

**EVALUATION REPORT OF
METAL SALES MANUFACTURING CORPORATION
'29 GA. CLASSIC RIB PANEL'**

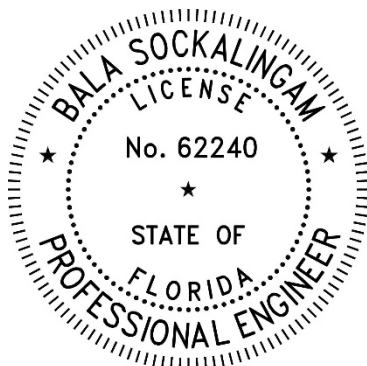
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 14645.6-R5
ROOFING
METAL ROOFING**

**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. C2673-6
Date: 8.3.2023**

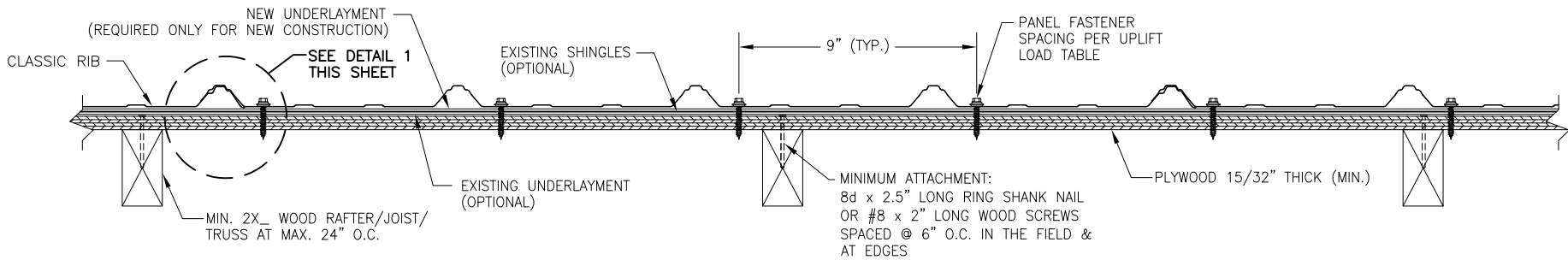


This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

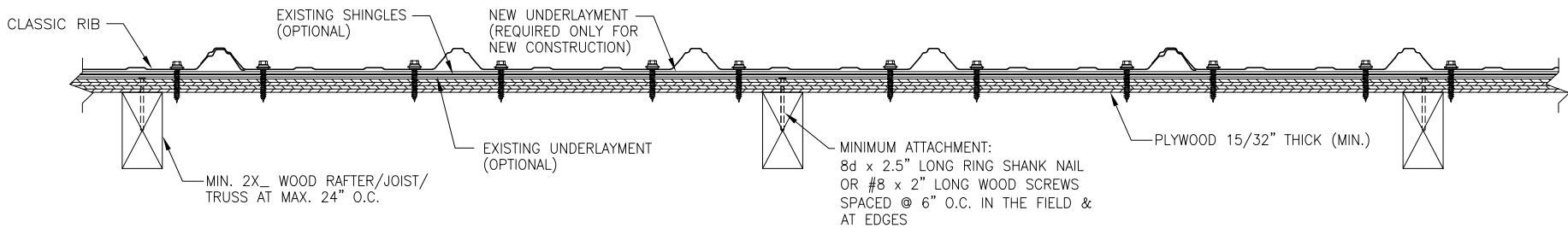
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Manufacturer:	Metal Sales Manufacturing Corporation
Product Name:	Classic Rib
Panel Description:	36" wide coverage with (5) 3/4" high ribs
Materials:	Min. 29 ga., 80 ksi steel or min. 24 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2023 Section 1507.4.3.
Deck Description:	Min. 15/32" 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.
New Underlayment:	Minimum underlayment as per FBC 2023 Section 1507.4.5.1. Required for new construction and optional for reroofing construction.
Existing Underlayment: (Optional)	One layer of asphalt shingles over one layer of #30 felt. For reroofing construction only.
Substrate (optional):	Min 1" x 4" No. 2 SYP wood purlins over one layer of asphalt shingles/felt (optional) and min. 15/32" thick plywood deck fastened to supports at maximum 24" o.c. Wood purlins shall be fastened to wood rafters with minimum (2) #9 x 3" long wood screws. The wood purlins will be spaced same as panel fastener spacing along panel length. The wood purlin, purlin to the rafter connection and rafters must be designed by others to carry the load imposed on the panels and installed as per FBC 2023.
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)	41.5 psf at fastener spacing of 48" o.c. 91.0 psf at fastener spacing of 6" o.c.
Fastener Pattern: 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 5.5"-3.5"-5.5" o.c. across panel width
At intermediate	at 9" o.c. across panel width

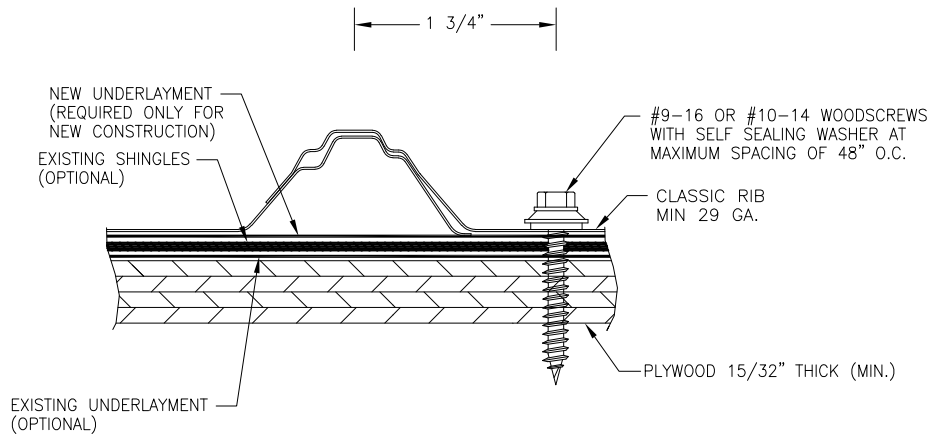
- Sidelap Attachment:
(Optional) ¼"-14 x 7/8" long SDS with washer at 12" o.c. Recommended for roof slope less than 3:12. Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.
- Test Standards: Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies', UL1897-04 'Uplift Tests for Roof Covering Systems' and FM 4470 Section 5.5 'Resistance to Foot Traffic'.
- Test Equivalency: The test procedure in FM 4470 (1992) comply with test procedure prescribed in FM 4470 (2016) Section 4.6 'Resistance to Foot Traffic'. The test procedures in UL 1897-04 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: UL580/UL1897 Test Reports
Farabaugh Engineering and Testing Inc.
Project No. T188-16, Reporting Date 4/29/2016
Project No. T189-16, Reporting Date 4/29/2016
- FM 4470 Test Report
ENCON Technology Inc.
C1587-2, Reporting Date 5/17/2008



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 ARE SHALL BE MIN 29 GA. (t = 0.014"). 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 LOADS SPECIFIED ON THIS DRAWING.
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: D.S.
DATE: 7/19/2023	
NO.	REVISION DESCRIPTION

DRAWING TITLE	CLASSIC RIB PANEL
CONSULTANTS	BALA SOCKALINGAM, PH.D., P.E.
MANUFACTURER	METAL SALES MANUFACTURING CORP.
	7800 HIGHWAY 60 SELLERSBURG, IN 47172 502-855-4300
	1216 N LANSING AVE, SUITE C TULSA, OK 74106 PHONE: 918-492-5992 FAX: 866-366-1543

DRAWING NO.	REV.
2673-6	
PAGE NO.	
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METAL SALES MANUFACTURING CORPORATION

Classic Rib Panel Uplift Loads

(Min 29 ga.)

Description	Fastener Spacing along panel length (in)	Allowable Uplift Load (psf)	
Coverage width: 36"	6	91.0	
	9	87.5	
Panel Fasteners #9-16 or #10-14 hex head wood screws with sealed washer	12	83.9	
	15	80.4	
	18	76.9	
	21	73.3	
	24	69.8	
	27	66.3	
	Panel fasteners spaced at 9" o.c. across panel width	30	62.7
		33	59.2
		36	55.3
		39	51.1
42		47.4	
45		44.3	
48		41.5	

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 14645.6 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.