

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

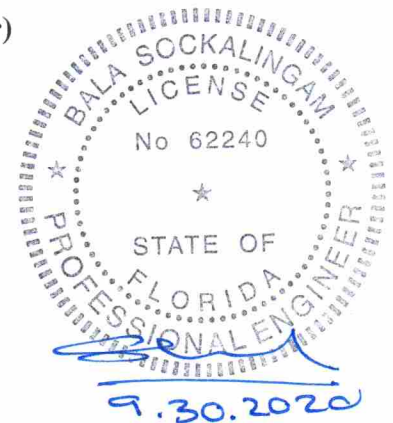
**FLORIDA BUILDING CODE 7TH EDITION (2020)  
FLORIDA PRODUCT APPROVAL  
FL 14016.1-R4  
STRUCTURAL COMPONENTS  
ROOF DECK**

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

**Report No. C2398-1  
Date: 9.30.2020**



Manufacturer: Central States Manufacturing, Inc.

Product Name: Central Seam Plus Panel

Panel Description: Standing seam panel with 12", 18" or 24" wide coverage and 3" 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). 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: For max. 24" wide, min 24 ga. panel (Includes a factor of safety of 2)  
Without Wind Clamps 38.0 psf at clip spacing of 60" o.c.  
98.5 psf at clip spacing of 12" o.c.

With Wind Clamps 56.8 psf at clip spacing of 60" o.c.  
176.5 psf at clip spacing of 12" o.c.

Panel Attachment: CSP2122 or CSP2124 sliding clip with (2) 1/4"-14 HWH self-drilling screws per clip. Clips and fasteners are corrosion resistant as per FBC 2020 Section 1506.7 and 1507.4.4, respectively.

Panel Rib Wind Clamp: S-5! DL Wind Clamp at every panel clip (optional)

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 2020 Section 1507.4.

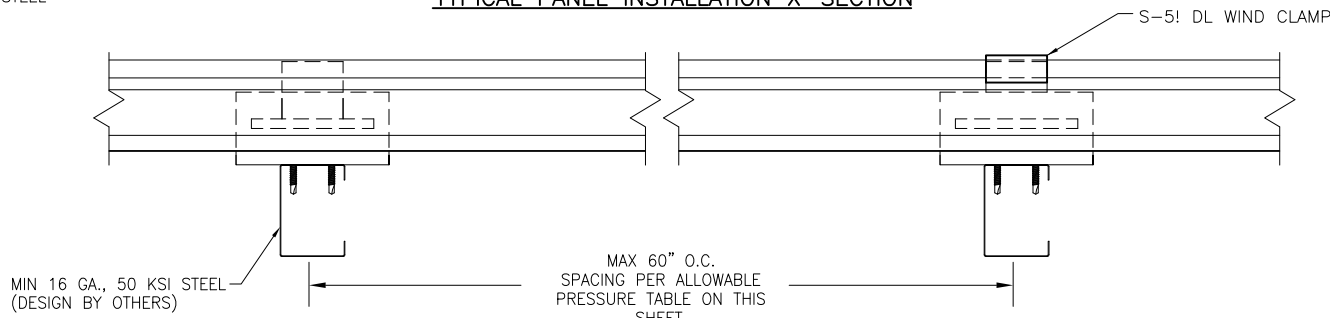
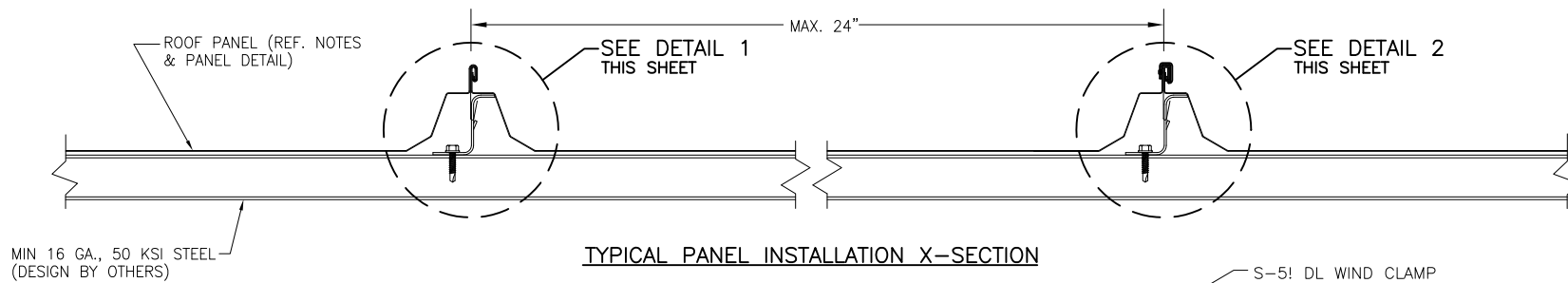
Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609 or ASCE 7-16 using allowable stress design. The maximum support spacing listed herein shall not be exceeded. The design pressure for reduced clip spacing may be computed using rational analysis prepared by a Florida Professional Engineer. 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 Reports  
Force Engineering and Testing Inc.  
Report No. 07-0129T-06 A-D, Reporting Date 07/12/2006  
Report No. 07-0248T-08 E & F, Reporting Date 07/30/2008

FM 4471 Test Report  
FM Approvals  
Project ID 3005245, Reporting Date 7/24/2000

(Central States Manufacturing is authorized to use MBCI's Test Reports)

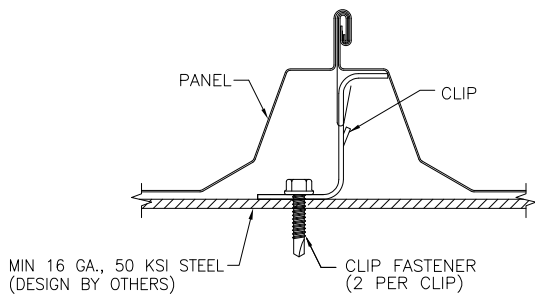


TYPICAL SIDE VIEW

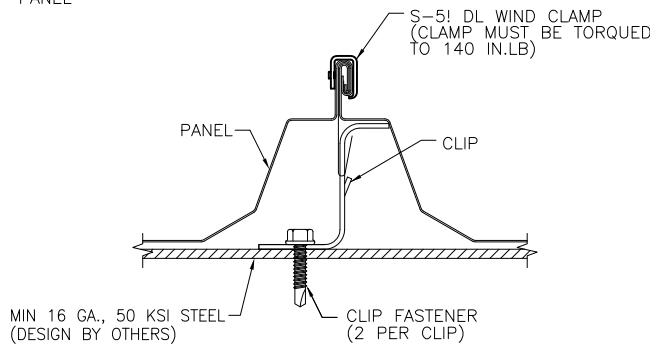
ALLOWABLE UPLIFT PRESSURE

| PANEL WIDTH | WIND CLAMPS | CLIP SPACING | PRESSURE (PSF) |
|-------------|-------------|--------------|----------------|
| 24"         | NO          | 60"          | 38.0           |
|             | NO          | 12"          | 98.5           |
| 24"         | WITH        | 60"          | 56.8           |
|             | WITH        | 12"          | 176.5          |

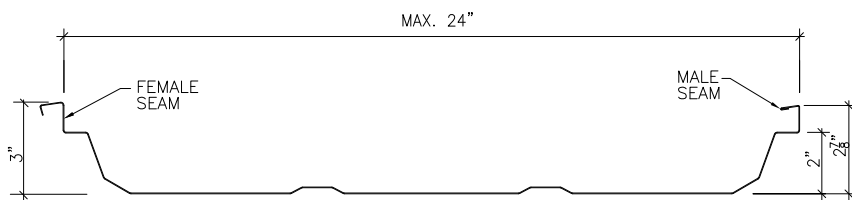
S-5! DL WIND CLAMP MUST BE LOCATED AT EVERY CLIP LOCATIONS



CLIP SECTION VIEW  
DETAIL 1



CLIP SECTION VIEW  
DETAIL 2



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 = 0.023") OR 22 GA. (t = 0.029"). 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:<br>B.S.  | CHECKED BY:<br>A.H. | PLOT:   | DATE:<br>8/21/15 |
| DATE   | BY                  | REVISION DESCRIPTION                                      | NO.              |
| DRAWING TITLE<br><b>CENTRAL SEAM PLUS STANDING SEAM ROOF PANEL</b> |                     |   |                  |
| CONSULTANTS<br><b>BALA SOCKALINGAM, P.H.D., P.E.</b>               |                     | MANUFACTURER<br><b>CENTRAL STATES MANUFACTURING, INC.</b> |                  |
| 1216 N LANSING AVE, SUITE C<br>TULSA, OK 74106                     |                     | 302 JANE PLACE<br>LOWELL, AR 72745                        |                  |
| PHONE: 918-492-5992  |                     | 800-356-2733  |                  |
| DRAWING NO.<br><b>2398-1</b>                                       |                     | REV.  |                  |
| PAGE NO.<br><b>1</b>   |                     | OF<br><b>1</b>  |                  |