

**EVALUATION REPORT OF
METAL SALES MANUFACTURING CORPORATION
'NOM 0.032" THICK ALUMINUM VERTICAL SEAM PANEL'**

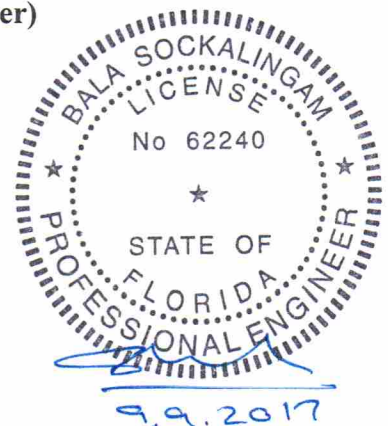
**FLORIDA BUILDING CODE 6TH EDITION (2017)
FLORIDA PRODUCT APPROVAL
FL 14645.6-R3
ROOFING
METAL ROOFING**

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

**Report No. C2182-6
Date: 9.9.17**



Manufacturer: Metal Sales Manufacturing Corporation

Product Name: Aluminum Vertical Seam

Panel Description: Standing seam panel with 16" wide coverage and 1.75" high ribs

Materials: Nom. 0.032" thick 3004-H14 or 3105-H24 Alloy (ASTM B209).

Deck Description: Min. 7/16" thick OSB or min. 15/32" thick Plywood or min. 3/4" thick wood plank (min SG of 0.42) for new and existing constructions. Designed by others and installed as per FBC 2017.

Deck Attachment: 8d x 2.5" long ring shank nails or #8 x 2" long wood screws @ 6" o.c. (Minimum) in the plywood field and edges. Designed as per FBC 2017.

New Underlayment: Minimum underlayment as per FBC 2017 Section 1507.4.5.1. Required for new construction and optional for reroofing construction.

Existing Underlayment: One layer of asphalt shingles over one layer of #30 felt. For reroofing (Optional) construction only.

Substrate (optional): Min 1" x 4" No. 2 SYP wood purlins over one layer of asphalt shingles/felt (optional) and min. 7/16" thick OSB or min. 15/32" thick plywood deck fastened to supports at maximum 24" o.c. Wood purlins shall be fastened to wood rafters with (2) #9 x 3" long wood screws. The wood purlins will be spaced same as panel fastener spacing along panel length. The wood purlin, purlin to the rafter connection and rafters must be designed by others to carry the load imposed on the panels and installed as per FBC 2017.

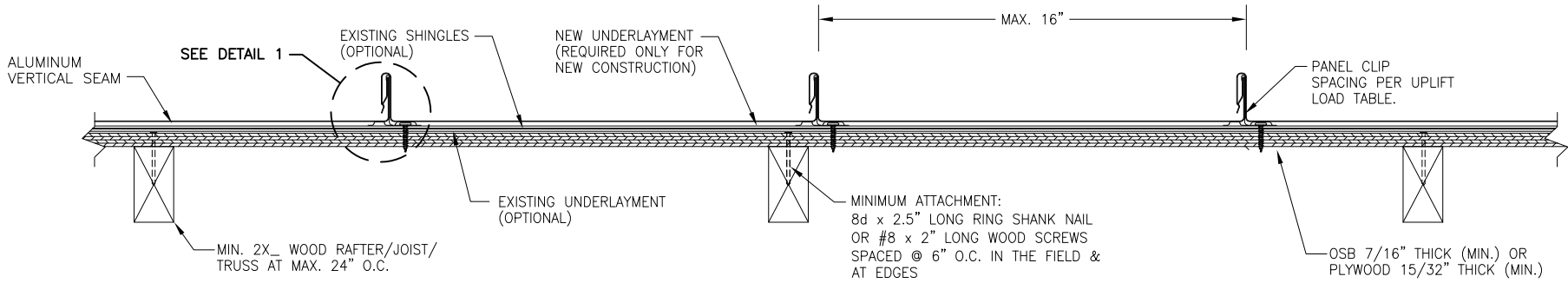
Slope: 1/4:12 or greater in accordance with FBC 2017 Section 1507.4.2.

Allowable Uplift Load: 41.6 psf @ clip spacing of 36" o.c.
(Factor of Safety = 2) 71.0 psf @ clip spacing of 12" o.c.
97.1 psf @ clip spacing of 12" o.c. with 3/8" bead adhesive in panel sidelap

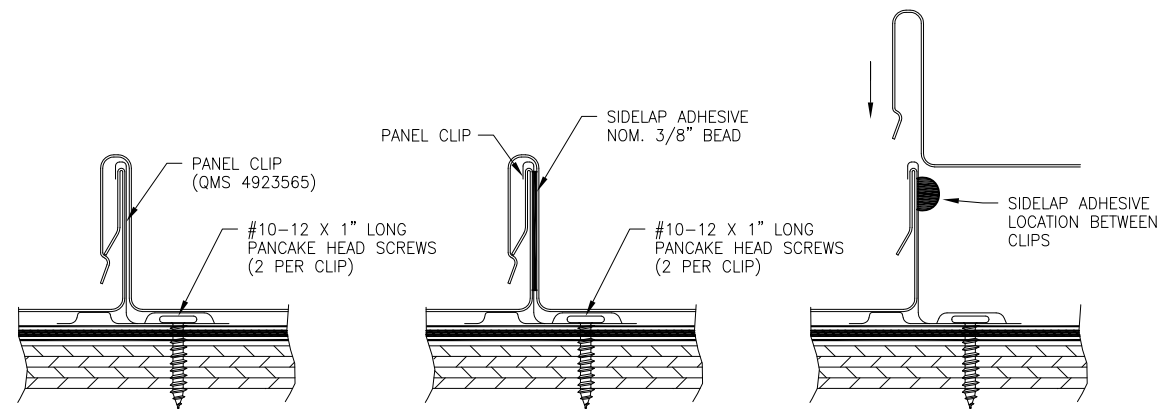
Fastener Pattern: At panel seam Panel clip (QMS 4923565) with (2) #10-12 pancake head screws per clip. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4".

Sidelap Adhesive: Schnee-Morehead SM7108 Permathane adhesive

- Test Standards:** Roof assembly tested in accordance with UL580-94 (Rev 98) 'Uplift Resistance of Roof Assemblies' & UL1897-98 'Uplift Tests for Roof Covering Systems'.
- Test Equivalency:** The test procedures in UL 580-94 comply with test procedures prescribed in UL 580-06.
The test procedures in UL 1897-98 comply with test procedures prescribed in UL 1897-12.
- 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 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. 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:** UL580/UL1897 Test Reports
Farabaugh Engineering and Testing Inc.
Project No. T210-11, Reporting Date 5/31/11
Project No. T236-11, Reporting Date 7/6/11



TYPICAL PANEL INSTALLATION X-SECTION



CLIP

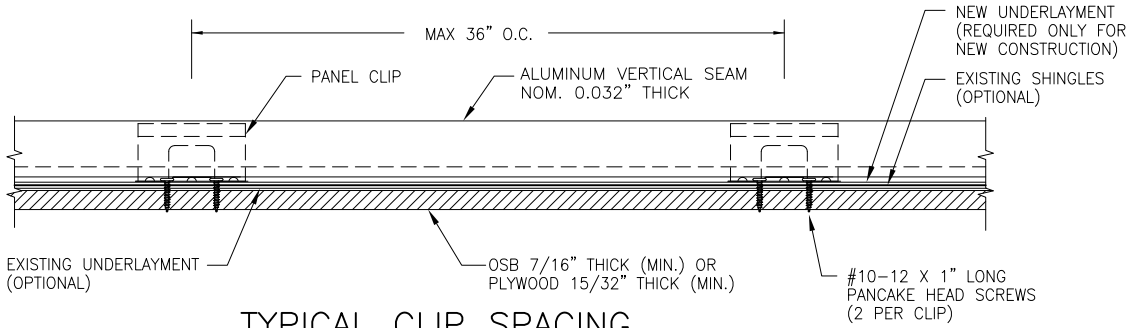
CLIP & ADHESIVE

ALLOWABLE UPLIFT PRESSURE

CLIP SPACING (IN)	ADHESIVE BEAD SIZE *	PRESSURE (PSF)
36	NONE	41.6
12	NONE	71.0
12	3/8"	97.1

* SIDELAP ADHESIVE IN PANEL SIDELAP

DETAIL 1



TYPICAL CLIP SPACING

GENERAL NOTES:

1. ARCHITECTURAL STANDING SEAM ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE NOM. 0.032" THICK ALUMINUM. MAXIMUM COVERING WIDTH OF PANEL = 16".
3. THE ROOF PANELS SHALL BE INSTALLED OVER SHEATHING & 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. 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.
6. RAFTERS/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:	D.S.
PLLOT:		DATE:	3/25/15
NO.	REVISION	DESCRIPTION	

DRAWING TITLE: ALUMINUM VERTICAL SEAM PANEL

CONSULTANTS: BALA SOCKALINGAM, PH.D., P.E.

MANUFACTURER: METAL SALES MANUFACTURING CORP.

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