



Product Evaluation Report

Date:	March 7, 2016
Report #:	2103
Report Revision No.:	2
Project #:	416-0301
Product Mfg.:	Jeld-Wen Inc. 3737 Lakeport Boulevard Klamath Falls, OR 97601
Product Description:	Premium Atlantic Vinyl Awning Window (8800) – Large Missile Impact
Product Category:	Windows
Product Sub-Category:	Awning
Compliance Method:	Product Approval Rule 61G20-3.005(1)(a) – Certification Mark or Listing
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CERTIFICATE OF INDEPENDENCE

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report.

PTC Product Design Group, LLC and Robert J. Amoruso, P.E. do not have, nor will acquire any financial interest in any other entity involved in the approval process or testing of the product(s) covered by this Product Evaluation Report.



SCOPE

Evaluate Jeld-Wen Inc. Premium Atlantic Vinyl Awning Window (8800) – Large Missile Impact for conformance to the Current Edition of the Florida Building Code – Building and Residential Volumes including the High Velocity Hurricane Zone (HVHZ).

The engineering analysis (Reference 3.a) determines the anchorage of the product to the supporting substrate and the product evaluation report (this document) summarizes current edition FBC compliance verification and appropriate Limitations and Conditions of Use.

DESCRIPTION OF PRODUCT – INSTALLATION REQUIREMENTS

See Reference 1 for a description of the product, its installation and other pertinent data related to its approved use.

CODE CONFORMANCE

This product is designed to comply with the current edition Florida Building Code (FBC) requirements including the High Velocity Hurricane Zone (HVHZ).

The current edition Florida Building Code (FBC) and current edition Florida Residential Code (FRC) requirements specific to this product that have been met by testing (Reference 2), engineering evaluation (Reference 3.a) and depicted on the installation drawings (Reference 1) are the following.

- Current Edition of the Florida Building Code (FBC), Building Volume
 - Protection of Openings
 - High Velocity Hurricane Zones - Impact Tests for Wind-Borne Debris
 - Exterior windows, sliding and patio glass doors
 - Anchorage methods
 - Doors and Operative Windows in Exterior Walls - HVHZ
- Current Edition of the Florida Building Code (FBC), Residential volume
 - Protection of Openings
 - High Velocity Hurricane Zones - Impact Tests for Wind-Borne Debris
 - Exterior windows, sliding and patio glass doors
 - Anchorage methods
 - Doors and Operative Windows in Exterior Walls – HVHZ



LIMITATIONS AND CONDITIONS OF USE

This product evaluation contains or makes reference to specifications, technical details and installation details and/or methods that pertain to the proper use and/or installation of the product specified herein. Specific limitations and conditions of its use including but not limited to the following are contained in Reference 1 and are the subject of Product Approval in accordance with the State of Florida Product Approval Rule 61G20-3.

- Design Pressure Rating (psf)
- Installation substrate requirements.
- Installation anchor requirements.
- Installation restrictions.
- Product description.
- Product components.

QUALITY ASSURANCE

This product is manufactured under a quality assurance program audited by an approved Certification and Quality Assurance Entity **National Accreditation & Management Institute (NAMI)** as required in Rule 61G20-3.005(3). See FBC Organization No. CER1773 and QUA1789 for approval under Rule 61G20-3.

APPLICATIONS/INSTALLATIONS OUTSIDE THE LIMITATIONS AND CONDITIONS OF USE

Rule 61G20-3.005(1)(e) states “Rational engineering analysis cannot be used in lieu of a standard test required by the Code for approval of products within the scope of the standard, except that project specific approval by the local authorities having jurisdiction in accordance with alternate methods and materials authorized in the Code.”

Any modification to this product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others. As allowed in Rule 61G20-3.005(1)(e), a project specific approval by the local authorities having jurisdiction may be used given an appropriate rational analysis is conducted and deemed acceptable to the local authorities having jurisdiction.

PERFORMANCE AND TESTING STANDARDS

Reference 2 conducted testing to the following standard(s). See Reference 3.b for Equivalency Evaluation of test procedures to the current edition FBC/FRC.

1. TAS201-94, Impact Test Procedures.
2. TAS202-94, Criteria for Testing Impact & Non-Impact Resistant Building Envelope Components Using Uniform Static Air Pressure.
3. TAS203-94, Criteria for Testing Products Subjected to Cyclic Wind Pressure Loading.



REFERENCES & SUPPORTING DOCUMENTS

1. Drawings:
 - a. JELD0101, Rev. A, dated December 23, 2013, signed and sealed by Robert J. Amoruso, Jeld-Wen Inc. Premium Atlantic Vinyl Awning Window (8800) – Large Missile Impact – Installation Anchorage Details.
2. Test Reports by National Certified Testing Laboratories:
 - a. NCTL-210-3267-2, dated May 26, 2006
 - b. NCTL-210-3373-1A, dated February 5, 2007
3. Reports:
 - a. PTC Report No. 2037, Rev. 0, Anchorage Engineering, for Jeld-Wen Inc. Premium Atlantic Vinyl Awning Window (8800) – Large Missile Impact, dated March 8, 2012, signed and sealed by Robert J. Amoruso.
 - b. PTC Report No. 2103-EER, Rev. 1, Equivalency Evaluation to the Current Edition FBC for Jeld-Wen Inc. Premium Atlantic Vinyl Awning Window (8800) – Large Missile Impact, dated December 23, 2013, signed and sealed by Robert J. Amoruso.
4. Florida Building Code:
 - a. The current edition Florida Building Code (FBC), Building Volume
 - i. Protection of Openings
 - ii. High Velocity Hurricane Zones - Impact Tests for Wind-Borne Debris
 - iii. Exterior windows, sliding and patio glass doors
 - iv. Anchorage methods
 - v. Doors and Operative Windows in Exterior Walls – HVHZ
 - b. The current edition Florida Building Code (FBC), Residential volume
 - i. Protection of Openings
 - ii. High Velocity Hurricane Zones - Impact Tests for Wind-Borne Debris
 - iii. Exterior windows, sliding and patio glass doors
 - iv. Anchorage methods
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