

**EVALUATION REPORT OF
METAL SALES MANUFACTURING CORPORATION
'NOM 0.032" THICK ALUMINUM VERTICAL SEAM PANEL'**

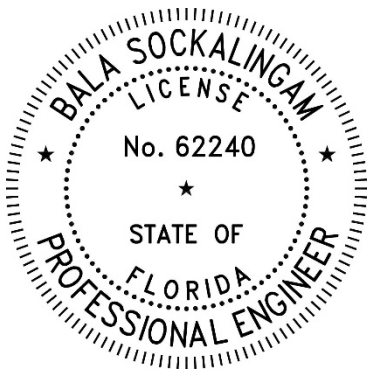
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 14645.4-R5
ROOFING
METAL ROOFING**

**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)**

**Report No. C2673-4
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.

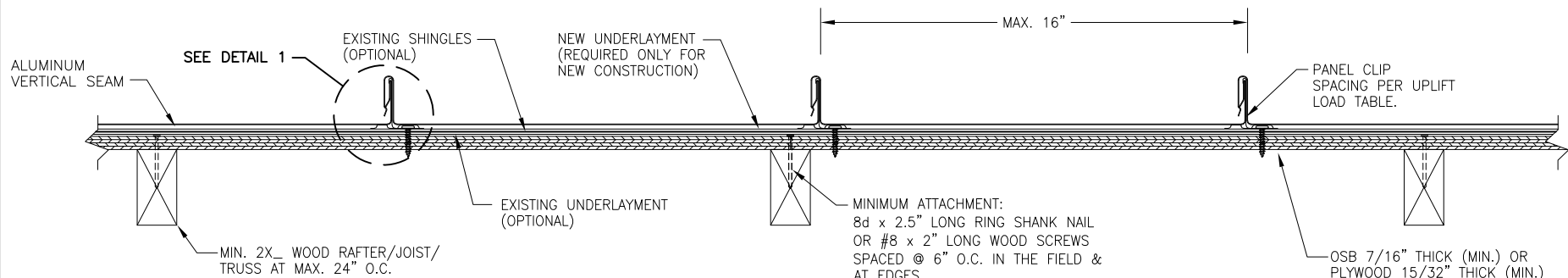
Manufacturer:	Metal Sales Manufacturing Corporation
Product Name:	Aluminum Vertical Seam
Panel Description:	Standing seam panel with max. 16" wide coverage and 1.75" high ribs
Materials:	Min. nominal 0.032" thick 3004-H14 or 3105-H24 Alloy (ASTM B209) as per FBC 2023 Section 1507.4.3. Pre-painted panels are required for use with adhesive.
Deck Description:	Min. 7/16" thick OSB or min. 15/32" thick Plywood or min. ¾" thick wood plank (min SG of 0.42) for new and existing constructions. Designed by others and installed as per FBC 2023.
Deck Attachment: (Minimum)	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. 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:	1/4:12 or greater in accordance with FBC 2023 Section 1507.4.2.
Allowable Uplift Load: (Factor of Safety = 2)	41.6 psf at clip spacing of 36" o.c. 71.0 psf at clip spacing of 12" o.c. 97.1 psf at clip spacing of 12" o.c. with 3/8" bead adhesive in panel sidelap
Fastener Pattern: At panel seam	Panel clip (QMS 4923565) with (2) #10-12 pancake head screws per clip. Fastener shall be of sufficient length to penetrate through the deck a minimum of 1/4". Clips and fasteners are corrosion resistant as per FBC 2023 Section 1506.7 and 1507.4.4, respectively.
Adhesive:	Geocel 4600™ Structural Adhesive Sealant. Applied in accordance with manufacturer's suggested installation.
Test Standards:	Roof assembly tested in accordance with UL580-94 (Rev 98) 'Uplift Resistance of Roof Assemblies' & UL1897-98 '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.

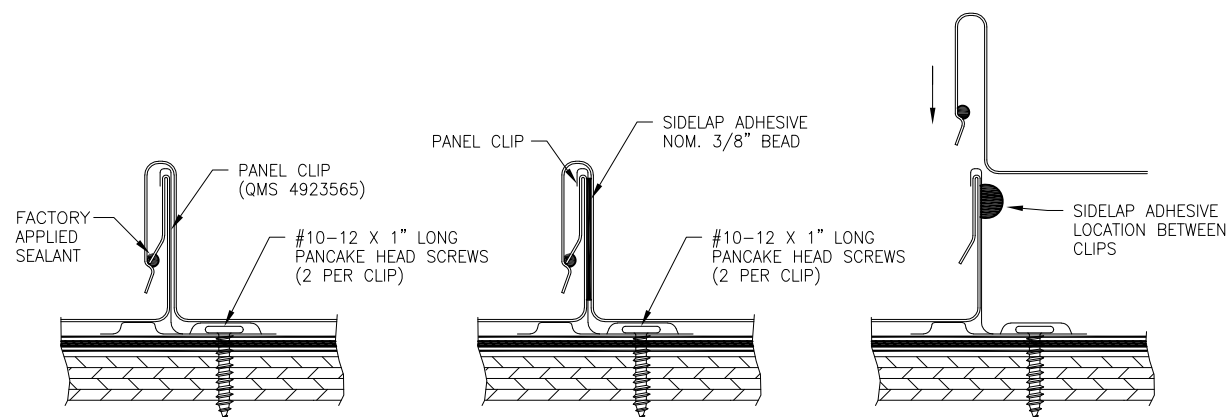
Code Compliance: The product described herein has demonstrated compliance with FBC 2023 Section 1507.4.

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 clip spacing listed herein shall not be exceeded. The design pressure for reduced clip spacing may be computed using rational analysis prepared by a Florida Professional Engineer. 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. T210-11, Reporting Date 5/31/2011
Project No. T236-11, Reporting Date 7/6/2011



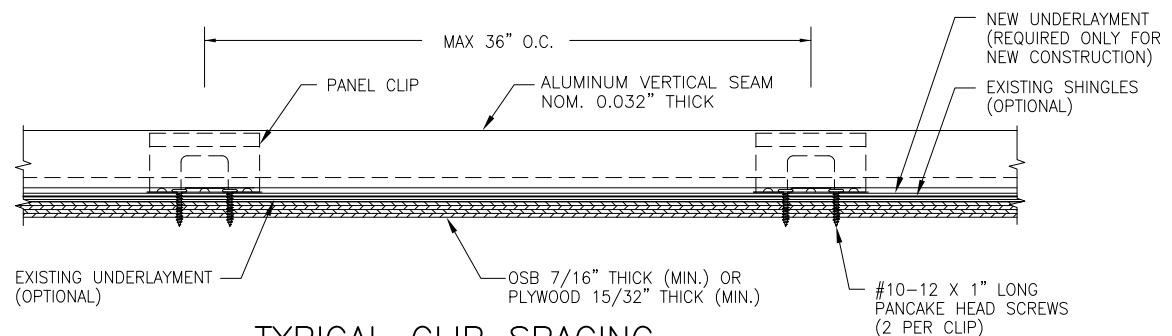
TYPICAL PANEL INSTALLATION X-SECTION



CLIP

CLIP & ADHESIVE

DETAIL 1



TYPICAL CLIP SPACING

GENERAL NOTES:

1. ARCHITECTURAL STANDING SEAM ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN. NOMINAL 0.032" THICK ALUMINUM. MAXIMUM 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.

DRAWN BY: B.S.		CHECKED BY: D.S.	
PLOT:		DATE: 7/19/2023	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE ALUMINUM VERTICAL SEAM PANEL			
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E.		MANUFACTURER METAL SALES MANUFACTURING CORP.	
1216 N LANSING AVE, SUITE C TULSA, OK 74106		7800 HIGHWAY 60 SELLERSBURG, IN 47172	
PHONE: 918-492-5992		FAX: 866-366-1543	
DRAWING NO. 2673-4		REV. 	
PAGE NO. 1		OF 1	