



Product Evaluation

SHU221 | 1115

Engineering Services Program

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 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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: SHU-221

Effective Date: November 1, 2015

Re-evaluation Date: November 2019

Product Name: Colonial Standard and Bi-Fold Aluminum Shutters

Manufacturer: LAS Enterprises
2413 L & A Road
Metairie, LA 7001
(504) 832-1429

General Description:

The standard and bi-fold colonial shutters are manufactured of extruded aluminum and are assembled using extruded aluminum slats measuring 2.00" x 0.375".

The shutters are secured to the exterior side of the wall (wall mount) and must be installed in accordance with the design drawing referenced in this evaluation report.

Limitations:

Design Drawings:

- "Colonial Shutter Bi-Fold & Standard – LMI & SMI," manufactured by LAS Enterprises, Drawing No. 08-02483, Sheets 1 thru 7 of 7, dated September 08, 2014, signed, sealed, and dated September 10, 2014 by Luis R. Lomas, P.E. The stated drawings will be referred to as approved drawings in this report.

Colonial Shutter Configurations: The colonial shutters may be installed as a standard configuration or as a bi-fold configuration. Refer to the approved drawings for the specific types of configurations.

Mounting Conditions: The colonial shutters must be wall mounted. Refer to the approved drawings for the specific mounting requirements.

Wall Construction: The colonial shutters may be mounted to the following types of wall framing:

- Pre-cast concrete, cast-in-place concrete (minimum compressive strength required specified in drawings)
- Grout-filled concrete masonry units (CMU)
- Wood (minimum Spruce-Pine-Fir dimension lumber, S.G. = 0.42).

Allowable Design Pressure: The allowable design pressure for both the standard shutter and the bi-fold shutter is +/-50.0 psf.

Maximum Width:

- Standard Shutter: 42"
- Bi-Fold Shutter: 76-3/8"

Maximum Height:

- Standard Shutter: 84"
- Bi-Fold Shutter: 76-3/8"

Minimum Separation from Glass: The minimum glazing separation is 1-1/4". NOTE: The minimum glazing separation is only required when the colonial shutters are used in essential facilities as defined in ASCE 7.

Product Identification (Certification Agency Label on Shutter):

System		
Colonial Standard	Certification Agency	NAMI
	Manufacturer's Name or Code Name	LAS Enterprises, Inc.
	Product Name	Colonial Standard Shutter Assembly
	Maximum Size Tested	3'6" x 7'0"
	Design Pressure	+50 / -50 psf
	Test Standards	ASTM E330-02 ASTM E 1886-05; ASTM E 1996-05; Missile Level D
Colonial Bi-Fold	Certification Agency	NAMI
	Manufacturer's Name or Code Name	LAS Enterprises, Inc.
	Product Name	Colonial Bi-Fold Shutter Assembly
	Maximum Size Tested	6'4" x 6'6"
	Design Pressure	+50 / -50 psf
	Test Standards	ASTM E330-02 ASTM E 1886-05; ASTM E 1996-05; Missile Level D

Impact Resistance: These shutter assemblies satisfies the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I zone** and the **Seaward zone**. The assemblies passed Missile Level D specified in ASTM E 1996. The assemblies may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded.

Installation Instructions:

General Installation Requirements: The shutters must be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report. Copies of the approved drawings must be available on the jobsite during inspection of the shutter assembly.

Anchorage: The shutters must be anchored to the structure in accordance with the approved drawings. Anchorage of the shutters to concrete, grout-filled concrete masonry units (CMU), and wood wall framing must follow the mounting conditions and fastener options specified on the approved drawings and the wall construction requirements in this evaluation report.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.