

# WOLTERS ENGINEERING

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## PRODUCT EVALUATION

PRODUCT: ARMOUR RIB 29 Ga. STEEL 36" WIDE ROOF PANEL  
OVER 2x4 WOOD PURLINS (FLPA# 27567.2)

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 galvalume coated structural steel roof panel (80 ksi min) that meets the requirements of Section 1507.4 of the 7<sup>th</sup> Edition (2020) Florida Building Code. The panel has been tested per UL 580 (2006), UL 1897 (2004), and FM 4471 Section 5.4 (1992) by Force Engineering & Testing, with results shown in test reports 384-0030T-10E and 593-0258T-15B. I have reviewed FM 4471 Section 5.4 (1992) & UL 1897 (2004), and have determined that for this product they are equivalent to FM 4470 Section 4.6 (2016) and UL 1897 (2012), as referenced in the 7<sup>th</sup> Edition (2020) Florida Building Code.

### Technical Documentation:

1. Drawing "1CSR24WB" dated 8/10/22, 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 1CSR24WB, 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 7<sup>th</sup> Edition (2020) 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 Purlin Spacing:        | 24" O.C. (max)  |
|                             | Fastener Spacing across panel: | 9" O.C. (max), Beside each Rib.                                 |
|                             | Fastener Spacing along panel:  | 24" O.C. (thru purlins)   |
|                             | Min. Panel Fasteners:          | #10 x 1 1/2" HiLo Woodgrip HWH<br>Screw with Weatherseal Washer |
|                             | Min. Slope:                    | 1/2"/12" (with Lap Sealant)<br>3"/12" (no Lap Sealant)          |
|                             | Max. Design Pressure:          | -93.5 psf   |

Panel Seams: Panel Side-Laps are fastened with 1/4" x 7/8" HWH Self-Drilling Screws with Weatherseal Washers spaced 24" O.C. (max).

Wood Purlins: 2x4 Wood (S.G.= 0.42 min), spaced 24" O.C. (max), fastened to 2x Wood Rafters spaced 24" O.C. (max) with (2) #9 x 3" FH Deck Screws.

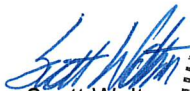
Other Limitations:

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 2x4 Wood Purlins may be installed over existing R-panel roofing, provided the existing roof meets all of the requirements of Sections 1511 or 1521 of the Florida Building Code.

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

Thank you,ed

  
Scott Wolters  
FL PE# 62354  
AUG 10 2021

