

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

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## **ENGINEER'S EVALUATION REPORT #WWS-196**

### **Prepared for:**

Kolbe & Kolbe Millwork Co., Inc.  
1323 South 11<sup>th</sup> Ave.  
Wausau, WI 54401  
Phone: 715-842-5666

### **Prepared by:**

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

**Manufacturer:** Kolbe & Kolbe Millwork Co., Inc.

**Product Category:** Windows

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

**Product model & name:** Ultra Sterling Impact Double Hung Transom/Picture Window

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

1. W. W. Schaefer Engineering & Consulting drawing No. 1751

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

See drawing No. 1751

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

See drawing No. 1751

### **Installation requirements:**

See drawing No. 1751

### **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.

Test Standards applicable to the testing of these windows:

TAS-201, 202 & 203

Test Laboratory: Stork Twin City Testing Corporation

Test report number: TCT006055P-1033.1 & TCT006055P-1033.2. Note that 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. 1751 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 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).
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.

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

AUG 14 2017

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

