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 Effective August 1, 2013
SHU-95

*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.

Extruded PVC Slat P55 Roll-up Shutter, Impact Resistant, manufactured by

Roll-a-way by QMI (QMI Security Solutions)
1661 Glenlake Avenue
Itasca, IL 60143
Telephone: (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 a design drawing that is referenced in this product evaluation report.

PRODUCT DESCRIPTION

The P55 extruded PVC slat roll-up shutter is a permanently mounted impact protective system. The PVC slats have a total width of 2.539", a depth of 0.50", and a typical wall thickness of 0.039". The slats are reinforced with an extruded aluminum 6065-T5 slat rebar. 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. 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

Design Drawings: The roll-up shutters shall be installed in accordance with Roll-a-way by QMI Drawing No. 3-01-100 Rev B, Sheets 1–20 of 20, dated May 21, 2009, with each sheet signed, sealed, and dated June 24, 2009 by Donald L. Fowler, P.E. Note Sheet 19 of 20 is dated November 11, 2008 and is signed, sealed, and dated August 3, 2009 by Donald L. Fowler, P.E. 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.

Wall Framing Construction: The roll up shutter may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum 3,250 psi)
- Hollow concrete block
- Wood dimension lumber (minimum Southern Yellow Pine)

Anchors: Refer to Sheet 1 of 20, 9 of 20, and 20 of 20 of the approved drawings for the type of anchors that may be used. The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Design Pressure Rating:

- The allowable design pressure, as a function of single span shutter size ranges from ±26.0 psf to ±95 psf. Refer to sheet 16 of 20 of the approved drawings.
- The allowable design pressures, as a function of allowable unit heights and unit width for multiple spans ranges from ±26.0 psf to ±95 psf. Refer to sheets 17 and 18 of 20 of the approved drawings.
- The allowable design pressures for mullions, as a function of allowable unit heights and unit width for multiple spans ranges from ±25.0 psf to ±95 psf. Refer to sheets 17 and 18 of 20 of the approved drawings.

Shutter Width: The shutter width varies depending on whether the system is a single span, two span, or three span system. Refer to Sheet 1 of 20, 16 of 20, 17 of 20, 18 of 20, and 19 of 20 of the approved drawings.

Shutter Height: The maximum allowable shutter height is 252 inches for single span shutters. Refer to Sheet 16 of 20 of the approved drawings. For multiple span shutters, refer to Sheets 17, 18, and 19 of the approved drawings for the maximum shutter heights.

Minimum Separation From glass: The minimum separation distance to the glass is detailed on Sheets 10, 11, 12, 13, 14, and 15 of 20 of the approved drawings.

Product Identification: A label will be affixed to the assembly. The label includes the manufacturer's name, the product name, and compliance with ASTM E 330, ASTM E 1886, and ASTM E 1996.

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 for the **Small Missile** impact test. The shutter assemblies passed Missile Level A specified in ASTM E 1996-04. The shutter assemblies may be installed at heights located **above 30 feet** on the structure as long as the design pressure rating for the assemblies is not exceeded.

INSTALLATION INSTRUCTIONS

General Installation Requirements: The roll up shutters shall be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report. During a high wind event, the shutters shall be locked and in the closed position.

Wall Framing Construction: The roll up shutter may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum 3,250 psi)
- Hollow concrete block
- Wood dimension lumber (minimum Southern Yellow Pine)

Anchors: Refer to Sheet 1 of 20, 9 of 20, and 20 of 20 of the approved drawings for the type of anchors that may be used. The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Installation: The roll up shutters shall be installed as specified on the approved drawings. Refer to the installation details and the anchorage requirements specified on the approved drawings.

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