



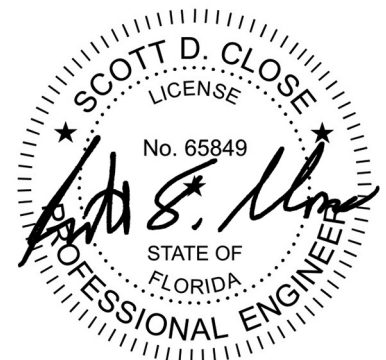
Product Evaluation Report for
24 Ga. PBR Wall Panel over open framing
Florida Product Approval # 7548.2
Florida Building Code 2023
Per Rule 61G20-3
Method: 2-B
Category: Structural Components
Subcategory: Structural Wall
Compliance Method: 61G20-3.005(2)(b)
HVHZ

Product Manufacturer:
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1/2/2024, 8:34:16 AM

Engineer Evaluator:
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This document has been
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Compliance Statement:	The product as described in this report has demonstrated compliance with the FBC 2023 including High Velocity Hurricane Zone (HVHZ), Sections 1709.2.
Product Description:	PBR Wall Panel, Minimum 24 Ga. Steel, 36" wide, through fastened structural wall panel. Structural Application.
Panel Materials/Standards:	Material: Minimum 24 Ga. Steel, panel material shall comply with FBC 2023 Section 1405.2. Yield Strength: Min. 50.0 ksi
Panel Dimensions:	Thickness: 0.0260" min. Width: 36" coverage Rib Height: 1-1/4" major rib at 12" O.C.
Panel Fastener:	#12-14 x 1-1/4" HWH SD with sealing washer at 12"-12"-12" fastener pattern. Panel side laps fastened together with 1/4"-14 x 7/8" HWH SD with sealing washer at 18" O.C. Corrosion Resistance: Per FBC 2023.
Substrate Description:	Min. 16 Ga. Steel Framing. Framing must be designed in accordance with FBC 2023.
Design Pressures:	*see wall panel uplift load table
Code Compliance:	The product described herein has demonstrated compliance with the FBC 2023, Section 1709.2.
Evaluation Report Scope:	The product evaluation is limited to compliance with the structural wind load requirements of the FBC 2023, as relates to Rule 61G20-3.
Performance Standards:	The product described herein has demonstrated compliance with: 1. TAS 125-03, Test method for structural performance of sheet metal and siding systems by uniform static air pressure difference. 2. TAS 201-94, Impact Testing. 3. TAS 202-94, Uniform Static Air Testing. 4. TAS 203-94, Cyclic Testing.
Reference Data:	1. TAS 125-03, Test report 34-0229T-11A-C dated 10-3-11 by Force Engineering & Testing, Inc. 2. TAS 201-94, Impact Testing: Test report 34-0229T-11D-G dated 10-5-11 by Force Engineering & Testing, Inc. 3. TAS 202-94, Uniform Static Air Testing: Test report 34-0229T-11D-G by Force Engineering & Testing, Inc. 4. TAS 203-94, Cyclic Testing: Test report 34-0229T-11D-G by Force Engineering & Testing, Inc.
Quality Assurance Entity:	The manufacturer has established compliance of roof 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.

Installation:	Install per manufacturer's recommended details.
Insulation:	Manufacturer's approved product (Optional).
Roof Panel Fire Classification:	Fire classification is not part of this acceptance.
Shear Diaphragm:	Shear Diaphragm values are outside the scope of this report.
Design Procedure:	Design wind loads shall be determined for each project in accordance with FBC 2023 Section 1609 or ASCE 7-22 using allowable stress design. These design wind loads for wall cladding are compared to the allowable pressures shown below. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to his structure and analyze the panel fasteners for pullout and pullover. Support framing must be in compliance with FBC 2023 Chapter 22 for steel and Chapter 16 for structural loading.

Panel Load Span Table

Panel Type= **Trident Building Systems 24ga PBR Wall Panel**

SECTION PROPERTIES					TOP IN COMPRESSION				BOTTOM IN COMPRESSION		
Gauge	F _y (ksi)	Weight (psf)	V _a kip/ft	P _{a_end} lbs/ft	P _{a_int} lbs/ft	I _x in ⁴ /ft	S _e in ³ /ft	M _a kip-in/ft	I _x in ⁴ /ft	S _e in ³ /ft	M _a kip-in/ft
24	50.0	1.14	0.9568	206.57	400.46	0.0551	0.0567	1.6980	0.0420	0.0570	1.7070

1. Section properties are calculated in accordance with the 2012 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

2. V_a is the allowable shear.

3. P_a is the allowable load for web crippling on end & interior supports.

4. I_x is for deflection determination.

5. S_e is for bending.

6. M_a is the allowable bending moment.

7. All values are for one foot of panel width.

Allowable Uniform Loads (psf)

		Span in Feet								
		1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50
Single	Positive Wind	503	283	181	126	92	71	56	45	37
	Negative Wind	506	285	182	126	93	71	56	46	38
4 Span										
	Positive Wind	588	331	212	147	108	83	65	53	44
	Negative Wind	591	332	213	148	109	83	66	53	44

Notes:

1. Allowable uniform loads are based upon equal span lengths.

2. Positive Wind is wind pressure and is NOT increased by 33 1/3 %.

3. Negative Wind is wind suction or uplift and is NOT increased by 33 1/3 %.

4. The weight of the panel has NOT been deducted from the allowable loads.

5. Positive Wind and Negative Wind values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.

6. Positive Wind values are limited by web crippling using a bearing length of 2".

7. Web crippling values are determined using a ratio of the uniform load actually supported by the top flanges of the section.