

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

Effective August 1, 2013

SHU-107

*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 2014**.*

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.

40mm and 60mm Bertha Roll-up Shutters manufactured by:

Eastern Metal Supply, Inc.
4268 Westroads Drive
West Palm Beach, Florida 33407
Telephone: (305) 871-1530

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation along with Drawing No. 13-029 sheets 1 through 14 of 14, signed by Walter A. Tillit, Jr., P.E. on April 1, 2013.

PRODUCT DESCRIPTION

The 40mm and 60mm extruded aluminum roll-up shutter is composed of a 6063-T6 aluminum alloy permanently mounted impact protective system. The Type 1 (60mm) extruded aluminum slats have a total width of 2.803" and a depth of 0.604" and a typical wall thickness of 0.050". The Type 2 (40mm) extruded aluminum slats have a total width of 1.870" and a depth of 0.382" and a typical wall thickness of 0.043". The slats are mounted with the following components: the header, the mullions, track, the reel box assembly and storm bars. The overall horizontal span of the system can be increased by the use of storm bars that create multiple spans. Consecutive single spans and multiple spans are connected by mullions. All aluminum extrusions shall be 6063-T6 aluminum alloy. The shutters may be wall mounted, inside mounted, face mounted, build-out or any combination thereof.

Product Identification: The shutter assemblies shall have a label that identifies the manufacturer and the type of shutter system.

LIMITATIONS

Maximum Allowable Design Load (Wood): 90 psf when attached to wood construction.

Maximum Allowable Design Load (Concrete or CMU): See sheet 9 of 14 of the drawings for maximum slat performance and corresponding maximum slat span.

Maximum Slat Span: The slat spans a maximum of 7'-8" but may be reinforced with vertical storm bars or vertical mullions to form larger width openings. The slats interlock to form openings of unlimited height for single units, but are limited to 14'-1" when using mullions and storm bars.

Maximum Storm Bar Span: The maximum horizontal span of the system depends on the storm bar spacing, the design pressure, span condition and the storm bar type. The storm bar spacing shall be such that the maximum slat span shall not be exceeded. The "Storm Bar Loading Chart" on sheets 10 and 11 of 14 is used to determine the maximum total span.

Maximum Mullion Span: The maximum span of the shutter system with consecutive spans and/or multiple spans is also dependent on the mullion span which is determined using the "Mullion Loading Chart" on sheet 14 of 14. The mullion span is determined from the design pressure, the mullion spacing and the type of mullion.

Maximum Header: The maximum span of the shutter system depends on the storm bar height, the design pressure and the header type. The "Header Loading Chart" on sheet 12 and 13 of 14 is used to determine the maximum total span for a given type of header and storm bar height.

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 Drawing No. 13-029 sheets 1 through 14 of 14, signed by Walter A. Tillit, Jr., P.E. on April 1, 2013.

Anchorage:

The shutters shall be anchored in accordance with the mounting details and the anchor schedules on the drawings. For attachment to wood framing, the framing members shall be a minimum 2" x 4" Southern Pine #2 grade lumber (s.g. = 0.55 or greater).

Separation from Glass Schedule:

The shutter shall be separated from the glass by a minimum of 2". Refer to the minimum separation to glass schedule on sheet 9 of 14.

Note: The manufacturer's installation instructions and Drawing No. 13-029 sheets 1 through 14 of 14, signed by Walter A. Tillit, Jr., P.E. on April 1, 2013, 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.