

Product Evaluation Report

December 14, 2011

Application Number: FL 6418-R3
FLB Project Number: 05-TPS-0001Product Manufacturer: Transparent Protection Systems, Inc.
Manufacturer Address: 6643 42nd Terrace North
West Palm Beach, FL 33407Product Name & Description: ValueGuard™ Polymer Storm Panels
& MaxLite™ Storm Panel System
Translucent & Transparent Storm Panels

Scope of Evaluation:

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 9N-3.005, F.A.C., for statewide acceptance per Method 1(d). All products listed above have been tested and/or evaluated as summarized herein to show compliance with the 2010 Florida Building Code and are, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

Substantiating Data:

- **PRODUCT EVALUATION DOCUMENTS**

FLB drawing #05-TPS-0001 titled "ValueGuard™ Polymer Storm Panels", sheets 1-5, prepared by Frank L. Bennardo, P.E., Inc., signed & sealed by Frank L. Bennardo, P.E. is an integral part of this Evaluation Report.

- **TEST REPORTS**

Uniform static structural performance has been tested in accordance with ASTM E330-02 test standards per test report(s) #0239-0107-05 & 0239-0216-05 by Hurricane Test Laboratory (HTL).

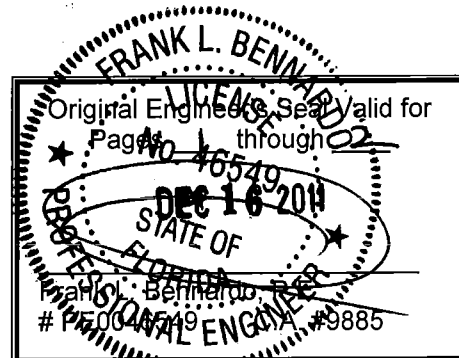
Large missile impact resistance and cyclic loading performance have been tested in accordance with ASTM E1886-02 & E1996-02 test standards per test report(s) #0239-0107-05 & 0239-0216-05 by Hurricane Test Laboratory (HTL).

- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Maximum Allowable Spans
2. Minimum Allowable Spans
3. Anchor Spacing

No 33% increase in allowable stress has been used in the design of each product.



Transparent Protection Systems, Inc. – ValueGUARD™ and MaxLite™ Storm Panels

When installed outside ASTM Wind Zone 4 and Essential Facilities, this system has been designed as a non-porous assembly as defined in the ASTM E1996 standard. Therefore, a minimum separation between the shutter and any glazing behind it is NOT required outside ASTM Wind Zone 4 and Essential Facilities.

Impact Resistance:

Large Missile Impact Resistance has been demonstrated as evidenced in previously listed test reports, and is accounted for in the engineering design of this product.

Wind Load Resistance

Each product has been designed to resist wind loads as indicated in the span schedule(s) on its respective Product Evaluation Document (i.e. engineering drawing).

Installation

Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document (i.e. engineering drawing), along with all components noted therein.

Each product component shall be of the material specified in that product's respective Product Evaluation Document (i.e. engineering drawing).

Limitations & Conditions of Use:

Use of each product shall be in strict accordance with its respective Product Evaluation Document (i.e. engineering drawing) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times.

Each product NOT has been designed for use within the High Velocity Hurricane Zone (HVHZ).