



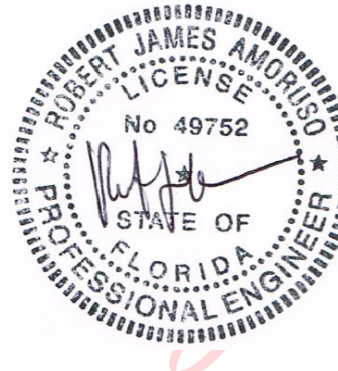
Equivalency Evaluation Report

Date:	June 26, 2023
Report #:	2437-EER
Report Revision No.:	3
Project #:	423-0107
Product Mfg.:	CENTRIA 1550 Coraopolis Heights Road, Suite 500 Moon Township, PA 15108
Product Description:	Formawall Dimension Series/Formawall Dimension Series Graphix 3"T Panels, 30" Module Formawall Dimension Series 2" Panels, 36" Module Formawall Dimension Series/Formawall Dimension Series Graphix 2-1/2" Panels, 36" Module Formawall Dimension Series/Formawall Dimension Series Graphix 3"T Panels, 36" Module
Product Category:	Structural Components
Product Sub-Category:	Structural Wall
Compliance Method:	Product Approval Rule 61G20-3.015(4)(d) – Equivalency of Standards
Prepared By:	Robert J. Amoruso, P.E. Florida P.E. No. 49752 PTC Product Design Group, LLC, PO Box 520775, Longwood, FL 32752-0775 Florida C of A No. 25935

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.



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



SCOPE

Evaluate Centria's Formawall Dimension Series and Formawall Graphix Dimension Series 2", 2-1/2" and 3" T Panels for conformance to the 8th Edition (2023) Florida Building Code including the High Velocity Hurricane Zone (HVHZ).

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.

EQUIVALENCY EVALUATION

Performance Testing Equivalency Evaluation per Product Approval Rule 61G20-3.015(4)(d):

The table below equates performance testing standard revision levels and compares them to the revision level in the Current Edition of the FBC – Test Protocols.

Standard Used in Testing	Standard as Listed in Current Edition FBC/FRC
TAS 201-1994	TAS 201-1994
TAS 202-1994	TAS 202-1994
TAS 203-1994	TAS 203-1994
ASTM E8-04	Not in FBC or FRC
ASTM E84-16	ASTM E84-18b
ASTM D1929-16	ASTM D1929-16

Based upon my review of the test reports, test methods and results as well as the standards used in testing, it was determined this product meets the testing requirements of the Current Edition of the Florida Building Code.

Design Standards Equivalency Evaluation per Product Approval Rule 61G20-3.015(4)(d):

Fastener Design Safety factors used in engineering evaluation (Reference 3.i and 3.ii) are as prescribed in AISI S100-07/S2-10. Fastener allowable is based on a safety factor of 3. Deflection limitation based on L/240 which exceeds L/120 required by the building code.

The 8th Edition (2023) Florida Building Code (FBC) requires AISI S100-16(2020) w/S2-20 and/or AISI S100-16, S1-18 to be used for cold-formed steel design.

The engineering evaluations in Reference 3 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.

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



REFERENCES & SUPPORTING DOCUMENTS

- 1) Manufacturer's Installation Instructions:
 - a) INSTALL_FWDS_FWGS_36in Installation Details, Rev. 1
 - i) For 36" Maximum Panel Module Formawall Dimension Series 2" and Formawall Dimension Series /Formawall Dimension Graphix Series 2-1/2" and 3"T Panels, Signed and Sealed by Robert J. Amoruso, P.E., dated 6/20/18.
 - b) INSTALL_FWDS_FWGS_30in Installation Details, Rev. 1
 - i) For 30" Maximum Panel Module Formawall Dimension Series/Formawall Dimension Graphix Series 3"T Panels, Signed and Sealed by Robert J. Amoruso, P.E., dated 6/20/18.
- 2) Testing
 - a) TAS 201, TAS 202 and TAS 203
 - i) Farabaugh Engineering and Testing Inc. Test Report No. T169-16, Dated 3/31/16, Signed and Sealed by Daniel G. Farabaugh, P.E. for Formawall Dimension Series 2" and Formawall Dimension Series/Formawall Dimension Graphix Series 3"T Panels. 36" Maximum Panel Module used in testing.
 - ii) Farabaugh Engineering and Testing Inc. Test Report No. T182-16, Dated 4/20/16, Signed and Sealed by Daniel G. Farabaugh, P.E. for Formawall Dimension Series/Formawall Graphix Series 3"T Panels. 30" Maximum Panel Module used in testing.
 - b) ASTM E8-04 testing
 - i) Farabaugh Engineering and Testing Inc. Test Report No. T169-16, Dated 3/31/16, Signed and Sealed by Daniel G. Farabaugh, P.E. for Formawall Dimension Series/Formawall Graphix Series 2" and 3"T Panels (22 GA (0.0269") G90 Galvanized Steel)
 - ii) Farabaugh Engineering and Testing Inc. Test Report No. T182-16, Dated 4/20/16, Signed and Sealed by Daniel G. Farabaugh, P.E. for Formawall Dimension Series/Formawall Graphix Series 3"T Panels (22 GA (0.0269") G90 Galvanized Steel)
 - c) Farabaugh Engineering and Testing Inc. Test Report No. T177-17, Dated 5/29/17, Uniform Load Test of CENTRIA FWDS & FWDS60 w/ Rubitherm (PIR) , Signed and Sealed by Daniel G. Farabaugh, P.E.
 - i) Used as basis for evaluation in Reference 3.ii.
 - d) ASTM E84-16 Flame Spread and Smoke Developed Index testing of foam core material in various thicknesses to envelope Formawall product.
 - i) Intertek Report No. F9712.08-121-24, dated 8/4/16, 2" foam
 - ii) Intertek Report No. F9712.09-121-24, dated 8/4/16, 2" foam
 - iii) Intertek Report No. F9712.01-121-24, dated 8/3/16, 3" foam
 - iv) Intertek Report No. F9712.02-121-24, dated 8/3/16, 3" foam
 - v) Intertek Report No. F9712.03-121-24, dated 8/3/16, 3" foam
 - e) ASTM D1929-16 Self-Ignition and Flash- Ignition Temperature testing of foam core material
 - i) Intertek Report No. F9652.03-106-31, dated 8/23/17
- 3) Reports and Calculations
 - i) PTC Calculation No. 2436, Anchorage Analysis - Formawall Dimension Series/Formawall Graphix Series 2" and 3" T Panels, Signed and Sealed by Robert J. Amoruso, P.E.



ii) PTC/Centria Product Evaluation No. 2437-1, Rev. 0, Structural Comparison between Baytherm PIR & Rubitherm PIR, Formawall Dimension Series & Graphix Series

4) Standards

- a) AISI S100-16(2020) w/S2-20 and/or AISI S100-16, S1-18, North American Specification for the Design of Cold-formed Steel Structural Members