

Product Evaluation

SHU220 | 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-220

Effective Date: April 1, 2021

Re-evaluation Date: April 2025

Product Name: Eyewall Armor Fabric Shutter

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

General Description:

The shutters, with either nylon fabric with poly coating (4200 Denier Warp) with 13 x 13 (4200 Denier Weft) or vinyl coated polyester fabric mesh 35x30 laminate backed, are supported on each vertical side by a 2" wide by 3.5" long nylon 6 clip that may be installed directly to the host structure or as a trap mount with a 2" x 2" x 1/8" studded angle. Direct mount of the clip to the host structure shall utilize 1/4" or 5/16" anchors spaced in accordance with the design tables on the approved drawings. For trap mounted conditions, the studded angle must be installed to the nylon clip with 1/4-20 studs spaced at 12" on center. Studded angles must be installed to the host structure with 1/4" or 5/16" anchors spaced in accordance with the design tables on the approved drawings.

Limitations:**Design Drawings:**

"Eyewall Armor Fabric Shutter;" Town & Country Industries; Drawing No. 20-24244.9; Sheets 1 thru 7 of 7, dated April 25, 2014; revised July 10, 2020; signed, sealed, and dated November 23, 2020 by Frank L. Bennardo, P.E. The stated drawings will be referred to as approved drawings in this report.

Wall Construction: The fabric shutters 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 or hollow block concrete masonry units (CMU)
- Wood (minimum Spruce-Pine-Fir dimension lumber).

Mounting Conditions: The fabric shutters may be wall mounted or trap mounted. Refer to the approved drawings for specific mounting conditions.

Allowable Design Pressure: The maximum design pressure rating is ± 60 psf. Refer to the approved drawings for specific design pressure limitations.

Maximum Span: The maximum allowable slat span is 120".

Maximum Width: The maximum allowable width (non-span direction) is unlimited.

Minimum Separation from Glass: The minimum glazing separation is as specified on Sheet 2 of 5 of the approved drawing. The shutters may not be installed on essential facilities as defined in the IBC.

Product Identification: The fabric shutter assemblies permanent label that indicates the name of the manufacturer (Town & Country Industries); the name of the product (Eyewall Armor Fabric Shutter); the missile level (Missile Level D); the test standards (ASTM E 300, ASTM E 1886, ASTM E 1996); and the TDI evaluation report number (SHU-220).

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

Impact Resistance: This fabric shutter assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris. The assembly passed Missile Level D 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.

Installation:

General Installation Requirements: The fabric shutters 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 fabric shutters must be anchored to the structure in accordance with the approved drawings. Anchorage of the fabric shutters to concrete, grout-filled concrete masonry units (CMU), hollow CMU, and wood wall framing must follow the mounting conditions and fastener options specified on the approved drawings referenced in this evaluation report.

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