secured to the wood wall framing members using the window nailing fin with minimum 0.120" x 2 ¾" smooth shank nails. Along the head and the sill, the fasteners shall be spaced approximately 3 inches from each corner and approximately 10 inches on center. Along the side jambs, the fasteners shall be spaced approximately 4 inches from each corner and approximately 16 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

**System 2 (Replacement window):** The wall framing shall be minimum Spruce-Pine-Fir dimension lumber. The window side jambs shall be secured to the aluminum mullion (2.872" x 1.750") using an aluminum mullion clip. The mullion clip is secured to the mullion with minimum No. 10 x 7/8" screws spaced approximately 4 inches from each end and approximately 12 inches on center. An aluminum mullion bracket (1 ½" x 1 ½" x 1 ⅛") is secured to each end of the mullion with two (2) No. 10 x 5/8" screws. The bracket is secured to the wall framing at the head and the sill with four (4) No. 10 x 1 ½" screws. The window assembly shall be fastened to the wood wall framing members using the window frame head and side jambs with minimum No. 10 x 3 ½" screws. Along the head, four (4) fasteners are required for each window. One fastener shall be located approximately 3 inches from each end and two fasteners shall be evenly spaced between them. Along each side jamb, a fastener shall be located approximately 4 inches from each end and approximately 12 inches on center. Along the sill, a fastener shall be located on either side of each mullion. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing. The window frame shall be fully sealed to the wood framing members with silicone.

**System 2 (New Construction Window):** The wall framing shall be minimum Spruce-Pine-Fir dimension lumber. The window side jambs shall be secured to the aluminum mullion (2.872" x 1.750") using an aluminum mullion clip. The mullion clip is secured to the mullion with minimum No. 10 x 7/8" screws spaced approximately 4 inches from each end and approximately 12 inches on center. An aluminum mullion bracket (1 ½" x 1 ½" x 1 ⅛") is secured to each end of the mullion with two (2) No. 10 x 5/8" screws. The bracket is secured to the wall framing at the head and the sill with four (4) No. 10 x 1 ½" screws. The window assembly shall be fastened to the wood wall framing members using the window frame nailing fin with minimum 0.120" x 2 ¾" smooth shank nails. The fasteners shall be located approximately 4 inch 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 ⅞ inches into the wall framing. The window frame shall be fully sealed to the wood framing members with silicone.

**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.