

**EVALUATION REPORT OF  
CENTRAL STATES MANUFACTURING, INC.  
'R-LOC PANEL'**

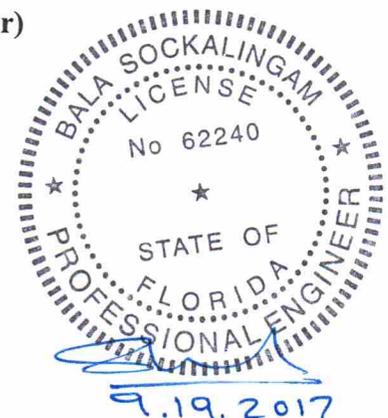
**FLORIDA BUILDING CODE 6TH EDITION (2017)  
FLORIDA PRODUCT APPROVAL  
FL 14016.3-R3  
STRUCTURAL COMPONENTS  
ROOF DECK**

**Prepared For:  
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**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)**

**Report No. C2184-3  
Date: 9.19.2017**



Manufacturer: Central States Manufacturing, Inc.

Product Name: R-Loc Panel

Panel Description: 36" wide coverage with (4) 1-1/4" high ribs

Materials: Min. 26 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).

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: 44.2 psf @ fastener spacing of 60 o.c. (3 or more spans)  
(Factor of Safety = 2) 112.7 psf @ fastener spacing of 24 o.c. (3 or more spans)

Panel Attachment:

At panel ends #12-14 x 1-1/4" long SDS with integral washer @ 7"-5"-7" o.c. across panel width

At intermediate #12-14 x 1-1/4" long SDS with integral washer @ 12" o.c. across panel width

Sidelap Attachment: 1/4"-14 x 7/8" long SDS with washer @ 20" o.c.

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 4471 Section 5.4 'Resistance to Foot Traffic'.

Test Equivalency: The test procedures in ASTM E1592-01 comply with test procedures prescribed in ASTM E1592-05(2012).

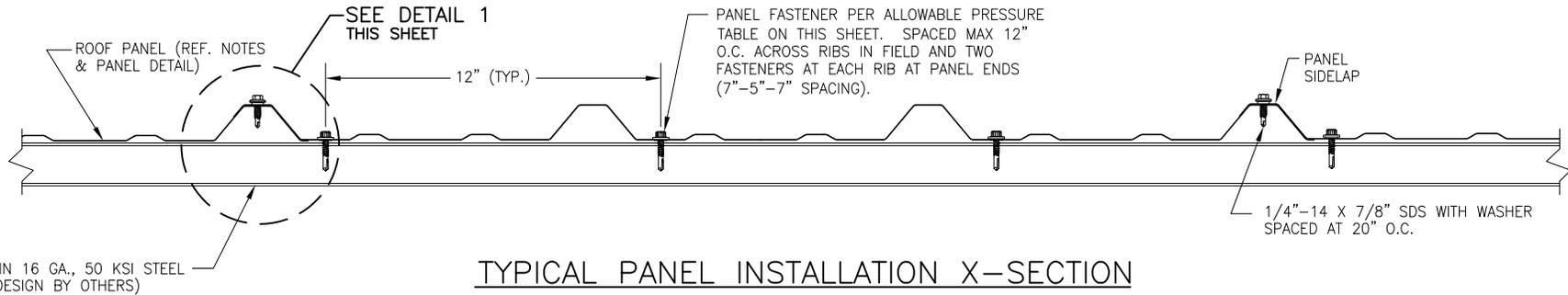
Code Compliance: The product described herein has demonstrated compliance with FBC 2017 Section 1507.4.

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 pressure for reduced clip spacing may be computed using rational analysis prepared by a Florida Professional Engineer. 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  
Force Engineering and Testing Inc.  
Report No. 410-0237T-13 A & B, Reporting Date 12/21/2013

FM 4471 Test Report  
Force Engineering & Testing, Inc.  
Report No. 410-0277T-10, Reporting Date 08/23/2010

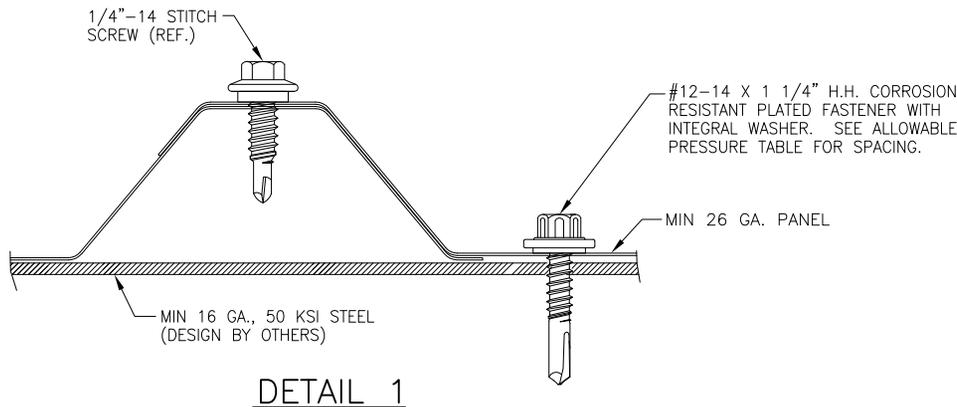


MIN 16 GA., 50 KSI STEEL  
(DESIGN BY OTHERS)

### TYPICAL PANEL INSTALLATION X-SECTION

#### ALLOWABLE UPLIFT PRESSURE

PANEL FASTENERS SPACING ALONG RIB	PRESSURE (PSF)
60"	44.2
24"	112.7



DETAIL 1

#### GENERAL NOTES:

- STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
- PANELS SHALL BE MIN. 26 GA. ( $t = 0.019"$ ). EFFECTIVE COVERING WIDTH OF PANEL = 36".
- ROOF PANELS SHALL BE INSTALLED OVER STRUCTURE AS SPECIFIED ON THIS DRAWING.
- 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.
- 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.
- 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: A.H.
PLOT:	DATE: 8/21/15
NO.	REVISION DESCRIPTION
DRAWING TITLE <b>R-LOC ROOF PANEL</b>	
CONSULTANTS <b>BALA SOCKALINGAM, PH.D., P.E.</b>	
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DRAWING NO. <b>2184-3</b>	REV.
PAGE NO. <b>1</b>	OF <b>1</b>