

# 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-158

Effective April 1, 2008

*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 3 years after the effective date.*

*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.*

**Maestrosshield Maestran Security Shield Hurricane Barrier** manufactured by

**USA Shutter Company LLC**  
**1455 Rail Head Blvd., Unit 6**  
**Naples, Florida 34110**  
**(239) 596-8883**

will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation along with Drawing No. FL 00106, sheets 1-5 of 5, dated April 9, 2007, Revision B, dated February 28, 2008, signed and sealed by Luis R. Lomas, P.E. on February 28, 2008. The stated drawings will be referred to as the approved drawings in this report.

## PRODUCT DESCRIPTION

The Maestrosshield Maestran Security Shield Hurricane Barrier is constructed with an aramid mesh system. The mesh consists of a 1500 denier aramid fiber core. Each aramid fiber is surrounded by six (6), 0.2 mm diameter Grade 304 stainless steel strands. Along the entire length of the top and bottom edge of the hurricane barrier, the mesh base is placed over the fabric and the fabric is folded back over the mesh base support. All aluminum extrusions shall be 6063-T5 aluminum alloy unless otherwise noted on the drawings.

## LIMITATIONS

**Maximum Allowable Design Pressure:** ±70 psf

**Maximum Barrier Span:** 94 ½”

**Impact Resistance:** This 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 shutter assemblies passed an impact-resisting standard equivalent to Missile Level D specified in ASTM E 1996-02. The shutter 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

### **General Installation Requirements:**

All shutters shall be installed in accordance with the approved drawings.

### **Mounting Conditions:**

The shutter system shall be mounted and anchored to concrete, masonry or wood substrate in accordance with the mounting conditions shown on the drawings. For attachment to any wood framing members, the wood framing members shall be a minimum G<sub>0.53</sub>. For attachment to all substrates, the drawings specify minimum embedment and edge distance requirements for the various types of anchors. In all cases, the maximum spacing of the fasteners used to anchor the barrier to the substrate shall be 6" o.c.

**Note:** Manufacturer's installation instructions and the approved drawings shall be available on the job site. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).