

Product Evaluation

SHU234 | 0421

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-234

Effective Date: April 1, 2021

Re-evaluation Date: April 2025

Product Name: 55 mm Rolling Door Shutters

Manufacturer: Advanced Hurricane Technologies
16501 Old Airport Haul Road
Fort Myers, FL 33913
(239) 595-0022

General Description:

The 55 mm rolling door shutters are manufactured of extruded aluminum components. The shutter consists of 55 mm extruded aluminum slats. The shutters are a permanently mounted impact protective system.

The shutters may be mounted as single units or multiple units. Mounting conditions consist of wall mount, build out, or inset mount.

The shutters must be installed in accordance with design drawings referenced in this evaluation report.

Limitations:

Design Drawings:

"Wind Abatement System – Large Missile 55 MM Rolling Door System;" manufactured by Advanced Hurricane Technology; Drawing No. 19-044-1; Sheets 1–13 of 13, dated April 13, 2020;

signed, sealed, and dated April 13, 2020 by Pedro Figueiredo, P.E. The stated drawings will be referred to as approved drawings in this report.

Roll-Up Configurations: The roll-up shutters are installed as single span units or multiple span units.

Mounting Conditions: The roll-up shutters may be wall mounted, inset mounted, or build out mounted. Refer to the approved drawings for specific mounting conditions.

Wall Construction: The roll-up shutters may be mounted to the following types of wall framing:

- Pre-cast concrete, cast-in-place concrete (minimum compressive strength required specified in drawings)
- Grout-filled concrete masonry units (CMU)
- Wood (minimum Southern Yellow Pine dimension lumber, 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 track to track width, mullion span, mounting condition, anchors, and substrate. Refer to the approved drawings for the allowable design pressure. The maximum allowable design pressure is +/-180.0 psf.

Maximum Shutter Span: The maximum allowable track to track width is 288". Finished width not to exceed 294-1/2". Refer to the approved drawings for allowable track to track widths for specific configurations.

Maximum Width: Unlimited shutter modules for multiple units may be used. Refer to Sheet 2 of 13 of the approved drawings for multiple unit elevations.

Minimum Separation from Glass: The minimum glazing separation as a function of track to track width is specified in Table 2 on Sheet 1 of 13 of the approved drawing.

Product Identification: The roll-up shutter assemblies must have a manufacturer-produced label that indicates the manufacturer (Advanced Hurricane Technology Inc.); the name of the product (Wind Abatement System Large Missile 55 mm Rolling Door System); the missile level (Missile Level D); and compliance with ASTM E 330-14, ASTM E 1886-13a, and ASTM E 1996-14a.

Impact Resistance: This roll-up shutter assembly satisfies the Texas Department of Insurance's criteria for protection from windborne. 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 in essential facilities as defined in ASCE 7-16.

Installation:

General Installation Requirements: The roll-up shutters must be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report. A copy of the approved drawings must be available on the jobsite during inspection of the shutter assembly.

Anchorage: The roll-up shutters must be anchored to the structure in accordance with the approved drawings. Anchorage of the roll-up shutters to the structure must follow the mounting conditions and fastener options specified on the approved drawings.

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.