



Product Evaluation

SHU227 | 0317

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-227

Effective Date: March 1, 2017

Re-evaluation Date: March 2021

Product Name: Van Guard II Aluminum Hurricane Barrier, Outswing, 14-Gauge Stainless Steel Screen

Manufacturer: Kane Security Systems
515 N. Fraley Street
Kane, PA 16735
(814) 837-6464

General Description:

The Van Guard II Hurricane Barriers are impact protective systems that are permanently secured to the structure over the window assemblies. The frames are manufactured of 6063 T-6 extruded aluminum. The screen material is 14-gauge perforated stainless steel.

Design Drawings:

- "Van Guard II Aluminum Hurricane Barrier, Outswing, Impact, 14 Ga. Stainless Steel Screen;" manufactured by Kane Security Screens; Drawing No. TX-4616; Sheets 1 thru 12 of 12; dated June 21, 2016. The drawing is signed, sealed, and dated February 15, 2017 by Lyndon F. Schmidt, P.E. The stated drawings are referred to as approved drawings in this report.

Limitations:

Configurations: The shutters are installed as a standard single configuration.

Mounting Conditions: The shutters are wall mounted. Refer to the approved drawing for the specific mounting requirements.

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 3,000 psi).
- Hollow concrete masonry units (CMU), C90.
- Wood (minimum Spruce-Pine-Fir dimension lumber, S.G. = 0.42).

Allowable Design Pressure: The allowable design pressure is +/-70.0 psf.

Maximum Shutter Width: The maximum allowable shutter width is 50-1/2".

Maximum Shutter Height: The maximum allowable shutter height is 110-3/8".

Minimum Separation from Glass: The minimum glazing separation from glass is specified on the approved drawings.

Product Identification: The roll-up shutter assemblies must have a manufacturer-produced label that indicates the following information:

Manufacturer Name:	Kane Security Systems
Product Name:	VAN GUARD II Aluminum Hurricane Barrier (14 Ga. Stainless Steel Screen)
Drawing:	TX-4616
Test Standards:	ASTM E 330-02, E 1886/E1996-02; Impact "Missile Level D"

Impact Resistance: The shutter 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 assembly passed Missile Level D specified in ASTM E 1996. 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:

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.

Anchorage: The shutters must be anchored to the structure in accordance with the approved drawings. Anchorage of the shutters to concrete, hollow concrete masonry units (CMU), and wood wall framing must follow the mounting conditions and fastener options specified on the approved drawings and the wall construction requirements in this evaluation report.

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