

**EVALUATION REPORT OF  
METAL SALES MANUFACTURING CORPORATION  
'26 GA. IMAGE II PANEL'**

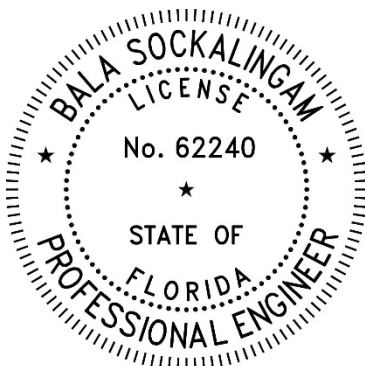
**FLORIDA BUILDING CODE 8TH EDITION (2023)  
FLORIDA PRODUCT APPROVAL  
FL 14645.10-R5  
ROOFING  
METAL ROOFING**

**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 (2 Pages)  
Load Span Table (1 Page)**

**Report No. C2673-10  
Date: 8.3.2023**



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

Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

Manufacturer: Metal Sales Manufacturing Corporation

Product Name: Image II

Panel Description: Max. 16" wide coverage with 1" 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). Corrosion resistant as per FBC 2023 Section 1507.4.3. Pre-painted panels are required for use with adhesive and support strap.

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 2023.

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

New Underlayment: Minimum underlayment as per FBC 2023 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.

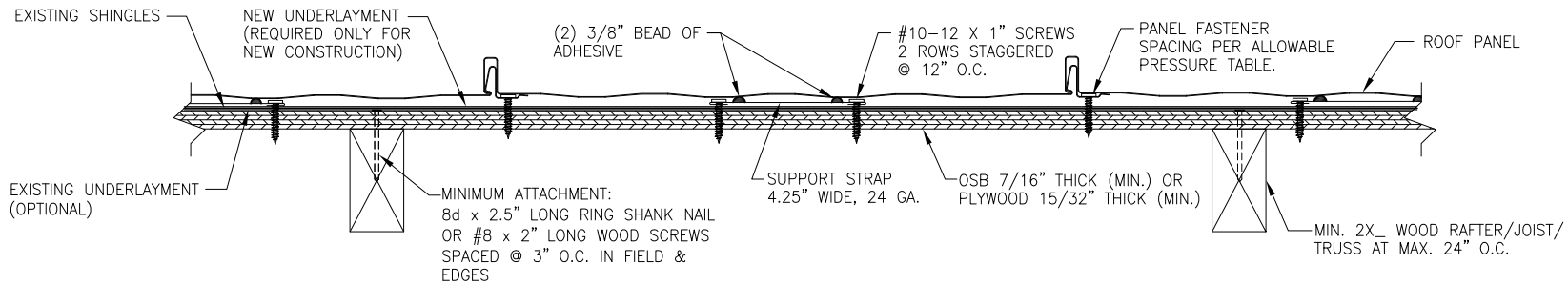
Slope: 1/2:12 or greater in accordance with FBC 2023 Section 1507.4.2. Requires applied lap sealant for roof slopes less than 3:12.

Allowable Uplift Load: (Factor of Safety = 2)  
20.8 psf at fastener spacing of 24" o.c  
63.5 psf at fastener spacing of 6" o.c  
86.6 psf at fastener spacing of 6" o.c with 3/8" bead adhesive in panel sidelap  
116 psf at fastener spacing of 6" o.c. with support strap and adhesive. The support strap fastened to deck with screws spaced at staggered 12" o.c.  
169 psf at fastener spacing of 6" o.c. with support strap and adhesive and 3/8" bead adhesive in panel sidelap. The support strap fastened to deck with screws spaced at staggered 12" o.c.  
183.5 psf at fastener spacing of 6" o.c. with support strap and adhesive and 3/8" bead adhesive in panel sidelap. The support strap fastened to deck with screws spaced at 6" o.c.

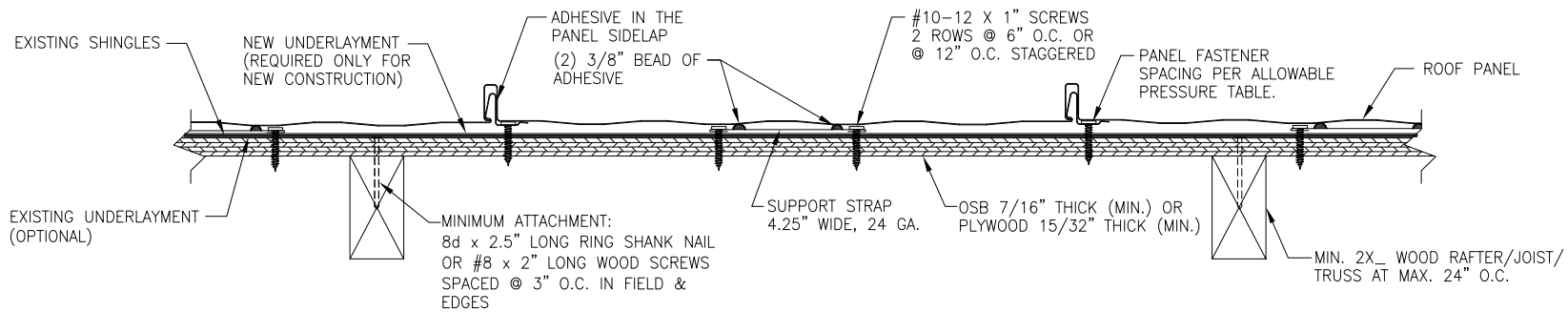
Fastener Pattern: #10 pancake head screws along panel seam. Fasteners are corrosion resistant as per FBC 2023 Section 1507.4.4. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4".

- Support Strap: 4.25" wide, 24 ga., 50 ksi pre-painted strap fastened to deck with 2 rows of #10-12 x 1" long pancake head screws at 6" o.c. spacing or 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.
- Support Strap & Panel Sidelap Adhesive: Geocel 4600™ Structural Adhesive Sealant. Applied in accordance with manufacturer's suggested installation procedures.
- Test Standards: Roof assembly tested in accordance with UL 580-94 and 580-06 'Uplift Resistance of Roof Assemblies' and UL 1897-98 and 1897-12 '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 1897-15.
- 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 the 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: UL580 & UL1897 Test Reports  
Farabaugh Engineering and Testing Inc.  
Project No. T176-11, Reporting Date 4/26/2011  
Project No. T260-11, Reporting Date 8/15/2011  
Project No. T259-21, Reporting Date 10/30/2021  
Project No. T158-23, Reporting Date 4/14/2023  
Project No. T215-23, Reporting Date 7/5/2023





**FASTENING PATTERN 3**



**FASTENING PATTERN 4 OR 5**

**TYPICAL PANEL INSTALLATION X-SECTION**

DRAWN BY: B.S.  
CHECKED BY: D.S.  
PLOT: DATE: 7/30/2023

NO.	REVISION DESCRIPTION	DATE	BY

DRAWING TITLE: **ALUMINUM IMAGE II ROOF PANEL**

CONSULTANTS: **BALA SOCKALINGAM, PH.D., P.E.**  
1216 N LANSING AVE., SUITE C  
COLUMBIANA, MS 38916  
PHONE: 918-482-5992 FAX: 918-493-3568

MANUFACTURER: **METAL SALES MANUFACTURING CORP.**  
7800 HIGHWAY 60  
SELLERSBURG, IN 47172  
502-855-4300

DRAWING NO. **2673-10** REV.   
PAGE NO. **2** OF **2**

**METAL SALES MANUFACTURING CORPORATION**

**Image II Uplift Loads**

**(Min. 26 ga.)**

Description	Fastener Spacing along Panel Length (in)	Allowable Uplift Load (psf)
Coverage width: 16"  Panel Fastener: #10-12 pancake head screws	<b>6</b>	<b>63.5</b>
	8	58.8
	10	49.8
	12	41.5
	14	35.6
	16	31.1
	18	27.7
	20	24.9
	22	22.6
	<b>24</b>	<b>20.8</b>
With Sidelap Adhesive	<b>6</b>	<b>86.6</b>
With Support Strap & Adhesives. Strap fastened at staggered 12" o.c.	<b>6</b>	<b>116.0</b>
With Support Strap & Adhesives & Sidelap Adhesive. Strap fastened at staggered 12" o.c.	<b>6</b>	<b>169.0</b>
With Support Strap & Adhesives & Sidelap Adhesive. Strap fastened at 6" o.c.	<b>6</b>	<b>183.5</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 14645.10 and Metal Sales current installation procedure.
3. Three or more spans condition.