

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

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ENGINEER'S EVALUATION REPORT #WWS-359

Prepared for:

Kolbe Windows & Doors
1211 Depot Street
Manawa, WI 54949
Phone: (920) 596-2501

Prepared by:

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

Manufacturer: Kolbe Windows & Doors

Product Category: Mullions

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

Product model & name: Forgent ½" Impact & Non-Impact Reinforced Mullion

Documents that must accompany this report:

1. W. W. Schaefer Engineering & Consulting drawing No. 1973

Mullion size & use restrictions and assembly requirements:

See drawing No. 1973

Maximum allowable design pressure:

See drawing No. 1973

Installation requirements:

See drawing No. 1973

Code compliance:

Code section(s) considered with this evaluation:

FBC Chapters 17

Mullions:

Mullion conditions stated in this approval have been tested and engineered in accordance with the requirements of FBC.

Test Standards applicable to the testing of these mullions:

TAS-201, 202 & 203

Test Laboratory: Quast Consulting & Testing, Inc.

Test report numbers: QCT20-5695.01

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. 1973 are based off the referenced test reports and/or engineering analysis in accordance with the Florida Building Code.
2. Mullions & their connectors 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 mullions are both small & large missile impact rated for use in wind zone 4 & missile level "D" locations. Therefore, the mullions and the windows they support need not be shuttered providing the window is approved for impact.

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

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

