

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-188

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 **March 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.

Studio Star 40 mm Rollup Shutter manufactured by:

Alutech United, Inc.
117 Dixon
Selbyville, DE 19975
Telephone: (302) 436-6005

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

PRODUCT DESCRIPTION

General: The Studio Star 40mm extruded aluminum roll-up shutter is a 6063-T6 aluminum alloy permanently mounted impact protective system. Aluminum extruded roll up shutters are assembled from interlocking extruded slats. The slats are mounted with the following components: the guide rails and the hood assembly. For double units, a storm bar is required. Aluminum extrusions shall be 6003-T6 aluminum alloy, unless otherwise noted on the drawings. The shutters may be wall mounted to concrete, concrete-filled concrete masonry block or wood framing.

Slat Description: The aluminum slats are 6063-T6 aluminum alloy with a thickness of 0.043" and a cross section of 1.870" wide by 0.382" deep.

Product Identification: All shutters shall be labeled with the manufacturer's name, product name and compliance standards ASTM E 330, ASTM E 1886 and E 1996. Storm bars shall bear a permanent label with a warning note instructing the tenant or homeowner that storm bars and corresponding hardware must be installed during high wind events.

LIMITATIONS

Design Drawings: The Studio Star 40mm roll up shutters shall be installed in accordance with Drawing No. 12-170, sheets 1 through 5 of 5, dated November 5, 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. A copy of the approved drawings shall be available at the job site.

Design Pressure Rating: The maximum design pressure rating for the shutter system is +50, -55 psf.

Span Configurations: The shutters can be installed as a single span configuration or a double span configuration. Double span configurations require a storm bar.

Wall Framing Construction: The shutters may be mounted to concrete; concrete-filled concrete masonry block, or wood framing with a minimum specific gravity of 0.42.

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 standard equivalent to 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 and this product evaluation report.

During a high wind event, the shutters shall be locked and in the closed position. For the double units, the removable storm bars must be stored with easy and immediate access. The storm bars must be installed during high wind events in order for the shutter to properly perform.

Anchorage: All devices are mounted and anchored in accordance with the approved drawings. The side rail shall be mounted to approved structural substrates with the fasteners specified on the drawings. The fasteners shall be spaced a maximum of 6" o.c. For arch assemblies, the side rails shall be adequately secured to the structural substrate around the perimeter of the arch.

Note: All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.