

**EVALUATION REPORT OF
STEEL AND METAL SYSTEMS, INC.
'275 NEW LOCK PANEL'**

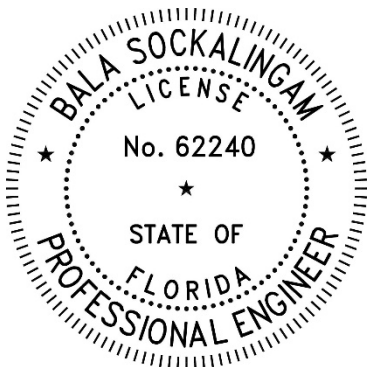
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 39298.1-R1
ROOFING
METAL ROOFING**

**Prepared For:
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**Prepared By:
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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. C2704-1
Date: 7.28.2023**



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

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**2023.07.28
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Manufacturer:	Steel and Metal Systems, Inc.
Product Name:	275 New Lock Panel
Panel Description:	Standing seam panel with maximum 17.5" wide coverage and 2" high ribs.
Materials:	Min. 24 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.
Deck Description:	Min. 15/32" 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: (Minimum)	Minimum attachment: 8d x 2.5" long ring shank nails or #8 x 2" long wood screws @ 6" o.c. in the field and edges. Designed as per FBC 2023.
Underlayment:	Minimum underlayment as per FBC 2023 Section 1507.4.5.1.
Slope:	1/4:12 or greater in accordance with FBC 2023 Section 1507.4.2
Design Uplift Pressure: Factor of Safety = 2	17.5" wide, 24 ga. panel unseamed 56 psf at clip spacing of 24" o.c. 17.5" wide, 24 ga. panel with 90° seam 52.5 psf at clip spacing of 36" o.c. 108.5 psf at clip spacing of 12" o.c. Clip fastener, deck, supports and support connections must be designed to resist all loads.
Panel Attachment:	NCF33000 fixed clips with (2) #10-12 x 1" long pancake head wood screws per clip. Clips and fasteners are corrosion resistant as per FBC 2023 Section 1506.7 and 1507.4.4, respectively.
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 1897-15.
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 Professional Engineer or based on Steel and Metal Systems' 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 & 1897 Test Reports
Force Engineering & Testing, Inc.
78-0014T-14, Reporting Date 3/12/2014
78-0214T-16A, B, Reporting Date 10/4/2016

(Steel and Metal Systems, Inc. is authorized to use Karr's Building Supply & Service's Test Reports)



1. ARCHITECTURAL STANDING SEAM ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MIN. 24 GA. EFFECTIVE COVERAGE WIDTH = 17.5"
3. THE ROOF PANELS SHALL BE INSTALLED OVER 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. CLIPS AND FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. PURLINS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWING NO.		REV.	
2704-1			
PAGE NO. 1 OF 1			
DRAWING TITLE			
275 NEW LOCK ROOF PANEL			
CONSULTANTS		MANUFACTURER	
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DRAWN BY:	CHECKED BY:	DATE:	
B.S.	S.D.	6/30/2021	
PLOT:			
NO.	REVISION	DESCRIPTION	BY
			DATE

STEEL AND METAL SYSTEMS, INC.
275 New Lock Panel with 90° seam
Fastened to min 15/32" thick Plywood
Design Uplift Loads

Panel Clip Spacing	Uplift Load (psf)
3' 0" on center	52.5
2' 6" on center	66.5
2' 0" on center	80.5
1' 6" on center	94.5
1' 0" on center	108.5

Notes:

1. The allowable uplift loads were determined from UL580/UL1897 testing.
2. The factor of safety was 2.0 for all tests.
3. Panels must be installed as per Evaluation Report FL 39298.1 and Steel and Metal Systems, Inc.'s current installation procedure.