

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

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ENGINEER'S EVALUATION REPORT #WWS-204

Prepared for:

Kolbe & Kolbe Millwork Co., Inc.
1323 South 11th 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 Impact Awning Window

Documents that must accompany this report:

1. W. W. Schaefer Engineering & Consulting drawing No. 1763

Window size restrictions and assembly requirements:

See drawing No. 1763

Maximum allowable design pressure:

+/-80 PSF

Installation requirements:

See drawing No. 1763

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-201, 202 & 203 and meet the requirements of FBC.

Test Standards applicable to the testing of these windows:

TAS-201, 202 & 203

Test Laboratory: Element Material Technology (Previously named Stork Twin City Testing Corporation) & Quast Consulting & Testing

Test report number: Element reports ESP008603P-1161.1B, ESP008603P-1161.1A, ESP026530P-2215 & ESP034340P-2581 and Quast report QTC21-6148.01

(Note: All test reports are signed and sealed by a Florida PE)

General report notes & system limitations:

1. All size & installation conditions shown in this report and the referenced drawing No. 1763 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 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.

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

MAR 17 2021

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

