

Certificate of Authorization No. 29824 17520 Edinburgh Drive Tampa, FL 33647 (813) 480-3421

EVALUATION REPORT

FLORIDA BUILDING CODE 7TH EDITION (2020)

Manufacturer: A&E METAL ROOFING SUPPLY SOUTH

Issued September 4, 2020

230 Lee Road 430 Smiths Station, AL 36877

(334) 664-0114

www.aemetalroofing.com

Manufacturing: Smiths Station, AL

Quality Assurance: PRI Construction Materials Technologies (QUA9110)

SCOPE

Category: Roofing
Subcategory: Metal Roofing
Code Sections: 1504.3

Properties: Wind Resistance

REFERENCES

Entity	Report No.	Standard	<u>Year</u>
PRI Construction Materials Technologies (TST5878)	2264T0001	UL 1897	2012
		UL 580	2006
PRI Construction Materials Technologies (TST5878)	2264T0003	UL 1897	2012
		UL 580	2006
PRI Construction Materials Technologies (TST5878)	2264T0005	UL 1897	2012
• , ,		UL 580	2006
PRI Construction Materials Technologies (TST5878)	2264T0007	UL 1897	2012
5 (,		UL 580	2006

PRODUCT DESCRIPTION

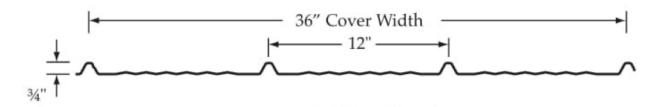
Panel: Apex

Description: Preformed panel; 0.75-inch rib; Maximum 36-inch coverage

Material: 29 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A755 steel ($F_y = min. 80 ksi$);

26 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A755 steel (F_y = min. 50 ksi);

Shall conform with FBC Section 1507.4.3



Apex Dimensions



Panel:

R-Panel

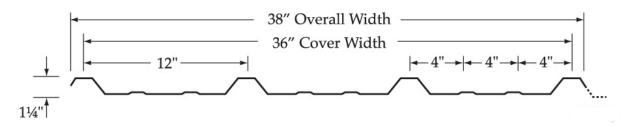
Description:

Preformed panel; 1.25-inch rib; Maximum 36-inch coverage

Material:

26 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A755 steel (F_y = min. 80 ksi); 24 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A755 steel (F_y = min. 50 ksi);

Shall conform with FBC Section 1507.4.3



R-Panel Dimensions

Panel:

Low Rib

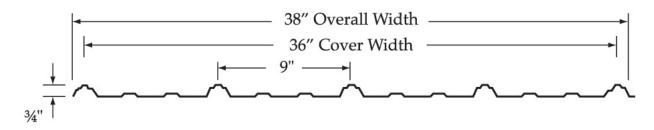
Description:

Preformed panel; 0.75-inch rib; Maximum 36-inch coverage

Material:

29 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A 755 steel (F_y = min. 80 ksi); 26 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A 755 steel (F_y = min. 50 ksi);

Shall conform with FBC Section 1507.4.3



Low Rib Dimensions

Panel:

Snap Lock

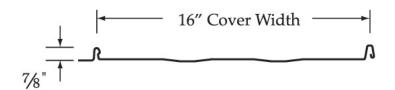
Description:

Preformed panel; 7/8-inch rib; Maximum 16-inch coverage

Material:

26 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A 755 steel ($F_y = min. 50 ksi$); 24 ga. ASTM A792 AZ55, ASTM A653 G90, or ASTM A 755 steel ($F_y = min. 50 ksi$);

Shall conform with FBC Section 1507.4.3





Snap Lock Dimensions



APPROVED ASSEMBLIES

Apex	System A-1:	System A-2:									
Slope:	Shall be in accordance with FBC Section 1507.4.2.	Shall be in accordance with FBC Section 1507.4.2.									
Roof Deck:	Minimum 15/32-inch APA span rated plywood sheathing or wood plank.	Minimum 15/32-inch APA span rated plywood sheathing or wood plank.									
Underlayment:	Installed in accordance with FBC requirements.	Installed in accordance with FBC requirements.									
Attachment:	#10-16 x minimum 1-inch HWH wood screws with 0.5-inch diamete sealing washers spaced maximum 24-inches o.c. along the panel length with the fastening pattern shown below.	#10-16 x minimum 1-inch HWH wood screws with 0.5-inch diameter sealing washers spaced maximum 24-inches o.c. along the panel length with the fastening pattern shown below.									
Maximum Design	-30 psf	-67.5 psf									
Pressures:	Pressure calculated using 2:1 margin of safety per 1504.9	Pressure calculated using 2:1 margin of safety per 1504.9									
Fastening across panel width:	Fastening (2.5"-9.5"-12")	Fastening (2.5"-9.5"-2.5"-9.5")									
	Maximum Mean Roof Heights for Gable/Hip Roofs	Maximum Mean Roof Heights for Gable/Hip Roofs									
	Slopes 2:12 – 12:12	Slopes 2:12 – 12:12									
Exposure	Basic Wind Speed (mph)	Basic Wind Speed (mph)									
Ехробито	120 130 140 150 160 170 180 190 200	120 130 140 150 160 170 180 190 200									
	Zone 1	Zone 1									
В	35 ft 20 ft NA NA NA NA NA NA NA	60 ft 60 ft 60 ft 60 ft 60 ft 52 ft 35 ft 23 ft 16 ft									
С	NA NA NA NA NA NA NA NA	60 ft 60 ft 60 ft 42 ft 22 ft NA NA NA NA									
D	NA NA NA NA NA NA NA NA NA	60 ft 60 ft 37 ft 17 ft NA NA NA NA NA									
	Zone 2 (includes 2e, 2n, and 2r) – Perimeter	Zone 2 (includes 2e, 2n, and 2r) – Perimeter									
В	NA NA NA NA NA NA NA NA NA	60 ft 60 ft 54 ft 33 ft 21 ft NA NA NA NA									
С	NA NA NA NA NA NA NA NA	58 ft 27 ft NA NA NA NA NA NA NA									
D	NA NA NA NA NA NA NA NA NA	25 ft NA NA NA NA NA NA NA									
_	Zone 3 (includes 3e and 3r) – Corner	Zone 3 (includes 3e and 3r) – Corner									
В	NA NA NA NA NA NA NA NA	60 ft 49 ft 29 ft 18 ft NA NA NA NA NA									
С	NA NA NA NA NA NA NA NA	25 ft NA NA NA NA NA NA NA									
D	NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA									
N1 / 4\ E		0) 1: :: :: 1									

Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of $10ft^2$ or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_d = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asd} = V_{ult} \sqrt{0.6}$ per 1609.3.1.

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R-Panel	Syste	m B-1:							System B-2:											
Slope:	Shall be	vith FBC	Section	1507.4.	2.		Shall be in accordance with FBC Section 1507.4.2.													
Roof Deck:	Minimur	n 15/32-	inch AP	A span r	ated plyv	vood sh	eathing o	r wood p	Minimum 15/32-inch APA span rated plywood sheathing or wood plank.											
Underlayment:	Installed	d in acco	rdance v	with FBC	require	ments.		•		Installed	l in acco	rdance v	with FBC	requirer	nents.					
	#10-16	x minim	num 1.5-	inch HV	VH wood	screw	s with 0.	5-inch d	liameter	er #10-16 x minimum 1.5-inch HWH wood screws with 0.5-inch diameter										
Attachment:				ed maxim n shown		nches o	.c. along	the pan	h sealing washers spaced maximum 24-inches o.c. along the panel length with the fastening pattern shown below.											
Maximum Design	-30 psf		ig pattor		00.011.				-52.5 ps		g patton	1 0110 1111	DOI:0111.							
Pressures:			ed usina 2	2:1 margir	of safety	per 150	4.9					ed usina 2	:1 margir	of safety	per 1504	.9				
Fastening across panel width:	1			Fastenin	ng (12"-	î 12"-12	 ")	_^*\	Fastening (3"-9"-3"-9")											
	Maximum Mean Roof Heights for Gable/Hip Roofs Slopes 2:12 – 12:12										Maximum Mean Roof Heights for Gable/Hip Roofs Slopes 2:12 – 12:12									
F		Basic Wind Speed (mph)										Basic Wind Speed (mph)								
Exposure	120	130	140	150	160	170	180	190	200	120	130	140	150	160	170	180	190	200		
			•	•	Zone 1		•	•	•	Zone 1										
В	35 ft	20 ft	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	52 ft	33 ft	21 ft	NA	NA	NA		
С	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	49 ft	24 ft	NA	NA	NA	NA	NA	NA		
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	52 ft	20 ft	NA	NA	NA	NA	NA	NA	NA		
		Z	Zone 2 (i	ncludes	2e, 2n, a	nd 2r) –	Perimete	er		Zone 2 (includes 2e, 2n, and 2r) – Perimeter										
В	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	37 ft	22 ft	NA	NA	NÁ	NA	NA	NA		
С	NA	NA	NA	NA	NA	NA	NA	NA	NA	17 ft	NA	NA	NA	NA	NA	NA	NA	NA		
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
			Zone	3 (includ	les 3e ar	nd 3r) –	Corner			Zone 3 (includes 3e and 3r) – Corner										
В	NA	NA	NA	NA	NA	NA	NA	NA	NA	36 ft	20 ft	NA	NA	NA	NA	NA	NA	NA		
С	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
																7 .				

Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of $10ft^2$ or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_d = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asd} = V_{ult} \sqrt{0.6}$ per 1609.3.1.

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Low Rib	Syste	m C-1:						System C-2:												
Slope:	Shall be	e in acco	rdance v	vith FBC	Section	1507.4.2	2.		Shall be in accordance with FBC Section 1507.4.2.											
Roof Deck:	Minimur	m 15/32-	inch AP	A span r	ated ply	wood she	eathing o	r wood p	Minimum 15/32-inch APA span rated plywood sheathing or wood plank.											
Underlayment:	Installed	d in acco	rdance v	with FBC	require	ments.				Installed	d in acco	rdance v	with FBC	requirer	nents.					
Attachment:	sealing		s space	d maxim	num 24-i		s with 0. .c. along		#10-16 x minimum 1.5-inch HWH wood screws with 0.5-inch diameter sealing washers spaced maximum 24-inches o.c. along the panel length with the fastening pattern shown below.											
Maximum Design Pressures:	-37.5 p		ed using 2	2:1 margir	n of safety	/ per 1504	4.9		-97.5 psf Pressure calculated using 2:1 margin of safety per 1504.9											
Fastening across panel width:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\										\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\									
			.	Fastenir	ng (9"-9	"-9"-9 <u>"</u>)			Fastening (2.5"-6.5"-2.5"-6.5"-2.5"-6.5")										
		Maxii	mum Me	an Roo	f Height	s for Ga	ble/Hip	Roofs		Maximum Mean Roof Heights for Gable/Hip Roofs										
				Slope	es 2:12 -	- 12:12				Slopes 2:12 – 12:12										
Exposure				Basic V	/ind Spe	ed (mph)			Basic Wind Speed (mph)										
Exposure	120	130	140	150	160	170	180	190	200	120	130	140	150	160	170	180	190	200		
					Zone 1					Zone 1										
В	60 ft	43 ft	26 ft	16 ft	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft		
С	21 ft	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	42 ft	25 ft	15 ft		
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	60 ft	60 ft	33 ft	17 ft	NA	NA		
			Zone 2 (i	ncludes	2e, 2n, a	and 2r) –	Perimete	er		Zone 2 (includes 2e, 2n, and 2r) – Perimeter										
В	20 ft	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	60 ft	60 ft	50 ft	33 ft	23 ft	16 ft		
С	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	40 ft	21 ft	NA	NA	NA	NA		
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	35 ft	16 ft	NA	NA	NA	NA	NA		
	Zone 3 (includes 3e and 3r) – Corner											Zone	3 (includ	les 3e ar	nd 3r) – (Corner				
			20110	0 (
В	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	60 ft	60 ft	42 ft	27 ft	18 ft	NA	NA		
B C	NA NA	NA NA				NA NA	NA NA	NA NA	NA NA	60 ft 60 ft	60 ft 60 ft	60 ft 33 ft	60 ft 17 ft	42 ft NA	27 ft NA	18 ft NA	NA NA	NA NA		

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Snap Lock	Syster						System D-2:												
Slope:	Shall be	in acco	rdance	with FBC	Section	1507.4.	2.		Shall be in accordance with FBC Section 1507.4.2.										
Roof Deck:	Minimur	n 15/32-	inch AP	A span r	ated plyv	wood sh	eathing c	r wood p	Minimum 15/32-inch APA span rated plywood sheathing or wood plank.										
Underlayment:	Installed	l in acco	rdance	with FBC	require	ments.				Installed	d in acco	rdance	with FBC	requirer	nents.		•		
Attachment:	inches of as show	o.c. alon n below	g the na						#10-8 x minimum 1-inch pan head wood screws spaced maximum 12-inches o.c. along the nail strip of the male lock in the pre-punched holes as shown below. Bostik 915 sealant shall be applied over the screws along the nail strip in a 1/4-inch wide continuous bead prior to engaging the female lock.										
Maximum Design	-30 psf									-45 psf									
Pressures:	Pressure	calculate	ed using :	2:1 margiı	n of safety	per 150	4.9			Pressure	e calculate	ed using 2	2:1 margin	of safety	per 1504	1.9			
Fastening across panel width:							Ō	O: 12.00 in.	12.00 in	© 12.00 in	O								
		Maxi	mum M	ean Roo			ble/Hip	Roofs		Maximum Mean Roof Heights for Gable/Hip Roofs									
					es 2:12 -		`			Slopes 2:12 – 12:12 Basic Wind Speed (mph)									
Exposure	400	400	4.40		/ind Spe		/,	100	200	400	400	4.40					400	000	
·	120	130	140	150	160 Zone 1	170	180	190	120 130 140 150 160 170 180 190 200 Zone 1										
В	35 ft	20 ft	NA	NA	NA	NA	NA	NA	NA	60 ft	60 ft	49 ft	30 ft	19 ft	NA	NA	NA	NA	
C	NA	NA	NA	NA	NA	NA	NA	NA	NA	51 ft	23 ft	NA	NA	NA	NA	NA	NA	NA	
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	21 ft	NA	NA	NA	NA	NA	NA	NA	NA	
				includes							:		ncludes 2						
В	NA	NA	NA	NA	NA	NA	NA	NA	NA	38 ft	22 ft	NA	NA	NA	NA	NA	NA	NA	
C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
_				3 (includ		1							3 (includ				1		
В	NA	NA	NA	NA	NA	NA	NA	NA	NA	21 ft	NA	NA	NA	NA	NA	NA	NA	NA	
С	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Notes A) Forest				+		- 1-C	Line One III			0) 1::		· · · ·				042 1-	- 0\ T		

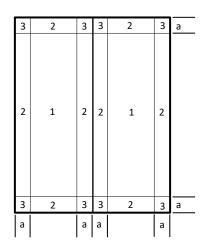
Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of $10ft^2$ or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_d = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asd} = V_{ult} \sqrt{0.6}$ per 1609.3.1.

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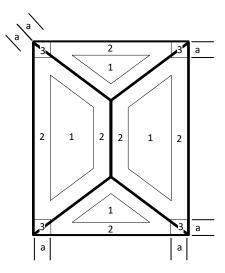
This evaluation report is provided for State of Florida product approval under Rule 61G20-3. The manufacturer shall notify CREEK Technical Services, LLC of any product changes or quality assurance changes throughout the duration for which this report is valid. This evaluation report does not express nor imply warranty, installation, recommended use, or other product attributes that are not specifically addressed herein.



Gable



Hip



Dimension "a" shall be 10% of the least horizontal dimension or (0.4 x *Mean Roof Height*), whichever is smaller, but not less than either 4% of the least horizontal dimension or 3ft.

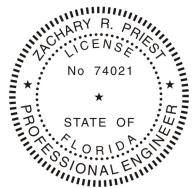
LIMITATIONS

- This report is not for use in the HVHZ.
- 2. Fire classification is not within the scope of this evaluation.
- 3. The roof deck and the roof deck attachment shall be designed by others to meet the minimum design loads established for components and cladding and in accordance with FBC requirements.
- 4. Fasteners shall penetrate through the deck a minimum 3/8-inch and shall conform to FBC section 1507.4.4 and 1506.6.
- 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.
- 6. Reroofing shall be in accordance with FBC Section 1511.
- 7. 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.
- 8. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.



COMPLIANCE STATEMENT

The products evaluated herein by Zachary R. Priest, P.E. have demonstrated compliance with the Florida Building Code, 7th Edition (2020) as evidenced in the referenced documents submitted by the named manufacturer.



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

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