## EVALUATION REPORT OF METAL SALES MANUFACTURING CORPORATION 'NOM 0.032" THICK ALUMINUM 5V-CRIMP PANEL'

## FLORIDA BUILDING CODE 6TH EDITION (2017) FLORIDA PRODUCT APPROVAL FL 11560.1-R3 ROOFING METAL ROOFING

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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. C2181-1 Date: 9.8.2017



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Manufacturer:	Metal Sales Manufacturing Corporation
Product Name:	Aluminum 5V-Crimp
Panel Description:	24" wide coverage with (5) 1/2" high ribs
Materials:	Nom. 0.032" thick 3004-H14 or 3105-H24 Alloy (ASTM B209).
Deck Description:	Min. 7/16" thick OSB, min. 15/32" thick Plywood or min. $\frac{3}{4}$ " 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.
New Underlayment:	Minimum underlayment as per FBC 2017 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:	1/2:12 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 psf @ fastener spacing of 36" o.c. 161.5 psf @ fastener spacing of 6" o.c.
Fastener Pattern: Type: At panel ends At intermediate	<ul> <li>#10-14 hex head wood screw with sealed washer. Fastener shall be of sufficient length to penetrate through the deck a minimum of 3/8".</li> <li>@ 6" o.c. across panel width</li> <li>@ max 12.5" o.c. across panel width</li> </ul>
Test Standards:	Roof assembly tested in accordance with TAS 125-03 'Standard Requirements for Metal Roofing Systems'.
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

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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: TAS 125 Test Reports Farabaugh Engineering and Testing Inc. Project No. T198-11, Reporting Date 5/19/11



Description	Fastener Spacing	Allowable Uplift
	along Panel Length	Load
	(in)	(psf)
Coverage width: 24"	6	161.5
	9	120.0
Panel Fastener:	12	90.0
#10-14 hex head screws with	15	72.0
sealed washer	18	60.0
	21	51.4
Panel fasteners spaced at	24	45.0
max. 12.5" o.c. across panel	27	40.0
width through ribs.	30	36.0
	33	32.7
	36	30.0

## METAL SALES MANUFACTURING CORPORATION Aluminum 5V-Crimp Uplift Loads (Nom. 0.032" thick)

## 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 11560.1 and Metal Sales current installation procedure.

3. Three or more spans condition.



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