

# WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

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## PRODUCT EVALUATION

PRODUCT: ARMOUR RIB 29 Ga. STEEL 36" WIDE ROOF PANEL  
OVER 1x4 WOOD BATTENS (FLPA# 24397.10)

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

To all concerned,

The Armour Rib 29 Ga. Steel 36" Wide Roof Panel, manufactured by 1<sup>st</sup> Coast Metal Roofing Supply, is a non-structural galvalume coated steel roof panel (80 ksi min) that meets the requirements of Section 1507.4 of the 8<sup>th</sup> Edition (2023) Florida Building Code. The panel has been tested per UL 580 (1998), UL 1897 (1998), and FM 4471 Section 5.4 (1992) by Force Engineering & Testing, with results shown in test reports 384-0030T-10 C, D, & E. I have reviewed UL 580 (1998), UL 1897 (1998), & FM 4471 Section 5.4 (1992), and have determined that for this product they are equivalent to UL 580 (2006), UL 1897 (2015), & FM 4470 Section 4.6 (2016), as referenced in the 8<sup>th</sup> Edition (2023) Florida Building Code.

### Technical Documentation:

1. Drawing "1CSRWB9" dated 10/11/23, signed and sealed by Scott Wolters, PE.
2. Test Reports listed above by Force Engineering & Testing, signed & sealed by Brandon Jasek, PE.
3. Supplemental Calculations to support 1CSRWB9, 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 of the requirements of the 8<sup>th</sup> Edition (2023) Florida Building Code generally, and chapter 15 specifically, for use outside of the High Velocity Hurricane Zone.

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


<u>Overall Limitations:</u>	Maximum Panel Width:	36" (nominal)
	Maximum 1x4 Batten Spacing:	24" O.C. (max)
	Fastener Spacing - across panel:	Pattern #1: 9" O.C. (max) (next to Overlaps & Middle Ribs) Pattern #2: 9" O.C. (max) (at Center of Ribs)
	Fastener Spacing along panel:	24" O.C. (thru battens)
	Min. Panel Fastener:	#10x1 1/2" (Pattern #1) or #10x2 1/2" (Pattern #2) HiLo Woodgrip HWH Screw with Weatherseal Washer
	Min. Slope:	1/2"/12" (with Lap Sealant) 3"/12" (no Lap Sealant)
	Max. Design Pressure:	-108.5 psf

- Wood Battens: 1x4 Wood Battens (S.G.=0.42 min) fastened thru deck to 2x rafters with (2) #8 x 3" FH Deck Screws, 24" O.C. (max).
- 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)
- 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
- Minimum Substrate: ½" (15/32" min) 4-ply CDX Plywood, nailed to 2x rafters spaced 24" O.C. (max) with 8d ring-shank nails spaced 6" O.C. (max), or ¾" solid wood planks (S.G.= .42 min)
- 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 Section 1507.4.2.
  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 Rib 29 Ga. Steel 36" Wide Roof Panel over 1x4 Wood Battens 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

