TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective August 1, 2013
SHU-68

*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.

RE 1000, RE 1500 and RE 3000 Slat Extruded Aluminum Roll-Up Shutter manufactured by

Roller Star
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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. 01-372R1, sheets 1-10 of 10, including latest revision date of April 28, 2003, prepared by Pedro De Figueiredo, P.E., dated October 10, 2001, signed by Pedro De Figueiredo, P.E. on August 7, 2003.

PRODUCT DESCRIPTION

General: The Roller Star RE 1000, RE 1500 and RE 3000 slat aluminum extruded roll up shutters are assembled from interlocking extruded slates. 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 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, inset mounted, header mounted, built-out or any combination thereof.

RE 1000 Slat Description: The slats are 6063-T6 aluminum alloy with a thickness of 0.050” and a cross section of 1.80” wide by 0.44” deep.

RE 1500 Slat Description: The slats are 6063-T6 aluminum alloy with a thickness of 0.050” and a cross section of 2.47” wide by 0.56” deep.

RE 3000 Slat Description: The slats are 6063-T6 aluminum alloy with a thickness of 0.050” and a cross section of 3.9” wide by 0.76” deep.

LIMITATIONS

Maximum Allowable Design Load: The allowable design pressure for the assembly shall be determined using the “Slats Windload Design Tables” on sheet 3 of 10 of the drawings. The slat span in inches shall be used to determine the allowable design pressure.

Maximum Slat Span: The maximum allowable blade single span is as follows: RE 1000 – 66 inches; RE 1500 – 96 inches; RE3000 – 112 inches.

Maximum Storm Bar Span: The maximum horizontal span of the system depends on the 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 sheet 5 of 10 of the drawings is used to determine the maximum total span of the multiple span system.

Maximum Mullion Span: The maximum span of the shutter system with consecutive spans and/or multiple spans is dependent on the mullion span which is determined using the "Mullion Selection Tables" on sheets 8 of 10 of the drawings. The mullion span 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 storm bar spacing shall not exceed the maximum slat span.

Maximum Header Span: The maximum horizontal span of the header shall be determined using the "Header Selection Tables" from sheets 7 of 10. The maximum header span is determined based on the type of header, the design pressure and the 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 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. 01-372R1, sheets 1-10 of 10, including latest revision date of April 28, 2003, prepared by Pedro De Figueiredo, P.E., dated October 10, 2001, signed by Pedro De Figueiredo, P.E. on August 7, 2003.

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 $1\frac{1}{2}$" into the wood framing members.

Note: Manufacturer's installation instructions and Drawing No. 01-372R1, sheets 1-10 of 10, including latest revision date of April 28, 2003, prepared by Pedro De Figueiredo, P.E., dated October 10, 2001, signed by Pedro De Figueiredo, P.E. on August 7, 2003. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.