

Product Evaluation

SHU210 | 0123

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-210

Effective Date: January 1, 2023

Re-evaluation Date: January 2027

Product Name: Brickhouse Low Profile Colonial Shutters, Impact Resistant

Manufacturer: B&B Metal Supply
1407 Fennell
Houston, TX 77095
(800) 996-6061

General Description:

The Colonial shutters have a maximum overall dimension of 45-1/4" wide x 99" high x 1-1/2" deep.

The Colonial shutters consist of two panels. Each panel has an overall dimension of 22-1/2" wide x 99" high.

The jambs consist of 6063-T6 rectangular aluminum tubes. At each corner, two (2) No. 10 x 1-1/4" screws secure the jambs to the top and bottom rails.

The top and bottom rails consist of 6063-T6 rectangular aluminum tubes.

Each panel contains 6063-T6 aluminum louver blades located across the width of the panel. Each louver blade measures 2.0" wide x 0.375" deep x 22-1/4" long x 0.045" thick. Measured from the

top, the 14th, 29th, and 43rd blades are secured from the jamb to the blade's screw bosses with two (2) No. 14 x 2" stainless steel sheet metal screws.

Three (3) 6063-T6 aluminum storm bars are required, located 25", 50", and 75" from the top. The storm bars are secured to each jamb with a storm bar clip and a 1/4" x 2-3/4" safety pin.

The storm bar clip is 1-1/4" wide x 1-3/4" deep x 2-1/8" long x 0.100" thick 6063-T6 aluminum. The storm bar clip is secured to each jamb with two (2) No. 14 x 1-1/3" stainless steel screws.

Each panel has four (4) two-piece hinges. The hinges are located at the top and bottom and 30-1/2" and 59-1/2" from the top. Each hinge is secured to the jamb with four (4) No. 12-14 x 1-1/4" Pancake head self-driller stainless steel screws. Each hinge is secured to wall framing with two (2) 1/4" x 4" TimberLok heavy duty wood screws by FastenMaster.

The storm bars consist of nominal 1" wide x 2" deep x 45-1/4" long x 0.125" thick 6063-T6 aluminum. Three (3) storm bars are required, located at 25", 50", and 75" from the top. The storm bars are attached to each jamb with a storm bar clip and a 1/4" x 2-3/4" safety pin.

The storm bar clip is a nominal 1-1/4" wide x 1-1/4" deep x 2-1/8" long x 0.100" thick 6063-T6 aluminum. The storm bar clip is secured to each jamb with two (2) No. 14 x 1-1/2" stainless steel flat head sheet metal screws.

The shutters are permanently mounted to the outside of the structure.

Limitations:

Design Drawings:

"Brickhouse Low Profile Colonial Shutter;" manufactured by Eastern Metal Supply; Sheets 1 thru 4 of 4; dated December 22, 2020; Revised October 18, 2022; signed, sealed, and dated October 18, 2022 by Brandon Jasek, P.E. The stated drawings will be referred to as approved drawings in this report.

Shutter Configurations: The Colonial shutters are installed as a single configuration. Refer to the approved drawings for an illustration of the configuration.

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:

- Wood (minimum Southern Yellow Pine dimension lumber, S.G. = 0.55).

Allowable Design Pressure: The allowable design pressure is +/-60.0 psf. **Note:** The shutters must be in a closed and locked position to achieve the allowable design pressure rating

Maximum Overall Dimensions: 45-1/4" wide x 99" high x 1-1/2" deep.

Maximum Dimensions of Individual Panels: 22-1/2" wide x 99" high.

Minimum Separation from Glass: The minimum glazing separation requirements are specified on the drawing. The shutter assembly is considered a porous impact protective system. The shutters may not be installed below a height of 30 feet on essential facilities as defined ASTM E 1996-14a.

Product Identification: The shutter assembly has a permanent label that indicates the manufacturer (Eastern Metal Supply); the name of the product (Brickhouse Low Profile Colonial Shutter System); the missile level (Missile Level D); the test standards: ASTM E 330-14 ASTM E 1886-13a, ASTM E 1996-14a; and the TDI product evaluation report number (SHU-210).

Compliance: The shutter assemblies passed test criteria equivalent to ASTM E 330-14; ASTM E 1886-13a, and ASTM E 1996-14a.

Impact Resistance: These shutter assemblies have been tested for protection from windborne debris. The assemblies passed Missile Level D and Missile Level A specified in ASTM E 1996-14a. The assemblies may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded. The shutters may not be installed below a height of 30 feet on essential facilities as defined ASTM E 1996-14a.

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. Fasteners must be long enough to penetrate a minimum of 2" into the wall framing.

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