

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION

Effective September 1, 2009

SHU-130

*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 2010**.*

*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.*

**Extruded PVC and Extruded Aluminum End Retention Roll-Up Shutters**, manufactured by

**Roll-a-way by QMI (QMI Security Solutions)**  
1661 Glenlake Avenue  
Itasca, IL 60143  
(630) 529-7111

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation along with Roll•a•Way by QMI drawing number 3-01-035, Rev A, sheets 1 through 25 of 25, dated January 31, 2006, signed and sealed by D. L. Fowler, P.E. on May 20, 2009. The stated drawings will be referred to as the approved drawings in this report.

## PRODUCT DESCRIPTION

The P55DER extruded PVC slat, P55TER extruded PVC slat, and US60 extruded aluminum slat roll-up shutters are a permanently mounted impact protective system. The PVC slats have a total coverage size of 2.16" and a depth of 0.55" and a typical wall thickness of 0.039". The aluminum slats have a total coverage size of 2.16" and a depth of 0.562" and a typical wall thickness of 0.049". The P55DER PVC slats are reinforced with an extruded aluminum 6005-T5 slat rebar (lower) and 6063-T6 slat rebar (upper). The P55TER PVC slats are reinforced with an extruded aluminum 6063-T6 slat rebar (upper). All slat types 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. All aluminum extrusions shall be constructed of the aluminum alloy as noted on the drawings. The shutters may be wall mounted, inside mounted, mullion mounted, build-out, or any combination thereof.

**Product Identification:** The shutter assemblies shall have a label that identifies the manufacturer, the name of the product, compliance with ASTM E-330, and compliance with ASTM E 1886, and ASTM E 1996, or equivalent.

## LIMITATIONS

**Design Drawings:** The roll-up shutters shall be installed in accordance with Roll-a-way by QMI Drawing No. 3-01-035 Rev A, Sheets 1–25 of 25, dated January 31, 2006, with each sheet signed and sealed by Donald L. Fowler, P.E. on May 20, 2009. The stated drawings will be referred to as approved drawings in this report and a reference to a certain sheet number will indicate which sheet of the 25 sheets to reference. A copy of the approved drawings shall be available at the job site.

**Maximum Allowable Design Load:** The allowable design pressure as a function of: slat span, anchor spacing, mounting condition and minimum separation from the glass is detailed on the approved drawings.

**Maximum Single PVC Slat Span (Design Load of 40 psf):** The maximum allowable blade span for a PVC slat single unit is 144”.

**Maximum Single Aluminum Slat Span (Design Load of 80 psf):** The maximum allowable blade span for an aluminum slat single unit is 96”.

**Anchorage:** The shutters shall be anchored to the structure in accordance with the approved drawings. Anchorage of shutters to concrete, grout-filled concrete masonry units (CMU), or wood framing shall follow the mounting details on the drawings and the fasteners specified in the mounting details. For attachment to wood framing, the lag screws shall have a minimum penetration of 1 ½ inches into the wood framing members. The anchor spacing shall be as indicated on sheets 10, 11, and 13 of the approved drawings for wood, concrete, or CMU installations.

**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.

**Minimum separation from glass:** The minimum separation distance to the glass is detailed on sheet 7 of the approved drawings.

## INSTALLATION INSTRUCTIONS

### General Installation Requirements:

All shutters shall be installed in accordance with Roll•a•Way by QMI drawing number 3-01-035, Rev A, sheets 1 through 25 of 25, dated January 31, 2006, signed and sealed by D. L. Fowler, P.E. on May 20, 2009.

For attachment to wood framing, the wood framing members shall be minimum Southern Yellow Pine (G=0.55) or greater and the minimum embedment depth for the lag screws shall be 2 inches. For attachment to concrete and masonry, the drawings specify minimum embedment and edge distance requirements for the various types of anchor options.

**Note:** The manufacturer's installation instructions and Roll•a•Way by QMI drawing number 3-01-035, Rev A, sheets 1 through 25 of 25, dated January 31, 2006, signed and sealed by D. L. Fowler, P.E. on May 20, 2009 shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).