

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION WIN-830

Effective July 1, 2007

*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 3 years after the effective date.*

*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.*

**New Construction Vinyl Awning and Casement Windows, Non-Impact** that are specifically listed in this evaluation report and manufactured by

**Simonton Building Products, Inc.**  
**One Cochrane Avenue**  
**Pennsboro, WV 26415-9403**  
**1-(800) 426-2249**

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The following PVC framed windows are acceptable under this product evaluation report within the size limitations specified on the AAMA label:

**Table 1**

Product Line	Type	Sash/ Frame	Max. Size (in.)	DP (psf)
ProFinish Contractor	Casement Window	08-08	36" x 80"	55
ProFinish Master	Triple Casement Window T-Mull	08-08	101" X 60"	50
Luminess 700	Triple Casement Window T-Mull	08-08	107" x 72"	45
Luminess 800	Triple Casement Window T-Mull	08-08	105" x 51"	50
	Awning Window	08-08	53" x 26"	55
	Awning Window	08-08	60" x 36"	45

**Frame Construction:** The window frames are constructed of vinyl with the corners mitered and welded.

**Sash Construction:** The window sashes are constructed of vinyl with the corners mitered and welded.

**Vent Construction:** The PVC vents were assembled utilizing mitered and welded corner construction.

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### PRODUCT DESCRIPTION (Continued)

**Reinforcement:** The vertical integral mullions contained a custom shaped hollow extruded aluminum reinforcement measuring 1.765" x 1.285 x 0.125", reference drawing #59457.

Casement windows may be reinforced with either steel, in all the rails and stiles, reinforcement code (E9), or aluminum, in the meeting rails (A2) or all the rails and stiles (A9).

**Mullions:** All mullions are non-reinforced or aluminum reinforced vinyl members with steel base plates at their ends.

#### Glazing Type:

**Triple Casement w/Integral Mullion** – Each unit is glazed from the exterior with ¾" thick sealed insulating glass fabricated from two (2) 3/32" thick clear annealed sheets and a metal spacer system. The insulating glass was set from the exterior onto a double-sided adhesive tape and secured with rigid vinyl glazing beads.

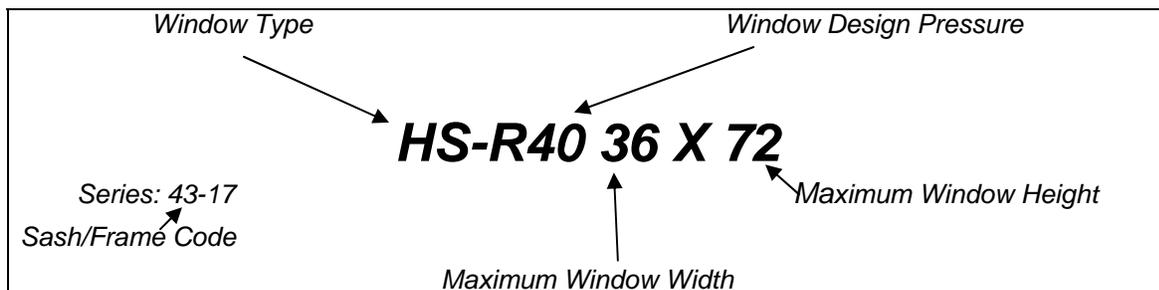
**Casement Window** – Each unit is exterior glazed using ¾" thick sealed insulating glass fabricated with two 1/8" annealed sheets separated by a "U" shaped steel spacer system. The glass was set against a double-sided adhesive tape and secured using snap-fit dual durometer vinyl glazing beads.

**Awning Windows** – Each unit is exterior glazed with ¾" thick sealed insulating glass fabricated from two (2) sheets of 3/32" thick clear annealed glass and a metal spacer system. The glass was set against double-sided adhesive tape and secured with snap-fit vinyl glazing beads.

**Glazing Method:** The windows are glazed on the interior with a vinyl snap-in bead and on the exterior with a two sided ½" x ¼" foam tape, or the foam tape may be used on the inside and the snap-in bead on the outside.

### LIMITATIONS

**Product Identification:** A certification program label (AAMA) label will be affixed to the window. The certification program label includes the manufacturer's code name (SIM-1, SIM-2, and, SIM-4); Series 08-08 performance characteristics, and approval agency to indicate compliance with the requirements of AAMA/NWWDA 101/I.S.2



#### AAMA Label Maximum Size Designation

**LIMITATIONS (Continued)**

**Design Pressure Limitations:** The design pressure of the window shall be as specified on the AAMA label. The building height limitation shall be determined by the design pressure, and be as specified in the Limitations section of this product evaluation.

**Mulled Unit Limitations:** The separate components of the mulled units shall not exceed the maximum sizes specified in the “Mulled Units Maximum Sizes” table. The building height limitation shall be determined by the design pressure of the mulled assembly and be as specified in the limitations section of this product evaluation. All the components of the mulled units are  $\frac{3}{4}$ ”, insulated glass comprised of single strength annealed glass lites. For illustration of the approved configurations, refer to Figure 1 of this product evaluation.

**Table 2**

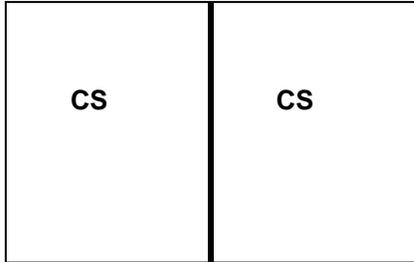
<b>Profinish Builder, 08-08; Profinish Contractor 08-08; Luminess 700, 08-08; Luminess 800, 08-08</b>						
<b>Mulled Unit Maximum Sizes</b>						
<b>Configuration (Fig.1)</b>	<b>Type of Window</b>	<b>Reinfor Code</b>	<b>Component Size (MAX)</b>		<b>Mullion Specification</b>	<b>DP (psf)</b>
			<b>Width (in)</b>	<b>Height (in)</b>	<b>Number, Type and Orientation</b>	
I	Twin Casement	N/A	72-1\2	74	Medium Mullion (Vertical)	45
II	Triple Casement	N/A	109	60	H-Mullion	35
II	Triple Casement	N/A	109	72	H-Mullion	45
III	Twin Casement with Picture (PW) Full Span	N/A	72-1\2	108.5	Medium Vertical and Large Horizontal Mullion	45
V	Casement with Picture (PW)	N/A	36	110.5	H-Mullion	50
IV	Twin Casement (CS) with Twin Picture (PW)	N/A	72-1\2	84.5	Medium Vertical and Horizontal Mullion	45

**Acceptance of Smaller Assemblies:** Windows with dimensions equal to or smaller than those specified in the Maximum Size table or on the AAMA label are acceptable within the limitations specified.

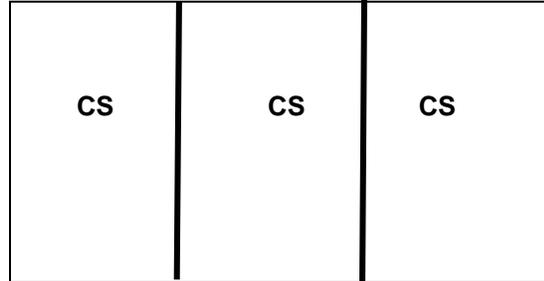
**Impact Resistance:** The windows do not satisfy the Texas Department of Insurance criteria for windborne debris. The assembly will need to be protected with an impact protective system.

### APPROVED CONFIGURATIONS

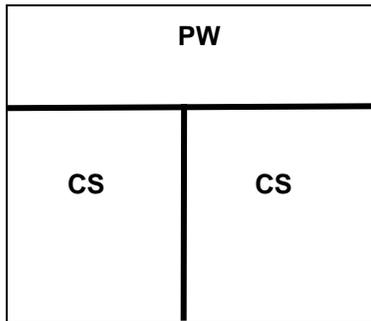
Approved Configuration I



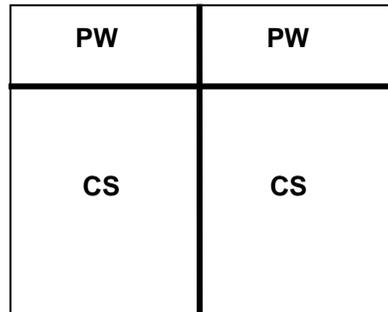
Approved Configuration II



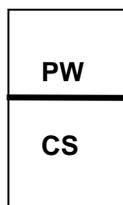
Approved Configuration III



Approved Configuration IV



Approved Configuration V



**Note:** Bold lines note mullion positions.

**Figure 1**

## INSTALLATION INSTRUCTIONS

**General Installation Requirements:** The windows shall be installed in accordance with the manufacturer's installation instructions and this product evaluation. All window assemblies shall be set against silicone bedding.

**Wood Species:** The window frame shall be fastened to minimum Spruce-Pine-Fir framing members unless otherwise stated in this installation instruction section.

**Anchorage:** The unit is installed in the wood framing unit constructed of Spruce-Pine-Fir construction lumber and sealed at the exterior fin with silicone sealant. The unit is secured through the nail fin using No. 8 by 1-1/4" long screws spaced approximately 4-1/4" on center.

**Casement and Awning Windows:** The casement windows shall be fastened to the wood framing members through the nailing flange with No. 8 x 1 1/4" drywall screws spaced 4" on center.

### **Installation of Muller Windows when Reinforced H-Mullions are Utilized:**

The mullion shall be fastened at both ends to frame with two 2 1/4" x 1" "L" brackets. The "L" bracket shall be fastened to the wood framing members with four No. 8 x 1 1/2" flat head drywall screws. The mullion shall be fastened to the bracket with two 1/4" rivets. The window units shall be fastened to the mullion with minimum No. 8 x 1" flat head drywall screws spaced a maximum 6" from the corners and 15" on center thereafter. The window frame shall be fastened through the nailing flange to the wood framing with minimum No. 8 x 1-1/8" flat head drywall screws spaced 4" on center. The mullion type and reinforcements shall be as specified in the limitation section for the configuration illustrated in Figure 1 of this product evaluation. The use of base plate assemblies (provided with window assembly) is required at each end of every reinforced mullion.

### **Installation of Muller Windows when Non-Reinforced H-Mullions are Utilized:**

The unit shall be fastened to wood framing members through the nailing fin using No. 8 x 1-1/4" drywall screws spaced 4-3/4" on center and sealed with silicone caulking. The PVC H-Mullion shall be fastened through the window jambs using eight (8) No. 8 x 1-1/8" long screws per mullion four (4) per side evenly spaced. The H-Mullions were sealed at the interior and exterior perimeter with silicone caulking. H-Mulls contain 1/4" by 2-1/2" wide plywood strips.

### **Installation of Muller Windows when Non-Reinforced T-Mullion are Utilized:**

Four No. 8 x 3" flat head screws shall be fastened through the metal support plate per corner. The mulled assemblies with the T-mullion shall also be fastened through the nailing fin and into the wood framing members with No. 6 x 1 1/4" flat head drywall screws spaced 6" on center.

### **Installation of Muller Windows when Reinforced Integral T-Mullions are Utilized:**

The integral "T" mullion is reinforced with a custom shaped aluminum extrusion. The mullion is coped, butted and fastened at the head and sill with four screws. Two No 8 x 2 1/2" long screws are used at each end to fasten the interior side of the mullion, and two No. 8 x 1 3/4" long screws are used each end to fasten the exterior of the mullion. A 1/16" x 1/2" x 1 3/4" steel mullion plates is located at the exterior attachment screws, one per end of each mullion.

**INSTALLATION INSTRUCTIONS (Continued)**

**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) and the International Building Code (IBC) and the building specifications adopted by the Texas Department of Insurance.