

Product Evaluation

SHU181 | 0620

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-181

Effective Date: June 1, 2020

Re-evaluation Date: June 2024

Product Name: Force 12 Series 700 Rolling Fabric Shutter System, Impact Resistant

Manufacturer: Hendee Enterprises, Inc.
9350 South Point Drive
Houston, TX 77054
(800) 231-7275

General Description:

The Force 12 Series 700 rolling fabric shutter system is a flexible wind abatement and impact protection system. The system consists of a fabric storm panel that is held in place by side tracks and is rolled down from a top operator box over an exterior opening.

The Force 12 Series 700 rolling fabric shutter system consists of the following components:

Fabric: 100% polypropylene, 3/4 basketweave, minimum thickness of 0.021", warp - 60 ends per inch, fill - 50 ends per inch, calendered finish, 7.6 oz per square yard.

Reinforcement: Each corner of the fabric is reinforced with two (2) layers of fabric. At the top, bottom and side edges, the fabric is lock stitches with a 2" hem that is double folded.

Keder: A 6mm (0.24") keder made of polyvinyl chloride is sewn to the fabric. The keder is located along the side edges of the fabric and along the bottom edge of the fabric. There is a maximum

1/4" inch separation from the edge of the fabric to the top edge of the keder. Refer to the approved drawings for locations of the keder.

Top Operator Box: The components of the top operator box must be as specified in the approved drawings. The top box is mounted to the top of the side tracks using the top box end plates. The back hood of the top box is secured to the wall as specified in the approved drawings.

Product Identification: Each fabric panel must have a label that identifies the manufacturer (Hendee Enterprises, Inc.); the name of the product (Force 12 Hurricane Protection Series 700-Rolling Shutters); the design pressure rating; and the test standards (ASTM E330, ASTM E 1886-04, ASTM E 1996-09; Missile Level D).

Limitations:

Design Drawings: Force 12 700 Series Rolling Shutters, Sheets 1-3 of 3, Rev. 0, dated October 31, 2012. Each sheet is signed and sealed by James R. Bailey, P.E on May 5, 2020. 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 during inspection.

Wall Framing Construction: The wind abatement system may be mounted to several types of wall framing construction. The types of wall framing construction allowed included pre-cast or cast-in-place concrete (minimum 3,500 psi) and grout-filled CMU. The wind abatement system must be anchored to the wall substrate as specified on the approved drawings.

Mounting Conditions: The following mounting conditions are permitted: Direct Mount and Trap Mount.

Design Pressure Rating: The maximum design pressure rating is ± 60 psf. The design pressure rating varies as a function of the wall construction, mounting condition, side track anchor spacing, and panel span. Refer to the approved drawings for allowable design pressures.

Maximum Panel Span: For direct mount installations, the maximum panel span is 198.5". For trap mount installations, the maximum panel span is 189.5".

Maximum Panel Height: For both direct mount and trap mount installations, the maximum panel height (non-span direction) is unlimited.

Separation Distance from Glazed Openings: The minimum separation distance from glazed openings must be as specified in the approved drawings.

Impact Resistance: This assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris. 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:

Installation Requirements: The Force 12 Series 700 rolling fabric shutter system wind abatement system must be installed in accordance with manufacturer's installation instructions, the approved drawings, and this product evaluation report.

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