TDI | Texas Department of Insurance

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Product Evaluation

SHU111 | 0421 Engineering Services Program

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 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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: SHU-111

Effective Date: April 1, 2021
Re-evaluation Date: April 2025

Product Name: Eyewall Armor (EA) Storm Panels, Safety Edge and Polycarbonate Storm Panels

Manufacturer: Town & Country Industries
400 West McNab Road
Fort Lauderdale, FL 33309
(561) 512-9702

General Description:

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

System 2:
Polycarbonate Storm Panels: Polycarbonate storm panels may be alternated with 0.018" galvanized steel storm panels, (System 2). Polycarbonate panels are extruded into (2) 2" x 12-1/2"

sections with nominal coverage of 12-1/2" per panel. The 0.100" polycarbonate panels were tested with 0.018" steel storm panels (System 2).

Limitations:

Design Drawings:

"'Safety Edge' & Polycarb Storm Panels;" Town and Country Industries; Drawing No. 20-24244.1; Sheets 1–3 of 3; dated September 2, 2005; revised June 17, 2020, signed, sealed, and dated November 10, 2020 by Frank L. Bennardo, P.E. The stated drawings will be referred to as approved drawings in this report.

Mounting Conditions: Refer to the approved drawings for specific mounting conditions.

Minimum Separation from Glass: The minimum glazing separation is specified in a Table on Sheet 2 of 3 of the approved drawing. The storm panels may not be installed on essential facilities as defined in the IBC.

Product Identification: The storm panels have a permanent label that identifies the manufacturer (Town & Country Industries); the name of the product (Eyewall Armor (EA) Storm Panels); the missile Level (Missile Level D); the test standards (ASTM E 330, ASTM E 1886, and ASTM E 1996); and the TDI evaluation report number (SHU-111).

Compliance: The shutters comply with ASTM E 330-14, ASTM E 1886-13a, and ASTM E 1996-14a.

Impact Resistance: This shutter assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris. The assembly passed Missile Level D as specified in ASTM E 1996-14a. The assembly may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded.

Wall Construction: The storm panels may be mounted to the following types of wall framing:

- Pre-cast concrete, cast-in-place concrete (minimum compressive strength required specified in drawings)
- Grout-filled concrete masonry units (CMU)
- Hollow concrete masonry units (CMU.
- Wood (minimum Spruce-Pine-Fir dimension lumber, S.G. = 0.42).

Allowable Design Load and Span Schedule:
System 1: Galvanized Steel Storm Panels

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

System 2: Polycarbonate Storm Panels/Combination Metal Panels

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

Maximum Width: The width of the assembly is not limited.

Installation Instructions:
General Installation Requirements: The storm panels must be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report. Copies of the approved drawings must be available on the jobsite during inspection of the shutter assembly.

Anchorage: The storm panels must be anchored to the structure in accordance with the approved drawings. Anchorage of the storm panels to concrete, grout-filled and hollow block concrete masonry units (CMU), and wood wall framing must follow the mounting conditions and fastener options specified on the approved drawings and the wall construction requirements in this evaluation report.

Note: Keep the manufacturer's installation instructions and the approved drawings available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.