

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

SHU-174

Effective Date: July 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 **June 2017**.*

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.

Colonial Shutters manufactured by

Town & Country Industries
400 West McNab Road
Fort Lauderdale, Florida 33309
Telephone: (954) 970-9999

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation and the design drawing referenced in this evaluation report.

PRODUCT DESCRIPTION

Colonial shutters are constructed from 6063 T-6 extruded aluminum alloy with a minimum $F_y = 25$ ksi. The Colonial shutters consist of a minimum of two panels measuring 34" wide x $97 \frac{3}{4}$ " high. The shutters may be mounted as a two, three or four panel option. Each panel consists of an extruded aluminum section in the jambs, header and sill. The header and sill members are notched to allow the jamb members to slide into the horizontal frame members. The header and sill are attached to the jambs using two (2) No. 14 x 1" long stainless steel screws at each corner. At the jamb locations, the jamb snap member snaps into the jamb piece. Each panel consists of colonial louver blades across the width of the panel. Each colonial blade measures 1.2" wide x 2.154" high x 0.055" thick. The blades are attached at either end to the shutter framing members using one (1) No. 10 x 2" long 410 HT stainless steel sheet metal screw. Each panel has three hinges located at the jamb top, jamb center (3" maximum each side of centerline) and jamb bottom. A storm is located across the front of the panel at a distance of 10" from the bottom of the shutter. The storm bars are held in place with a machine bolt and locking nut. The shutters may be applied to wood, concrete, or hollow concrete block construction.

Product Identification: Each unit shall bear a permanent label containing the manufacturer's name, the name of the product, Missile Level D, the design pressure rating, and the following applicable standards: ASTM E 1886, ASTM E 1996, and ASTM E 330.

LIMITATIONS

Design Drawings: The colonial shutters shall be installed in accordance with "Eyewall Armor Hurricane Protection Hinged Colonial Shutter System," drawing No. 08-361, dated 1-27-2009, Revision 2, dated 5-29-2009, Sheets 1 through 5, signed, sealed, and dated 5-29-2009 by V.J. Knezevich, P.E. The stated drawings are referred to as the approved drawings in this evaluation report.

Maximum Span: The maximum allowable shutter span is 97.75”.

Maximum Width: The maximum allowable shutter width is 136”. Refer to the approved drawing for allowable shutter widths as a function of shutter configuration.

Wall Construction: The shutters may be secured to wood, concrete, or hollow concrete block substrates.

Design Wind Pressure: +57.2, -66.2 psf

Note: Shutters must be in a closed and locked position to achieve allowable design pressure rating.

Maximum Dimensions of Individual Panels: 34” wide x 97 ³/₄” high

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 1996-05. 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.

Anchorage:

The hinges shall be anchored to the structure in accordance with the approved drawings. Refer to the Wall Hinge Anchor Schedule on Sheet 2 of 5 of the approved drawings.

For shutter configurations that require beams, refer to the Beam Schedule on Sheet 4 of 5 of the approved drawings.

For Z-bar connection requirements, refer to the Z-bar Anchor Schedule on Sheet 5 of 5 of 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.