

**EVALUATION REPORT OF  
METAL SALES MANUFACTURING CORPORATION  
'26 GA. PBR-PANEL OR R-PANEL'**

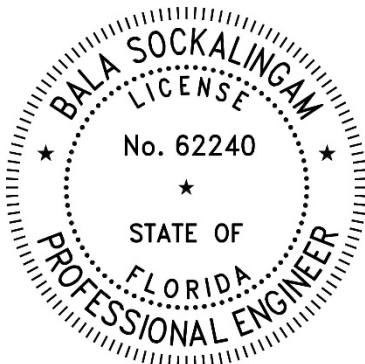
**FLORIDA BUILDING CODE 8TH EDITION (2023)  
FLORIDA PRODUCT APPROVAL  
FL 14645.11-R5  
ROOFING  
METAL ROOFING**

**Prepared For:  
Metal Sales Manufacturing Corporation  
7800 Highway 60  
Sellersburg, IN 47172  
Telephone: (502) 855-4300  
Fax: (502) 855-4200**

**Prepared By:  
Bala Sockalingam, Ph.D., P.E.  
Florida Professional Engineer #62240  
1216 N Lansing Ave., Suite C  
Tulsa, OK 74106  
Telephone: (918) 492-5992**

**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)  
Load Span Table (1 Page)**

**Report No. C2673-11  
Date: 8.3.2023**



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

Manufacturer: Metal Sales Manufacturing Corporation

Product Name: PBR-Panel or R-Panel

Panel Description: 36" wide coverage with (4) 1-1/4" high ribs

Materials: Min. 26 ga., 80 ksi steel or min. 24 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2023 Section 1507.4.3.

Deck Description: Min. 15/32" thick plywood or min. 3/4" thick wood plank (min SG of 0.42) for new and existing constructions. Designed by others and installed as per FBC 2023.

Deck Attachment: 8d x 2.5" long ring shank nails or #8 x 2" long wood screws at 6" o.c. (Minimum) in the plywood field and edges. Designed as per FBC 2023.

Underlayment: Minimum underlayment as per FBC 2023 Section 1507.4.5.1

Slope: 1/2:12 or greater in accordance with FBC 2023 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 3:12.

Design Uplift Pressure: 30.0 psf at fastener spacing of 48" o.c. (Factor of Safety = 2) 131.0 psf at fastener spacing of 6" o.c.

Panel Attachment:  
Type: #9-16 or #10-14 hex head wood screws with sealed washer. Fastener shall be of sufficient length to penetrate through the deck a minimum of 3/8". Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.  
At panel ends at 7"-5"-7" o.c. across panel width  
At intermediate at 12" o.c. across panel width

Sidelap Attachment: 1/4"-14 x 7/8" long SDS with washer at 12" o.c. Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.

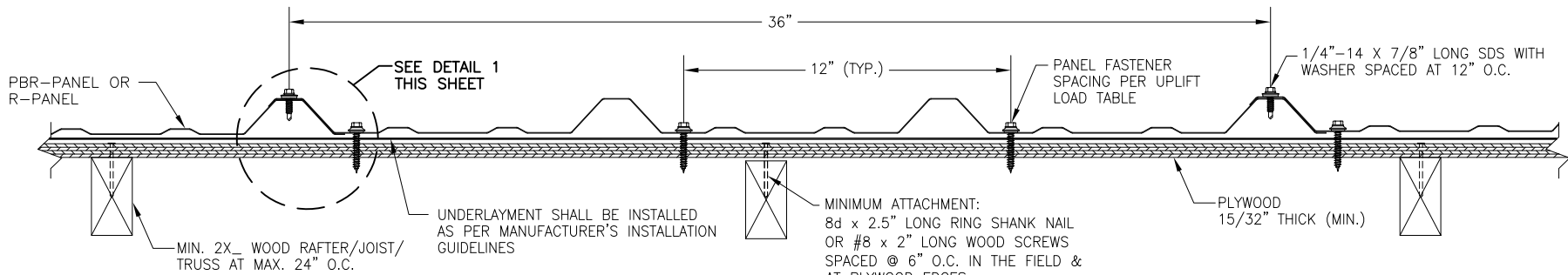
Test Standards: Roof assembly tested in accordance with UL580-94 (Rev 98) 'Uplift Resistance of Roof Assemblies' & UL1897-98 'Uplift Tests for Roof Covering Systems'.

Test Equivalency: The test procedures in UL 580-94 comply with test procedures prescribed in UL 580-06.  
The test procedures in UL 1897-98 comply with test procedures prescribed in UL 1897-15.

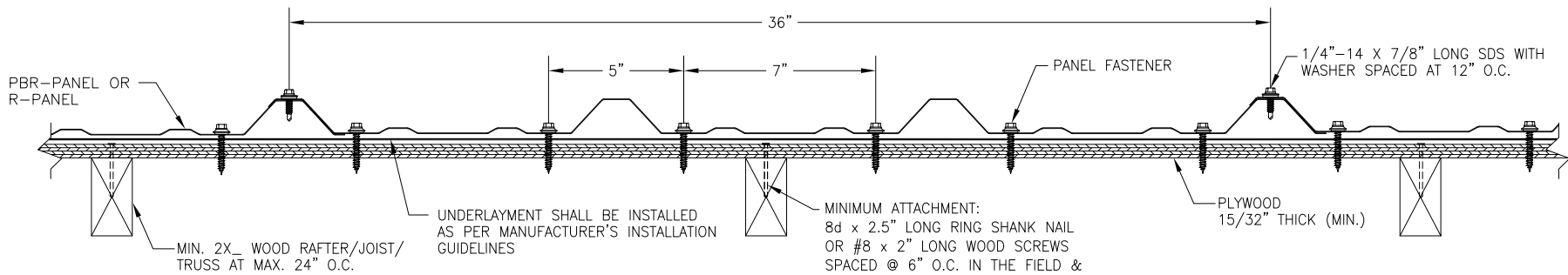
Code Compliance: The product described herein has demonstrated compliance with FBC 2023 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2023 Section 1609 or ASCE 7-22 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. The design pressure for reduced fastener spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Metal Sales load span table. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within the scope of this Evaluation Report. Refer to FBC 2023 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

Supporting Documents: UL 580 & UL 1897 Test Report  
Farabaugh Engineering and Testing Inc.  
Project No. T285-08, Reporting Date 11/17/2008, Revised Date 12/3/2008

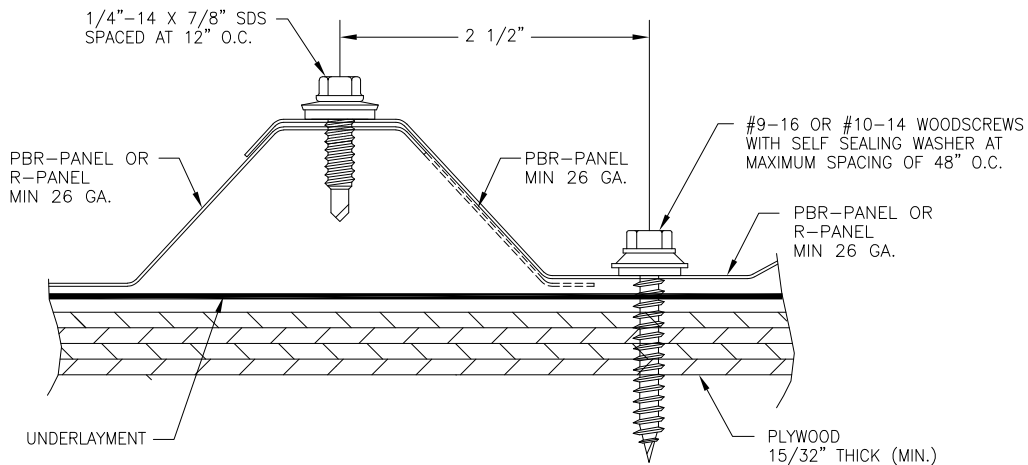


**FASTENER PATTERN AT INTERMEDIATE LOCATIONS**



**FASTENER PATTERN AT PANEL ENDS**

**TYPICAL PANEL INSTALLATION X-SECTION**



**DETAIL 1**

**GENERAL NOTES:**

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN. 26 GA. (t = 0.017"). EFFECTIVE COVERING WIDTH OF PANEL = 36".
3. THE ROOF PANELS SHALL BE INSTALLED OVER SHEATHING & STRUCTURE AS SPECIFIED ON THIS DRAWING.
4. REQUIRED DESIGN WIND LOADS SHALL BE DETERMINED FOR EACH PROJECT. THIS PANEL SYSTEM MAY NOT BE INSTALLED WHEN THE REQUIRED DESIGN WIND LOADS ARE GREATER THAN THE ALLOWABLE WIND LOAD TABLE.
5. ALL FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & THE FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. RAFTERS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.
7. REQUIRES APPLIED LAP SEALANT FOR ROOF SLOPE < 3:12.

DRAWN BY: B.S.		CHECKED BY: O.S.	
PLOT:		DATE: 7/19/2023	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: PBR-PANEL OR R-PANEL		CONSULTANTS: METAL SALES MANUFACTURING CORP.	
		7800 HIGHWAY 60 SELLERSBURG, IN 47172 502-855-4300	
		1216 N LANSING AVE., SUITE C LANSING, IN 47306 PHONE: 918-492-5992 FAX: 866-566-1543	
DRAWING NO. 2673-11		REV. 1	
PAGE NO. 1		OF 1	

**METAL SALES MANUFACTURING CORPORATION**  
**PBR-Panel or R-Panel Uplift Loads**  
**(Min 26 ga.)**

Description	Fastener Spacing along panel length (in)	Allowable Uplift Load (psf)	
Coverage width: 36"	<b>6</b>	<b>131.0</b>	
	9	123.8	
Panel Fasteners #9-16 or #10-14 hex head wood screws with sealed washer	12	116.6	
	15	96.0	
	18	80.0	
	21	68.6	
	24	60.0	
	Panel fasteners spaced at 12" o.c. across panel width	27	53.3
		30	48.0
		33	43.6
		36	40.0
		39	36.9
42		34.3	
45		32.0	
<b>48</b>		<b>30.0</b>	

**Notes:**

1. The bold numbers indicate design loads calculated from test data with safety factor of 2.
2. Panels must be installed as per Evaluation Report FL 14645.11 and Metal Sales current installation procedure.
3. Three or more spans condition.
4. Optional wood purlins must be spaced same as panel fastener spacing along the panel length.