

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / 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-111

Effective Date: May 1, 2013

*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 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.

Eyewall Armor (EA) Storm Panels, Safety Edge and Polycarbonate Storm Panels manufactured by

Town & Country Industries
400 McNab Road
Fort Lauderdale, Florida 33309
Telephone: (954) 691-2344

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation, the manufacturer's installation instructions and Drawing No. 05-TCM-0001, revision 2, dated November 4, 2008, sheets 1 – 3 of 3, signed by Frank L. Bennardo, P.E. on November 6, 2008. Installation instructions and the approved drawings shall be provided and available on the job site during installation.

PRODUCT DESCRIPTION

System 1:

Aluminum Shutter Panels are 0.022 inch embossed aluminum panels. These panels are rolled formed into a two (2) ribbed 2" x 12" section with a nominal coverage of 12" per panel. As an option, these panels were also perforated to allow a small amount of light to filter through the installed panel assembly. Each perforation was a half-moon indentation over an area approximately $\frac{3}{8}$ " wide at widest point by $\frac{1}{2}$ " long with an actual opening approximately $\frac{3}{32}$ " at widest point.

System 2:

Galvanized Steel Storm Panels are 28 gauge (0.018 inch thick) galvanized steel storm panels. These panels are rolled formed into a two (2) ribbed 2" x 12" section with a nominal coverage of 12" per panel. As an option, these panels were also perforated to allow a small amount of light to filter through the installed panel assembly. Each perforation was a half-moon indentation over an area approximately $\frac{3}{8}$ " wide at widest point by $\frac{1}{2}$ " long with an actual opening approximately $\frac{3}{32}$ " at widest point.

System 3:

Polycarbonate Storm Panels: Polycarbonate storm panels shall be alternated with 0.018 inch galvanized steel storm panels, (System #2). Polycarbonate panels were extruded into (2) 2 x 12 $\frac{1}{2}$ " sections with nominal coverage of 12 $\frac{1}{2}$ " per panel. The $\frac{1}{10}$ polycarbonate panels were tested with 0.018 inch steel storm panels (System #2).

Product Identification: Each storm panel shall bear a permanent label indicating the following: Town & Country – Ft. Lauderdale, FL (H) Refer to Texas TDI Approval EA Storm Panel.

LIMITATIONS

Maximum Allowable Design Load:

System 1: Embossed Aluminum Shutter Panels

Panel Type Embossed Aluminum (0.022")	Span		Maximum Allowable Load ±38 psf
	Max. span 9' 2" (All mounting conditions)		
	Min. span 26" (Direct mount top & bottom)		
	Min. span 16" (All other conditions)		

System 2: Galvanized Steel Storm Panels

Panel Type Galvanized Steel [28 ga. (0.018")]	Span		Maximum Allowable Load ±54 psf
	Max. span 9' 2" (all mounting conditions)		
	Min. span 26" Direct mount top & bottom		
	Min. span 16" (All other conditions)		

System 3: Polycarbonate Storm Panels/Combination Metal Panels

Panel Type Clear Polycarbonate Full/Half (0.100")	Span		Maximum Allowable Load ±54 psf
	Max. span 9' 2" (All mounting conditions)		
	Min. span 24" (Direct mount top & bottom)		
	Min. span 15" (All other conditions)		

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 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 and this product evaluation report.

Mounting Conditions:

The shutter system shall be mounted and anchored in accordance with the mounting conditions shown on the approved drawings.

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), the International Building Code (IBC), and the Texas Revisions.