EVALUATION REPORT OF CENTRAL STATES MANUFACTURING, INC. '26 GA. HORIZON LOC PANEL'

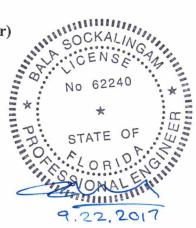
FLORIDA BUILDING CODE 6TH EDITION (2017) FLORIDA PRODUCT APPROVAL FL 14026.1-R4 ROOFING METAL ROOFING

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

> Report No. C2085-1 Date: 9.22.2017



Manufacturer: Central States Manufacturing, Inc.

Product Name: Horizon Loc Panel

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

Materials: Minimum 26 ga., 50 ksi steel. Galvanized coated steel (ASTM A653)

or Galvalume coated steel (ASTM A792) or painted steel (ASTM

A755).

Deck Description: Min. 7/16" thick OSB or min. 15/32" thick APA rated 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 2017.

Underlayment: Minimum underlayment as per FBC 2017 Section 1507.4.5.1.

Required for new construction.

Slope: 1/2:12 or greater in accordance with FBC 2017 Section 1507.4.2

Design Uplift Pressure: (Factor of Safety = 2)

System 1: 56.0 psf at seam fastener spacing of 6.5" o.c. along panel seam into

min. 7/16" thick OSB or min. 15/32" thick plywood.

System 2: 78.5 psf at seam fastener spacing of 4.75" o.c. along panel seam into

min. 7/16" thick OSB or min. 15/32" thick plywood with and 3/8" diameter continuous bead of Weathermaster metal roof sealant applied

in the male rib.

System 3: 138.5 psf at seam fastener spaced at 4.75" o.c. along panel seam into

min. 15/32" thick plywood deck with exterior fasteners spaced at 12" o.c. and 3/16" diameter continuous bead Novaflex silicone or

Weathermaster metal roof sealant applied in the male rib.

Seam Fastener: #10 x 1" wafer head wood screws along panel seam. Fastener shall be

of sufficient length to penetrate through the deck a minimum of 1/4".

Exterior Fastener: #10 x 1" long Kwikseal II Woodbinder screws with sealing washer or

approved equal. Located on the panel flat at 1.25" from either side of

panel sidelap. Spaced at maximum 12" o.c. along panel length.

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 1897-12.

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Code Compliance: The product described herein has demonstrated compliance with FBC

2017 Section 1507.4.

Product Limitations: Design wind loads shall be determined for each project in accordance

with FBC 2017 Section 1609 or ASCE 7-10 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. This product is not approved for use in the High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2017 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report

from an accredited laboratory for fire ratings of this product.

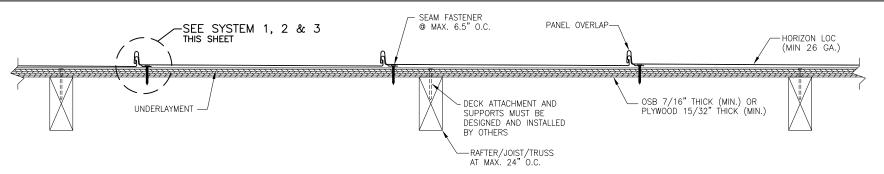
Supporting Documents: UL580 & UL1897 Test Reports

Force Engineering and Testing Inc.

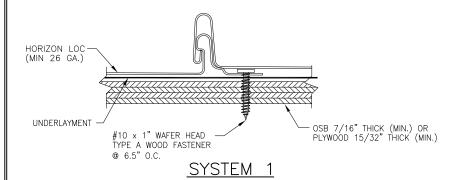
Report No. 410-0022T-13, Reporting Date 12/6/2013

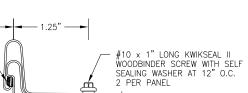
Farabaugh Engineering and Testing Inc.

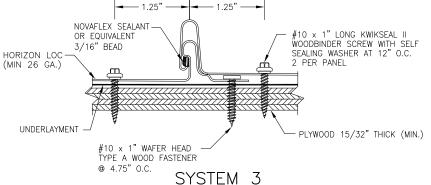
Project No. T286-15, Reporting Date 10/20/15 Project No. T245-17, Reporting Date 9/1/17



TYPICAL PANEL INSTALLATION X-SECTION







WEATHERMASTER SEALANT OR EQUIVALENT 3/8" BEAD HORIZON LOC-(MIN 26 GA.) UNDERLAYMENT OSB 7/16" THICK (MIN.) OR PLYWOOD 15/32" THICK (MIN.) #10 x 1" WAFER HEAD TYPE A WOOD FASTENER @ 4.75" O.C. SYSTEM 2

ALLOWABLE UPLIFT PRESSURE

SYSTEM	SEAM FASTENER SPACING (IN) ALONG RIB	EXTERIOR FASTENER SPACING (IN)	SEAM SEALANT DIAMETER (IN)	PRESSURE (PSF)
1	6.5	NONE	NONE	56.0
2	4.75	NONE	3/8	78.5
3	4.75	12	3/16	138.5

GENERAL NOTES:

- 1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
- 2. ROOF PANELS ARE SHALL BE 26 GA. EFFECTIVE COVERING WIDTH OF PANEL = 16".
- 3. 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 LOAD TABLE.
- 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.

No. REASON DESCRIPTION DATE PARKING TITLE HORIZON LOC PANEL PANUFACTURER PANUFACTURING MISS. SUITE CENTRAL STATES MANUFACTURING, INC. 302 JANE PLACE 1216 N LIMSNIG ARE SUITE LOWELL, AR 72745 PHONE: 918-492-5992 FAX: 866-366-1543 PANUFACTURING PANUFACTURING, INC. PANUFACTURING,
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DRAWN BY: CHECKED BY: