# EVALUATION REPORT OF METAL SALES MANUFACTURING CORPORATION 'NOM 0.032" THICK ALUMINUM IMAGE II PANEL'

# FLORIDA BUILDING CODE 8TH EDITION (2023) FLORIDA PRODUCT APPROVAL FL 11560.3-R5 ROOFING METAL ROOFING

Prepared For:
Metal Sales Manufacturing Corporation
7800 Highway 60
Sellersburg, IN 47172
Telephone: (502) 855-4300
Fax: (502) 855-4200

Prepared By:
Bala Sockalingam, Ph.D., P.E.
Florida Professional Engineer #62240
1216 N Lansing Ave., Suite C
Tulsa, OK 74106
Telephone: (918) 492-5992

This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (1 Page)
Load Span Table (1 Page)

Report No. C2672-3 Date: 8.3.2023

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

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Manufacturer: Metal Sales Manufacturing Corporation

Product Name: Aluminum Image II

Panel Description: Max. 16" wide coverage with 1" high ribs

Materials: Min. nominal 0.032" thick 3004-H14 or 3105-H24 Alloy (ASTM

B209) as per FBC 2023 Section 1507.4.3. Pre-painted panels are

required for use with adhesive and support strap.

Deck Description: Min. 15/32" thick Plywood or min. 3/4" thick wood plank (min SG of

0.42) for new and existing constructions. Designed and installed as

per FBC 2023.

Deck Attachment: Minimum attachment: 8d x 2.5" long ring shank nails or #8 x 2" long

wood screws at 6" o.c. in the plywood field and edges.

Deck fastener spacing at 3" o.c. in the plywood field and edges for roof zones installed with support strap. Designed as per FBC 2023.

Underlayment: Minimum underlayment as per FBC 2023 Section 1507.4.5.1.

Slope: 1/2:12 or greater in accordance with FBC 2023 Section 1507.4.2.

Requires applied lap sealant for roof slopes less than 3:12.

Design Uplift Pressure: 33.3 psf at fastener spacing of 24" o.c.

(Factor of Safety = 2) 93.5 psf at fastener spacing of 6" o.c.

222.3 psf at fastener spacing of 6" o.c. with support strap

Fastener Pattern: #10-12 pancake head screws along panel seam. Fastener shall be of

sufficient length to penetrate through the deck a minimum of ½". Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4.

Support Strap: 4.25" wide, 24 ga., 50 ksi strap fastened to deck with 2 rows of #10-12

x 1" long pancake head screws at staggered 12" o.c. spacing. The strap is continuous over the entire corner or edge roof zones. Prior to the panel installation, two rows of 3/8" bead of adhesive are field

applied along the length of the strap.

Adhesive: Geocel 4600<sup>TM</sup> Structural Adhesive Sealant. Applied in accordance

with manufacturer's suggested installation.

Test Standards: Roof assembly tested in accordance with UL580-06 'Uplift Resistance

of Roof Assemblies' & UL1897-12 'Uplift Tests for Roof Covering Systems' or TAS 125-03 'Standard Requirements for Metal Roofing

Systems'.

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Test Equivalency: The test procedures in UL 1897-12 comply with test procedures

prescribed in UL 1897-15.

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 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 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: TAS 125 Test Report

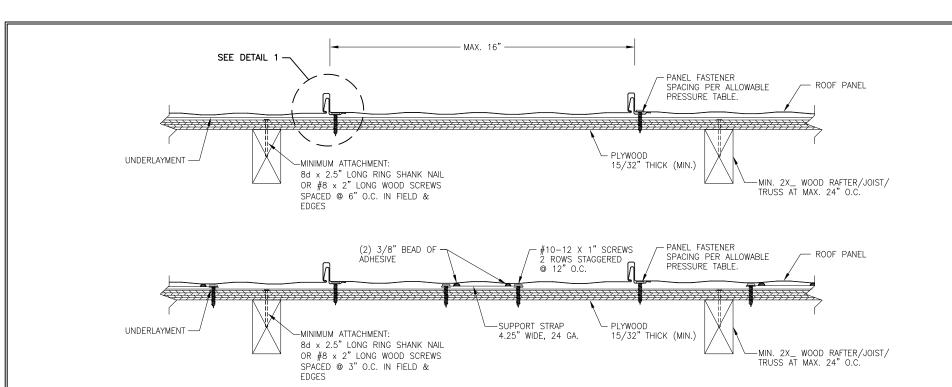
Farabaugh Engineering and Testing Inc.

Project No. T129-23, Reporting Date 3/15/2023

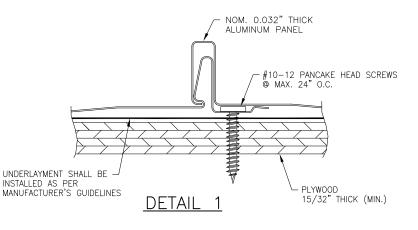
UL580 & UL1897 Test Reports

Farabaugh Engineering and Testing Inc.

Project No. T160-23, Reporting Date 4/14/2023



# PANEL INSTALLATION X-SECTION



#### **GENERAL NOTES:**

- ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
- ROOF PANELS ARE SHALL BE NOM. 0.032" THICK ALUMINUM. MAX. 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.
- 7. REQUIRES APPLIED LAP SEALANT FOR ROOF SLOPE < 3:12.

RAWN BY B.S. CHECKED BY D.S. SALES MANUFACTURING CORP. 7800 HIGHWAY 60 SELLERSBURG, IN 47172 502-855-4300 PANEL METAL ROOF = IMAGE Δ. SOCKALINGAM, PH.D., ALUMINUM N LANSING , TULSA, OK -492-5992 B B B 2672-3 PAGE NO. OF

## METAL SALES MANUFACTURING CORPORATION

# Aluminum Image II Uplift Loads (Min. Nominal 0.032" thick)

Description	Fastener Spacing	Allowable Uplift
	along Panel Length	Load
	(in)	(psf)
Coverage width: 16"	6	93.5
	8	86.8
Panel Fastener:	10	79.8
#10-12 pancake head screws	12	66.5
	14	57.0
	16	49.9
	18	44.3
	20	39.9
	22	36.3
	24	33.3
With Support Strap & Adhesives	6	222.3

### **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 11560.3 and Metal Sales current installation procedure.
- 3. Three or more spans condition.