



VERSALOC SR™

1" 24GA. VERSALOC SR™ 16½" WIDE ROOF PANEL OVER 15/32" PLYWOOD
FLORIDA PRODUCT APPROVAL NO. 11651.4 R2

Product Evaluation Report
GULF COAST SUPPLY & MANUFACTURING, LLC.

1" 24 Ga. VersaLoc SR™ 16½" Wide Roof Panel over 15/32" Plywood

Florida Product Approval #11651.4 R2

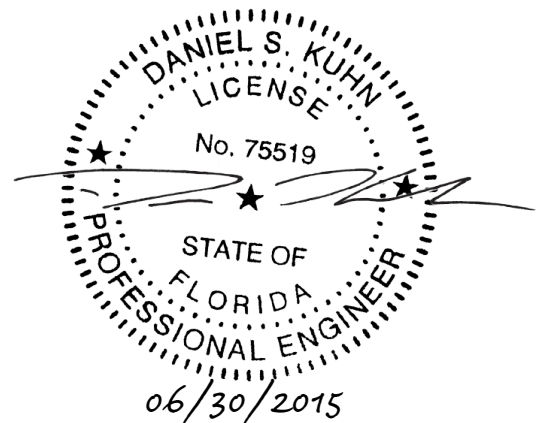
Florida Building Code 2014
Per Rule 61G20-3
Method: 1 –D

Category: Roofing
Subcategory: Metal Roofing
Compliance Method: 61G20-3.005(1)(d)
HVHZ

Product Manufacturer:
Gulf Coast Supply & Manufacturing, LLC.
14429 SW 2nd Place, Suite G30
Newberry, FL 32669

Engineer Evaluator:
Dan Kuhn, P.E. #75519
Florida Evaluation ANE ID: 10743

Validator:
Locke Bowden, P.E. #49704
9450 Alysbury Place
Montgomery, AL 36117



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Compliance Statement:	The product as described in this report has demonstrated compliance with the Florida Building Code 2014, Sections 1504.3.2, 1518.9, 1523.6.5.2.4.
Product Description:	VersaLoc SR™, 1" Mechanical Lock Standing Seam Roof Panel, Minimum 24 Ga. Steel, Maximum 16½" Wide, Roof Panel restrained with steel clips into minimum 15/32" Plywood decking. Non-Structural Application.
Panel Material/Standards:	Material: Minimum 24 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2014 Section 1507.4.3. Paint Finish Optional. Yield Strength: Minimum 80.0 ksi Corrosion Resistance: Panel Material shall comply with Florida Building Code 2014, Section 1507.4.3.
Panel Dimension(s):	Thickness: 0.0235" Minimum Width: 16 ½" Coverage Maximum Rib Height: 1" Panel Seam: 180° Seam, Double Lock w/ Mechanical Seamer
Roof Panel Clips:	Product Name: DMP 1 ML Fixed EZ Seam Type: Fixed, 24Ga., 2" Long Corrosion Resistance: Per Florida Building Code 2014 Section 1506.7
Clip Fastener:	(2) #12-11x1" Pancake Type A ¼" Minimum penetration through Plywood Corrosion Resistance: Per Florida Building Code 2014, Section 1506.6, 1507.4.4
Substrate Description:	Minimum 15/32" thick, APA Rated Plywood over supports at maximum 24" O.C. Design of plywood and plywood supports are outside the scope of this evaluation. Must be designed in accordance w/ Florida Building Code 2014.





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Design Uplift Pressures:

Table "A"		
Maximum Total Uplift Design Pressure	71.0 psf	138.5 psf
Clip Spacing	24" O.C.	6" O.C.
# Fasteners per Clip	2	2
*Design Pressure includes a Safety Factor = 2.0.		

Code Compliance:

The product described herein has demonstrated compliance with the Florida Building Code 2014, Sections 1504.3.2, 1518.9, 1523.6.5.2.4.

Evaluation Report Scope:

The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2014, as relates to Rule 61G20-3.

Performance Standards:

The product described herein has demonstrated compliance with:

- TAS 125-03
- UL 580-06 - Test for Uplift Resistance of Roof Assemblies
- UL 1897-04 - Uplift Test for Roof Covering Systems
- TAS 100-95 - Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems
- TAS 110-00 - Accel. Weathering ASTM G 155 / Salt Spray ASTM B 117

Reference Data:

1. TAS 125-03: UL 580-94 / 1897-98 Uplift Test
Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
Report No. 72-0198T-07*, Dated 07/11/2007
2. TAS 100-95
Farabaugh Engineering & Testing, Inc. (FBC Organization # TST-1654)
Report No. T231-07*, Dated 07/13/2007
3. TAS 110-00: Valspar Fluoropon coated metal panel testing
A) ASTM G 26 by PRI Asphalt Technologies dated 01/19/2004
B) ASTM B 117 by PRI Asphalt Technologies dated 01/19/2004
4. Certificate of Independence
By Dan Kuhn, P.E. (FL# 75519) @ Kuhn Engineering, LLC
(FBC Organization # ANE ID: 10743)





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Test Standard Equivalence:	<ol style="list-style-type: none">1. The UL 580-94 test standard is equivalent to the UL 580-06 test standard.2. The UL 1897-98 test standard is equivalent to the UL 1897-04 test standard.3. ASTM G 26 is equivalent to ASTM G 155.
Quality Assurance Entity:	The manufacturer has established compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005(3) for manufacturing under a quality assurance program audited by an approved quality assurance entity.
Minimum Slope Range:	Minimum Slope shall comply with Florida Building Code 2014, including Section 1515.12 and in accordance with Manufacturers recommendations.
Installation:	Install per Manufacturer's recommended details and RAS 133.
Underlayment:	Per Manufacturer's installation guidelines per Florida Building Code 2014 section 1518.2, 1518.3, 1518.4.
Fire Barrier:	Any approved fire barrier having a current NOA. Refer to a current fire directory listing for fire ratings of this roofing system assembly as well as the location of the fire barrier within the assembly. Fire classification is not part of this acceptance.
Shear Diaphragm:	Shear Diaphragm values are outside the scope of this report.
Design Procedure:	For roofs within the parameters listed on the load table, fastening pattern must at a minimum meet those listed for the applicable wind zone. For all roofs outside the parameters listed on the load table, design wind loads shall be determined for each project in accordance with FBC 2014 Section 1609 or ASCE 7-10 using allowable stress design. The maximum clip/fastener spacing listed herein shall not be exceeded.

*The Test Reports are owned by Metalforming, Inc. Metalforming, Inc. gives the above manufacturer permission to use these test reports.





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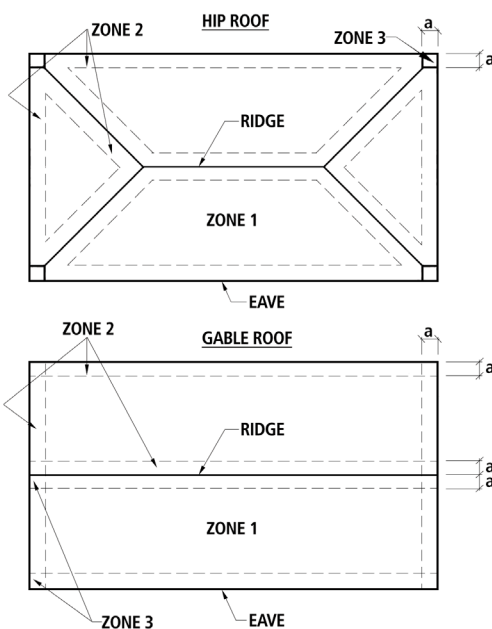
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ENGINEER LOAD TABLE: 1", 24 Ga. VersaLoc SR™ 16½" Wide Roof Panel over 15/32" Plywood

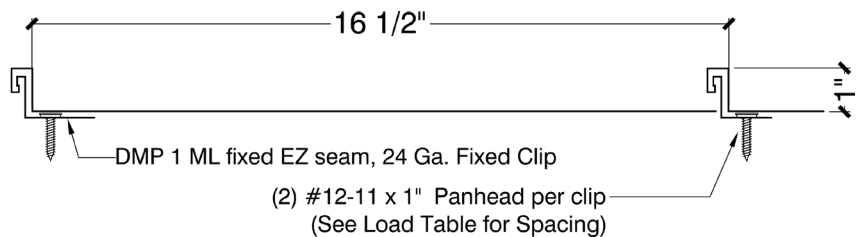
Buildings having a Roof Mean Height ≤ 20'-0"; Roof Slope: 2"/12" - 12"/12" Gable or Hip Roof; Wind Speeds 120-180mph, Exposure C, Risk Category II, Enclosed Building, based on Florida Building Code 2014.

WIND SPEED	FASTENER (MIN. 1/4" Penetration)	SUBSTRATE (MIN. 15/32")	120	130	140	150	160	170	180
			ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING	ON CENTER SPACING
ZONE 1	(2) #12-11x1"	CDX PLYWOOD	24"	24"	24"	24"	24"	24"	24"
ZONE 2	(2) #12-11x1"	CDX PLYWOOD	24"	24"	24"	24"	24"	24"	6"
ZONE 3	(2) #12-11x1"	CDX PLYWOOD	24"	24"	24"	6"	6"	6"	6"

- PANEL DESCRIPTION:** 1", VERSALOC SR™ MIN. 24 GA., 16½" MAX WIDTH, DOUBLE LOCK SEAM.
- PANEL FASTENER:** (2) #12-11X1" PANCAKE TYPE A PER CLIP.
- PANEL CLIP:** DMP 1 ML FIXED EZ SEAM, 24 GA. FIXED CLIP
- MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE:** 71.0 PSF @ 24" O.C., 138.5 PSF @ 6" O.C. PRESSURE BASED ON UL 580/UL 1897 TESTING BY FORCE ENGINEERING, TEST REPORT #72-0198T-07A-C.
- PLYWOOD DECKING:** MIN. 15/32" THICK, APA RATED PLYWOOD, GRADE C-D. MUST BE DESIGNED IN ACCORDANCE FBC 2014
- LOAD TABLE** BASED ON WIND PRESSURES CALCULATED PER ASCE 7-10 (KD = 0.85) MULTIPLIED BY 0.6 PER FLORIDA BUILDING CODE 2014.



Note: Dimension (a) is defined as 10% of the minimum width of the building or 40% of the mean height of the roof, whichever is smaller, however, (a) cannot be less than either 4% of the minimum width of the building or 3 feet.



FL# 11651.3 R2 • JUNE 15, 2015

PRODUCT EVALUATION REPORT



KUHN ENGINEERING, LLC

11670 ISLAND LAKES LANE, BOCA RATON, FL 33498 • FL COA #30464