

# **W. W. Schaefer Engineering & Consulting, P.A.**

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## **ENGINEER'S EVALUATION REPORT #WWS-217**

### **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:** Doors

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

**Product model & name:** Ultra Series Manor Non-Impact Door

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

1. W. W. Schaefer Engineering & Consulting drawing No. 1831

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

See drawing No. 1831

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

See drawing No. 1831

### **Installation requirements:**

See drawing No. 1831

### **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.

### **Mullions:**

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

Test Standards applicable to the testing of these doors:

TAS- 202

Test Laboratory & test report numbers: Stork Twin City Testing Corporation report number 06-30303.01; Element Material Technology (Previously named Stork Twin City Testing Corporation) report number ESP012542P-1385; Quast Consulting & Testing, Inc. report number QCT23-6906.21

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. 1831 are based off the referenced test reports and/or engineering analysis in accordance with the Florida Building Code.
2. Doors 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 doors are non-impact rated & must be shuttered with a Florida code approved shutter where required by code.

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

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