EVALUATION REPORT OF
METAL SALES MANUFACTURING CORPORATION
'24 GA. VERTICAL SEAM PANEL'

FLORIDA BUILDING CODE 5TH EDITION (2014)
FLORIDA PRODUCT APPROVAL
FL 11560.11-R2
ROOFING
METAL ROOFING

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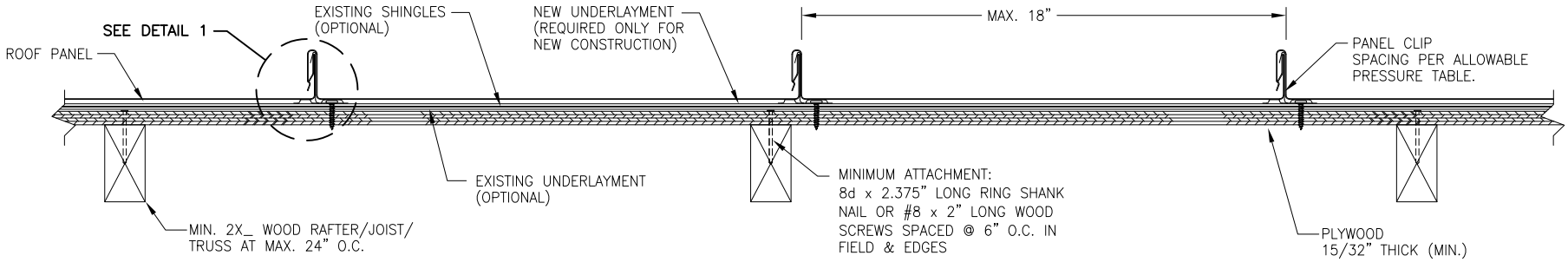
This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (1 Page)

Report No. C2009-11
Date: 3.27.15

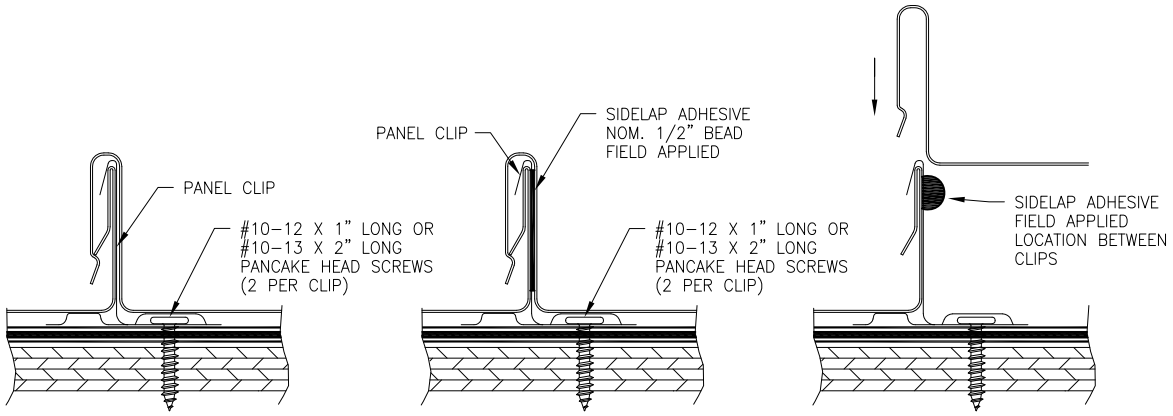
Manufacturer:	Metal Sales Manufacturing Corporation
Product Name:	Vertical Seam
Panel Description:	Max. 18" wide coverage with 1.75" high ribs
Materials:	Min. 24 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755).
Deck Description:	Min. 15/32" thick plywood at max span of 24" for new and existing constructions. Designed and installed as per FBC 2014.
Deck Attachment: (Minimum)	8d x 2.5" long ring shank nails or #8 x 2" long wood screws @ 6" o.c. in the plywood field and edges
New Underlayment:	Minimum underlayment as per FBC 2014 Section 1507.4.5.1. Required for new construction and optional for reroofing construction.
Existing Underlayment: (Optional)	One layer of asphalt shingles over one layer of #30 felt. For reroofing construction only.
Slope:	1/4:12 or greater in accordance with FBC 2014 Section 1507.4.2
Design Uplift Pressure: (Factor of Safety = 2)	30.0 psf @ clip spacing of 48" o.c. 82.5 psf @ clip spacing of 12" o.c. 105.0 psf @ clip spacing of 12" o.c. with 1/2" bead adhesive field applied in panel sidelap
Fastening Pattern: At panel seam	Panel clip (UL90 Clip) with (2) #10-12 x 1" long pancake head screws per clip for new and recovered deck. Panel clip (UL90 Clip) with (2) #10-13 x 2" long pancake head screws per clip for existing deck with asphalt shingles. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4" and installed as per Metal Sales current installation procedure.
Sidelap Adhesive:	Schnee-Morehead SM7108 Permathane adhesive
Test Standards:	Roof assembly tested in accordance with UL580-06 ‘Uplift Resistance of Roof Assemblies’ & UL1897-04 ‘Uplift Tests for Roof Covering Systems’.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2014 Section 1507.4

Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2014 Section 1609 or ASCE 7-10 using allowable stress design. The maximum clip spacing listed herein shall not be exceeded. This evaluation report is not applicable in High Velocity Hurricane Zone. Refer to current NOA for use of this product in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2014 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 & 1897 Test Reports
PRI Construction Materials Technologies
MSMC-015-02-01, Reporting Date 9/20/13
MSMC-022-02-01, Reporting Date 1/23/14



TYPICAL PANEL INSTALLATION X-SECTION



CLIP

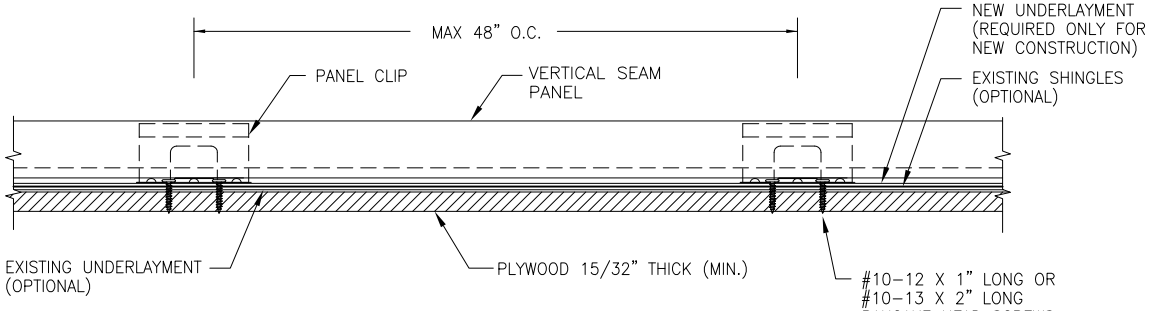
CLIP & ADHESIVE

DETAIL 1

ALLOWABLE UPLIFT PRESSURE

CLIP SPACING (IN)	ADHESIVE BEAD SIZE *	PRESSURE (PSF)
48	NONE	30.0
12	NONE	82.5
12	1/2"	105.0

* ADHESIVE FIELD APPLIED IN PANEL SIDELAP



TYPICAL CLIP SPACING

GENERAL NOTES:

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN. 24 GA. MAX. EFFECTIVE COVERING WIDTH OF PANEL = 18".
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 DESIGN UPLIFT PRESSURES 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.
PLOT: | DATE: 3/25/15

NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE: VERTICAL SEAM PANEL

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DRAWING NO. 2009-11 | REV.

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