



EVALUATION REPORT

FLORIDA BUILDING CODE, 8TH EDITION (2023)

Manufacturer: TRI COUNTY METALS
 301 SE 16th Street
 Trenton, FL 32693
 (877) 766-3309
www.tricountymetals.com

Issued June 24, 2024

Manufacturing Locations: Trenton, FL

Quality Assurance: PRI Construction Materials Technologies (QUA9110)


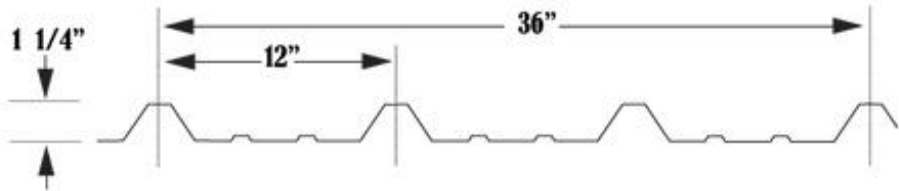

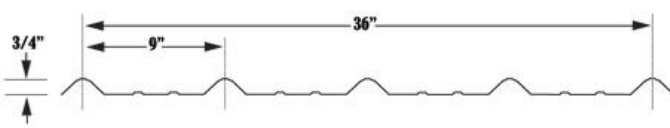
SCOPE

Category: Roofing
Subcategory: Metal Roofing
Code Edition: Florida Building Code, 8th Edition (2023)
Code Sections: 1504.3, 1504.3.2, 1504.7
Properties: Wind Resistance

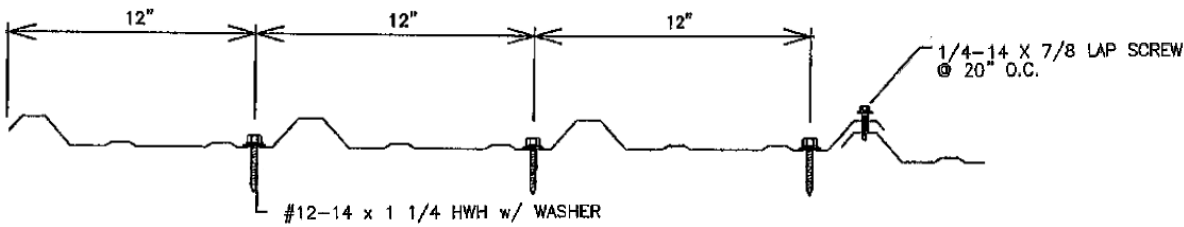
REFERENCES

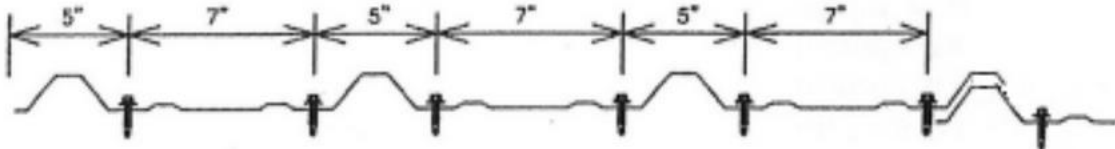
<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>	<u>Year</u>
Force Engineering & Testing, Inc. (TST5328)	136-025T-15A	ASTM E 1592	2005(2017)
Force Engineering & Testing, Inc. (TST5328)	136-025T-15B	ASTM E 1592	2005(2017)
Force Engineering & Testing, Inc. (TST5328)	136-0076T-16	FM 4471	1992
Force Engineering & Testing, Inc. (TST5328)	136-0173T-12E	FM 4471	1992
Force Engineering & Testing, Inc. (TST5328)	136-0393T-07A	ASTM E 1592	2005(2017)
Force Engineering & Testing, Inc. (TST5328)	136-0393T-07B	ASTM E 1592	2005(2017)
PRI Construction Materials Technologies (TST5878)	945T0002	ASTM B 117	2016
PRI Construction Materials Technologies (TST5878)	945T0004	ASTM G 155	2013
PRI Construction Materials Technologies (TST5878)	1272T0002	ASTM B 117	2016
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	1272T0003	ASTM B 117	2016
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	1272T0005	ASTM G 155	2013
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	1272T0006	ASTM G 155	2013
		TAS 110	2000
PRI Construction Materials Technologies (TST5878)	1930T0009	FM 4471	1992
PRI Construction Materials Technologies (TST5878)	1930T0017	ASTM E 1592	2005(2017)
PRI Construction Materials Technologies (TST5878)	1930T0047	ASTM E 1592	2005(2017)

PRODUCT DESCRIPTION

PBR	Profile:	1-1/4 in. ribs at 12 in. o.c.; 36 in. coverage
	Description:	Non-structural, through fastened roof panel
	Material:	Min. 26 ga. ($F_y = \text{min. } 80 \text{ ksi}$) ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel; Shall conform with FBC Section 1507.4.3
 		
Ultra Rib	Profile:	3/4 in. ribs at 9 in. o.c.; 36 in. coverage
	Description:	Non-structural, through fastened roof panel
	Material:	Min. 29 ga. ($F_y = \text{min. } 80 \text{ ksi}$) ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel; Shall conform with FBC Section 1507.4.3
 		

APPROVED ASSEMBLIES

System PBR-1: Min. 26 ga. steel	
Slope:	Shall be in accordance with FBC Section 1507.4.2.
Purlins:	Minimum 16 ga. steel purlins with minimum 3 in. wide bearing surface spaced maximum 60 in. o.c. Purlins shall be designed by others in accordance with FBC requirements.
Attachment:	Minimum #12-14 x 1.25 in. HWH self-drilling screws with sealer washer installed at each purlin with the fastening pattern shown below. Panel seams are secured with 1/4"-14 x 7/8 in. Lap Tek screws with washer spaced maximum 20 in. o.c. Fasteners shall fully penetrate through the purlin and shall conform to FBC section 1507.4.4 and 1506.6.
Maximum Design Pressures:	+55/-45 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>
	

System PBR-2: Min. 26 ga. steel	
Slope:	Shall be in accordance with FBC Section 1507.4.2.
Purlins:	Minimum 16 ga. steel purlins with minimum 3 in. wide bearing surface spaced maximum 60 in. o.c. Purlins shall be designed by others in accordance with FBC requirements.
Attachment:	Minimum #12-14 x 1.5 in. Impax screws, cupped HWH with bonded EPDM sealer washer installed adjacent to the rib at each purlin with the fastening pattern shown below. Panel seams are secured with 1/4"-14 x 7/8 in. ZAC Impax Lap screws with bonded EPDM sealer washer spaced maximum 20 in. o.c. Fasteners shall fully penetrate through the purlin and shall conform to FBC section 1507.4.4 and 1506.6.
Maximum Design Pressures:	+55/-55 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>
	

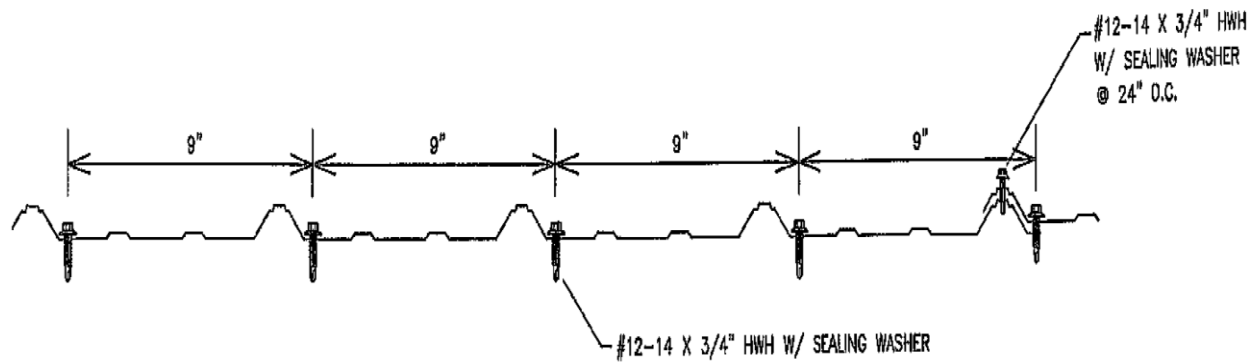


System PBR-3: Min. 26 ga. steel	
Slope:	Shall be in accordance with FBC Section 1507.4.2.
Purlins:	Minimum 16 ga. steel purlins with minimum 3 in. wide bearing surface spaced maximum 60 in. o.c. Purlins shall be designed by others in accordance with FBC requirements.
Attachment:	Minimum #12-14 x 1.5 in. Impax screws, cupped HWH with bonded EPDM sealer washer installed adjacent to the rib at each purlin with the fastening pattern shown below. Panel seams are secured with 1/4"-14 x 7/8 in. ZAC Impax Lap screws with bonded EPDM sealer washer spaced maximum 20 in. o.c. Fasteners shall fully penetrate through the purlin and shall conform to FBC section 1507.4.4 and 1506.6.
Maximum Design Pressures:	+55/-65 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>

System PBR-4: Min. 26 ga. steel	
Slope:	Shall be in accordance with FBC Section 1507.4.2.
Purlins:	Minimum 16 ga. steel purlins with minimum 3 in. wide bearing surface spaced maximum 24 in. o.c. Purlins shall be designed by others in accordance with FBC requirements.
Attachment:	Minimum #12-14 x 1.5 in. Impax screws, cupped HWH with bonded EPDM sealer washer installed adjacent to the rib at each purlin with the fastening pattern shown below. Panel seams are secured with 1/4"-14 x 7/8 in. ZAC Impax Lap screws with bonded EPDM sealer washer spaced maximum 20 in. o.c. Fasteners shall fully penetrate through the purlin and shall conform to FBC section 1507.4.4 and 1506.6.
Maximum Design Pressures:	+150/-142.5 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>



System RIB-1: Min. 29 ga. steel	
Slope:	Shall be in accordance with FBC Section 1507.4.2.
Purlins:	No. 2 SYP 1x4 wood purlins installed max. 24 in. o.c. with two (2) min. #9 x 3 in. wood screws placed at each batten and truss/rafter intersection. Roof trusses/rafters shall be spaced max. 24 in. o.c. and shall be 90 degrees to the battens. Purlins shall be designed by others in accordance with FBC requirements.
Attachment:	Minimum #9-15 x 1.5 in. Woodgrip HWH screws with sealer washer installed at each purlin with the fastening pattern shown below. Fasteners shall fully penetrate through the purlin and shall conform to FBC section 1507.4.4 and 1506.6.
Maximum Design Pressures:	+45/-105 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>
<p>The diagram illustrates the fastening pattern for the metal roofing system. It shows a series of peaks and valleys representing the metal profile. Dimensions are provided for the spacing between fasteners: 6.5 inches between the centers of adjacent fasteners, and 2.5 inches from the center of a fastener to the center of the next valley. A callout line points to one of the fasteners, which is labeled as "(1) HWH wood screw w/sealing washer".</p>	

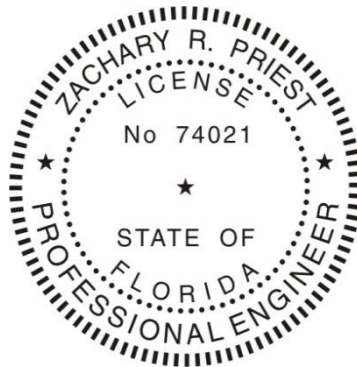
System RIB-2: Min. 29 ga. steel	
Slope:	Shall be in accordance with FBC Section 1507.4.2.
Purlins:	Minimum 18 ga. steel purlins with minimum 1.5 in. wide bearing surface spaced maximum 60 in. o.c. Purlins shall be designed by others in accordance with FBC requirements.
Attachment:	Minimum #12-14 x 0.75 in. HWH self-drilling screws with sealer washer installed at each purlin with the fastening pattern shown below. Panel seams are secured with #12-14 x 0.75 in. HWH self-drilling screws with washer spaced maximum 24 in. o.c. Fasteners shall fully penetrate through the purlin and shall conform to FBC section 1507.4.4 and 1506.6.
Maximum Design Pressures:	+26/-31.2 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>
	

LIMITATIONS

1. This report is not for use in the HVHZ.
2. Fire classification is not within the scope of this evaluation.
3. The purlins shall be designed by others to meet the minimum design loads established for components and cladding and in accordance with FBC requirements.
4. Roof systems are evaluated for wind resistance as non-structural roof cladding only. Where structural applications are desired, Chapter 16 structural load evaluations shall be provided by a licensed design professional to the satisfaction of the Authority Having Jurisdiction.
5. Reroofing shall be in accordance with FBC Section 1511.
6. Installation of the evaluated products shall comply with this report, the FBC and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
7. Rational analysis shall be conducted by a qualified design professional in accordance with Section 2210.1.1.2 and Chapter 16. Maximum Design Pressures listed below are established based on uniform static loading in accordance with Section 1504.3.2 and ASTM E 1592.
8. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

COMPLIANCE STATEMENT

This report has been prepared in accordance with F.A.C. Rule 61G20-3.



**This item has been
digitally signed and
sealed by Zachary R.
Priest, PE, on 6/24/2024.**

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Zachary R. Priest, P.E.
Florida Registration No. 74021
Organization No. ANE9641

CERTIFICATION OF INDEPENDENCE

CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

CREEK Technical Services, LLC is not owned, operated, or controlled by any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

END OF REPORT