



# Product Evaluation

SHU175 | 0617

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-175

**Effective Date:** June 1, 2017

**Re-evaluation Date:** June 2021

**Product Name:** FullView Bahama Shutter

**Manufacturer:** Town & Country Industries  
400 West McNab Road  
Fort Lauderdale, FL 33309  
(954) 970-9999

## General Description:

Bahama shutters are constructed from 6063 T6 extruded aluminum alloy with a minimum  $F_y = 25$  ksi. The shutter assembly may be raised into an open position. The shutter assembly must be lowered into the closed position during a hurricane event. The shutters may be installed as a single panel configuration or as a multi panel configuration. The multi panel configuration has an unlimited width if a storm bar is not used. When the storm bar is utilized, the maximum width is limited as specified in the approved drawings. The shutters may be secured to wood, concrete, or hollow concrete block wall construction.

## Limitations:

### Design Drawings:

- “Eyewall Armor Hurricane Protection Fullview Bahama Shutter” manufactured by Town & Country Industries; Drawing No. 15-2342; Sheets 1 thru 6 of 6; dated June 8, 2010; revised October 27, 2016; signed, sealed, and dated October 28, 2016 by Frank L. Bennardo, P.E. The stated drawings will be referred to as approved drawings in this report.

## Shutter Configurations:

- Single Panel Span shutters
- Multi Panel Span shutters

**Wall Construction:** The Bahama shutters may be mounted to the following types of wall framing:

- Concrete, cast-in-place concrete (minimum compressive strength required specified in drawings)
- Hollow block concrete masonry units (CMU)
- Wood (minimum Spruce-Pine-Fir dimension lumber; G=0.42)

**Mounting Conditions:** The Bahama shutters may be wall mounted, trap mounted, or built out. Refer to the approved drawings for specific mounting conditions.

**Allowable Design Pressure:** The maximum allowable design pressure rating is +78 psf, -95 psf. Refer to the approved drawing for specific design pressure requirements.

**Note:** The shutters must be in a closed and locked position to achieve the allowable design pressure rating.

**Maximum Shutter Span:**

- The maximum allowable shutter span is 96-3/4". Refer to the approved drawings for specific allowable span requirements.

**Maximum Width:**

- The maximum allowable slat span for single span configurations is 53-1/2".
- The maximum allowable slat span for multi span configurations is 38".
- For multi span configurations, if a storm bar is used, then the maximum width is 122-1/2".
- For multi span configurations, if a storm bar is not used, then the width of the assembly is unlimited.

**Beam:** A beam may be installed horizontally across the front of the multi panel configuration shutter assemblies. The beam is located at mid span of the shutter assembly as shown on the approved drawing. An optional beam may be installed horizontally at the bottom of the multi panel configuration shutter assembly. The beams are secured to the wall framing as specified in the approved drawings.

**Minimum Separation from Glass:** The shutter system is a non-porous impact protective system. There is no minimum separation of glazing. The shutters may be installed on essential facilities as defined in the IBC. The minimum separation from glass for installation on essential facilities is specified in the approved drawings.

**Product Identification:** The shutter assemblies must have a manufacturer-produced permanent label that indicates the following information: Town & Country Industries; Ft. Lauderdale, FL; ASTM E 330, E1886 & E1996; Missile Level D.

**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 assembly passed a missile level equivalent to Missile Level D specified in ASTM E 1996. 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 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 shutters must be anchored to the structure in accordance with the approved drawings. Anchorage of the shutters to concrete, 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 and the approved drawings available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.