

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

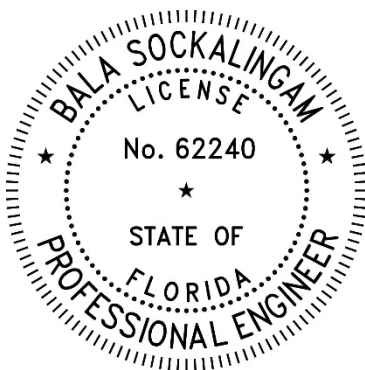
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 39298.2-R1
ROOFING
METAL ROOFING**

**Prepared For:
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**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (1 Page)**

**Report No. C2704-2
Date: 7.28.2023**



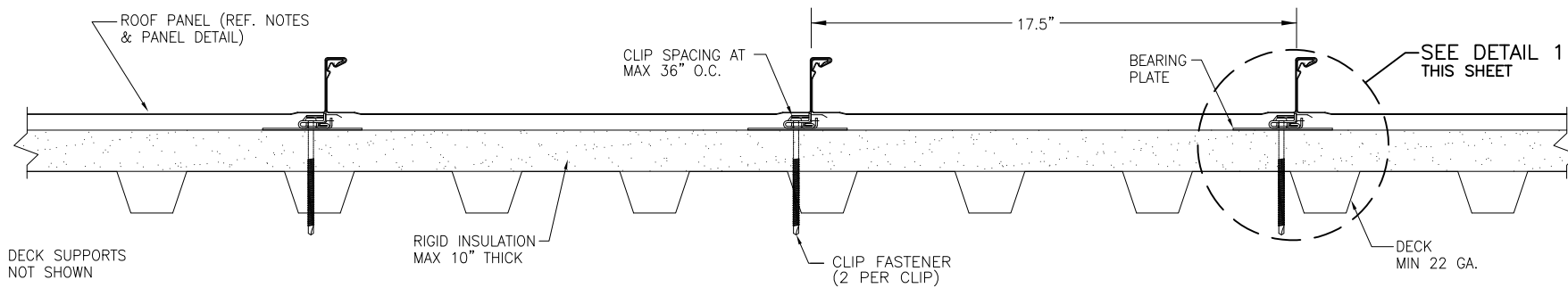
This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

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

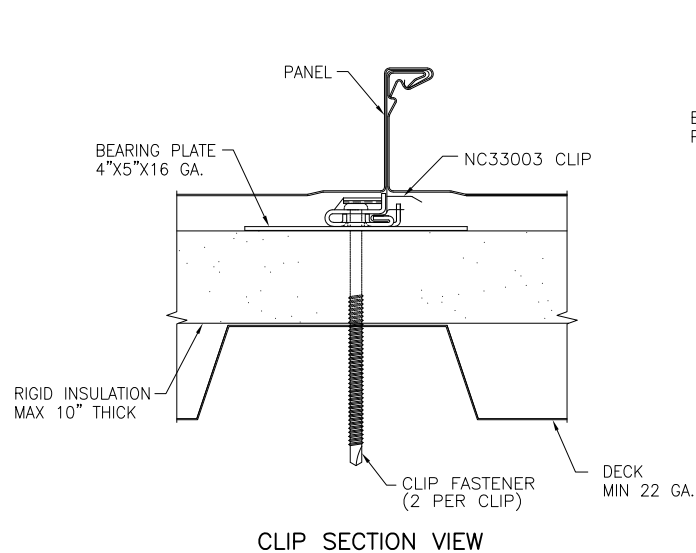
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Manufacturer:	Steel and Metal Systems, Inc.
Product Name:	275 New Lock Panel
Panel Description:	Standing seam panel with maximum 17.5" wide coverage and 2" high ribs.
Materials:	Min. 24 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2023 Section 1507.4.3.
Deck Description:	Min. 22 ga., Grade 33 B-deck. The deck and its attachment to supports must be designed by other to carry the panel loads. Designed as per FBC 2023.
Insulation (Optional):	10" thick (max.) rigid board insulation
Gypsum Board (Optional)	Min thick 1/2 in. To be placed on top of either the deck or rigid insulation (Item 3). Combined thickness of the gypsum board and rigid insulation not to exceed 4 in. All joints to be taped with 2.5 in. wide joint tape.
Plywood: (Optional)	Min. 15/32" Plywood decking to be used in lieu of gypsum board and located over rigid insulation. Combined thickness of the plywood and rigid insulation not to exceed 4 in.
Bearing Plates:	4" x 5" x 16 ga. bearing plate. Required over rigid insulation and optional when plywood is used over rigid insulation.
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 with 90° seam 52.5 psf at clip spacing of 36" o.c. Clip fastener, deck, supports and support connections must be designed to resist all loads.
Panel Attachment:	NC33003 sliding clips with (2) #14-13 deck screws per clip through 4" x 5" x 16 ga. bearing plate and rigid insulation into deck. Fastener shall be of sufficient length to penetrate the deck a minimum of 1/2". 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'.

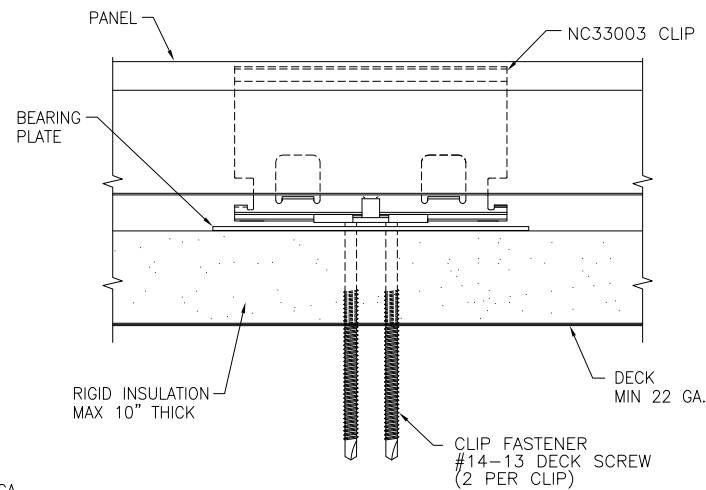
- Test Equivalency: The test procedures in UL 1897-04 comply with test procedures prescribed in UL 1897-15.
- Code Compliance: The product described herein has demonstrated compliance with FBC 2023 Section 1507.4.
- Product Limitations: Design wind loads shall be determined for each project in accordance 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. 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.
78-0090T-14A, Reporting Date 5/29/2014
- (Steel and Metal Systems, Inc. is authorized to use Karr's Building Supply & Service's Test Reports)



TYPICAL PANEL INSTALLATION X-SECTION

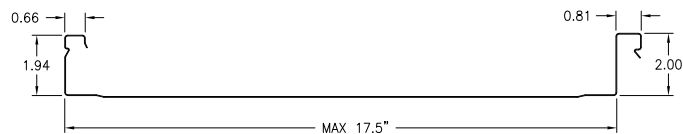


CLIP SECTION VIEW



CLIP SIDE VIEW

DETAIL 1



PANEL SECTION
(MIN 24 GA.)

GENERAL NOTES:

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.

DRAWN BY: B.S.	CHECKED BY: S.D.
PLOT:	DATE: 6/30/2021
NO.	DATE
BY	REVISION DESCRIPTION
NO.	REVISION DESCRIPTION
DRAWING TITLE 275 NEW LOCK ROOF PANEL	
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E.	MANUFACTURER STEEL AND METAL SYSTEMS, INC.
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DRAWING NO. 2704-2	REV.
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