EVALUATION REPORT OF
PETERSEN ALUMINUM CORPORATION
'TITE-LOC PLUS PANEL'
(16" WIDE, NOM. 0.032" THICK ALUMINUM PANEL)

FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 5562.2-R10
STRUCTURAL COMPONENTS
ROOF DECK

Prepared For:
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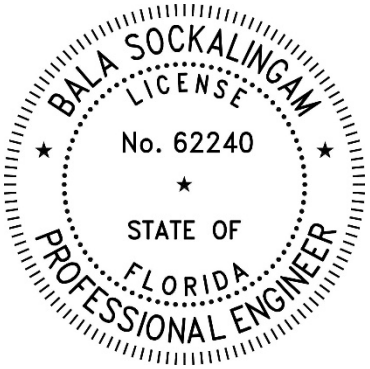
This report consists of
Evaluation Report (2 Pages including cover)
Installation Details (1 Page)
Load Span Table (1 Page)

Report No. C2699-2
Date: 7.31.2023



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

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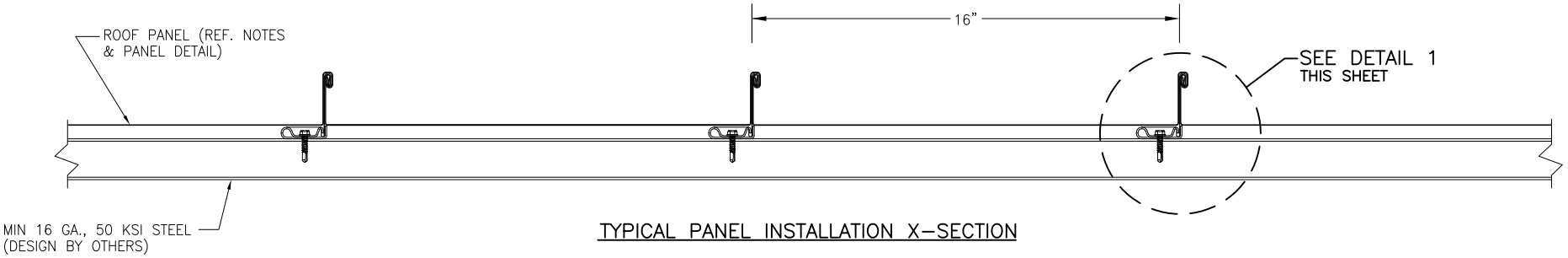
Manufacturer:	Petersen Aluminum Corporation
Product Name:	Tite-Loc Plus Panels
Panel Description:	Standing seam panel with 16" wide coverage and 2" high ribs
Materials:	Nom. 0.032" thick aluminum (ASTM B209) as per FBC 2023 Section 1507.4.3. Minimum thickness and yield stress are 0.029" and 19.4 ksi, respectively.
Support Description:	Min. 16 ga., 50 ksi steel section. (Must be designed by others)
Slope:	1/4:12 or greater in accordance with FBC 2023 Section 1507.4.2.
Design Uplift Pressure: (Factor of Safety = 2)	23.6 psf @ clip spacing of 5' o.c. 57.4 psf @ clip spacing of 2' o.c.
Panel Attachment:	Tite-Loc Plus sliding clip with (2) #12-14 x 1" long SDS per clip. Clip Tab: 4.313" wide, 50 ksi and 22 ga. G90 coated steel Clip Base: 2.125" wide, 50 ksi and 16 ga. G90 coated steel Clips and fasteners are corrosion resistant as per FBC 2023 Section 1506.7 and 1507.4.4, respectively.
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', FM 4470 Section 4.6 'Resistance to Foot Traffic' and ASTM G155-13 'Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials'.
Test Equivalency:	The test procedure in ASTM E1592-01 complies with test procedure prescribed in ASTM E1592-05(2017).
Code Compliance:	The product described herein has demonstrated compliance with FBC 2023 Section 1507.4.
Product Limitations:	Design wind loads shall be determined for each project in accordance with FBC 2023 Section 1609 or ASCE 7-22 using allowable stress design. The maximum clip 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 Petersen Aluminum's load span table. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within the scope of this Evaluation Report. Refer to FBC 2023 Section 1505 and current approved roofing

materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

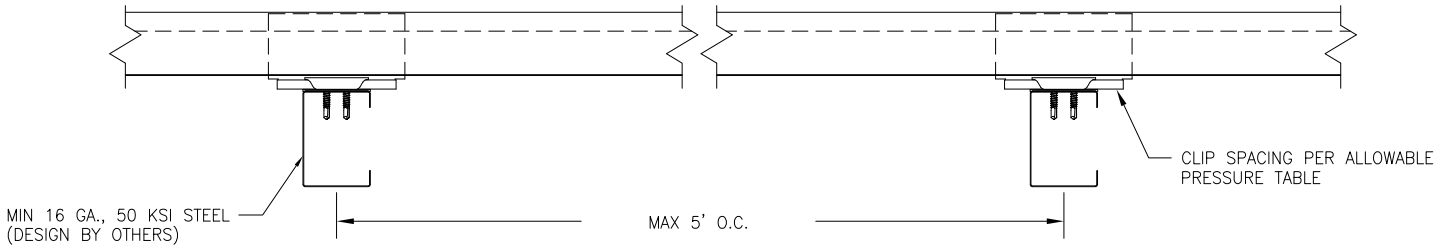
Supporting Documents: ASTM E1592 Test Report
Farabaugh Engineering and Testing Inc.
Project No. T227-02, Reporting Date 7/15/2002

FM 4470 Test Report
ENCON Technology Inc.
C2421-1, Reporting Date 12/5/2023

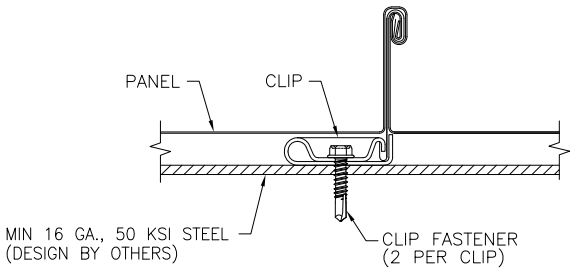
ASTM G155 Test Report
PRI Construction Materials Technologies
VLS-004-02-01, Reporting Date 2/22/2013



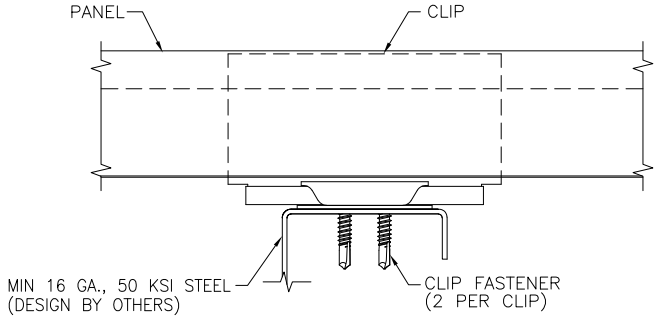
TYPICAL PANEL INSTALLATION X-SECTION



TYPICAL SIDE VIEW

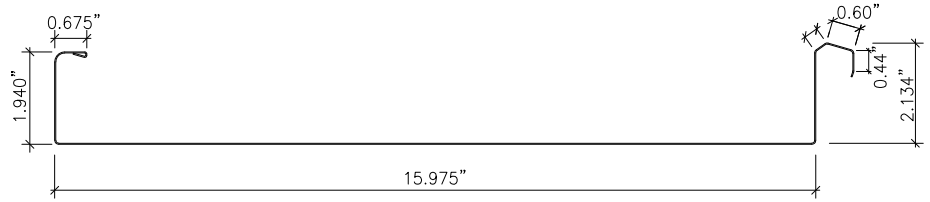


CLIP SECTION VIEW



CLIP SIDE VIEW

DETAIL 1



PANEL SECTION
(NOM. 0.032" THICK ALUMINUM)

GENERAL NOTES:

1. STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE NOM. 0.032" THICK ALUMINUM. 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 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: S.D.
PLOT: | DATE: 6/19/15

NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE: 16" WIDE, 0.032" THICK ALUMINUM TITE-LOC PLUS PANEL

MANUFACTURER
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DRAWING NO. 2699-2 | REV.

PAGE NO. 1 OF 1

PETERSEN ALUMINUM CORPORATION
Tite-Loc Plus Panel
(16" wide, nom. 0.032" thick aluminum panel)

Description	Clip Spacing (ft)	Uplift Design Load (psf)
Coverage width: 16" Sliding Clip with (2) fasteners per clip	**2**	**57.4**
	2.5	51.8
	3	46.1
	3.5	40.5
	4	34.9
	4.5	29.2
	5	**23.6**

Notes:

1. The bold numbers indicate design loads calculated from test data with safety factor of 2.
2. The design loads for other spans are based on linear interpolation.
3. Panels must be installed as per Evaluation Report FL 5562.2 and Petersen Aluminum current installation procedure.

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