

**EVALUATION REPORT OF
METALMAX ROOFING AND SIDING
'PBR PANEL'**

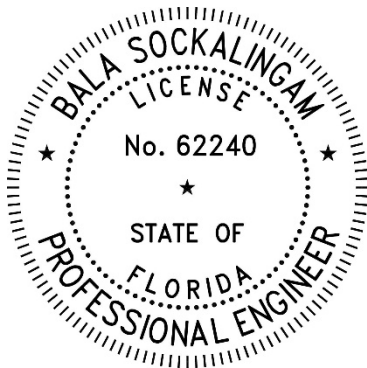
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 42128.4-R1
ROOFING
METAL ROOFING**

**Prepared For:
MetalMax Roofing and Siding
900 Cpt Joe Fulghum Drive
Murfreesboro, TN 37129
Telephone: (615) 494-1693**

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

**Report No. C2731-4
Date: 9.15.2023**



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

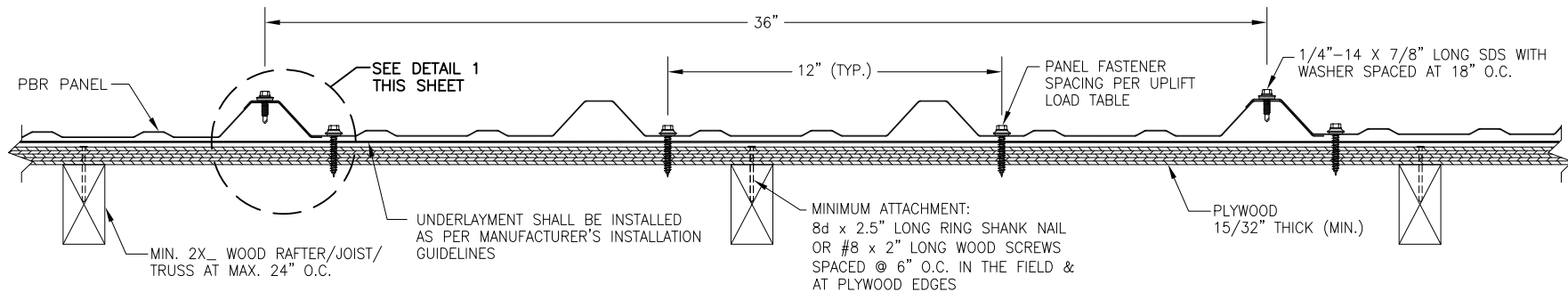
Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

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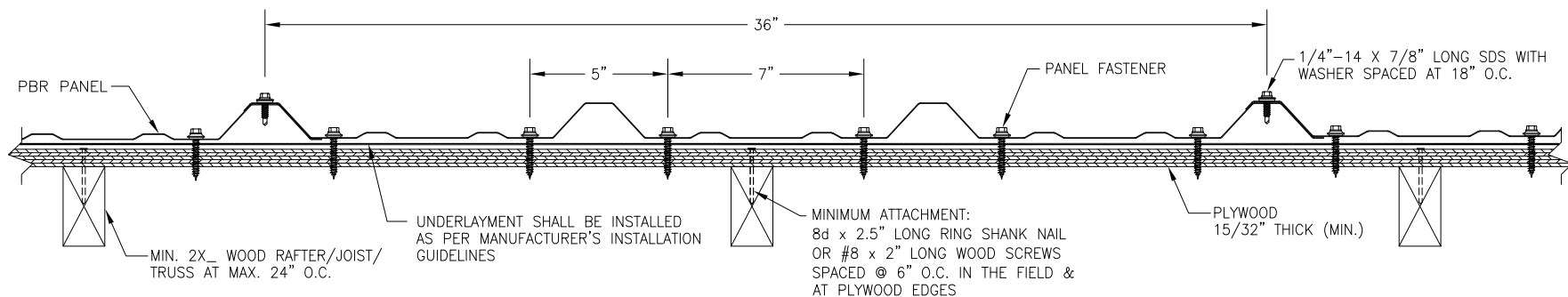
Manufacturer:	MetalMax Roofing and Siding
Product Name:	PBR Panel
Panel Description:	36" wide coverage with (4) 1-1/4" high ribs
Materials:	Min. 26 ga., 80 ksi steel or min. 24 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion 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: (Minimum)	8d x 2.5" long ring shank nails or #8 x 2" long wood screws at 6" o.c. 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: (Factor of Safety = 2)	41.6 psf at fastener spacing of 36" o.c. 162.0 psf at fastener spacing of 6" o.c.
Panel Attachment: Type:	#14-10 x 1" long Type 17 Pt., 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 self-drilling screw with washer at 18" o.c. Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.
Test Standards:	Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies' & UL1897-12 'Uplift Tests for Roof Covering Systems'.
Test Equivalency:	The test procedures in UL 1897-12 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 MetalMax's 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. T156-23, Reporting Date 4/15/2023

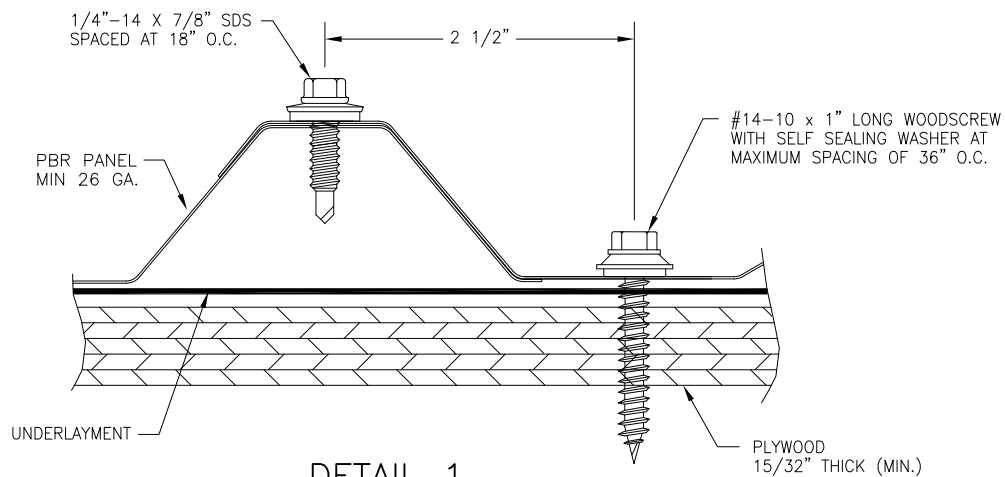


FASTENER PATTERN AT INTERMEDIATE LOCATIONS



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 = 0.018"). 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.

DRAWN BY: B.S.	CHECKED BY: R.B.
DATE: 4/21/2023	
PLT:	
DATE	
BY	
REVISION DESCRIPTION	
NO.	
PBR PANEL CONSULTANTS BALA SOCKALINGAM, PH.D., P.E. 1216 N LANSING AVE, SUITE C MURFREESBORO, TN 37129 PHONE: 918-492-5992 FAX: 866-566-1543	
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DRAWING NO. 2731-4	REV. 1
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METALMAX ROOFING AND SIDING'S
PBR Panel Uplift Loads
(Min 26 ga.)

Description	Fastener Spacing along panel length (in)	Allowable Uplift Load (psf)
Coverage width: 36" Panel Fasteners #14-10 x 1" long Type 17 Pt. Hex head wood screws with sealed washer Panel fasteners spaced at 12" o.c. across panel width	6	162.0
	9	150.0
	12	124.8
	15	99.8
	18	83.2
	21	71.3
	24	62.4
	27	55.5
	30	49.9
	33	45.4
	36	41.6

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 42128.4 and MetalMax current installation procedure.
3. Three or more spans condition.