

EVALUATION REPORT

Code: Florida Building Code, 2017 – 6th Edition
Product Category: Shutters
Product Sub-Category: Fabric Storm Panels
Product Name: Ez Screen-Max Polypropylene Screen Shutter
Manufacturer: Custom Hurricane Products, Inc.
2024 58TH Ave Cir E
Bradenton, Florida 34203
Fire Classification: N/A
Maximum Allowable Design Pressures: 60.0 psf and -60.0 psf
Florida Product Approval: FL#14110.1

1. Executive Summary

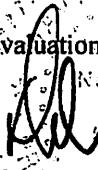
The following is a Product Control Evaluation Report issued by David G. Karins, P.E. to Custom Hurricane Products for the proposed Ez-Screen Max Polypropylene Screen Shutter. The intent of this report is to provide the necessary Code certification from a Florida Registered Professional Engineer for private residential and commercial use of the hurricane fabric screen shutters.

It is the professional opinion of David G. Karins that this hurricane shutter system is in compliance with the Florida Building Code 2017 – 6th Edition (the Code) and that the products are, for the purpose intended, at least equivalent to that required by the Code by evidence of test results and comparative and rational analysis.

Re-evaluation of this Product Evaluation Report is necessary following any code changes to maintain its validity.

Applicable Florida Building Code Sections

Sections: 1609.1.2
1609.1.2.4
1709.9

Evaluation Report Prepared By:

AUG 16 2017

David G. Karins, P.E.
President
FL Registration No. 52677
August 9, 2017

2. Product Description & Information

High Velocity Hurricane Zone: Not Approved

Outside High Velocity Hurricane Zone: Approved

Maximum Allowable Design Pressures: 60.0 psf. and -60.0 psf (required for testing)

Allowable wind loads shall be in accordance with current edition of Chapter 16 of the Florida Building Code and ASCE 7, and for a basic wind speed as required by the jurisdiction where the screen will be installed and multiplied by 0.6 per 1609.1.2.4 and 1609.1.3

Product Description:

Fabric Type: Black colored 20 mil 100% polypropylene mesh screen.

Mesh Construction: ¾" basket weave; warp at 60 ends per inch; fill at 50 ends per inch; per manufactures drawings.

Boundary Reinforcement: 2" wide thermo-sealed polypropylene webbing front and back of screen.

#3 grommet spacing is a function of the height of the screen as determined by code.

Strap spacing is a function of the height of the screen as determined by code.

7" on center #3 Grommet spacing, 8" and 14" on center strap/bracket and strap/buckle spacing based on screen testing assembly.

Limitations: The product evaluation document and installation instructions are generic and do not provide information for site specific projects (Anything deviating from these documents and installation instructions). All site specific projects shall require a Florida Registered Professional Engineer Seal whom shall take all responsibilities of the product.

Glass separation is required for Wind Zone 4 and all wind zones for essential facilities.

(Refer to Attached Drawings for additional information)

3. Evaluation Analysis

Custom Hurricane Products, Inc. supplied KEG with drawings and certification letters of independent testing performed on the proposed shutter system. KEG researched and analyzed the specifications of the code tested system for the evaluation, as well as, calculated wind load capacities. All testing required by the Code and ASTM standards for these products were performed by independent testing laboratories certified by FBC and not affiliated with Custom Hurricane Products, Inc. See Appendix A for Test Report number and Tests performed.

TAS 201-94	Large Missile Impact Test
TAS 202-94	Uniform Static Air Pressure Test – Loading
TAS 202-94	Air Infiltration Test
TAS 203-94	Cyclic Wind Pressure Loading Test

Within these TAS testing standards and in accordance with the Florida Building Code 2017, the ASTM testing standards listed below were also performed on the comparable screen shutter.

ASTM E330	Structural Performance by Uniform Static Air Pressure Difference
ASTM E283	Rate of Air Leakage under Specified Pressure Differences

This product shall have porosity of less than 10% outside of the High Velocity Hurricane Zone (HVHZ)

4. Substantiating Data

4.1 Test Reports

The following tests were conducted and documented by FBC Approved Testing Laboratories:

1. Product Testing Report by Architectural Testing Report No. 80976.01-401-18 dated 04/15/08
Test Procedures Performed – TAS 201-94
TAS 202-94
TAS 203-94
2. Product Testing Report by Fenestration Testing Laboratory, Inc. titled Polypropylene Screen with Storm Bars dated June 5, 2007 and June 15, 2007.
Test Procedures Performed – TAS 201-94 on Storm Bars
TAS 202-94 on Storm Bars

5. Certification of Independence

This Florida Professional Engineer does not have, nor does intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products evaluated.

This Florida Professional Engineer is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.

This Florida Professional Engineer performing an evaluation does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the reports are being issued.

This Florida Professional Engineer performing an evaluation does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.



David G. Karins, P.E.
President
FL Registration No. 52677
August 9, 2017

Appendix A

References

- Florida Building Code 2017 – 6th Edition
- Chapter 61G20-3.005 Department of Community Affairs – Florida Building Commission
B.C.I.S. Product Approval Application 61G20-3.005 Method 1-D – Product Evaluation and
Quality Assurance for Optional Statewide Approval
- Drawings of Polypropylene Screen Shutter, Sheet 1, Sheet 1.2, Sheet 1.3, and Sheet 1.4
- Fastener Chart, Sheet 2.1a thru 2.1f , Sheet 2.2, and Sheet 2.3
- Fabric Specification, Sheet 3