

TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION SHU-120

Effective March 1, 2005
Revised December 1, 2006

*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.

AL6-E Extruded Aluminum Roll-Up Shutter manufactured by

QMI
1661 Glenlake Avenue
Itasca, Illinois 60143
(800) 446-2500

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. 05-056, sheets 1, 1A, 2-9, 9A, 10, 10A and 10B of 10, dated April 21, 2005, signed and sealed by Walter A. Tillit, Jr., P.E. on April 27, 2005. The stated drawings will be referred to as the approved drawings in this report.

PRODUCT DESCRIPTION

The AL6-E extruded aluminum roll-up shutter is a 6005-T5 aluminum alloy permanently mounted impact protective system. The aluminum slats have a total width of 2.756" and a depth of 0.529" and a typical wall thickness of 0.055". The slats are mounted with the following components; the mullions, the reel box assembly and side rails. The overall horizontal span of the system can be increased by the use of mullions. All aluminum extrusions shall be 6005-T5 aluminum alloy. The shutters may be wall mounted, inside mounted, mullion mounted, build-out or any combination thereof.

LIMITATIONS

Maximum Single Slat Span (Design Load of 35 psf): The maximum allowable blade span for a single unit is 19'-6".

Maximum Allowable Design Pressure (Single Span of 8'-11"): 125 psf

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 Loading Charts" on sheets 9 and 10 of 10 of the approved drawings. The mullion span is determined from the design pressure and the type of mullion.

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.

Mounting Conditions:

The shutter system shall be mounted and anchored in accordance with the mounting conditions shown on the drawings. Refer to sheet 5 of 10 for limitations on side rail connections to masonry and wood. For attachment to any wood framing members, the wood framing members shall be a minimum Southern Yellow Pine lumber ($SG \geq 0.55$), and lag screws shall have a minimum penetration of $1 \frac{1}{2}$ " into the wood framing members.

Slat Engagement:

The slats shall fully penetrate into the side rails 1".

Note: Manufacturer's installation instructions and the approved drawings shall be available on the job site. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).