

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
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PRODUCT EVALUATION

Effective February 1, 2014

SHU-161

*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 **August 2017**.*

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.

Bertha HV Board and Batten Aluminum Shutter manufactured by

Eastern Metal Supply, Inc.
4268 West Roads Drive
West Palm Beach, Florida 33407
(800) 432-2204

Eastern Metal Supply, Inc.
9400 Telge Road
Houston, Texas 77095
(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 that are referenced in this report.

PRODUCT DESCRIPTION

The board and batten colonial shutter system is a double panel or quadruple panel system. The board and batten panels have a nominal dimension of 25 ½" in width and 66 ⅛" in height. The aluminum panels consists of five aluminum boards which are 0.938" x 5" x 66" high. Each board is fastened to an aluminum angle. Each panel has three hinges. All aluminum extrusions are 6063-T6 aluminum alloy unless otherwise specified on the drawings.

LIMITATIONS

Design Drawings: The shutter system shall be installed in accordance with Eastern Metal Supply, Inc. drawing "Bertha HV Board and Batten Shutter", Drawing No. 13-052, sheets 1-13 of 13, dated June 19, 2013, revision 1, all signed and sealed by Walter A. Tillit Jr., P.E. on June 21, 2013. The stated drawings will be referred to as approved drawings in this report.

Product Identification: Each unit must bear a permanent label containing the product evaluation holder, the evaluation number and contact information for the authorized dealer-fabricator of the installed product. Each shutter shall bear a permanent label in a visible place with the warning note: During periods of hurricane warnings, the owner, tenant or others must properly secure the shutter with storm bars and safety pins.

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 1996-05. 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.

Design Wind Pressure:

System	Maximum Overall Width (in.)	Maximum Height (in.)	Design Pressures (psf)
Double Panel	51 $\frac{1}{8}$	66 $\frac{1}{8}$	+50, -60
Quadruple Panel	102 $\frac{3}{8}$	66 $\frac{1}{8}$	+40, -45

Separation from Glass: The minimum separation from glass is 1”.

Wall Construction: The storm panel may be mounted to the following types of wall framing:

- Pre-cast concrete, cast-in-place concrete (minimum compressive strength 3,192 psi);
- Concrete masonry units (C-90); or
- Wood (minimum Southern Pine).

INSTALLATION INSTRUCTIONS

General Installation Requirements: All shutters shall be installed in accordance with the approved drawings. The panels may be attached to concrete, hollow block masonry or wood wall framing. For attachment to concrete or masonry, anchors shall have a minimum edge distance of 3” and minimum penetration of 1 $\frac{1}{4}$ ”. For attachment to wood framing, the wood framing members shall be minimum Southern Yellow Pine (G=0.55) with a minimum penetration of 1 $\frac{1}{2}$ ”.

Anchorage: The panels can be direct mounted to concrete, hollow masonry, or wood framing in accordance with the mounting details in the manufacturer’s installation instructions.

Note: The manufacturer’s installation instructions and the approved engineer 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.