

Evaluation Report "PBR Wall Panel" Metal Wall Assembly

Manufacturer:
R & N Manufacturing, LLC.

3500 Neville Rd., Suite A
Neville Island, PA 15225
(412) 778-4103

for

Florida Product Approval

FL 19606.1 R4

Florida Building Code 8th Edition (2023)

Method: 1 - D

Category: Structural Components

Sub - Category: Structural Wall

Product: *PBR Wall Panel 36 × 26 Ga.*

Material: Steel

This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

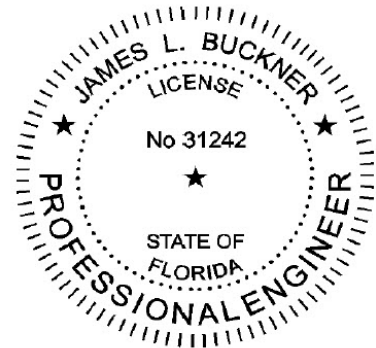
Prepared by:

James L. Buckner, P.E., SECB
Florida Professional Engineer # 31242
Florida Evaluation ANE ID: 1916
Report No. 25-743-PBRWall-S6G-ER
(Revises Report No. 23-602.01-PBRWall-36W-ER7, FL19606.1 R3)
Date: 7/16/2025

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Evaluation Report

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James L. Buckner, P.E.

FL31242



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CBUCK, Inc. dba CBUCK Engineering

Phone: (561) 491-9927 · Email: cbuck@cbuckinc.net · Website: www.cbuckinc.net

Business: 1374 Community Dr., Jupiter, FL 33458

Manufacturer:	R & N Manufacturing, LLC.
Product Name:	"PBR Wall Panel"
Product Category:	Structural Components
Product Sub-Category	Structural Wall
Compliance Method:	State Product Approval Rule 61G20-3.005 (1) (d)
Product/System Description:	"PBR Wall Panel, 36" Wide, 26 Ga. Thick Steel lapped wall panel fastened into Steel Supports.
Product Assembly as Evaluated:	Refer to Page 4 of this report for product assembly components/materials & standards: 1. Wall Panel 2. Fasteners
Support:	Type: Steel Supports (Design of steel support and its attachment to support framing is outside the scope of this evaluation.) Description: Material: Steel Thickness: 16 Gauge minimum Yield Strength: 50 ksi minimum Girt/Stud Size: 2" min. flange bearing
Performance:	Wind Resistance: • Negative Load: - 65.93 PSF • Positive Load: + 52.0 PSF (Refer to "Table A" attachment details herein)

- Performance Standards:** The product described herein has demonstrated compliance with:
- **ASTM E330-14** – *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*
- Standards Equivalency:** The ASTM E330-02 standard version used to test the evaluated product assembly is equivalent to ASTM E330-14 standard version adopted by the Florida Building Code 8th Edition (2023).
- Code Compliance:** The product(s) described herein have demonstrated compliance with the performance standard listed above as referenced in the:
Florida Building Code 8th Edition (2023)
- Evaluation Report Scope:** This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.
- Limitations and Conditions of Use:**
- Diaphragm and axial load capacity is outside the scope of this evaluation.
 - Scope of “Limitations and Conditions of Use” for this evaluation:
This evaluation report for “Optional Statewide Approval” contains technical documentation, specifications and installation method(s) which include “Limitations and Conditions of Use” throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under “Optional Statewide Approval”.
 - Option for application outside “Limitations and Conditions of Use”
Rule 61G20-3.005(1)(e) allows engineering analysis for “project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code”. Any modification of the 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.
 - Design of support system is outside the scope of this report. Support shall be designed by others and shall comply with the FBC Chapters 22 for steel and Chapter 16 for structural loading.
 - Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
 - This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)
- Quality Assurance:** The manufacturer has demonstrated compliance of wall panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Farabaugh Engineering and Testing, Inc. (FBC

Organization ID# QUA 7733).

**Components/Materials
(by Manufacturer):**

Wall Panel:

PBR Wall Panel
Material: Steel
Thickness: 26 gauge (min.)
Panel Width: 36" (max.) Coverage
Rib Height: 1-1/4"
Yield Strength: 57 ksi min.
Steel Grade: 57
Corrosion Resistance: In compliance with FBC Section 1405.2

Fastener:

FASTENER 1:

Panel to Support
Type: Hex-Head, Self-Drilling Sheet Metal Screw with WSW
Sizes: 12 - 14 x 1-1/2"
Corrosion Resistance: Per FBC Section 1405.17
Standard: Approved per FBC Section 1405.17

FASTENER 2:

Panel to Panel, Stitch Lap
Type: Hex-Head, Self-Drilling Sheet Metal Screw with WSW
Size : #12 – 14 x 1"
Corrosion Resistance: Per FBC Section 1405.17
Standard: Approved per FBC Section 1405.17

Installation:

Installation Method:

(Refer to **"TABLE A"** below and drawings on Pages 6-7 of this report.)

- Girt/Support Spacing: **Per Table A Below**
- Fastener spacing: 6" o.c. Nominal
(located on both sides of major corrugation)
- Side Lap Spacing: 15" o.c.
- Minimum fastener penetration thru support, 3/4".
(through flange of steel supports)

TABLE "A"		
ALLOWABLE LOADS		
	METHOD 1:	METHOD 2:
Design Pressure:	- 65.93 PSF + 52.0 PSF	- 31.2 PSF + 34.6 PSF
Max. Support Spacing:	60" (5'- 0)	90" (7' – 6")
Fastener Spacing:	6" Nominal	6" Nominal
Side Lap Spacing:	15"	15"
Span Condition:	2 or more	2
Notes: • Positive Pressure Inward/Negative Pressure Outward • Allowable design pressure(s) for allowable stress design (ASD).		

Install the PBR Wall Panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Referenced Data:

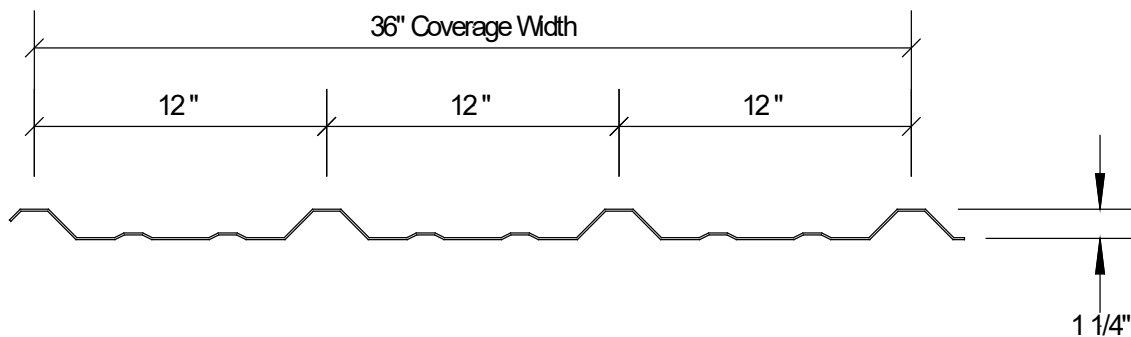
1. ASTM E330-02 – Positive Pressure
UL1897-04 (with 2008 Revisions) – Negative Pressure
By Farabaugh Engineering & Testing, Inc. (FBC Organization #TST ID: 1654)
Report #: T283-08, Dated: 10/28/08
2. ASTM E330/E330M-14
By Farabaugh Engineering & Testing, Inc. (FBC Organization #TST ID: 1654)
Report #: T156-25, Dated: 3/5/25
3. Equivalency of Test Standard Certification
By James L. Buckner, P.E. @ CBUCK Engineering
(FBC Organization # ANE 1916)
4. Quality Assurance
UL, LLC (FBC Organization #: QUA 9625)
5. Certification of Independence
By James L. Buckner, P.E. @ CBUCK Engineering (FBC Organization #ANE 1916)

Installation Method

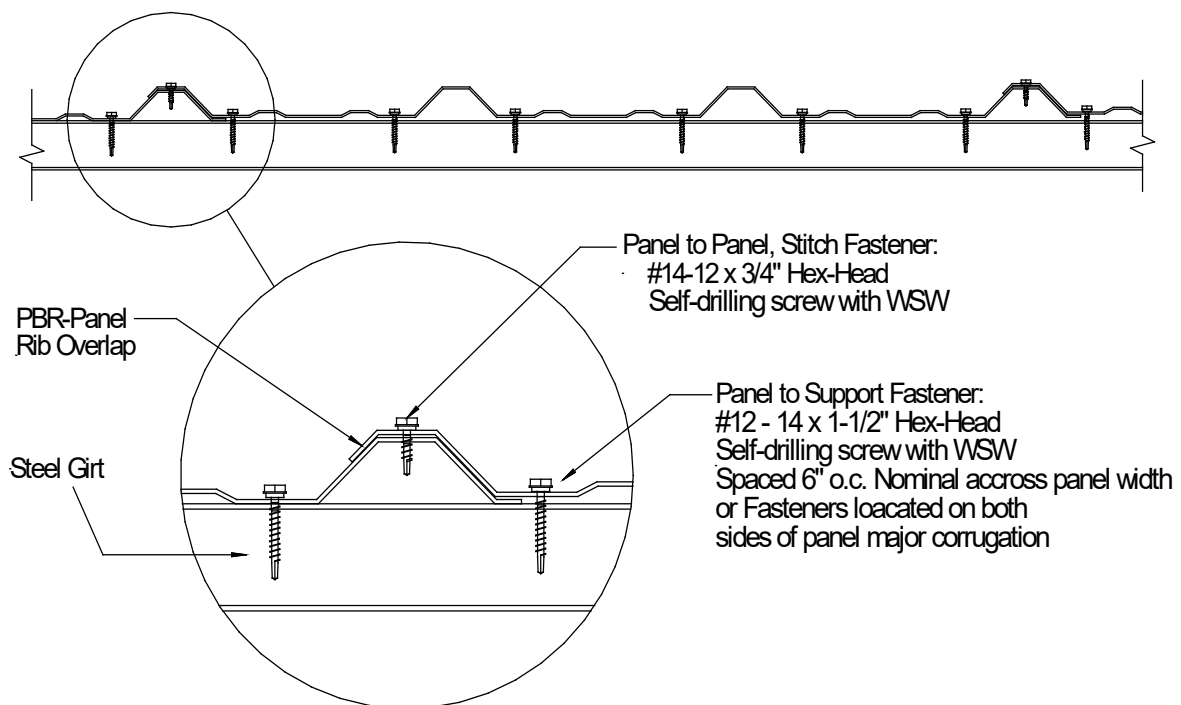
R & N Manufacturing, LLC.

PBR Wall Panel 36" x 26 Ga. Steel attached to Steel Supports

Profile Drawings



Typical PBR Wall Panel
Profile View

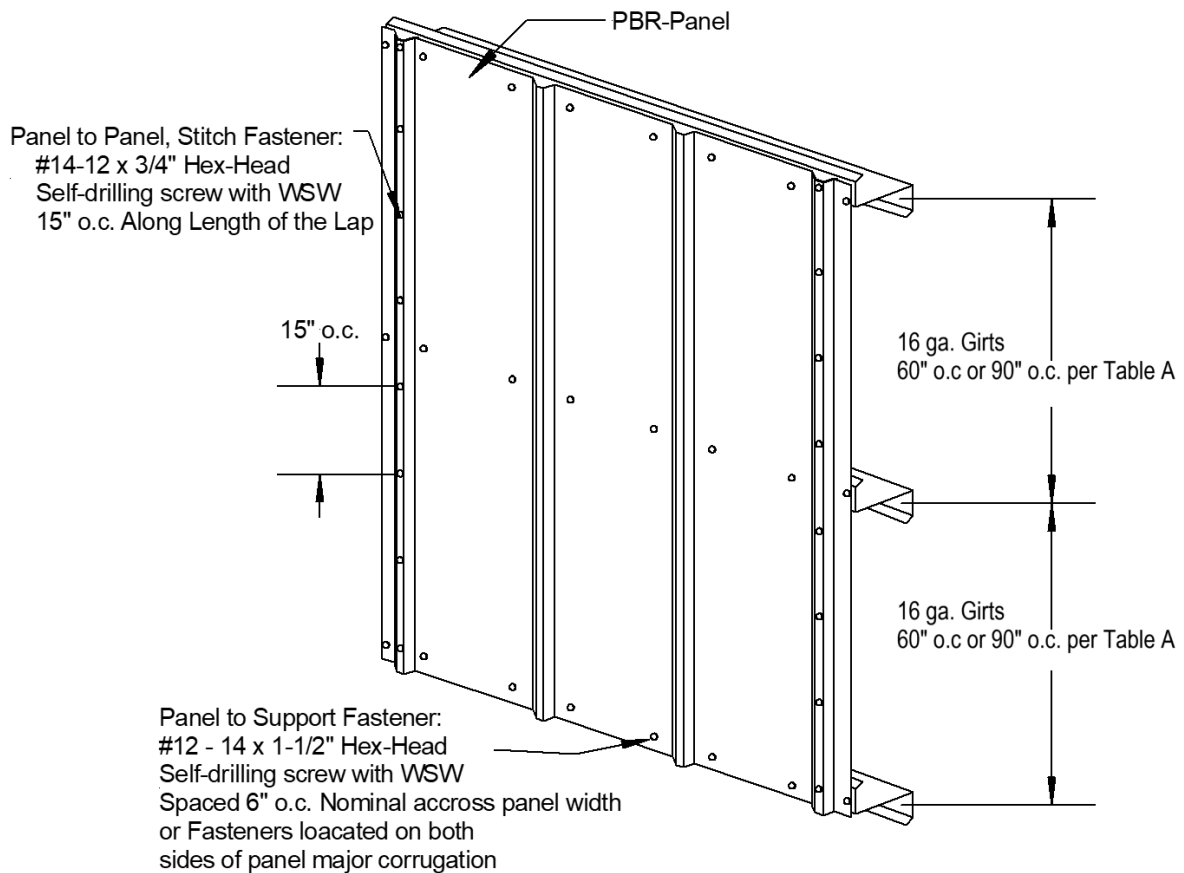


Assembly Profile View
Typical Fastening Pattern Across Panel Width

Installation Method

R & N Manufacturing, LLC.

PBR Wall Panel 36" x 26 Ga. Steel attached to Steel Supports



**Typical Elevation View
Outside of Wall Assembly**

TABLE "A" ALLOWABLE LOADS		
	METHOD 1:	METHOD 2:
Design Pressure:	- 65.93 PSF + 52.0 PSF	- 31.2 PSF + 34.6 PSF
Max. Support Spacing:	60" (5' - 0)	90" (7' - 6")
Fastener Spacing:	6" Nominal	6" Nominal
Side Lap Spacing:	15"	15"
Span Condition:	2 or more	2