

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

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ENGINEER'S EVALUATION REPORT #WWS-234

Prepared for:

Hope's Windows, Inc.
84 Hopkins Ave.
Jamestown, NY 14702-0580
Phone: 716-665-5124

Prepared by:

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

Manufacturer: Hope's Windows, Inc.

Product Category: Doors

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

Product model & name: 5000 Series Impact Lift & Slide Door

Documents that must accompany this report:

1. W. W. Schaefer Engineering & Consulting drawing No. 1849

Door size restrictions and assembly requirements:

See drawing No. 1849

Maximum allowable design pressure:

See drawing No. 1849

Installation requirements:

See drawing No. 1849

Code compliance:

Code section(s) considered with this evaluation:

FBC Chapters 17 & 24

Coatings:

Coating of steel door members complies with FBC.

Steel coatings have been tested in accordance with ASTM D1654, D714, D4585, B117, G85, D5894 & D4541.

Glass:

All glass meets the current ASTM E1300 standard.

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

Test Laboratory: Element Material Technology

Test report numbers: ESP010855P, ESP010855P-1, ESP010855P-2 & ESP010855P-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. 1849 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 both small & large missile impact rated for use in wind zone 4 & missile level "D" locations and need not be shuttered.
6. When job required positive design pressure exceeds +50 psf, these door units shall not be approved for use where water infiltration resistance is required by the door. Unless units are installed in non-habitable areas where the unit & the area are designed to accept water infiltration, units shall be installed only at locations protected by a canopy or overhang where-by the overhang(oh) ratio is equal to or more than 1.0 per FBC.

Quality Assurance Entity: National Accreditation and Management Institute (NAMI)

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Warren W. Schaefer, P.E.
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