

Product Evaluation

SHU248 | 0423

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-248

Effective Date: April 1, 2023

Re-evaluation Date: April 2027

Product Name: Fixed Track Fabric Shutter, Impact Resistant

Manufacturer: Progressive Screens
7839 Fruitville Rd
Sarasota, FL 34240
(941) 360-0037

General Description:

The fixed track fabric shutter is a windborne debris protective system. The windborne debris protective system consists of a fabric shutter system that is secured to the exterior of the structure. The fabric shutter system consists of the following components:

Fabric: A woven screen fabric using 0.027" diameter vinyl coated 1500 denier polyester yarns in the wrap direction and 0.030" diameter vinyl coated 2000 denier Aramid yarns or Uhmwpp yarns in the fill direction. Refer to the approved drawing for additional details.

Keder: Keder is 4 mm (at tracks) PVC cord provided by Keder Solutions with a tensile strength of 2100 psi, wrapped and welded with a double flap keder using standard weave fabric provided by Keder Solutions, with 64 mm width (at tracks). Refer to the approved drawing for additional details.

All Extrusion Material: Manufactured from 6063-T6 extruded aluminum unless otherwise noted on the approved drawing. The dimensions are specified on the approved drawing.

Limitations:

Design Drawings:

"Fixed Track Fabric Shutter" manufactured by Progressive Screens; Drawing No. PRG009; Sheets 1 thru 5; dated July 17, 2022; signed, sealed, and dated November 30, 2022, by Hermes F. Norero, P.E. The stated drawings will be referred to as approved drawings in this report.

Mounting Conditions: Refer to the approved drawings for specific mounting conditions.

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

- Pre-cast concrete, cast-in-place concrete (minimum 3,000 psi compressive strength)
- Grout-filled concrete masonry units (ASTM C-90, minimum 2,000 psi compressive strength)
- Wood (minimum Southern Yellow Pine dimension lumber, minimum S.G. = 0.55)
- Steel, minimum A36, 3/16" thickness
- Aluminum, minimum 6063-T6, 1/4" thickness

Allowable Design Pressure: The allowable design pressure is a function of mounting condition, substrate type, track to track span, anchor type, mullion type, and mullion span. Refer to the approved drawings for the allowable design pressure. The maximum allowable design pressure is +/-105 psf.

Maximum Frame Span: The maximum frame span in the direction of perpendicular to tracks is 120".

Product Identification: The fabric shutters have a permanent label, a NAMI Quality Assurance Label, that indicates the manufacturer (Progressive Screens); the name of the product (Fixed Track Fabric Shutter); the test standards (TAS 201/202/203-94); and the missile level (Large Missile Impact Rated).

Compliance: The products comply with ASTM E 1886-13a and ASTM E 1996-14a as referenced in the 2018 IRC and 2018 IBC.

Impact Resistance: The shutters have been tested for windborne debris resistance. The assembly passed the equivalent of Missile Level D specified in ASTM E 1996-14a.

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.

Installation: Refer to the approved design drawings for the installation of the shutter assembly. Anchor schedules indicate the minimum embedment depth, the minimum edge distance, and the maximum anchor spacing for various anchor types and design pressures.

Intended Use: The shutter assembly is permanently secured to the structure. The shutters are intended for year-round use.

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