

Product Evaluation

SHU236 | 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-236

Effective Date: January 1, 2023

Re-evaluation Date: January 2027

Product Name: Brickhouse Bahama Shutters, Impact Resistant

Manufacturer: Eastern Metal Supply
9400 Telge Road
Houston, TX 77095
(800) 996-6061

General Description:

The Bahama Shutter is a single mulled shutter with a maximum overall dimension of 60" wide x 72" high x 1-1/2" deep.

The side rails are 6063-T6 aluminum rectangle tubes. At each corner, two (2) 3/16" x 1-1/4" stainless steel flathead sheet metal screws through the side rail into the top/bottom rail screw bosses.

The center mullion is 6063-T6 aluminum rectangle tube. Four (4) 3/16" stainless steel rivets into the top/bottom rails on the interior and exterior, for a total of eight (8).

The top and bottom rails are 6063-T6 aluminum rectangle tubes with the top rail having a male hinge section.

The louver blades are 6063-T6 aluminum located across the width of the entire panel. Each louver blade measures 2" wide x 0.375" deep x 59 15/16" long x 0.045" thick. Minimum 2 1/8" bite into the side rails. Forty (40) blades total per panel. Measured from the bottom, the 20th blade is secured from the side rail to the blade's screw bosses with two (2) No. 14 x 1 1/2" stainless steel sheet metal screws.

2" x 5-1/2" x 1/2" thick 6061-T6 aluminum flat bar shutter stops are attached to the interior of the side rails with four (4) 1/4" x 1" stainless steel bolts and shutter stops anchored to wood wall framing with three (3) 1/4" x 4" Powerlag wood screws (or approved equal). Two (2) shutter stops per side rail at 3" and 35-1/2" up from bottom rail.

An HV Low Profile Bahama Female Awning Hinge is mounted to the top of the wall wood framing with six (6) 1/4" x 4" Powerlag wood screws (or approved equal).

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

Limitations:

Design Drawings:

"Brickhouse Bahama 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 Bahama shutters are installed as a single mulled configuration. Refer to the approved drawings for an illustration of the configuration.

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

Wall Construction: The Bahama 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: 60" wide x 72" high x 1-1/2" deep.

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 Bahama 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-236).

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.