

WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

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PRODUCT EVALUATION

PRODUCT: ARMOUR LOC 24 Ga. STEEL 1 3/4" SNAPLOCK 18" WIDE
ROOF PANEL – HVHZ (FLPA# 35255.1)

MANUFACTURER: 1ST COAST METAL ROOFING SUPPLY
186 STATE ROAD 207
EAST PALATKA, FL 32131

To all concerned,

The Armour Loc 24 Ga. Steel 1 3/4" Snaplock 18" Wide Roof Panel, manufactured by 1st Coast Metal Roofing Supply, is a non-structural galvalume coated Fluoropon painted steel roof panel (50 ksi min) that meets the requirements of Sections 1507.4 and 1518.9 of the 8th Edition (2023) Florida Building Code. The panel has been tested per TAS 100, TAS 125, and ASTM E8 by Intertek with results shown in test reports L1965.05-450-44-R1 and L1965.06-450-44-R1, and per TAS 110 by PRI Construction Materials Technologies, with results shown in test reports VLS-004-02-01 and VLS-005-02-01. I have reviewed the TAS 100 testing listed above and it is equivalent to TAS 100-23.

Technical Documentation:

1. Drawing "1CSSL18-HZ" dated 10/10/23, signed and sealed by Scott Wolters, PE.
2. Test Reports listed above by Architectural Testing, Inc. signed and sealed by Vinu Abraham, PE, and by PRI Construction Materials Technologies, signed and sealed by Zachary R Priest, PE.
3. Supplemental Calculations to support 1CSSL18-HZ, signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 8th Edition (2023) Florida Building Code generally, and chapter 15 specifically, including the HVHZ provisions.

Limitations: This panel is approved for use inside and outside of the HVHZ.

<u>Overall Limitations:</u>	Maximum Panel Width:	18" (nominal)
	Minimum Rib Height:	1 3/4"
	Clip Anchors:	18 Ga. galvanized steel, 3 1/2" long
	Min. Slope:	HVHZ: 2"/12" Non-HVHZ: 1/2"/12" (with Lap Sealant) 3"/12" (no Lap Sealant)

	Option #1 Installation	Option #2 Installation
Max. Design Pressure:	-166 psf	-243.5 psf
Clip Anchor Spacing:	4" From Ends, 16" Max. O.C.	4" From Ends, 8" Max. O.C.
Min Panel Fasteners:	#10x1" Panclip Fasteners (2) Per Clip	#10x1" Panclip Fasteners (2) Per Clip

Fire Barrier: Where required by code, install an approved fire barrier. 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. (See note #2 below)

Note: Outside of the HVHZ, in areas with windspeeds < 170 mph, 1" round plastic caps meeting the requirements of FBC Section 1507.1.1.1, may be used to prevent galvanic reactions.

Underlayment: Minimum ASTM D 226 Type II, installed and anchored per FBC Section 1507.1.1.1 (min).

(or)

Any underlayment with a valid FLPA or Miami-Dade NOA

Note: Outside of the HVHZ, in areas with windspeeds < 170 mph, 1" round plastic caps meeting the requirements of FBC Section 1507.1.1.1 may be used to prevent galvanic reactions.

Minimum Substrate: ½' (15/32" min) 4-ply CDX Plywood or ¾" solid wood planks (S.G. = .42 min), nailed to 2x rafters spaced 24" max O.C. with 8d ring-shank nails spaced 6" O.C.

Note: The ¾" wood planking must be installed as a solid deck and must be nailed or fastened in a manner equal to the deck above, or as specified by a Florida licensed Architect/Engineer

Other Limitations:


1. Roof slope must meet requirements of FBC Sections 1507.4.2 or 1515.2.
2. Fire classification is not a part of this evaluation. Refer to a current Approved Roofing Materials Directory for fire ratings of this product.
3. Design of substrate is by others and is not a part of this evaluation.
4. All panel system perimeters, penetrations, and transitions to be flashed and sealed per the requirements of RAS 133.

Re-Roofing:

The Armour Loc 24 Ga. Steel 1 3/4" Snaplock x 18" Wide Roof Panel may be installed over a single layer of existing asphalt shingles, provided the existing roof meets all of the requirements of Section 1511 of the Florida Building Code.

If you have any questions or need more information concerning this approval, please contact me.

Thank you,


Scott Wolters
FL PE# 62354
OCT 10 2023

