

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION SHU-110

Effective October 1, 2004

*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 3 years after the effective date.*

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.

RE 40 and RE 60 Slat Extruded Aluminum Roll-Up Shutters, manufactured by:

Roller Star Corporation
6351 N.W. 28th Way, Suite C
Fort Lauderdale, Florida 33309
(954) 972-4772

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. 04-040, sheets 1-19 of 19, prepared by Tiltco, Inc., dated March 15, 2004, signed by Walter A. Tillit, Jr., P.E. on July 6, 2004.

PRODUCT DESCRIPTION

General: The Roller Star RE 40 and RE 60 slat aluminum extruded roll up shutters are assembled from interlocking extruded slates. The slats are mounted with the following components: the header, mullions, side rails, 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 with mullions. Aluminum extrusions shall be 6003-T5 or 6003-T6 aluminum alloy unless otherwise noted on the drawings. The shutters may be wall mounted, ceiling & floor mounted, inset mounted, mullion mounted, built-out or any combination thereof.

RE 40 Slat Description: The slats are 6063-T6 aluminum alloy with a thickness of 0.047" and a cross section of 1.890" wide by 0.369" deep.

RE 60 Slat Description: The slats are 6063-T6 aluminum alloy with a thickness of 0.047" and a cross section of 2.847" wide by 0.591" deep.

LIMITATIONS

Maximum Allowable Design Load and Corresponding Slat Span: The allowable design pressure for the assembly shall be determined using the "Slats Windload Design Tables" on sheet 15 of 19 of the drawings. The slat span in inches shall be used to determine the allowable design pressure.

Maximum Allowable Design Load (Wood): 90 psf.

Maximum Storm Bar Height: The maximum storm bar height of the system depends on the type of anchorage system, storm bar spacing, the design pressure and the storm bar type. The storm bar spacing shall not exceed the maximum slat span. The "Storm Bar Selection Tables" on sheets 16 and 17 of 19 of the drawings is used to determine the maximum storm bar height.

Maximum Header Span: The maximum mullion height of the header shall be determined using the "Header Selection Tables" from sheets 18 of 19. The maximum header span is determined based on the type of header, the design pressure and the storm bar height.

Maximum Mullion Height: The maximum mullion height of the shutter system with consecutive spans and/or multiple spans is determined using the "Mullion Selection Tables" on sheets 19 of 19 of the drawings. The mullion height is determined from the design pressure, the type of mullion and the mullion spacing. For mullions installed without storm bars, the mullion spacing shall not exceed the maximum slat span. For mullions installed without storm bars and headers, the mullion spacing shall not exceed the maximum header span and the rail spacing shall not exceed the maximum slat span.

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 C specified in ASTM E 1996-99. 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. 04-040, sheets 1-19 of 19, prepared by Tilteco, Inc. (dated March 15, 2004) and signed by Walter A. Tillit, Jr., P.E. on July 6, 2004.

Mounting Conditions:

The shutter system shall be mounted and anchored in accordance with the mounting conditions shown on the drawings. For attachment to any wood framing members, the wood framing members shall be a minimum 2" x 4" Southern Pine No. 2 grade lumber and lag screws shall have a minimum penetration of 1 ½" into the wood framing members.

Note: Manufacturer's installation instructions and Drawing No. 04-040, sheets 1-19 of 19, prepared by Tilteco, Inc. (dated March 15, 2004) and signed by Walter A. Tillit, Jr., P.E. on July 6, 2004. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).