

Product Report

Manufacturer: Marlyn Metals, Inc.

6808 Harney Road

Tampa, FL 33610

(813) 621-1375

Florida Product Approval FL 8384

Sub-Category: Roof Deck

Method 1-D

Compliant with Current Florida Building Code 2023 8th ed.

Compliant with Florida Product Approval Rule # 61G20-3

Compliant Quality Assurance Program: Keystone Certifications

FL 8384.1 Product: PBR 26GA Panel over 16GA Steel Purlins

Structural Application

Non-HVHZ

36" wide

80ksi

1-1/4" tall rib @ 12" o.c.

Substrate: 16GA steel framing designed in compliance w/ FBC . Corrosion Resistant Fastener #12-14 HWH SD w/ sealing washer or approved equal at 12" - 12" - 12" fastener pattern for interior supports. Panel side laps fastened w/ 1/4-14 x 7/8" HWH SD w/sealing washer Continuous tape seal for slopes less than 3:12. Install per manufacturer's instructions and in compliance w/current FBC 2023 8th ed.

Design Pressure	Fastening Pattern	Fastener Spacing
-47.5 PSF	12" - 12" - 12"	@ 5'-0" o.c.
+60.0 PSF	12" - 12" - 12"	@ 5'-0" o.c.

FL 8384.2 Product: PBR 24GA Panel over 16GA Steel

Structural application

HVHZ

36" WIDE 80ksi

1-1/4" tall rib @ 12" o.c.

Substrate: 16GA steel framing designed in compliance w/ FBC 2023 8th ed.. Corrosion Resistant Fastener #12-14 HWH SD w/ sealing washer or approved equal at 12" - 12" - 12" fastener pattern for interior supports. Panel side laps fastened w/ 1/4-14 x 7/8" HWH SD w/sealing washer @ 18" o.c. Continuous tape seal for slopes less than 3:12. Install per manufacturer's instructions and in compliance w/current FBC 2023 8th ed.

Design Pressure	Fastening Pattern	Fastener Spacing
- 60.0PSF	12" - 12" - 12"	@ 5'-0" o.c.
- 150.0 PSF	12" - 12" - 12"	@ 2'-0" o.c.

FL 8384.3 Product: R or PBR 26GA Panel over 16GA Steel Purlins

Structural Application

NON-HVHZ

36" wide

80ksi

1 1/4" tall rib @ 12" o.c.

Substrate: 16GA steel framing designed in compliance w/ FBC 2023 8th ed.. Corrosion Resistant Fastener #12-14 HWH SD w/ sealing washer or approved equal at 7" - 5" - 7" - 5" - 7" - 5" fastener pattern for interior supports. Panel side laps fastened w/ 1/4-14 x 7/8" HWH SD w/sealing washer @ 20" o.c. Continuous tape seal for slopes less than 3:12. Install per manufacturer's instructions and in compliance w/current FBC 2023 8th ed.

Design Pressure	Fastening Pattern	Fastener Spacing
-52.5 PSF	7" - 5" - 7" - 5" - 7" - 5"	@ 5'-0" o.c.

FL 8384.4 Product: PBR 26GA Panel over 16GA Steel Purlins

Structural application

NON-HVHZ

36" wide

80ksi

1 1/4" tall rib @ 12" o.c.

Substrate: 16GA steel framing designed in compliance w/ FBC 2023 8th ed.. Corrosion Resistant Fastener #12-14 HWH SD w/ sealing washer or approved equal at 12" - 12" - 12" fastener pattern for interior supports. Panel side laps fastened w/ 1/4-14 x 7/8" HWH SD w/sealing washer @ 20" o.c. Continuous tape seal for slopes less than 3:12. Install per manufacturer's instructions and in compliance w/current FBC 2023 8th ed.

Design Pressure	Fastening Pattern	Fastener Spacing
-52.5 PSF	12" - 12" - 12"	@ 5'-0" o.c.

Force Engineering & Testing (TST-5328)	205-0061T-07 M, N	ASTM E 1592-01 ¹
Force Engineering & Testing (TST-5328)	205-0315T-11 A	FM 4471-10 ²
Force Engineering & Testing (TST-5328)	205-0241T-07 A-D	TAS 125-03 / ASTM E 1592-01 ¹
Farabaugh Engineering & Testing (TST-1654)	T202-07	TAS 201-94
	T203-07	TAS 114 (FM 4471 appendix G-1995)
PRI Construction Materials Technologies (TST-5878)	VLS-004-02-01	TAS 110-00 (ASTM G 155)
	VLS-005-02-01	TAS 110-00 (ASTM B 117)
Underwriters Laboratory	Construction #112	UL 580-94 ³
Force Engineering & Testing (TST-5328)	205-0315T-11 A	FM 4471-10 ²
Underwriters Laboratory	Construction #161	UL 580-94 ³
Force Engineering & Testing (TST-5328)	205-0315T-11 A	FM 4471-10 ²

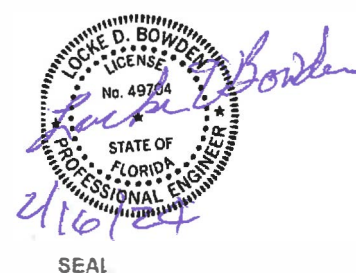
1. ASTM E 1592-01 test standard is equivalent to the ASTM E 1592-17 test standard

2. FM 4471-10 test standard is equivalent to the FM 4471-92 test standard.

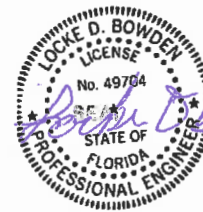
3. UL 580-94 test standard is equivalent to the UL 580 06 test standard

**DESIGN PRESSURE INCLUDES A SAFETY MARGIN OF 2:1

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SEAL



FL 8384 Panel Details

8384.1-PBR- Non HVHZ over 16GA steel purlins thru fastened with:

Corrosion resistant, #12-14 HWH SD with sealing washer

Or approved equal at 12"-12"-12" fastener pattern 5'-0" o.c. Panel side laps fastened with ¼-14 x 7/8" HWH SD with sealing washer at 20" o.c.

Continuous tape seal for slopes less than 3:12

8384.3-PBR- Non HVHZ over 16GA steel purlins thru fastened with:

Corrosion resistant, #12-14 HWH SD with sealing washer

Or approved equal at 7"-5"-7"-5"-7" fastener pattern 5'-0" o.c. Panel side laps fastened with ¼-14 x 7/8" HWH SD with sealing washer at 20" o.c.

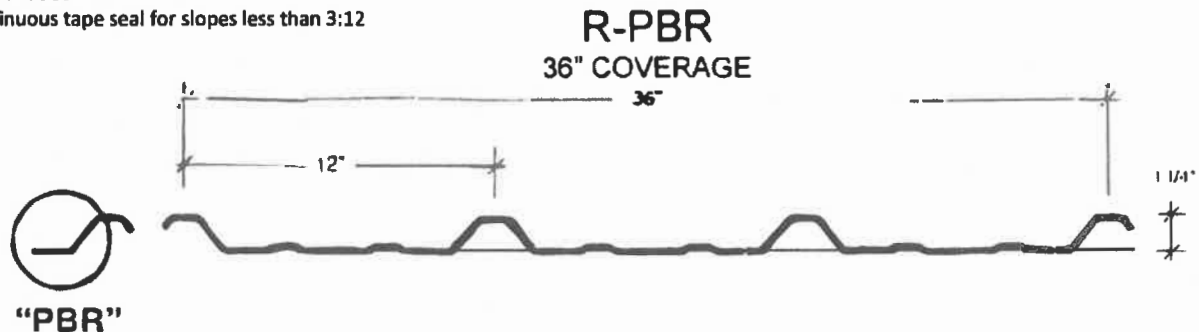
Continuous tape seal for slopes less than 3:12

8384.4-PBR Non HVHZ over 16GA steel purlins thru fastened with:

Corrosion resistant, #12-14 HWH SD with sealing washer

Or approved equal at 12"-12"-12" fastener pattern 5'-0" o.c. Panel side laps fastened with ¼-14 x 7/8" HWH SD with sealing washer at 20" o.c.

Continuous tape seal for slopes less than 3:12



PBR HVHZ 24GA over 16GA steel purlins fastened with:

Corrosion resistant, #12-14 HWH SD with sealing washer or approved equal at 12"-12"-12", Type 1 fastener pattern for interior supports

Panel end and side laps fastened with Type 2 fastener pattern-¼-14 x 7/8" Lap Tek with sealing washer at 18" o.c.-fastening pattern 7"-5"-7"-5"-7"-5" exterior

Laps: Double Bead continuous tape sealant w/bead of tube sealant per manufacturer instruction and in compliance with FBC. For HVHZ-use RAS 133. Continuous tape seal for slopes less than 3:12 slope

Type 1 Fastening Pattern Zone 1



Type 2 Fastening Patter Zone 2 and 3 End Lap and Panel Laps

