

**EVALUATION REPORT OF  
METAL SALES MANUFACTURING CORPORATION  
'24 OR 22 GA. SEAM-LOC 24 PANEL'**

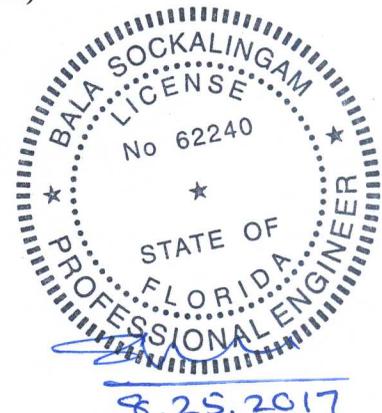
**FLORIDA BUILDING CODE 6TH EDITION (2017)  
FLORIDA PRODUCT APPROVAL  
FL 10999.8-R3  
STRUCTURAL COMPONENTS  
ROOF DECK**

**Prepared For:  
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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. C2180-8  
Date: 8.25.2017**



8.25.2017

Manufacturer: Metal Sales Manufacturing Corporation

Product Name: Seam-Loc 24

Panel Description: Standing seam panel with max. 24" wide coverage and 2-5/8" high ribs

Materials: 24 or 22 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: 1/4:12 or greater in accordance with FBC 2017 Section 1507.4.2

Design Uplift Pressure:

24 ga. Panel	37.9 psf @ support spacing of 60" o.c. 69.8 psf @ support spacing of 24" o.c.
22 ga. Panel	44.2 psf @ support spacing of 60" o.c. 74.1 psf @ support spacing of 24" o.c.

Panel Attachment: NC 3400 clip with (2) 1/4"-14 x 1-1/2" long SDS per clip.

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

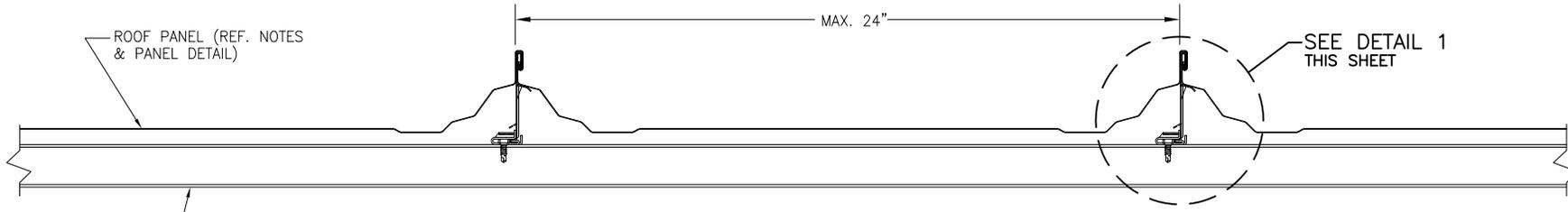
Test Equivalency: The test procedure in ASTM E1592-01 comply with test procedure prescribed in ASTM E1592-05(2012).  
The test procedure in FM 4470 (1992) comply with test procedure prescribed in FM 4470 (2012).

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 based on Metal Sales load span table. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not 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.

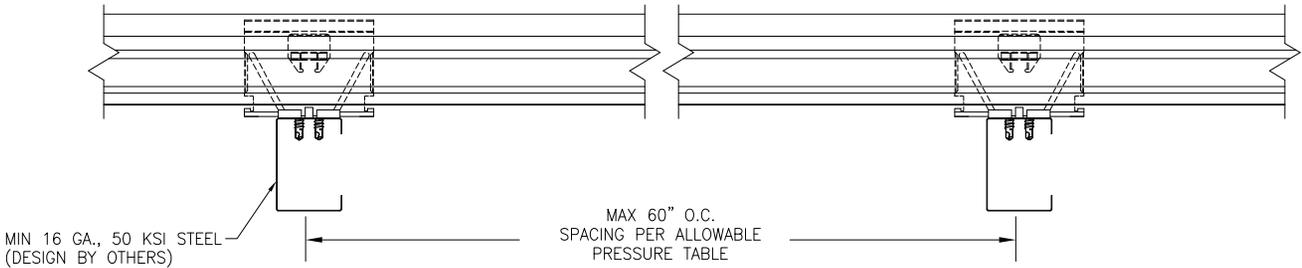
Supporting Documents: ASTM E1592 Test Reports  
ENCON Technology Inc.  
Project No. C1466-1, Reporting Date 3/31/06 (24 ga. Panel)  
Project No. C1424-2, Reporting Date 9/30/05 (22 ga. Panel)

FM 4470 Test Report  
ENCON Technology Inc.  
C1587-5, Reporting Date 6/30/08

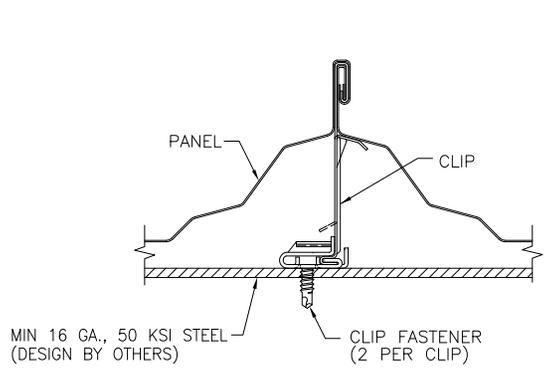


MIN 16 GA., 50 KSI STEEL  
(DESIGN BY OTHERS)

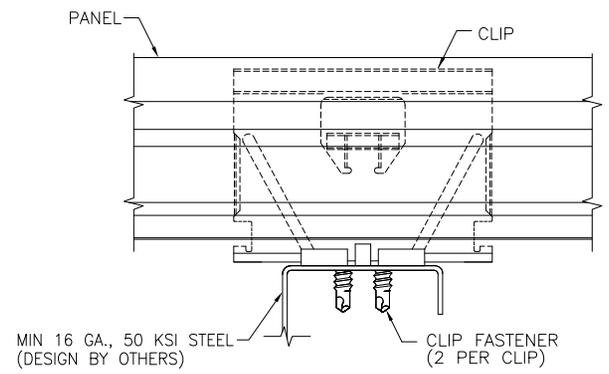
**TYPICAL PANEL INSTALLATION X-SECTION**



**TYPICAL SIDE VIEW**

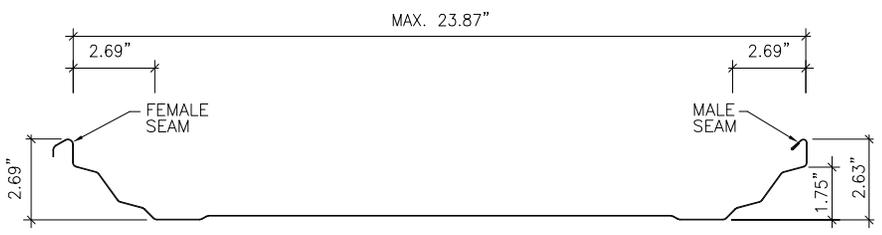


**CLIP SECTION VIEW**



**CLIP SIDE VIEW**

**DETAIL 1**



**PANEL SECTION**  
(24 OR 22 GA.)

**GENERAL NOTES:**

1. STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE 24 GA. ( $t = 0.022$ ") OR 22 GA. ( $t = 0.028$ "). MAXIMUM EFFECTIVE COVERING WIDTH OF PANEL = 24".
3. THE ROOF PANELS SHALL BE INSTALLED OVER 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. CLIPS AND FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & 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.

DRAWN BY: B.S.	CHECKED BY: D.S.
DATE: 3/20/15	
NO.	DATE
BY	
REVISION DESCRIPTION	
DRAWING TITLE <b>SEAM-LOC 24 STANDING SEAM ROOF PANEL</b>	
CONSULTANTS <b>BALA SOCKALINGAM, PH.D., P.E.</b>	MANUFACTURER <b>METAL SALES MANUFACTURING CORP.</b>
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DRAWING NO. <b>2180-8</b>	REV.
PAGE NO. <b>1</b>	OF <b>1</b>

# METAL SALES MANUFACTURING CORPORATION

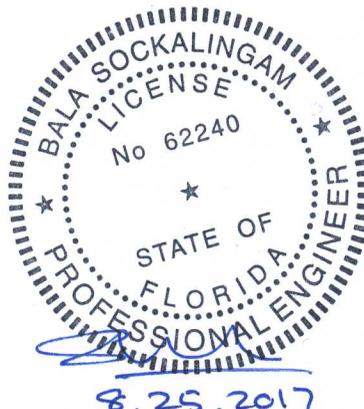
## Seam-Loc 24 panel

### Design Uplift Loads

Clip spacing along length (in)	Design Uplift Loads (psf)	
	24 ga.	22 ga.
<b>24</b>	<b>69.8</b>	<b>74.1</b>
27	67.1	71.6
30	64.5	69.1
33	61.8	66.6
36	59.2	64.1
39	56.5	61.6
42	53.9	59.2
45	50.5	56.7
48	47.4	54.2
51	44.6	51.7
54	42.1	49.1
57	39.9	46.5
<b>60</b>	<b>37.9</b>	<b>44.2</b>

#### Notes:

1. The bold numbers are based on testing on 24 and 22 ga. panels.
2. The panels are fastened to support with NC 3400 clips with (2) 1/4"-14 SDS.
3. Panels must be installed as per Evaluation Report FL 10999.8 and Metal Sales current installation procedure.
4. Three or more spans condition.



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