

**EVALUATION REPORT OF  
CENTRAL STATES MANUFACTURING, INC.  
'CENTRAL SPAN PANEL'**

**FLORIDA BUILDING CODE 7TH EDITION (2020)  
FLORIDA PRODUCT APPROVAL  
FL 14016.2-R4  
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. C2398-2  
Date: 9.30.2020**



Manufacturer: Central States Manufacturing, Inc.

Product Name: Central Span Panel

Panel Description: Standing seam panel with 16" wide coverage and 2" 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). Corrosion resistant as per FBC 2020 Section 1507.4.3.

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

Slope: 1/4:12 or greater in accordance with FBC 2020 Section 1507.4.2

Design Uplift Pressure: 75 psf @ support spacing of 24" o.c. with TripleLok™ Seam  
30.0 psf @ support spacing of 60" o.c. with TripleLok™ Seam  
112.5 psf @ support spacing of 24" o.c. with QuadLok™ Seam  
30.0 psf @ support spacing of 60" o.c. with QuadLok™ Seam

Panel Attachment: VSRLCLIP (2-3/8" high) or VSRHCLIP (3-3/8" high)  
Clip tab – 22 ga., 4-5/16" wide, 50 ksi steel with galvanized coating  
Clip base – 16 ga., 50 ksi steel with galvanized coating  
Clips fastened to supports with minimum (2) 1/4"-14 x 1-1/2" long SDS per clip. Clips and fasteners are corrosion resistant as per FBC 2020 Section 1506.7 and 1507.4.4, respectively.

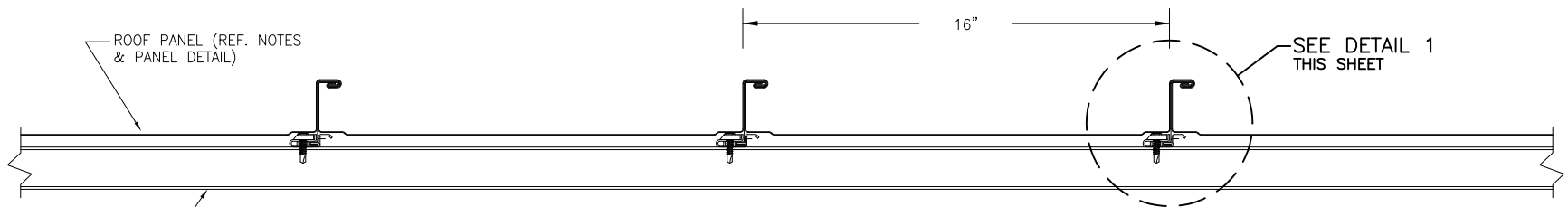
Test Standards: Roof assembly tested in accordance with ASTM E1592-05(2012) 'Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference' and FM 4471 Section 5.4 'Resistance to Foot Traffic'.

Code Compliance: The product described herein has demonstrated compliance with FBC 2020 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609 or ASCE 7-16 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 or based on Central States load span tables. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2020 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

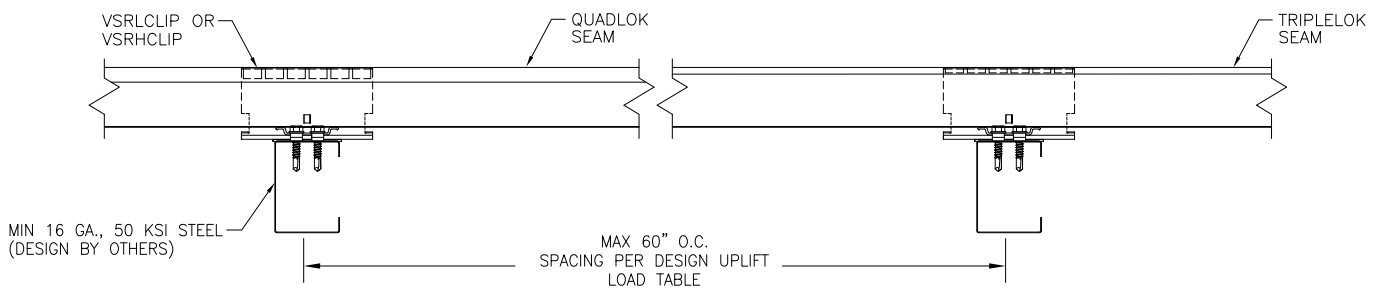
Supporting Documents: ASTM E1592 Test Report  
PRI Construction Materials Technologies  
FAE-015-02-01 Rev 1, Reporting Date 8/29/14

FM 4471 Test Report  
FM Approvals  
Project ID 1D7A7.AM, Reporting Date 12/31/1998  
(Central States is authorized to use Building Research System's Test  
Reports)



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

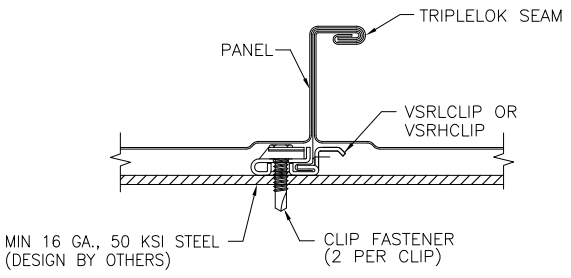
**TYPICAL PANEL INSTALLATION X-SECTION**



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

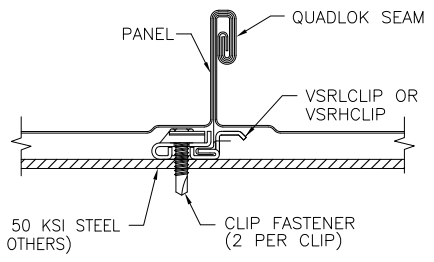
MAX 60" O.C.  
SPACING PER DESIGN UPLIFT  
LOAD TABLE

**TYPICAL SIDE VIEW**



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

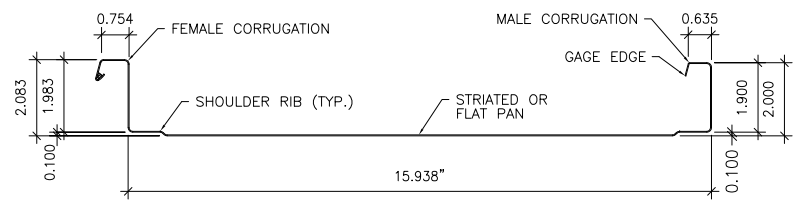
CLIP FASTENER  
(2 PER CLIP)



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

CLIP FASTENER  
(2 PER CLIP)

**CLIP SECTION VIEW  
DETAIL 1**



**PANEL SECTION  
(MIN 24 GA.)**

**GENERAL NOTES:**

1. STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN 24 GA. (t = 0.023"). EFFECTIVE COVERING WIDTH OF PANEL = 16".
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 DESIGN LOADS.
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: M.C.
PLOT:	DATE: 11/26/18
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE <b>CENTRAL SPAN PANEL</b>	
CONSULTANTS <b>BALA SOCKALINGAM, PH.D., P.E.</b>	MANUFACTURER <b>CENTRAL STATES MANUFACTURING, INC.</b>
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DRAWING NO. <b>2398-2</b>	REV.
PAGE NO. <b>1</b>	OF <b>1</b>

**CENTRAL STATES MANUFACTURING, INC.**  
**Min. 24 Ga., 16" wide Central Span Panel Uplift Loads**

Seam	Span (ft)	Ultimate Load (psf)	Design Load (psf)
TripleLok™	<b>2</b>	<b>150.0</b>	<b>75.0</b>
	2.5		67.5
	3		60.0
	3.5		52.5
	4		45.0
	4.5		37.5
	<b>5</b>	<b>60.0</b>	<b>30.0</b>
QuadLok™	<b>2</b>	<b>225.0</b>	<b>112.5</b>
	2.5		98.8
	3		85.0
	3.5		71.3
	4		57.5
	4.5		43.8
	<b>5</b>	<b>60.0</b>	<b>30.0</b>

**Notes:**

1. The bold numbers indicate test data.
2. The factor of safety was 2.0 for all tests.
3. Panels must be installed as per Evaluation Report FL 14016.2 and Central States current installation procedure.
4. Three or more spans condition.



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