

Product Report

Manufacturer: Metal Building Supplies, LLC

800 E. Donegan Ave.
Kissimmee, FL 34744
(407) 935-9714

FL # 8954

Category: Structural Components - Roof Deck

Compliant with CURRENT Florida Building Code

Compliant Quality Assurance Program: Keystone Certifications

FL # 8954.1 Product: PBR Roof Panel 24GA Roof Panel over open framing

HVHZ

36 wide 80 ksi 1 1/4" tall rib @ 12" o.c. thru fastened

Substrate: Min. 16GA Steel Framing, must be designed in compliance with FBC

****Design Pressures include margin of safety 2:1**

Corrosion Resistant Compliant Fastener #12-14 x 1 1/4" HWH SD w/ sealing washer or approved equal @ 12"-12"-12" fastener pattern.

Panel side laps fastened together w/ Corrosion Resistant Fastener 1/4"-14 x 1/8" HWH SD w/ sealing washer @ 18" o.c.

Valspar Fluoropon paint coating (optional). Installation: Per manufacturer's recommended details and RAS 133.

Fire Barrier: 1/4" Dens Deck 1/2:12 Min. slope shall comply w/ CURRENT FBC. For slopes less than 3:12, lap sealant must be used in panel side

laps.
****Design Uplift Pressure: - 60.0 PSF**

Fastening Pattern: 12"-12"-12" @ 5'0" O.C.

- 150.0 PSF

12"-12"-12" @ 2'0" O.C.

FL # 8954.2 Product: PBR Roof Panel 26GA Roof Panel over open framing

NON HVHZ

36" wide 80 ksi 1 1/4" tall rib @ 12" o.c. thru fastened

****Design Pressures include margin of safety 2:1**

Substrate: Min. 16 GA Steel Framing, must be designed in compliance with CURRENT FBC

Corrosion Resistant Fastener #12-14 x 1 1/4" HWH SD w/ sealing washer or approved equal @ 12"-12"-12" fastener pattern.

Panel side laps fastened together w/ 1/4"-14 x 7/8" HWH SD w/ sealing washer @ 20" o.c.

Installation: Per manufacturer's recommended details. Insulation: Install per manufacturer's approved product (optional).

Min. slope shall comply w/CURRENT FBC. For slopes less than 3:12, lap sealant must be used in panel side laps.

****Design Uplift Pressure: - 47.5 PSF**
+ 60.0 PSF

Fastening Pattern: 12"-12"-12" @ 5'0" O.C.
12"-12"-12" @ 5'0" O.C.

Panel Allowable Uplift Pressures Chart 1*

The Following are Panel Allowable for Uplift Pressures Based on ASTM E 1592 Testing:

Maximum Bending Moment of the panel at Support: 119.6 lbs-ft

Maximum Bending Moment of the panel at Mid Span: 86.2 lbs-ft

Maximum Panel Interior Support Reaction: 207.2 lbs

Maximum Panel Exterior Support Reaction: 87.7 lbs

Maximum Allowable Deflection of Roof Panel = L/240

Panel EI Value: 1 253 772 lbs-in²**Reference Data:**

Force Engineering & Testing (TST-5328)

#84-0320T-06 A-D

TAS 125-03

ASTM E 1592-01 (2005¹)

Farabaugh Engineering & Testing (TST-1654)

#T202-07

TAS 201-94

Farabaugh Engineering & Testing (TST-1654)

#T203-07

TAS 114 (FM 4471 appendix G-1995)

PRI Construction Material Technologies (TST-5878)

#VLS-004-02-01

TAS 110-00

#VLS-005-02-01

TAS 110-00 (ASTM G 155 and ASTM B 117)

Force Engineering & Testing (TST-5328)

#84-0248T-08

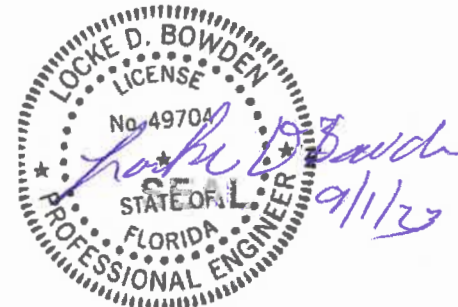
ASTM E 1592-01 (2005¹)

Force Engineering & Testing (TST-5328)

#84-0237T-09 A

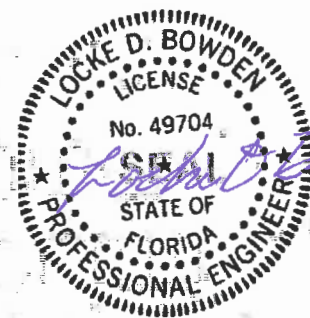
FM 4471-95 (1992²)***Chart 1 and install details- Provided by Force Engineering & Testing (TST-5328) Terrence E. Wolfe, P.E. #44923****1. The ASTM E 1592-01 test standards are equivalent to ASTM E 1592-2005, and 2012****2. The FM 4471-95 test standards are equivalent to FM 4471-1992 test standard.**

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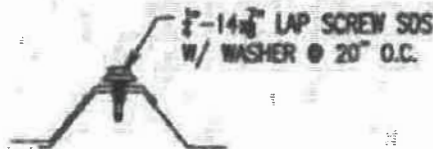
24/26 GA PBR Roof Panel over open framing

FASTENER PATTERN OVER METAL PURLINS



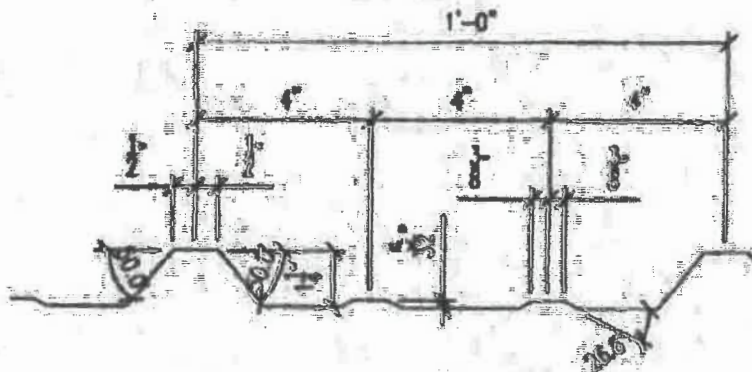
NOTES:

- 1) MATERIAL is min. 26 GA (MIN. 0.0185" COATED THICKNESS, $F_y=80$ KSI).
- 2) ALL RADII ARE 0.125".

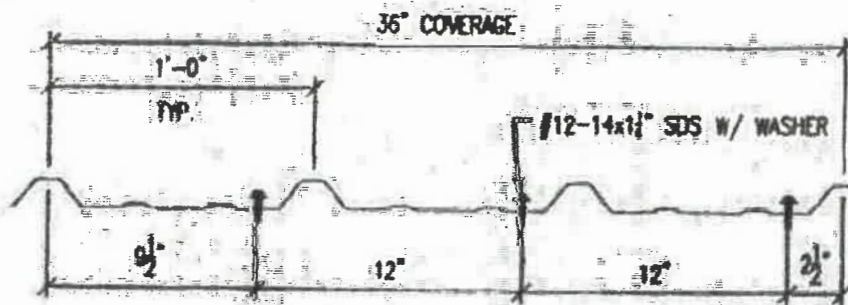


Fastening Pattern: 12"-12"-12" @ 5'0" O.C.
12"-12"-12" @ 2'0" O.C.

LAP DETAIL
SCALE: 3":1"



RIB DETAIL
SCALE: 3":1"



*Drawing provided by Force Engineering and Testing

Limitations:

1. Under-layment to be compliance with current Florida Building Code (FBC)
2. Minimum slope to be compliant with Florida Building Code, and per with Manufacturer's installation reference.
3. Products are compliant for State of Florida product approval per Rule 61G20-3. Compliance Method: 1-D
4. Engineering analysis for "project specific approval by local authorities w/jurisdiction is allowed by other registered engineers.
5. Fire classification is not part of this acceptance. Shear diaphragm values are outside this report.
6. Support framing in compliance w/CURRENT FBC Chapter 22 Steel, Chapter 23 Wood and Chapter 16 Structural Loading.
7. This report does not imply warranty, installation, recommended product use outside of this report.