

# **W. W. Schaefer Engineering & Consulting, P.A. (CA #6809)**

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Palm Beach Gardens, FL 33418  
Phone (561)744-3424

## **ENGINEER'S EVALUATION REPORT #WWS-329**

### **Prepared for:**

Pella Corporation  
102 Main Street  
Pella, IA 50219  
Phone: 641-621-1000

### **Prepared by:**

Warren W. Schaefer, P.E.  
Florida Professional Engineer #44135

**Manufacturer:** Pella Corporation

**Product Category:** Windows

**Evaluation Method:** 1-D (Engineer's evaluation)

**Product model & name:** HIG Aluminum Clad Wood Impact Fixed Casement Windows

### **Documents that must accompany this report:**

1. W. W. Schaefer Engineering & Consulting drawing No. 1519

### **Window size restrictions and assembly requirements:**

See drawing No. 1519

### **Maximum allowable design pressure:**

See drawing No. 1519

### **Installation requirements:**

See drawing No. 1519

### **Code compliance:**

Code section(s) considered with this evaluation:

FBC Chapters 17 & 24

### **Wood Coatings:**

All wood members shall be of an approved durable species or be treated in an approved method with an approved preservative per applicable codes and standards

### **Glass:**

All glass meets the current ASTM E1300 standard.

### **Mullions:**

Mullion conditions stated in this approval have been tested in accordance with TAS-201, 202 & 203 and meet the requirements of FBC.

Test Standards applicable to the testing of these windows:  
TAS-201, 202 & 203

Test Laboratory: Architectural Testing, Inc. (ATI) & Element Material Technology

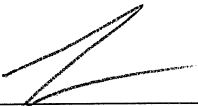
Test report numbers: ATI reports 71262.01-201-18, 71262.08-201-18, 93328.01-201-18 & 93261.01-201-18; Element reports ESP014011P, ESP017244P & ESP024464P.3

Note: All HVHZ test reports have been signed & sealed by a Florida PE.

**General report notes & system limitations:**

1. All size & installation conditions shown in this report and the referenced drawing No. 1519 are based off the referenced test reports and/or engineering analysis in accordance with the Florida Building Code.
2. Windows shall be constructed in accordance with the descriptions in this report, and the manufacturer's state approved quality assurance entity specifications.
3. This product is approved for use in & outside of the High Velocity Hurricane Zones (HVHZ).
4. Job required design wind pressure shall be calculated in accordance with the Florida Building Code Chapter 16 and ASCE 7 Minimum Design Loads for Buildings and Other Structures (0.85 directionality factor may apply per the current ASCE 7 standard).
5. These windows are both small & large missile impact rated for use in wind zone 4 & missile level "D" locations and need not be shuttered.
6. When applicable, all safety glass requirements must be met per FBC chapter 24.

**Quality Assurance Entity:** Window & Door Manufacturers Association (WDMA)

  
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Warren W. Schaefer, P.E.  
Florida P.E. #44135

FEB 14 2017

