
EQUIVALENCY EVALUATION REPORT	
Project No.: ACE-2024-124	Report No.: ACE-EER-1151, Rev. 0

Product Description: IW Series Concealed Fastener Metal Wall Panels

Product Manufacturer: Centria, 700 State Highway 121 Bypass, Suite 200, Lewisville, TX 75067

Compliance Method: Product Approval Rule 61G20-3.015(4)(d) – Equivalency of Standards

Product Category/Sub-Category: Structural Components/Structural Wall

SCOPE: Evaluate CENTRIA's IW Series Concealed Fastener Metal Wall Panels for conformance to the 8th Edition (2023) Florida Building Code excluding the High Velocity Hurricane Zone (HVHZ).

CODE CONFORMANCE:

The 8th Edition (2023) Florida Building Code (FBC) requirements specific to this product have been met by testing (Reference 2) and engineering evaluation (Reference 3.a) and depicted on the manufacturer's installation drawings (Reference 1) are the following.

- 1403.3 Exterior Walls – Wind Resistance
- 1404.5 Exterior Walls – Metal
- Table 1405.2 Minimum Thickness of Weather Coverings
 - Steel must meet or exceed 0.0149" in thickness.
- 1405.17 Exterior Walls - Fasteners
- Table 1604.3 Deflection Limits
 - Exterior Walls/Flexible Finishes, deflection for wind loading limited to L/120.
- 1609 Wind Loads
- 1707.1 Alternative Test Procedure
- 2210.1 Cold-Formed Steel, General

Testing is based on ASTM E72 per the recommendations of Reference 5.b (Section 1707.1 of the 8th Edition (2023) FBC). Testing determines the Negative (Uplift) Wind Pressure Loading in PSF. The minimum safety factor against failure used to determine the allowable pressure loading is 2.5 if excessive slipping or failure occurs at the connections and 2 for all other panel failure modes. IW-10A used in testing envelopes all IW Series profiles due to nearly identical section properties.

The engineering evaluation (Reference 3.a) is based on AISI S100-07/S2-10, North American Specification for the Design of Cold-formed Steel Structural Members. The engineering evaluation determines Positive (Downwards Acting) Wind Pressure Loading in PSF. Safety factors are as prescribed in AISI S100-07/S2-10. Fastener allowable is based on a safety factor of 2.5. Deflection limitation based on L/180 which exceeds L/120 required by the building code.

8th Edition (2023) Florida Building and Residential Code Standards requirements:

- The 8th Edition (2023) Florida Building Code (FBC) requires AISI S100-16(2020) w/S2-20 and the 8th Edition (2023) Florida Residential Code (FRC) requires AISI S100-16, S1-18 to be used for cold-formed steel design.
- ASTM E72 is not included in the 2023 FBC or 2023 FRC. As indicated above ASTM E72 is approved for use per the requirements of Section 1707.1 of the 8th Edition (2023) FBC, Alternative Test Procedure.

The engineering evaluation in Reference 3.a has been reviewed against the requirements of AISI S100-16(2020) w/S2-20 and AISI S100-16, S1-18 and found to be compliant with its requirements.

Testing using ASTM E72 is acceptable per Section 1707.1 of the 8th Edition (2023) FBC.

Therefore, this product and its testing and engineering evaluations meet the requirements of the 8th Edition (2023) Florida Building Code (FBC).

REFERENCES & SUPPORTING DOCUMENTS:

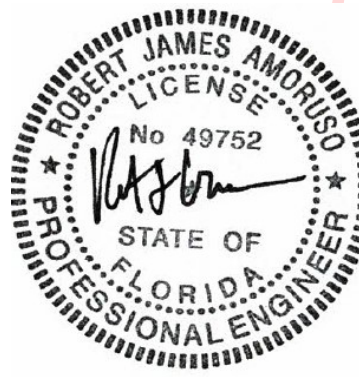
- 1) Manufacturer's Installation Instructions:
 - a) IW Series Horizontal Panel Profiles & Installation Details, Signed and Sealed by Robert J. Amoruso, P.E.
 - b) IW Series Vertical Panel Profiles & Installation Details, Signed and Sealed by Robert J. Amoruso, P.E.
- 2) Tests to ASTM E72-02
 - a) FET T201-12 IW-10A 12in W x 20 GA Negative Load Test with and without Clips
 - b) FET T202-12 IW-10A 12in W x 18 GA Negative Load Test with and without Clips
 - c) FET T229-11 IW-10A 20 GA Negative Load Test with Clips
 - d) FET T313-11 IW-10A 18 GA Negative Load Test with Clips
 - e) FET T315-11 IW-10A 22 GA Negative Load Test with Clips
- 3) Reports and Calculations
 - a) Report No. ACE-PER-1151, Appendix 2 & 3, Panel Span Analysis for Centria IW Series Concealed Fastener Metal Wall Panels to AISI S100-07/S2-10 and ASTM E72, Signed and Sealed by Robert J. Amoruso, P.E.
 - b) Report No. ACE-PER-1151, Product Evaluation for Centria IW Series Concealed Fastener Metal Wall Panels to the 8th Edition (2023) FBC & FRC, Signed & Sealed by Robert J. Amoruso, P.E.
- 4) 8th Edition (2023) Florida Building Code (FBC), Building Volume
 - i) 1403.3 Exterior Walls – Wind Resistance
 - ii) 1404.5 Exterior Walls – Metal
 - iii) Table 1405.2 Minimum Thickness of Weather Coverings
 - (1) Steel must meet or exceed 0.0149" in thickness.

- iv) 1405.17 Exterior Walls - Fasteners
 - v) Table 1604.3 Deflection Limits
 - (1) Exterior Walls/Flexible Finishes, deflection for wind loading limited to $L/120$.
 - vi) 1609 Wind Loads
 - vii) 1707 Alternative Test Procedure
 - viii) 2210.1 Cold-Formed Steel, General
- 5) Standards
- a) AISI S100-07/S2-10, North American Specification for the Design of Cold-formed Steel Structural Members
 - b) Metal Construction Association, Guidelines for Wall Panel, Preformed Metal Wall Specification Guidelines, 3rd Edition.
 - i) The test method shall be either ASTM E72 or ASTM E330.
 - ii) The minimum safety factor against failure shall be:
 - (1) 2.5 if excessive slipping or failure occurs at the connections.
 - (2) Otherwise, it shall be 2.

Certificate of Independence per Product
Approval Rule 61G20-3.009

Robert J. Amoruso, P.E., does not have, nor will he acquire, any financial interest in the company manufacturing or distributing product(s) covered by this Product Evaluation Report.

Robert J. Amoruso, P.E., does not have, nor will he 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.



Digitally signed
by Robert J
Amoruso
Date:
2025.08.18
16:40:39 -04'00'

Evaluated by:
Robert J. Amoruso, P.E.
FL P.E. License No. 49752