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

# FLORIDA BUILDING CODE 6TH EDITION (2017) FLORIDA PRODUCT APPROVAL FL 10999.3-R3 STRUCTURAL COMPONENTS ROOF DECK

Prepared For:
Metal Sales Manufacturing Corporation
545 South 3<sup>rd</sup> Street, Suite 200
Louisville, KY 40202
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
FAX: (866) 366-1543

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

Report No. C2180-3 Date: 8.25.2017



FL 10999.3-R3 C2180-3 8.25.2017 Page 2 of 3

Manufacturer: Metal Sales Manufacturing Corporation

Product Name: Classic Rib

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

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).

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

Slope: 1/2:12 or greater in accordance with FBC 2017 Section 1507.4.2.

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

Design Uplift Pressure: 61.2 psf @ fastener spacing of 48" o.c. (Factor of Safety = 2) 138.7 psf @ fastener spacing of 24" o.c.

(3 or more spans)

Panel Attachment: #12-14 x 1" long SDS with washer At panel ends #5.5"-5.5" o.c. across panel width

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

Sidelap Attachment: \( \frac{1}{4}\)"-14 x 7/8\" long SDS with washer \( \text{@} 12\)" o.c. Recommended for

(Optional) 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 procedures utilized in the test reports comply with

test procedures prescribed in ASTM E1592-05(2012).

The test procedure in FM 4470 (1992) comply with test procedure

prescribed in FM 4470 (2012).

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

2017 Section 1507.4

Product Limitations: Design wind loads shall be determined for each project in accordance

with FBC 2017 Section 1609 or ASCE 7-10 using allowable stress design. The maximum support spacing listed herein shall not be exceeded. The design uplift pressure for reduced support 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

FL 10999.3-R3 C2180-3 8.25.2017 Page 3 of 3

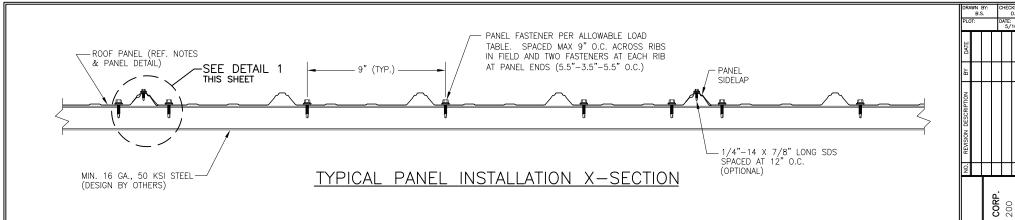
within scope of this Evaluation Report. Refer to FBC 2017 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

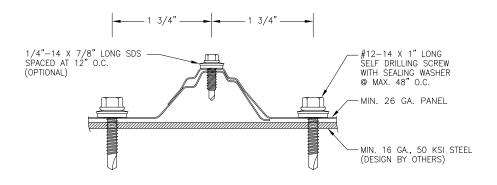
Supporting Documents: ASTM E1592 Test Reports

Farabaugh Engineering and Testing Inc. Project No. T151-06, Reporting Date 5/15/06 Project No. T191-16, Reporting Date 4/29/16

FM 4470 Test Report ENCON Technology Inc.

C1587-2, Reporting Date 5/17/08





DETAIL 1

### **GENERAL NOTES:**

- 1. STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
- 2. ROOF PANELS SHALL BE 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. 6. PURLINS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

SOCKALINGAM, PH.D., CLASSIC 1216 N LANSING A TULSA, OK :: 918-492-5992 BALA

DATE: 5/10/16

SALES MANUFACTURING C SOUTH 3RD ST., SUITE 2 LOUISVILLE, KY 40202 502-855-4300

METAL 545

P.E. ROOF

PANEL

묎

2180 - 3PAGE NO.

1 of

# 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.



1216 N Lansing Ave., Suite C Tulsa, Ok 74106 918 492 5992 Bala Sockalingam, Ph.D., P.E. FL 62240