TDI | Texas Department of Insurance

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Product Evaluation

SHU204 | 0721

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-204

Effective Date: July 1, 2021
Re-evaluation Date: June 2025

Product Name: Astro Guard Wind Abatement System

Manufacturer: Hurricane Fabric.com LLC
1 First Missouri Center
St. Louis, MO 63141
(561) 742-3756

General Description:
The Astro Guard Wind Abatement System is a flexible wind abatement and impact protection system. The system may be installed on new or existing construction. The fabric storm panel system consists of the following components:

Fabric: The fabric is a proprietary resin coated geotextile fabric with minimum average roll values as shown on sheet 1 of 2 of the approved drawings. The only sewing of the fabric required is stitching shown on sheet 1 of 2 if a splice is required. No sewing is required at the edges.

Mounting/Retention Clip: A patented mounting / retention clip is installed on the edges as shown on sheet 2 of 2 on the approved drawings.

Limitations:

Design Drawings:

The fabric storm panels must be installed in accordance with Astro Guard Wind Abatement System drawing 21-0915; pages 1-2 of 2; dated February 22, 2021; Each sheet is signed and sealed by John H. Kampmann Jr., P.E. on June 10, 2021. The stated drawings will be referred to as "approved drawings" in this evaluation report. A copy of the approved drawings must be available at the job site.

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

- Concrete, cast-in-place concrete
- Hollow or Grout-filled block concrete masonry units (CMU)
- Wood (minimum Southern Yellow Pine dimension lumber; G=0.55)

Mounting Conditions: The fabric storm may be inside mounted, outside mounted, or a combination of each. Refer to the approved drawings for specific mounting conditions.

Allowable Design Pressure: The maximum allowable design pressure rating is +60 psf, -60 psf.

Maximum Allowable Supported Span: The maximum allowable supported span is the distance between mounting / retention clips with fastener spacing as specified in the approved drawings for the performance of the product. The maximum supported span is 18'-0" (216"). Refer to the approved drawings.

Maximum Allowable Unsupported Span: The maximum allowable unsupported span is the distance between the non-reinforced fabric edges. There is no limit to this dimension. Additional fabric may be spliced together using the stitching detail shown on sheet 1. The fabric storm panel may be installed horizontally or vertically. Therefore, the panel span may be either a vertical dimension or a horizontal dimension. Refer to sheet 2 of the approved drawings for the maximum fabric panel span and the overall fabric panel span.

Mounting/Retention Clip: The fabric is placed within the clip so as to engage the No. 8-32 x 1/2" stainless steel screws and to extend to the edge as shown on sheet 2, option 1 of the approved drawings or at a minimum up to the removable fastener, as shown on sheet 2, option 2 of 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 not be installed on essential facilities as defined in the IBC.

Product Identification: Each fabric panel must have a permanent label that identifies the manufacturer (Hurricane Fabric.com); the name of the product (Astroguard Wind Abatement System); the drawing number (21-0915); and compliance with ASTM E330-02, ASTM E 1886-05, ASTM E 1996-05; Missile Level D.

Compliance: The shutter assembly passed test criteria equivalent to ASTM E330-14, 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 a missile level equivalent to 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. The shutters may not be installed on essential facilities as defined in the IBC.

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.

Anchors: Refer to sheet 1 of the approved drawings for the type of anchors that may be used. Page 1 of the approved drawings indicates the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

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