

# TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104  
Phone No. (512) 322-2212 Fax No. (512) 463-6693

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## PRODUCT EVALUATION

SHU-167

Effective February 1, 2009

*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 **July 2011**.*

*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.*

**Cat-5 Hurricane Netting System, Impact Resistant**, manufactured by

**CAT-5 Protection, Inc.**  
**160 SW 12th Avenue #106**  
**Deerfield Beach, FL 33442**  
**(954) 354-0660**

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

## PRODUCT DESCRIPTION

The Cat-5 Hurricane Netting fabric storm panels 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:** 100 percent vinyl-coated polypropylene constructed of 0.030" wide filaments and the netting system is designed to overlap, therefore consisting of two parts. Each corner of the fabric panel is reinforced with two (2) layers of screen material. Along the fabric panel edges, there is a 3 inch wide double fold with webbing.

**Grommets:** Brass grommets;  $\frac{5}{8}$ " hole diameter,  $1\frac{1}{8}$ " flange diameter. The grommets are installed along the perimeter of the fabric, in the center of a 3-inch wide fold back. The fold back has a  $1\frac{1}{2}$ "x0.040" thick nylon strap incorporated into the liner and is sewn into the fold back. The spacing of the grommets shall be as specified in this evaluation report.

**Product Identification:** Each fabric panel shall have a label that identifies the manufacturer, the name of the product, allowable design pressure, compliance with ASTM E330, ASTM E 1886, and ASTM E 1996. Tested fabric length of 12'-4" and tested overall length of 12'-10".

## LIMITATIONS

**Design Drawings:** The fabric storm panels shall be installed in accordance with Cat-5 Hurricane Net Drawing 0907-091-1TX pages 1-4, dated June 6, 2008. Each sheet is signed and sealed by Frank L. Bennardo, P.E. The stated drawings will be referred to as "approved drawings" in this evaluation report. A copy of the approved drawings shall be available at the job site.

**Wall Framing Construction:** The fabric storm panel may be mounted to several types of wall framing construction (refer to page 4 of the approved design drawings). The types of wall framing construction allowed included concrete, hollow concrete block and wood dimension lumber (minimum Southern Yellow Pine).

**Ground mount conditions:** One end of the fabric storm panel may be anchored to the ground. The ground mount media shall be concrete. The anchors shall be installed as described in the approved drawings on Page 4.

**Anchors:** Refer to page 4 of the approved drawings for the type of anchors that may be used. Page 4 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.

**Design Pressure Rating:**  $\pm 27.7$ psf

**Panel Width:** The fabric dimension parallel to the rows of grommets. This dimension is not limited. Refer to Page 1 of the approved drawings. Panels may be joined together at a grommet seam. The grommets shall be spaced 6 inches on center. Refer to Page 3 of the approved drawings for anchoring the grommet seam.

**Panel Span:** The maximum distance between rows of grommets. Note: 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 Page 1 of the approved drawings for the maximum fabric panel span and the overall fabric panel span.

**Grommets (Fabric end and edge distance):** The grommets are spaced a minimum of 1 inch from the ends of the fabric. The grommets shall be spaced as specified in the anchor schedule on Page 4 of the approved drawings.

**Separation Distance from Glazed Openings:** The fabric panels shall be separated a minimum of 36 inches from the glazed opening at its closest point. Additional design specifications are listed on Page 1 of the approved drawings.

**Impact Resistance:** This 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 fabric storm panels passed Missile Level D specified in ASTM E 1886-02/1996-02. The fabric storm panel 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

**Installation Requirements:** The fabric storm panels shall be installed in accordance with manufacturer's installation instructions, the approved drawings, and this product evaluation report.

**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.