

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

SHU-124

Effective Date: May 1, 2013

*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 **July 2015**.*

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.

0.050 Solid Bertha Aluminum Storm Panel 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 along with Eastern Metal Supply, Inc., Drawing No. 12-166, sheets 1-6, 6A, 7-14, 14A, 15 - 17 of 17, revision 1 to all sheets, dated November 3, 2012, signed and sealed by Walter A. Tillit Jr., P.E. on November 5, 2012. The stated drawings will be referred to as approved drawings in this report.

PRODUCT DESCRIPTION

The 0.050 solid Bertha aluminum storm panels are 0.050" thick 5052-H32 or 3004-H34 aluminum alloy panels. Full panels without hemmed edges are rolled formed, having a nominal width of 12" and a total width of 13.875", forming 2" deep ribs. Full panels with hemmed edges are rolled formed, having a nominal width of 12" and a total width of 13.601", forming 2" deep ribs. Components for mounting panels are 6063-T6 aluminum alloy, "h" header, "u" header, "u" build out, angle build out bracket, "F" track, "F" track angle, reversed "F" angle track, studded angle and angle with stud. Panels are overlapped to provide an unlimited width of opening perpendicular to the panel span. The 0.050 aluminum corrugated shutters in this report are not a permanently mounted shutter system.

LIMITATIONS

Maximum Allowable Design Load (refer to mounting conditions on sheet 2 of 17)¹: +90, -130 psf

Maximum Span¹: The maximum span in the direction of the ribs shall be 156" as shown in the maximum design load and panel length schedules on sheet 2 of 17.

Note: ¹ The maximum design load and maximum panel span for internally removable shutters as per the mounting installations on sheet 7 of 17 is ± 50 psf at a maximum panel span of 88". The maximum design load and maximum panel span for mounting as per alternative 10A on sheet 14 of 17 is +60, -66 psf at a maximum panel span of 108". The maximum design load and maximum panel span for mounting as per alternative #11 on sheet 14A of 17 is +50, -60 psf at a maximum panel span of 78". The maximum design load and maximum panel span for mounting as per alternative 14 on sheet 15 is ± 50 psf at a maximum span of 108".

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 an impact-resisting standard equivalent to Missile Level D specified in ASTM E 1996-02. 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. All assemblies must adhere to the limitations section of this evaluation.

Anchorage: When using the anchor schedules, the design pressures outlined in the limitation sections must be used. For attachment to wood framing, the wood framing members shall be a minimum Southern Yellow Pine lumber ($SG \geq 0.55$), and the fasteners for attachment to wood (lag screws or Tapcons) shall have a minimum penetration of $1 \frac{1}{2}$ " - 2" into the wood framing members depending on the installation method selected. The maximum clearance between the top of panels and the inside header shall be $\frac{1}{4}$ ". All assemblies must adhere to the limitations section of this evaluation.

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

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) and the International Building Code (IBC).