

**EVALUATION REPORT OF  
METAL SALES MANUFACTURING CORPORATION  
'26 GA. 5V-CRIMP PANEL'**

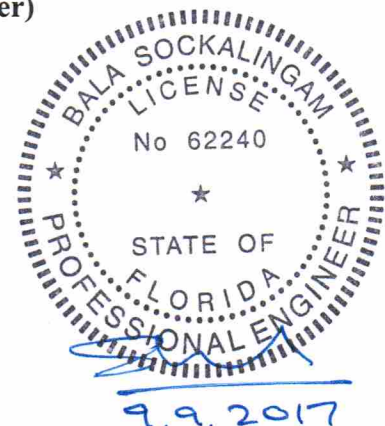
**FLORIDA BUILDING CODE 6TH EDITION (2017)  
FLORIDA PRODUCT APPROVAL  
FL 14645.4-R3  
ROOFING  
METAL ROOFING**

**Prepared For:  
Metal Sales Manufacturing Corporation  
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Louisville, KY 40202  
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**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)  
Load Span Table (1 Page)**

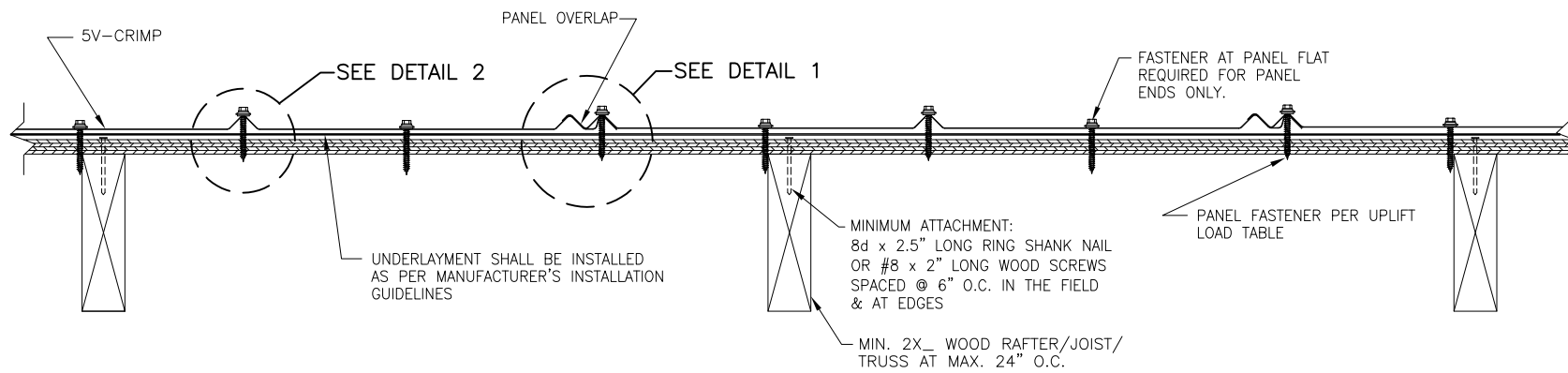
**Report No. C2182-4  
Date: 9.9.17**



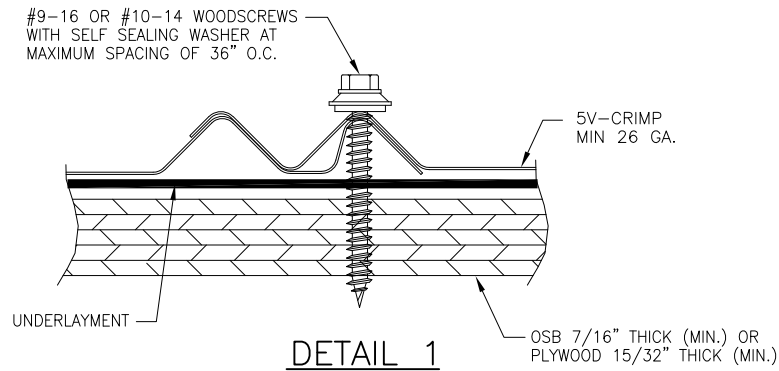
Manufacturer:	Metal Sales Manufacturing Corporation
Product Name:	5V-Crimp
Panel Description:	24" wide coverage with (5) 1/2" high ribs
Materials:	Min. 26 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755).
Deck Description:	Min. 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: (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. Designed as per FBC 2017.
Underlayment:	Minimum underlayment as per FBC 2017 Section 1507.4.5.1.
Slope:	1/2:12 or greater in accordance with FBC 2017 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 3:12.
Design Uplift Pressure: (Factor of Safety = 2)	30.0 psf @ fastener spacing of 36" o.c. 172.5 psf @ fastener spacing of 6" o.c.
Fastener Pattern: Type:	#9-16 or #10-14 hex head wood screws with sealed washer. Fastener shall be of sufficient length to penetrate through the deck a minimum of 3/8" and installed as per Metal Sales current installation procedure.
At panel ends	@ 6" o.c. across panel width
At intermediate	@ 12" o.c. across panel width
Test Standards:	Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies' & UL1897-04 'Uplift Tests for Roof Covering Systems'.
Test Equivalency:	The test procedures in UL 1897-04 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 fastener spacing listed herein shall not be exceeded. The design pressure for reduced fastener spacing may be

computed using rational analysis prepared by a Florida Professional Engineer or based on Metal Sales load span table. 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.

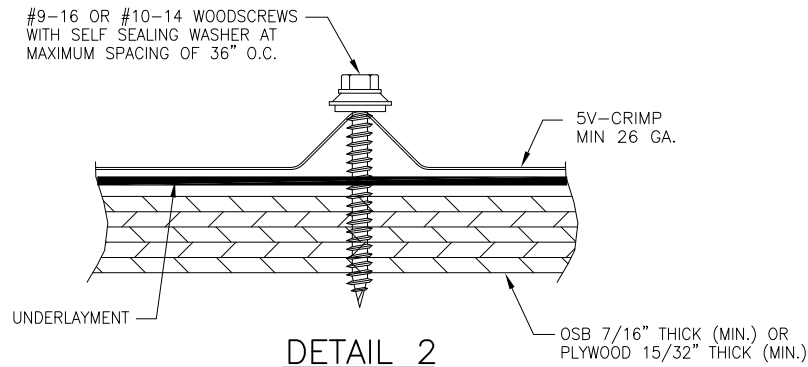
Supporting Documents: UL580 & 1897 Test Reports  
PRI Construction Materials Technologies  
MSMC-017-02-01, Reporting Date 9/20/13



**TYPICAL PANEL INSTALLATION X-SECTION**



**DETAIL 1**



**DETAIL 2**

**GENERAL NOTES:**

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN. 26 GA. ( $t = 0.019$ "), EFFECTIVE COVERING WIDTH OF PANEL = 24".
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: O.S.  
 PLOT: DATE: 3/25/15

NO.	REVISION	DESCRIPTION	DATE	BY

DRAWING TITLE: **5V-CRIMP PANEL**

MANUFACTURER: **METAL SALES MANUFACTURING CORP.**  
 545 SOUTH 3RD ST., SUITE 200  
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DRAWING NO. **2182-4** REV.

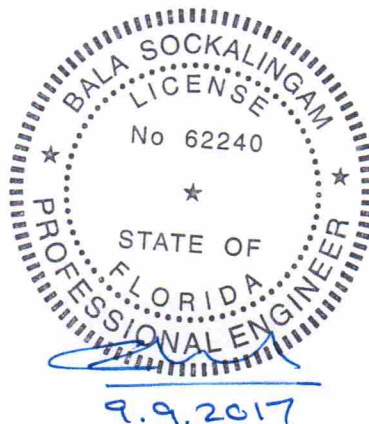
SHEET NO. **1** OF **1**

**METAL SALES MANUFACTURING CORPORATION**  
**5V-Crimp Uplift Loads**  
**(Min. 26 ga.)**

Description	Fastener Spacing along panel length (in)	Allowable Uplift Load (psf)
Coverage width: 24"  Panel Fasteners #9-16 or #10-14 hex head wood screws with sealed washer	<b>6</b>	<b>172.5</b>
	9	120.0
	12	90.0
	15	72.0
	18	60.0
	21	51.4
	24	45.0
	27	40.0
	30	36.0
	33	32.7
	<b>36</b>	<b>30.0</b>

**Notes:**

1. The bold numbers indicate design loads calculated from test data with safety factor of 2.
2. Panels must be installed as per Evaluation Report FL 14645.4 and Metal Sales current installation procedure.
3. Three or more spans condition.



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