EVALUATION REPORT OF METAL SALES MANUFACTURING CORPORATION '26 GA. CLASSIC RIB PANEL'

FLORIDA BUILDING CODE 8TH EDITION (2023) FLORIDA PRODUCT APPROVAL FL 10999.3-R5 STRUCTURAL COMPONENTS ROOF DECK

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

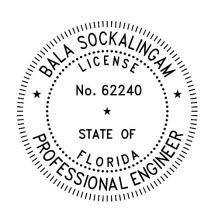
Prepared By:
Bala Sockalingam, Ph.D., P.E.
Florida Professional Engineer #62240
1216 N Lansing Ave., Suite C
Tulsa, OK 74106
Telephone: (918) 492-5992

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

Report No. C2670-3 Date: 7.21.2023

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.



FL 10999.3-R5 C2670-3 7.21.2023 Page 2 of 3

Manufacturer: Metal Sales Manufacturing Corporation

Product Name: Classic Rib

36" wide coverage with (5) 3/4" high ribs Panel Description:

Materials: Min. 26 ga., 80 ksi 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.

Support Description: Min. 16 ga., 50 ksi steel section. (Must be designed by others)

1/2:12 or greater in accordance with FBC 2023 Section 1507.4.2. Slope:

Requires applied lap sealant for roof slopes less than 3:12.

Underlayment: Not Required

Design Uplift Pressure: 61.2 psf at fastener spacing of 48" o.c. (Factor of Safety = 2)

138.7 psf at fastener spacing of 24" o.c.

(3 or more spans)

Panel Attachment: #12-14 x 1" long self-drilling screws with washer. Fasteners are

corrosion resistant as per FBC 2023 Section 1507.4.4.

5.5"-3.5"-5.5" o.c. across panel width At panel ends

At intermediate 9" o.c. across panel width with two fasteners at each sidelap.

¹/₄"-14 x 7/8" long self-drilling screws with washer at 12" o.c. Sidelap Attachment:

(Optional)

Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.

Recommended for roof slope less than 3:12.

Test Standards: Roof assembly tested in accordance with ASTM E1592-01 and E1592-

> 05(2012) 'Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference'

and FM 4470 Section 5.5 'Resistance to Foot Traffic'.

Test Equivalency: ASTM E1592-01 and E1592-05(2012) procedures utilized in the test

reports comply with test procedures prescribed in ASTM E1592-

05(2017).

The test procedure in FM 4470 (1992) complies with test procedure prescribed in FM 4470 (2016) Section 4.6 'Resistance to Foot Traffic'.

Code Compliance: The product described herein has demonstrated compliance with FBC

2023 Section 1507.4.

FL 10999.3-R5 C2670-3 7.21.2023 Page 3 of 3

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 uplift pressure for reduced fastener spacing may be computed using rational analysis prepared by a Florida Professional Engineer or 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:

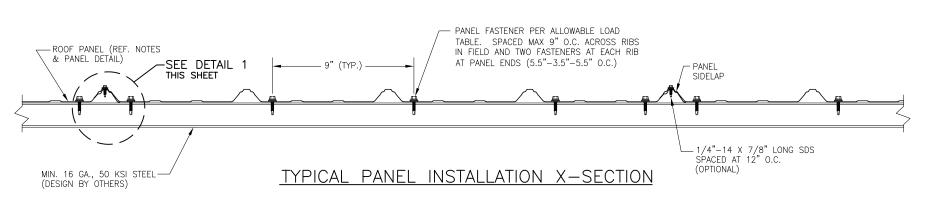
ASTM E1592 Test Reports

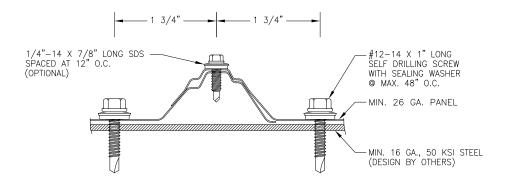
Farabaugh Engineering and Testing Inc.

Project No. T151-06, Reporting Date 5/15/2006 Project No. T191-16, Reporting Date 4/29/2016

FM 4470 Test Report ENCON Technology Inc.

C1587-2, Reporting Date 5/17/2008





DETAIL 1

GENERAL NOTES:

- STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
- 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 STRUCTURE AS SPECIFIED ON THESE DRAWINGS.
- 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
- REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.

 6. PURLINS/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.

DRAWING TITLE CLASSIC RIB ROOF PANEL CLASSIC RIB ROOF PANEL CLASSIC RIB ROOF PANEL CONSULTANTS CONSULTANTS CONSULTANTS CONSULTANTS CANSULTANTS CANSULT	B.S	š.	DATE:	D.S.		
MANUFACTURER METAL SALES MANUFACTURING CORP. 7800 HIGHWAY 60 SELLERSBURG, IN 4172 502-855-4300	PLOT:		7/1	4/2	23	
MANUFACTURER METAL SALES MANUFACTURING CORP. 7800 HIGHWAY 60 SELLERSBURG, IN 4172 502-855-4300	DATE					
MANUFACTURER METAL SALES MANUFACTURING CORP. 7800 HIGHWAY 60 SELLERSBURG, IN 4172 502-855-4300	ы					
MANUFACTURER METAL SALES MANUFACTURING CORP. 7800 HIGHWAY 60 SELLERSBURG, IN 4172 502-855-4300	REVISION DESCRIPTION					
CONSULTANTS CONSULTANTS CONSULTANTS BALA SOCCASLUNGAM, PH.D., P.E. Tate of the sume of the sum of	Š.					
DRAWING TITLE CLASSIC RIB ROOF CONSULTANTS BALA SOCKALINGAM, PH.D., P.E 1216 N LANSING AVE. SUITE C 1115A, OX 74106 PHONE: 918-492-5992 FAX: 866-154;	. Panel	MANUFACTURER METAL SALES MANUEACTURING CORP	7800 HIGHWAY 60	SELLERSBURG, IN 47172		
	DRAWING TITLE CLASSIC RIB ROOF	CONSULTANTS BALA SOCKALINGAM. PH.D P.E.		1216 N LANSING AVE, SUITE C TULSA. OK 74106	PHONE: 918-492-5992 FAX: 866-366-1543	

DRAWN BY: CHECKED BY: B.S. D.S.

DRAWING NO. REV 2670-3 PAGE NO. 1 OF 1

METAL SALES MANUFACTURING CORPORATION Classic Rib Panel Uplift Loads

(Min 26 ga.)

Description	Fastener Spacing	Allowable Uplift
	along panel length	Load
	(in)	(psf)
Coverage width: 36"	24	138.7
	26	128.0
Panel Fasteners	28	118.9
#12-14 hex head screws with sealed washer	30	111.0
	32	104.0
	34	97.9
Panel fasteners spaced at 9" o.c. across panel width with two fasteners at each sidelap.	36	92.5
	38	87.6
	40	83.2
	42	79.3
	44	72.8
	46	66.6
	48	61.2

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 10999.3 and Metal Sales current installation procedure.
- 3. Three or more spans condition.