

**EVALUATION REPORT OF
METAL SALES MANUFACTURING CORPORATION
'24 GA. SEAM-LOC 24 PANEL WITH S-5! CLAMPS'**

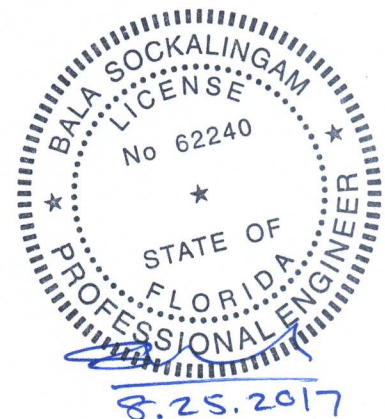
**FLORIDA BUILDING CODE 6TH EDITION (2017)
FLORIDA PRODUCT APPROVAL
FL 10999.9-R3
STRUCTURAL COMPONENTS
ROOF DECK**

**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. C2180-9
Date: 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: 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: 1/4:12 or greater in accordance with FBC 2017 Section 1507.4.2

Design Uplift Pressure: 53.5 psf @ support spacing of 60" o.c.
130.9 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

Clamp Attachment: S-5-U Mini clamp at each clip location

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'.

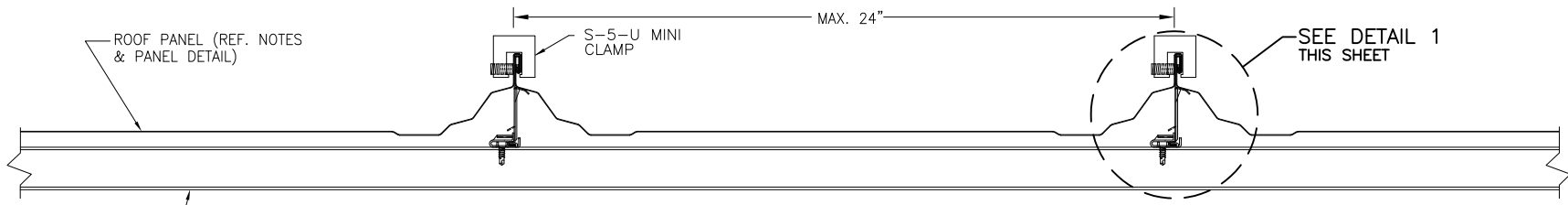
Test Equivalency: The test procedure in ASTM E1592-01 comply with test procedure prescribed in ASTM E1592-05(2012).
The test procedure in FM 4470 (1992) comply with test procedure prescribed in FM 4470 (2012).

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.

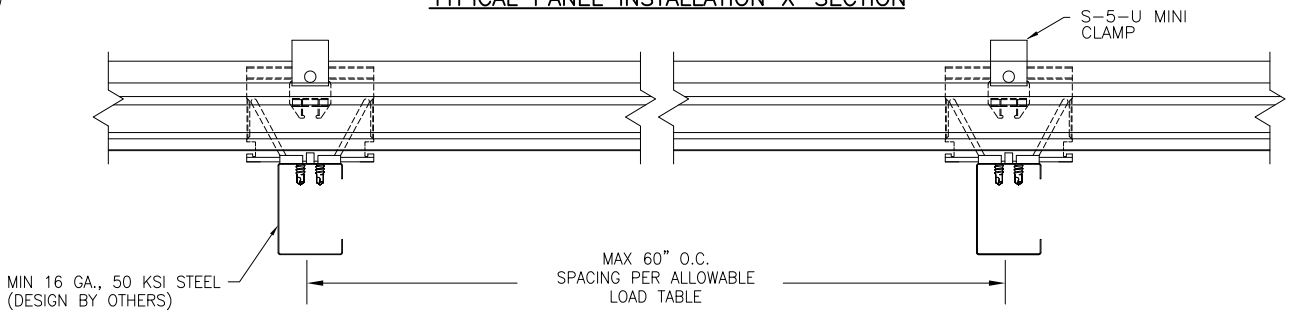
Supporting Documents: ASTM E1592 Test Reports
ENCON Technology Inc.
Project No. C1466-2, Reporting Date 3/31/06

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

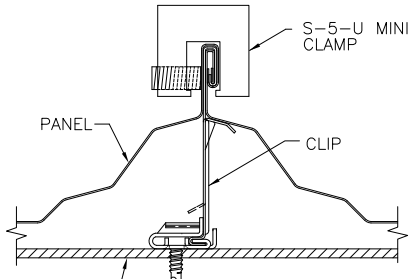


MIN 16 GA., 50 KSI STEEL
(DESIGN BY OTHERS)

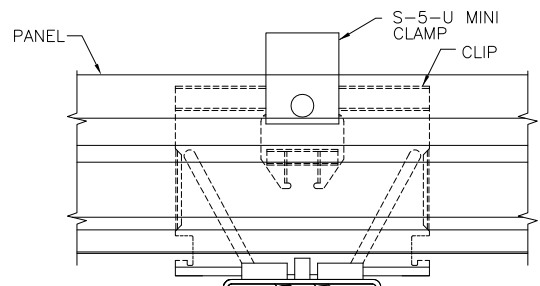
TYPICAL PANEL INSTALLATION X-SECTION



TYPICAL SIDE VIEW

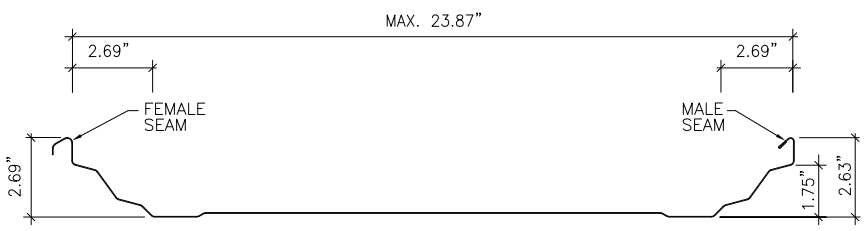


CLIP SECTION VIEW



CLIP SIDE VIEW

DETAIL 1



PANEL SECTION
(MIN 24 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"). 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.

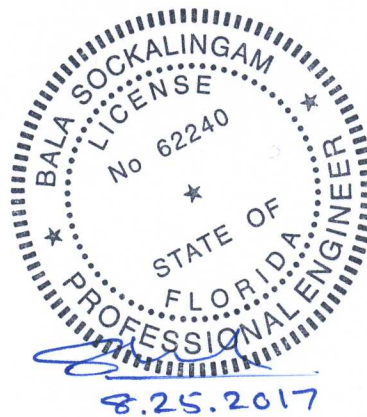
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REVISION DESCRIPTION	DATE	BY	
NO.			
DRAWING TITLE 24 GA. SEAM-LOC 24 STANDING SEAM ROOF PANEL			
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E. 1216 N. LANSING AVE., SUITE C PHONE: 918-482-5992 FAX: 866-366-1543			
MANUFACTURER METAL SALES MANUFACTURING CORP. 545 SOUTH 3RD ST., SUITE 200 LOUISVILLE, KY 40202 502-855-4300			
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1	OF 1		

METAL SALES MANUFACTURING CORPORATION
Seam-Loc 24 Panels with S-5! Clamps
Design Uplift Loads

Clip spacing along length (in)	Design Uplift Loads (psf)
	Min. 24 ga.
24	130.9
27	118.9
30	107.0
33	97.3
36	89.2
39	82.3
42	76.4
45	71.3
48	66.9
51	62.9
54	59.4
57	56.3
60	53.5

Notes:

1. The bold numbers are based on testing.
2. The panels are fastened to support with NC 3400 clips with (2) 1/4"-14 SDS.
3. S-5-U Mini clamp at each clip location
4. Panels must be installed as per Evaluation Report FL 10999.9 and Metal Sales current installation procedure.
5. Three or more spans condition.



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