

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

Effective November 1, 2012

SHU-210

*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 **November 2016**.*

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.

Brickhouse Low Profile Colonial Shutter manufactured by

Eastern Metal Supply of Texas, Inc.
9400 Telge Road
Houston, Texas 77095
Telephone: (800) 996-6061

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation and the design drawings specified in this evaluation report.

PRODUCT DESCRIPTION

The Colonial shutters have a maximum overall dimension of 45 $\frac{1}{4}$ " wide x 99" high x 1 $\frac{1}{2}$ " deep.

The Colonial shutters consist of two panels. Each panel has an overall dimension of 22 $\frac{1}{2}$ " wide x 99" high.

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

The top and bottom rails consist of 6063-T6 aluminum rectangular 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 $\frac{1}{4}$ " 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 inches, 50 inches, and 75 inches from the top. The storm bars are secured to each jamb with a storm bar clip and a $\frac{1}{4}$ " x 2 $\frac{3}{4}$ " safety pin.

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

Each panel has four (4) two-piece hinges. The hinges are located at the top and bottom and 30 ½" and 59 ½" from the top. Each hinges is secured to the jamb with four (4) No. 12-14 x 1 ¼" Pancake head self driller stainless steel screws. Each hinge is secured to wall framing with two (2) ¼" x 4" TimberLok heavy duty wood screws by FastenMaster.

The storm bars consist of nominal 1" wide x 2" deep x 45 ¼" 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 ¼" x 2 ¾" safety pin.

The storm bar clip is a nominal 1 ¼" wide x 1 ¼" deep x 2 ⅛" long x 0.100" thick 6063-T6 aluminum. The storm bar clip is secured to each jamb with two (2) No. 14 x 1 ½" stainless steel flat head sheet metal screws.

Product Identification: A permanent label will be applied to the shutter. The label includes the manufacturer's name, the name of the product, Missile Level D, the design pressure rating, and the following applicable standards: ASTM E 1886-04, ASTM E 1996-04 and ASTM E 330-02.

The shutter also has a permanent label with instructions to secure the shutter with storm bars and safety pins during a hurricane event.

LIMITATIONS

Design Drawings: The Colonial shutters shall be installed in accordance with "Brickhouse Low Profile Colonial Shutter System," job no. 368-0446T-09, sheets 1 of 4 thru 4, dated December 18, 2009, signed and sealed by Brandon T. Jasek, P.E. on October 19, 2012. The referenced drawings will be referred to as the "approved drawings" in this product evaluation report.

Design Wind Pressure: +60 psf, -60 psf

Note: Shutters shall be in a closed and locked position to achieve the design pressure rating.

Maximum Overall Dimensions: 45 ¼" wide x 99" high x 1 ½" deep.

Maximum Dimensions of Individual Panels: 22 ½" wide x 99" high

Separation Distance from Glazed Openings: The shutter shall be separated a minimum of 3 inches from the glazing.

Impact Resistance: This shutter assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris in both the **Inland I zone** and the **Seaward zone**. The shutter assemblies passed Missile Level D specified in ASTM E 1996-04. The shutter assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.

INSTALLATION INSTRUCTIONS

General Installation Requirements:

All shutters shall be installed in accordance with the approved drawings.

Wall Construction: The Colonial shutters shall be secured to the following types of wall framing:

- Wood (minimum Southern Yellow Pine dimension lumber)

Anchorage:

The shutter assembly shall be secured to the wall framing in accordance with Page 3 of 4 of the approved drawings. The fasteners shall be long enough to penetrate a minimum of 2 inches into the wall framing.

Note: The manufacturer's installation instructions and the approved drawings 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.