CREEK
TECHNICAL SERVICES, LLC

Registry No. 29824
17520 Edinburgh Dr
Tampa, FL 33647
(813) 480-3421

EVALUATION REPORT

FLORIDA BUILDING CODE, 7TH EDITION (2020)

Issued October 18, 2021

Manufacturer: GULF COAST SUPPLY & MANUFACTURING, LLC
14429 SW 2nd Place, Suite G30
Newberry, FL 32669
(352) 498-7852
www.gulfcoastsupply.com

Manufacturing Locations: Alachua, FL
Sebring, FL
Montgomery, AL

Quality Assurance: Keystone Certifications, Inc. (QUA1824)

SCOPE

Category: Roofing
Subcategory: Metal Roofing
Code Sections: 1504.3
Properties: Wind Resistance

REFERENCES

Entity	Report No.	Standard	Year
Force Engineering & Testing (TST5328)	72-0313T-06A-C	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	72-0198T-07A-C	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0033T-05	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0053T-05	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0062T-07A-C	UL 580	2006
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Force Engineering & Testing (TST5328)	117-0062T-07D-F	UL 580	2006
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Force Engineering & Testing (TST5328)	117-0062T-07G-I	UL 580	2006
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Force Engineering & Testing (TST5328)	117-0062T-07J-K	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0065T-07A-C	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0076T-12A	UL 580	2006
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Force Engineering & Testing (TST5328)	117-0089T-05.1	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0089T-05.2	UL 580	2006
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Force Engineering & Testing (TST5328)	117-0102T-05	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0165T-11B	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0238T-09D	FM 4471	1992
Force Engineering & Testing (TST5328)	117-0238T-09E	FM 4471	1992
Force Engineering & Testing (TST5328)	117-0238T-11A	FM 4471	1992
Force Engineering & Testing (TST5328)	117-0248T-07A,B	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0284T-09A	UL 580	2006
		UL 1897	2012

Entity	Report No.	Standard	Year
Force Engineering & Testing (TST5328)	117-0285T-09A	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0301T-10A-C	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0330T-10A-B	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0331T-08A	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0331T-08B	UL 580	2006
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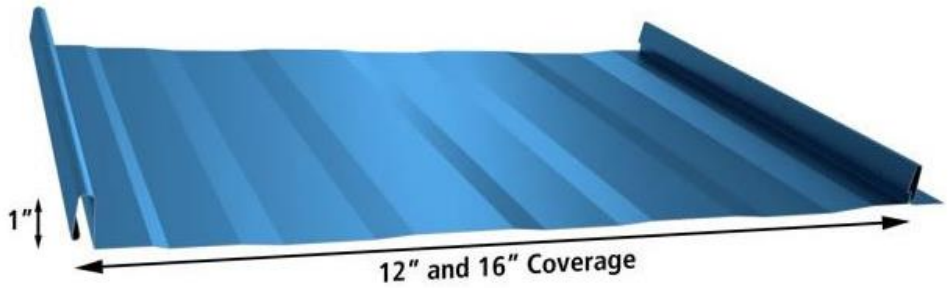
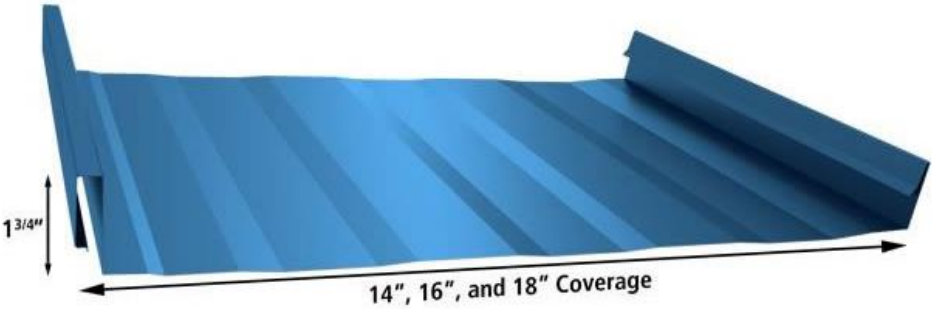
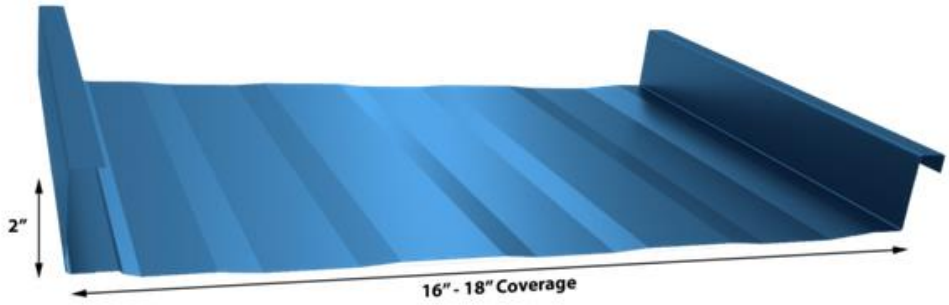
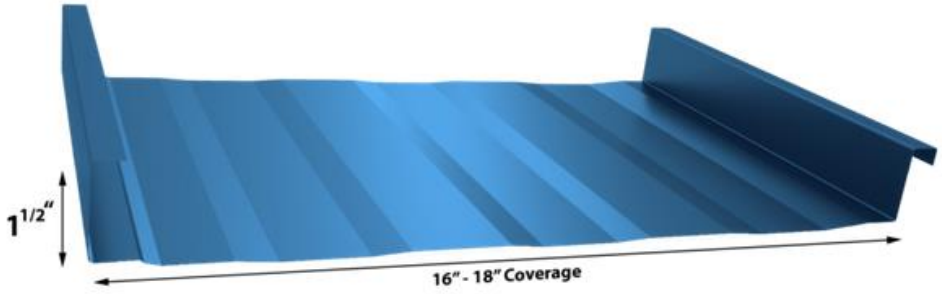
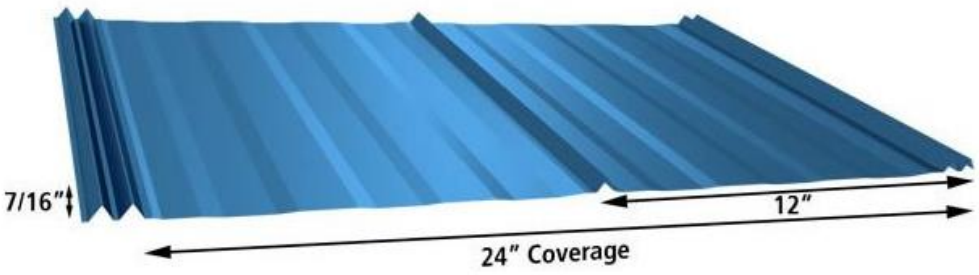
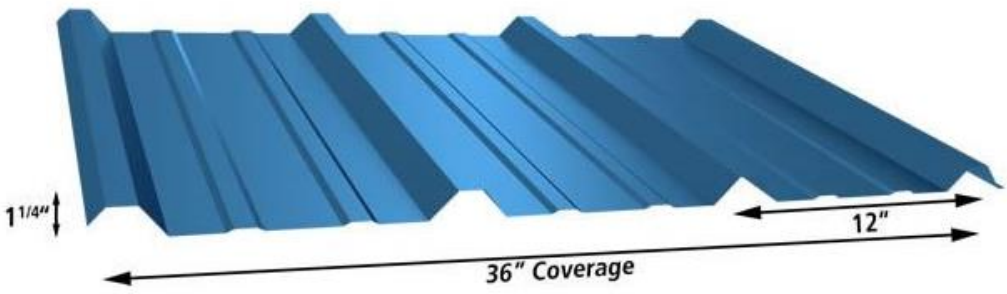
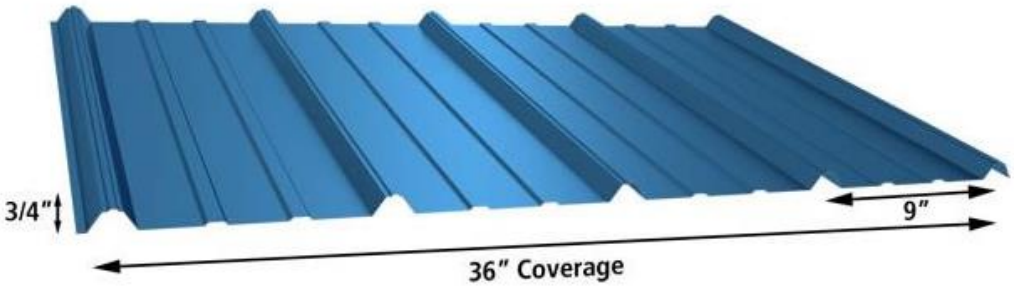
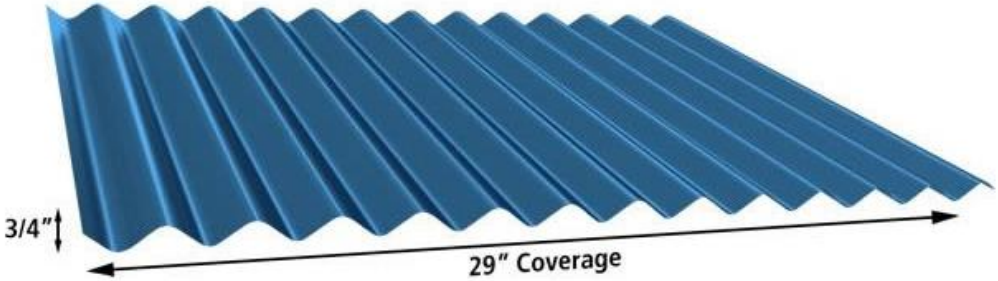
Force Engineering & Testing (TST5328)	117-0331T-08D	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0337T-10	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0378T-11A	FM 4471	1992
Force Engineering & Testing (TST5328)	117-0378T-11B	FM 4471	1992
Force Engineering & Testing (TST5328)	117-0378T-11C	FM 4471	1992
Force Engineering & Testing (TST5328)	117-0407T-09	UL 580	2006
		UL 1897	2012
Force Engineering & Testing (TST5328)	117-0407T-09A	UL 580	2006
		UL 1897	2012
Intertek- West Palm Beach (an ATI company) (TST1527)	B9000.01-450-18	UL 580	2006
		UL 1897	2012
Intertek- West Palm Beach (an ATI company) (TST1527)	C0308.01-450-18	UL 580	2006
		UL 1897	2012
Intertek- West Palm Beach (an ATI company) (TST1527)	D0818.01-450-18	UL 580	2006
Intertek- West Palm Beach (an ATI company) (TST1527)	D1692.01-450-44	UL 580	2006
		UL 1897	2012
		ASTM E 8	
Intertek- West Palm Beach (an ATI company) (TST1527)	G7287.01-450-44	UL 580	2006
PRI Construction Materials Technologies (TST5878)	1272T0005	ASTM G 155	2013
PRI Construction Materials Technologies (TST5878)	2292T0001	UL 580	2006
		UL 1897	2012
PRI Construction Materials Technologies (TST5878)	2292T0002	UL 580	2006
		UL 1897	2012
PRI Construction Materials Technologies (TST5878)	2292T0011	UL 580	2006
		UL 1897	2012

PRODUCT DESCRIPTION

GulfLok	**Profile:**	1 in. snap lock seam; Max.16 in. coverage
	Description:	Non-structural, snap lock standing seam roof panel with 7/8 in. slotted nail strip
	Material:	Min. 26 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 50 ksi; Shall conform with FBC Section 1507.4.3
		Min. 0.032 in. ASTM B209, 3105 H24 aluminum; Optional Fluropon® paint finish; F_y = min. 24 ksi; Shall conform with FBC Section 1507.4.3
		
GulfSeam	**Profile:**	1 3/4 in. snap lock seam; Max. 18 in. coverage
	Description:	Non-structural, snap lock standing seam roof panel
	Material:	Min. 26 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 50 ksi; Shall conform with FBC Section 1507.4.3
		Min. 0.032-inch ASTM B209, 3105 H24 aluminum, Optional Fluropon® paint finish; F_y = min. 21 ksi; Shall conform with FBC Section 1507.4.3
		
MegaLoc	**Profile:**	2 in. mechanical seam; Max. 18 in. coverage
	Description:	Non-structural, mechanical lock 180º standing seam roof panel
	Material:	Min. 24 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 50 ksi; Shall conform with FBC Section 1507.4.3
		

VersaLoc	**Profile:**	1.5 in. mechanical seam; Max. 18 in. coverage
	Description:	Non-structural, mechanical lock 180º standing seam roof panel
	Material:	Min. 24 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 50 ksi; Shall conform with FBC Section 1507.4.3
		
5V Crimp	**Profile:**	7/16 in. ribs at 12 in. o.c.; 24 in. coverage
	Description:	Non-structural, through fastened roof panel
	Material:	Min. 26 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 50 ksi; Shall conform with FBC Section 1507.4.3
		Min. 0.032 in. ASTM B209, 3105 H24 aluminum; Optional Fluropon® paint finish; F_y = min. 25 ksi; Shall conform with FBC Section 1507.4.3
		
GulfPBR	**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. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 80 ksi; Shall conform with FBC Section 1507.4.3
		

GulfRib	**Profile:**	3/4 in. ribs at 9 in. o.c.; 36 in. coverage
	Description:	Non-structural, through fastened roof panel
	Material:	Min. 29 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 80 ksi; Shall conform with FBC Section 1507.4.3
		
GulfWave	**Profile:**	3/4 in. corrugation; 29 in. coverage
	Description:	Non-structural, through fastened roof panel
	Material:	Min. 26 ga. ASTM A792 AZ50 or ASTM A653 G90; Optional Fluropon® paint finish; F_y = min. 80 ksi; Shall conform with FBC Section 1507.4.3
		

LIMITATIONS

1. Fire classification is not within the scope of this evaluation.
2. This report is not for use in the HVHZ.
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. Roof slope shall be in accordance with FBC Section 1507.4.2.
5. Reroofing shall be in accordance with FBC Section 1511. Recovery versus replacement shall be evaluated in accordance with FBC Section 1511.3.
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. 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.

This item has been digitally signed and sealed by Zachary R. Priest, PE, on 10/18/2021.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Digitally signed by Zachary R. Priest

2021.10.18 20:42:48 -04'00'

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.

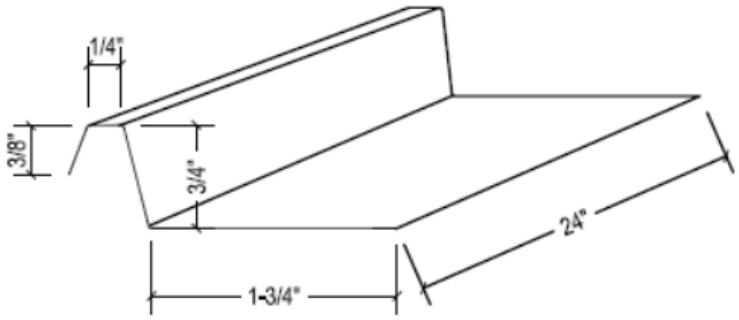
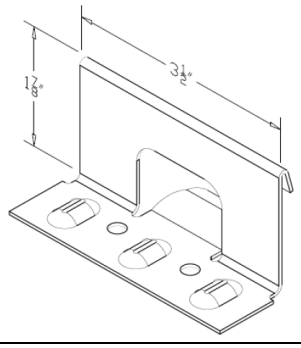
APPENDICES

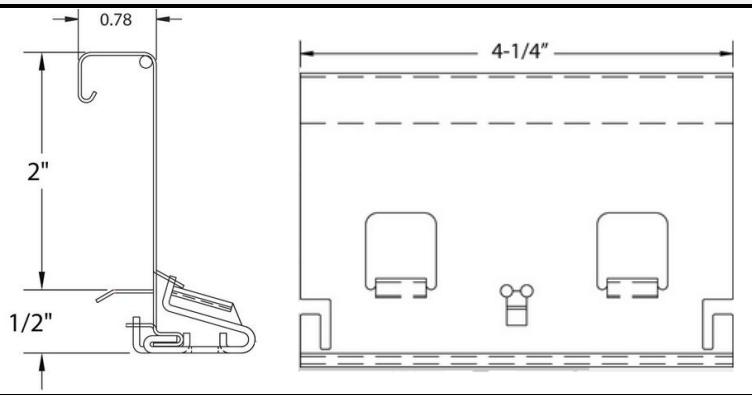
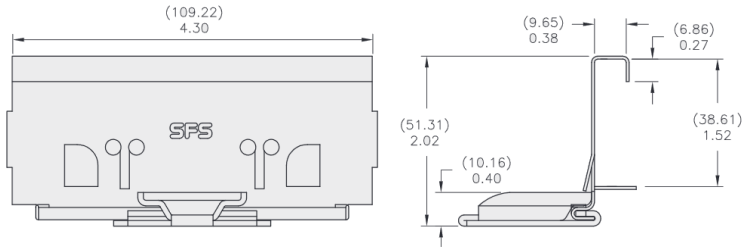
1) APPENDIX A – Installation (5 pages)
2) APPENDIX B – Approved Roof Systems (7 pages)
3) APPENDIX C – Design Wind Loads (4 pages)

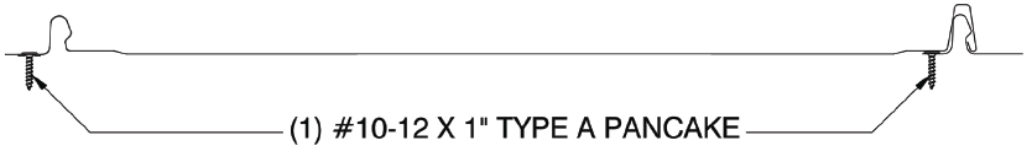
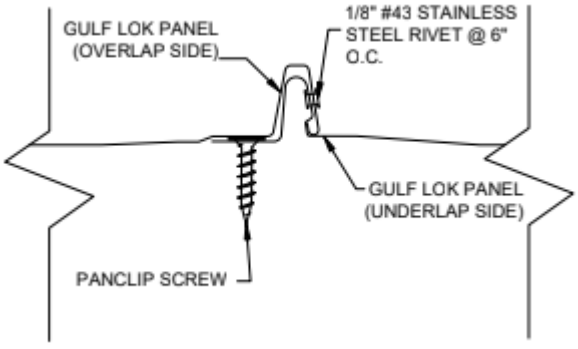
INSTALLATION

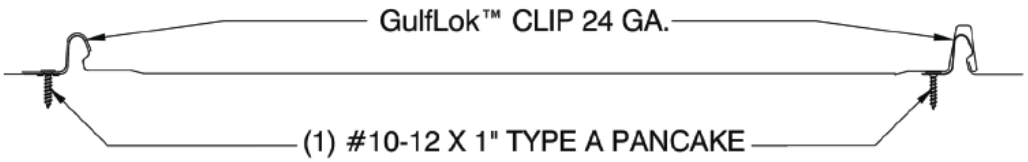
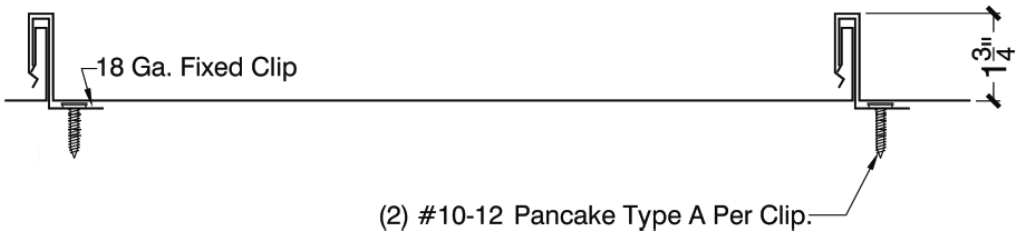
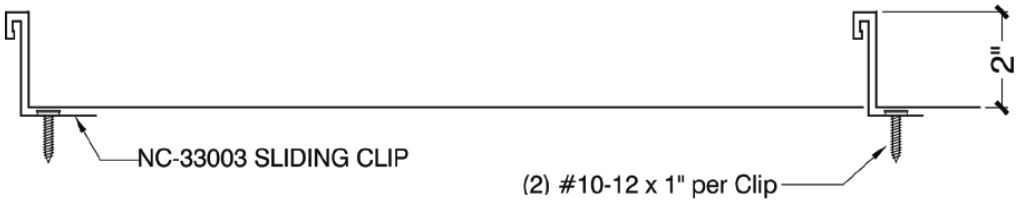
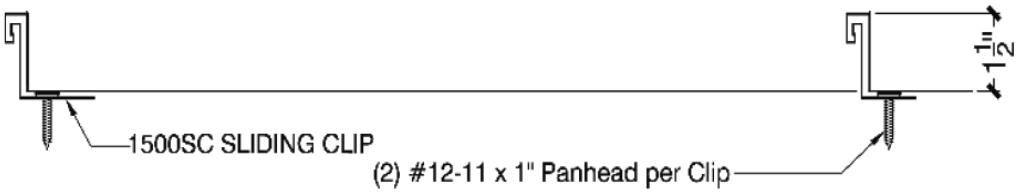
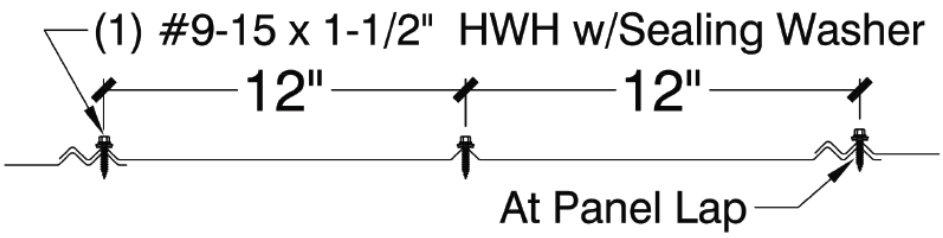
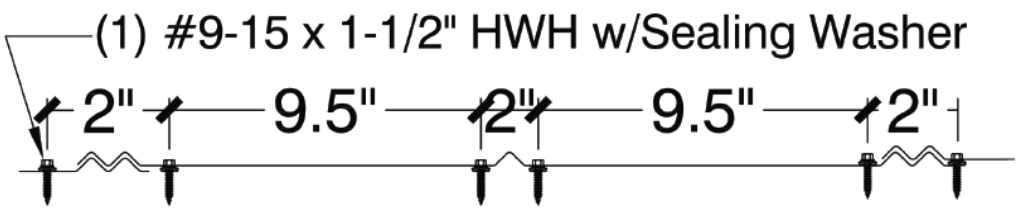
*Note - Refer to the **APPROVED ROOF SYSTEMS** section of this report for specific installation details of a selected system.*

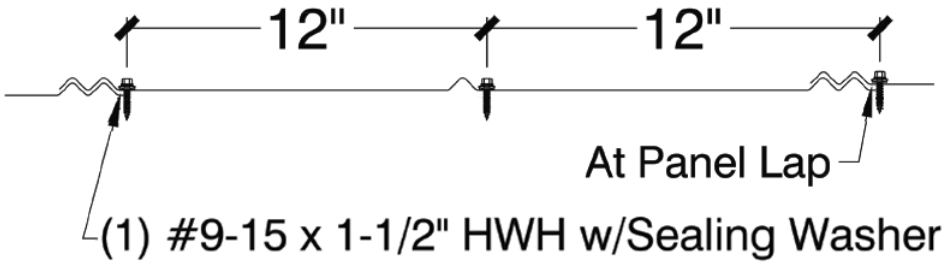
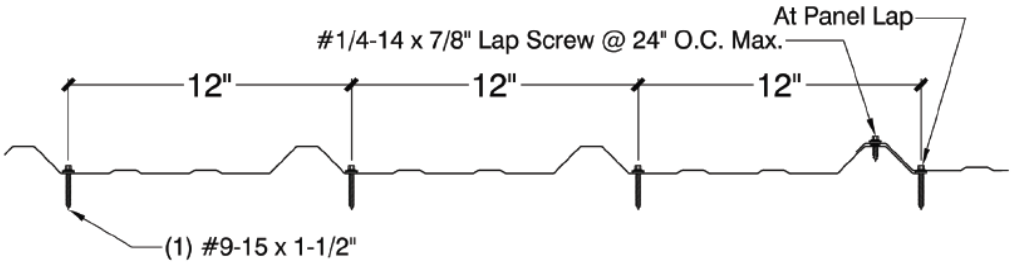
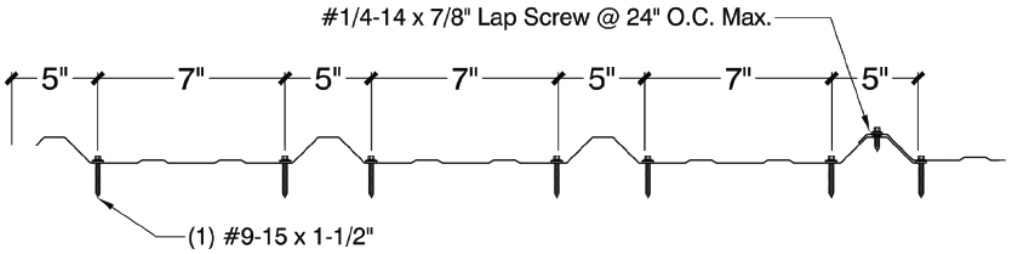
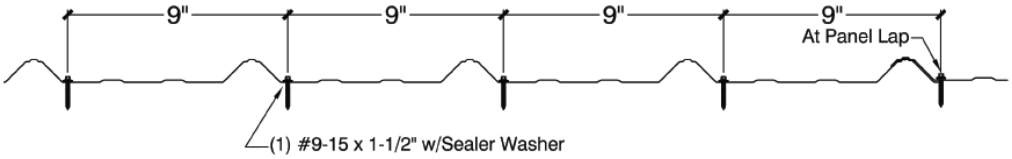
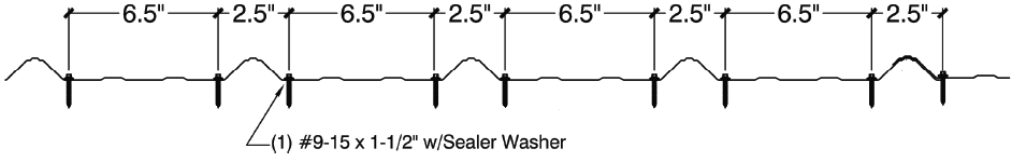
Unless otherwise specified in this report the following installation details shall be met for the named products:

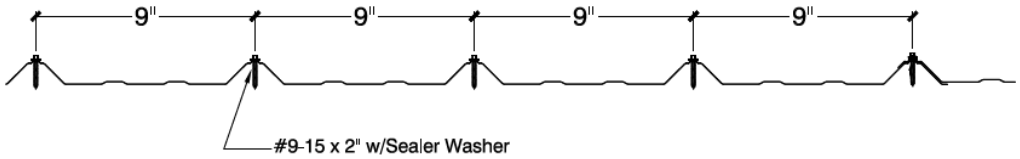
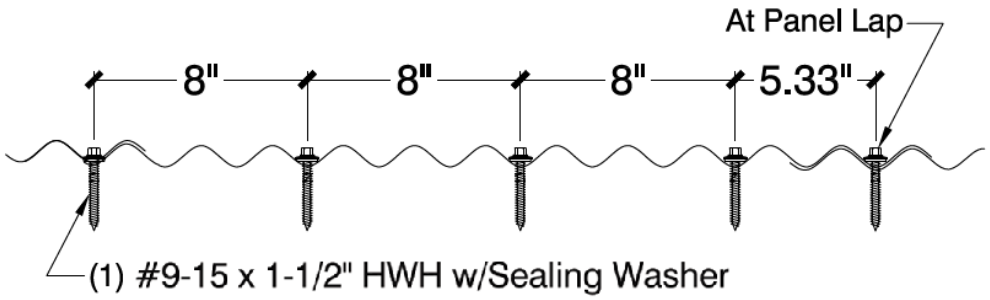
Component	Product	Installation Detail
Fasteners	#9-15 HWH wood screw with sealing washer	Shall penetrate through the sheathing a minimum 3/8 in. Shall be corrosion resistant in accordance with FBC section 1507.4.4.
	#9-15 HWH WoodZAC screw	
	#10-12 Pancake Type A screw	
	#10-14 HWH WoodTite Fastener with sealing washer	
	#12-11 Pancake Type A screw	
	#12-8 HWH Woodgrip XG screw with sealing washer	
	1/4-14 HWH ZAC Impax Lap screw	Installed at panel side lap; Shall be corrosion resistant in accordance with FBC section 1507.4.4.
Clips	GulfLok Clip	24 ga. in-seam clip 
	Fixed Clip	18 ga. in-seam clip 

Component	Product	Installation Detail
Clips (Cont'd)	NC-33003-3 Sliding Clip	
	1500SC Sliding Clip	22 ga. top; 16 ga. base; in-seam clip 
Sealants	TiteBond Weathermaster Metal Roof Sealant	Shall be applied in 1/4"- 5/16" continuous beads on the male rib along the seam

Fastening Details	
Nomenclature	Attachment
GulfLok Type 1	
GulfLok Overlap	

Fastening Details	
Nomenclature	Attachment
GulfLok Type 2	
GulfSeam Type 1	
MegaLoc Type 1	
VersaLoc Type 1	
5V Type 1	
5V Type 2	

Fastening Details	
Nomenclature	Attachment
5V Type 3	
GulfPBR Type 1	
GulfPBR Type 2	
GulfRib Type 1	
GulfRib Type 2	

Fastening Details	
Nomenclature	Attachment
GulfRib Type 3	
GulfRib Type 4	
GulfWave Type 1	

APPROVED ROOF SYSTEMS

The following notes shall be observed when using the assembly tables below.

1. Maximum Design Pressure (*MDP*) was calculated using a 2:1 margin of safety per FBC Section 1504.9.
2. Refer to **LIMITATIONS** and sections of this evaluation when using the table(s) below.
3. Refer to **INSTALLATION** section of this report for installation detail when the information is not explicitly stated for the selected assembly.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.
5. The panel thickness or gauge is the minimum allowable.
6. Steel Deck shall be designed by others in accordance with FBC requirements and shall be minimum 22 ga (F_y = min.40 ksi) Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC.
7. Wood Deck shall be designed by others in accordance with FBC requirements and shall be minimum 15/32-inch thick APA Span-Rated plywood sheathing at maximum 24-inch span.

Roof System Numbers and Definitions	
LOK-W#	GulfLok over Wood Deck (New or Existing)
SEAM-W#	GulfSeam over Wood Deck (New or Existing)
MEGA-W#	MegaLoc over Wood Deck (New or Existing)
VL-W#	1.5" VersaLoc over Wood Deck (new or Existing)
5V-W#	5V Crimp over Wood Deck (New or Existing)
PBR-W#	GulfPBR over Wood Deck (New or Existing)
RIB-W#	GulfRib over Wood Deck (New or Existing)
WAVE-W#	GulfWave over Wood Deck (New or Existing)

Approved Systems for GulfLok over Wood Deck (New or Existing)

System No.	Deck	Fire Barrier	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
LOK-W-1	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.032" Al GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment with #10-12 x 1" Pancake Type A screws spaced 5-3/16 in. o.c.	**-65.5**
LOK-W-2	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.032" Al GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment with #10-12 x 1" Pancake Type A screws spaced 5-3/16 in. o.c. Titebond Weathermaster Metal Roof Sealant applied to male rib.	**-116**
LOK-W-3	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.040" Al GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment with #10-12 x 1" Pancake Type A screws spaced 6 in. o.c. Female leg snap-fit to male leg with *GulfLok Overlap*	**-93.5**

Approved Systems for GulfLok over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
LOK-W-4	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	26 ga. GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment with #10-12 x 1" Pancake Type A screws spaced 5-3/16 in. o.c. Titebond Weathermaster Metal Roof Sealant applied to male rib.	**-121.75**
LOK-W-5	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	26 ga., Grade 80 GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment #10-12 x 1" Pancake Type A p screws spaced 5-3/16 in. o.c	**-63.5**
LOK-W-6	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	26 ga., Grade 80 GulfLok Max. 16-inch coverage	*GulfLok Type 2* attachment with #10-12 x 1" Pancake Type A screws through clip and spaced 5-3/16 in. o.c.	**-161**
LOK-W-7	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	24 ga. GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment with #10-12 x 1" Pancake Type A screws spaced 10-1/4 in. o.c.	**-81.75**
LOK-W-8	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	24 ga. GulfLok Max. 16-inch coverage	*GulfLok Type 1* attachment with #10-12 x 1" Pancake Type A screws spaced 5-1/8 in. o.c.	**-96.75**

Approved Systems for GulfSeam over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
SEAM-W-1	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.032" Al GulfSeam Max. 16-inch coverage	*GulfSeam Type 1* attachment with stainless steel clips spaced 18 in. o.c.	**-60**
SEAM-W-2	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.032" Al GulfSeam Max. 16-inch coverage	*GulfSeam Type 1* attachment with stainless steel clips spaced 6 in. o.c.	**-75**
SEAM-W-3	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.032" Al GulfSeam Max. 18-inch coverage	*GulfSeam Type 1* attachment with stainless steel clips spaced 18 in. o.c.	**-86**

Approved Systems for GulfSeam over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
SEAM-W-4	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfSeam Max. 16-inch coverage	*GulfSeam Type 1* attachment with clips spaced 18 in. o.c.	**-60**
SEAM-W-5	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfSeam Max. 16-inch coverage	*GulfSeam Type 1* attachment with clips spaced 6 in. o.c.	**-75**
SEAM-W-6	Min. 1x4 No. 2 SYP wood purlins spaced 18 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. GulfSeam Max. 16-inch coverage	*GulfSeam Type 1* attachment with clips spaced 18 in. o.c. over wood purlins	**-93.5**
SEAM-W-7	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. GulfSeam Max. 18-inch coverage	*GulfSeam Type 1* attachment with clips spaced 24 in. o.c.	**-69.25**
SEAM-W-8	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. GulfSeam Max. 18-inch coverage	*GulfSeam Type 1* attachment with clips spaced 12 in. o.c.	**-108.5**
SEAM-W-9	Min. 1x4 No. 2 SYP wood purlins spaced 24 in. o.c. over Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. GulfSeam Max. 18-inch coverage	*GulfSeam Type 1* attachment with clips spaced 24 in. o.c. over wood purlins	**-114.25**
SEAM-W-10	Min. 1x4 No. 2 SYP wood purlins spaced 12 in. o.c. over Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. GulfSeam Max. 18-inch coverage	*GulfSeam Type 1* attachment with clips spaced 12 in. o.c. over wood purlins	**-159.25**

Approved Systems for MegaLoc over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
MEGA-W-1	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. MegaLoc Max. 18-inch coverage	*MegaLocType 1* attachment with clips spaced 24 in. o.c.	**-71**
MEGA-W-2	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. MegaLoc Max. 18-inch coverage	*MegaLocType 1* attachment with clips spaced 12 in. o.c.	**-108.5**

Approved Systems for VersaLoc over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
VL-W-1	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. VersaLoc Max. 16-inch coverage	*VersaLoc Type 1* attachment with clips spaced 24 in. o.c.	**-59.75**
VL-W-2	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 24 ga. VersaLoc Max. 16-inch coverage	*VersaLoc Type 1* attachment with clips spaced 6 in. o.c.	**-123.5**

Approved Systems for 5V Crimp over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
5V-W-1	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 0.032" Al 5V Crimp 24-inch coverage	*5V Crimp Type 1* attachment with #9-15 HWH wood screws with sealing washers spaced 12 in. o.c.	**-108.5**
5V-W-2	OPTIONAL layer of ASTM D 3462 shingles over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. 5V Crimp 24-inch coverage	*5V Crimp Type 3* attachment with #10-14 HWH WoodTite Fasteners with sealing washers into wood purlins installed 16 in. o.c. counter to the structural supports and attached with min. 0.113" x 2-3/8" ring shank nails spaced 4 in. o.c. beginning 1 in. from the edge	**-75**

Approved Systems for 5V Crimp over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
5V-W-3	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. 5V Crimp 24-inch coverage	*5V Crimp Type 3* attachment with #9-15 HWH wood screws with sealing washers spaced 16 in. o.c.	**-94.25**
5V-W-4	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. 5V Crimp 24-inch coverage	*5V Crimp Type 1* attachment with #9-15 HWH wood screws with sealing washers spaced 12 in. o.c.	**-108.5**
5V-W-5	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. 5V Crimp 24-inch coverage	*5V Crimp Type 2* attachment with #9-15 HWH wood screws with sealing washers spaced 16 in. o.c.	**-131**
5V-W-6	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. 5V Crimp 24-inch coverage	*5V Crimp Type 1* attachment with #9-15 HWH wood screws with sealing washers spaced 6 in. o.c.	**-156.5**

Approved Systems for GulfPBR over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
PBR-W-1	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfPBR 36-inch coverage	*GulfPBR Type 1* attachment with #9-15 15 HWH WoodZAC screws spaced 24 in. o.c. Laps fastened with 1/4-14 x 7/8" HWH ZAC Impax Lap screws spaced 24 in. o.c.	**-60.5**
PBR-W-2	Min. 1x4 No. 2 SYP wood purlins spaced 24 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfPBR 36-inch coverage	*GulfPBR Type 1* attachment with #9-15 HWH WoodZAC screws spaced 24 in. o.c. into wood purlins Laps fastened with 1/4-14 x 7/8 ZAC Impax Lap screws spaced 24 in. o.c.	**-100.5**

Approved Systems for GulfPBR over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
PBR-W-3	Min. 1x4 No. 2 SYP wood purlins spaced 12 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfPBR 36-inch coverage	*GulfPBR Type 2* attachment with #9-15 15 HWH WoodZAC screws spaced 12 in. o.c. into wood purlins Laps fastened with 1/4-14 x 7/8" HWH ZAC Impax Lap screws spaced 24 in. o.c.	**-151.75**
PBR-W-4	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfPBR 36-inch coverage	*GulfPBR Type 2* attachment with #9-15 HWH WoodZAC screws spaced 12 in. o.c. Laps fastened with 1/4-14 x 7/8" HWH ZAC Impax Lap screws spaced 24 in. o.c.	**-154.75**

Approved Systems for GulfRib over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
RIB-W-1	Min. 7/16 OSB	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 4* attachment with #12-8 HWH Woodgrip XG wood screws with sealing washers spaced 24 in. o.c.	**-22.66**
RIB-W-2	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 3* attachment with #9-15 HWH wood screws with sealing washers spaced 24 in. o.c.	**-56**
RIB-W-3	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 1* attachment with # with #9-15 HWH WoodZAC screws spaced 24 in. o.c	**-71.75**
RIB-W-4	Min. 1x4 No. 2 SYP wood purlins spaced 24 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 1* attachment with #9-15 x 1 1/2" HWH wood screws with sealing washers spaced 24 in. o.c. into wood purlins	**-76.75**

Approved Systems for GulfRib over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
RIB-W-5	Min. 1x4 No. 2 SYP wood purlins spaced 24 in. o.c. over Min. 7/16 OSB	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 1* attachment with #9-15 x 1 1/2" HWH wood screws with sealing washers spaced 24 in. o.c. into wood purlins	**-101**
RIB-W-6	Min. 15/32 CDX plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 3* attachment with #9-15 HWH wood screws with sealing washers spaced 12 in. o.c.	**-101**
RIB-W-7	Min. 7/16 OSB	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 4* attachment with #12-8 HWH Woodgrip XG wood screws with sealing washers spaced 6 in. o.c.	**-116.0**
RIB-W-8	Min. 1x4 No. 2 SYP wood purlins spaced 24 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 2* attachment with #9-15 x 1 1/2" HWH wood screws with sealing washers spaced 24 in. o.c. into wood purlins	**-123.5**
RIB-W-9	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 29 ga. GulfRib 36-inch coverage	*GulfRib Type 2* attachment with #9-15 HWH wood screws with sealing washers spaced 12 in. o.c.	**-146.0**
RIB-W-10	Min. 1x4 No. 2 SYP wood purlins spaced 24 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfRib 36-inch coverage	*GulfRib Type 1* attachment with #9-15 HWH WoodZAC screws spaced 24 in. o.c. into wood purlins	**-106.75**
RIB-W-11	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfRib 36-inch coverage	*GulfRib Type 2* attachment with #9-15 HWH WoodZAC screws spaced 12 in. o.c.	**-159.25**

Approved Systems for GulfRib over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
RIB-W-12	Min. 1x4 No. 2 SYP wood purlins spaced 12 in. o.c. over Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfRib 36-inch coverage	*GulfRib Type 1* attachment with #9-15 HWH WoodZAC screws spaced 12 in. o.c. into wood purlins	**-164.25**

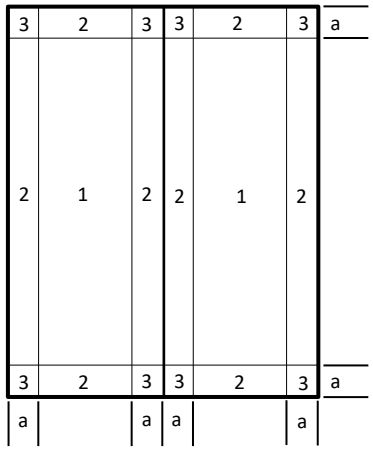
Approved Systems for GulfWave over Wood Deck (New or Existing)						
System No.	Deck	Fire Barrier/ Insulation	Underlayment	Roof Panel	Panel Attachment	*MDP* (psf)
WAVE-W-1	Min. 15/32 B-C plywood	OPTIONAL *Approved* fire barrier or insulation	As required per FBC	Min. 26 ga. GulfWave 29-inch coverage	*GulfWave Type 1* attachment with #9-15 HWH wood screws with sealing washers spaced 24 in. o.c.	**-78.5**

DESIGN WIND LOADS

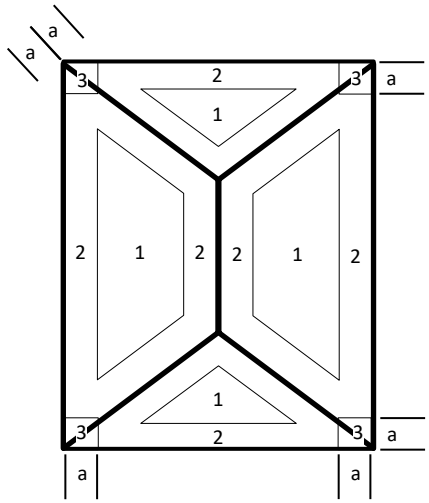
The following tables provide design wind loads for components and cladding in accordance with Section 1609 of the FBC and ASCE 7-16 under the following provisions:

1. Wind speeds for risk category I, II, III, and IV buildings shall be as defined in Section 1609 of the FBC.
2. Exposure B, C, and D shall be as defined in section 1609 of the FBC.
3. Design wind load provided only for gable/hip roofs with roof slopes between 2:12 and 6.1:12
4. All calculations are based on an effective wind area of 10-ft^2 or less.
5. Topographic factors such as escarpments or hills have been excluded from the analysis
6. Overhangs have been excluded from the analysis.
7. Wind directionality factor, K_d = 0.85
8. V_{ult} is shown in the tables below. Design wind loads are calculated using $V_{asd} = V_{ult}\sqrt{0.6}$ per 1609.3.1.
9. Zone 2 is inclusive of Zone 2e, Zone 2n, and Zone 2r
10. Zone 3 is inclusive of Zone 3e and Zone 3r
11. Projects with mean roof heights greater than 60-ft shall be evaluated by a licensed design professional
12. Zones 1, 2, and 3 shall be defined as shown below. 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

Gable



Hip



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Gable/Hip Roofs in **Exposure B** (Roof slope between 2:12 and 12:12)										
Building Type	Zone	Mean Roof Height (ft)	Basic Wind Speed (mph)								
			120	130	140	150	160	170	180	190	200
Enclosed/ Partially Open	1	20	-25.4	-29.8	-34.6	-39.7	-45.2	-51.0	-57.2	-63.7	-70.6
		25	-27.5	-32.2	-37.4	-42.9	-48.8	-55.1	-61.8	-68.8	-76.3
		30	-28.7	-33.7	-39.1	-44.8	-51.0	-57.6	-64.6	-71.9	-79.7
		40	-31.2	-36.6	-42.4	-48.7	-55.4	-62.5	-70.1	-78.1	-86.5
		50	-33.2	-39.0	-45.2	-51.9	-59.0	-66.6	-74.7	-83.2	-92.2
		60	-34.8	-40.9	-47.4	-54.4	-61.9	-69.9	-78.4	-87.3	-96.8
	2	20	-37.1	-43.5	-50.5	-57.9	-65.9	-74.4	-83.4	-92.9	-103.0
		25	-40.1	-47.0	-54.5	-62.6	-71.2	-80.4	-90.1	-100.4	-111.3
		30	-41.9	-49.1	-57.0	-65.4	-74.4	-84.0	-94.2	-104.9	-116.3
		40	-45.4	-53.3	-61.9	-71.0	-80.8	-91.2	-102.2	-113.9	-126.2
		50	-48.4	-56.8	-65.9	-75.7	-86.1	-97.2	-109.0	-121.4	-134.5
		60	-50.8	-59.6	-69.2	-79.4	-90.3	-102.0	-114.3	-127.4	-141.2
	3	20	-44.1	-51.7	-60.0	-68.8	-78.3	-88.4	-99.1	-110.5	-122.4
		25	-47.6	-55.9	-64.8	-74.4	-84.7	-95.6	-107.1	-119.4	-132.3
		30	-49.8	-58.4	-67.7	-77.7	-88.4	-99.8	-111.9	-124.7	-138.2
		40	-54.0	-63.4	-73.5	-84.4	-96.0	-108.4	-121.5	-135.4	-150.0
		50	-57.6	-67.6	-78.4	-90.0	-102.3	-115.5	-129.5	-144.3	-159.9
		60	-60.4	-70.9	-82.2	-94.4	-107.4	-121.2	-135.9	-151.4	-167.8
Partially Enclosed	1	20	-29.7	-34.9	-40.5	-46.5	-52.8	-59.7	-66.9	-74.5	-82.6
		25	-32.1	-37.7	-43.7	-50.2	-57.1	-64.5	-72.3	-80.5	-89.2
		30	-33.6	-39.4	-45.7	-52.4	-59.7	-67.4	-75.5	-84.1	-93.2
		40	-36.4	-42.8	-49.6	-56.9	-64.8	-73.1	-82.0	-91.3	-101.2
		50	-38.8	-45.6	-52.9	-60.7	-69.0	-77.9	-87.4	-97.4	-107.9
		60	-40.8	-47.8	-55.5	-63.7	-72.4	-81.8	-91.7	-102.2	-113.2
	2	20	-41.4	-48.6	-56.3	-64.7	-73.6	-83.1	-93.1	-103.7	-115.0
		25	-44.7	-52.5	-60.9	-69.9	-79.5	-89.8	-100.6	-112.1	-124.2
		30	-46.7	-54.8	-63.6	-73.0	-83.1	-93.8	-105.1	-117.1	-129.8
		40	-50.7	-59.5	-69.0	-79.3	-90.2	-101.8	-114.1	-127.2	-140.9
		50	-54.1	-63.4	-73.6	-84.5	-96.1	-108.5	-121.6	-135.5	-150.2
		60	-56.7	-66.6	-77.2	-88.6	-100.9	-113.9	-127.6	-142.2	-157.6
	3	20	-48.4	-56.8	-65.8	-75.6	-86.0	-97.1	-108.8	-121.3	-134.4
		25	-52.3	-61.4	-71.2	-81.7	-92.9	-104.9	-117.6	-131.1	-145.2
		30	-54.6	-64.1	-74.3	-85.3	-97.1	-109.6	-122.9	-136.9	-151.7
		40	-59.3	-69.6	-80.7	-92.7	-105.4	-119.0	-133.4	-148.7	-164.7
		50	-63.2	-74.2	-86.0	-98.8	-112.4	-126.8	-142.2	-158.4	-175.6
		60	-66.3	-77.8	-90.3	-103.6	-117.9	-133.1	-149.2	-166.3	-184.2

Gable/Hip Roofs in **Exposure C** (Roof slope between 2:12 and 12:12)											
Building Type	Zone	Mean Roof Height (ft)	Basic Wind Speed (mph)								
			120	130	140	150	160	170	180	190	200
Enclosed/ Partially Open	1	20	-36.9	-43.3	-50.2	-57.6	-65.6	-74.0	-83.0	-92.5	-102.5
		25	-38.5	-45.2	-52.4	-60.2	-68.5	-77.3	-86.7	-96.6	-107.0
		30	-40.2	-47.1	-54.7	-62.8	-71.4	-80.6	-90.4	-100.7	-111.6
		40	-42.6	-50.0	-58.0	-66.6	-75.8	-85.6	-95.9	-106.9	-118.4
		50	-44.7	-52.4	-60.8	-69.8	-79.4	-89.7	-100.5	-112.0	-124.1
		60	-46.3	-54.4	-63.0	-72.4	-82.3	-93.0	-104.2	-116.1	-128.7
	2	20	-53.8	-63.2	-73.2	-84.1	-95.7	-108.0	-121.1	-134.9	-149.5
		25	-56.2	-66.0	-76.5	-87.8	-99.9	-112.8	-126.5	-140.9	-156.1
		30	-58.6	-68.8	-79.8	-91.6	-104.2	-117.6	-131.8	-146.9	-162.8
		40	-62.2	-73.0	-84.6	-97.2	-110.5	-124.8	-139.9	-155.9	-172.7
		50	-65.2	-76.5	-88.7	-101.8	-115.9	-130.8	-146.6	-163.4	-181.0
		60	-67.6	-79.3	-92.0	-105.6	-120.1	-135.6	-152.0	-169.4	-187.7
	3	20	-64.0	-75.1	-87.1	-99.9	-113.7	-128.4	-143.9	-160.3	-177.7
		25	-66.8	-78.4	-90.9	-104.4	-118.8	-134.1	-150.3	-167.5	-185.6
		30	-69.7	-81.7	-94.8	-108.8	-123.8	-139.8	-156.7	-174.6	-193.5
		40	-73.9	-86.7	-100.6	-115.5	-131.4	-148.3	-166.3	-185.3	-205.3
		50	-77.5	-90.9	-105.4	-121.0	-137.7	-155.5	-174.3	-194.2	-215.2
		60	-80.3	-94.3	-109.3	-125.5	-142.8	-161.2	-180.7	-201.3	-223.1
Partially Enclosed	1	20	-43.2	-50.6	-58.7	-67.4	-76.7	-86.6	-97.1	-108.2	-119.9
		25	-45.1	-52.9	-61.3	-70.4	-80.1	-90.4	-101.4	-113.0	-125.2
		30	-47.0	-55.1	-64.0	-73.4	-83.5	-94.3	-105.7	-117.8	-130.5
		40	-49.9	-58.5	-67.9	-77.9	-88.6	-100.1	-112.2	-125.0	-138.5
		50	-52.3	-61.3	-71.1	-81.7	-92.9	-104.9	-117.6	-131.0	-145.2
		60	-54.2	-63.6	-73.7	-84.7	-96.3	-108.7	-121.9	-135.8	-150.5
	2	20	-60.1	-70.5	-81.8	-93.9	-106.8	-120.6	-135.2	-150.6	-166.9
		25	-62.7	-73.6	-85.4	-98.0	-111.5	-125.9	-141.2	-157.3	-174.3
		30	-65.4	-76.8	-89.0	-102.2	-116.3	-131.3	-147.2	-164.0	-181.7
		40	-69.4	-81.5	-94.5	-108.5	-123.4	-139.3	-156.2	-174.0	-192.8
		50	-72.8	-85.4	-99.0	-113.7	-129.3	-146.0	-163.7	-182.4	-202.1
		60	-75.4	-88.5	-102.7	-117.8	-134.1	-151.4	-169.7	-189.1	-209.5
	3	20	-70.2	-82.4	-95.6	-109.7	-124.8	-140.9	-158.0	-176.0	-195.1
		25	-73.3	-86.1	-99.8	-114.6	-130.4	-147.2	-165.0	-183.9	-203.7
		30	-76.5	-89.7	-104.1	-119.5	-135.9	-153.5	-172.0	-191.7	-212.4
		40	-81.1	-95.2	-110.5	-126.8	-144.3	-162.9	-182.6	-203.4	-225.4
		50	-85.0	-99.8	-115.8	-132.9	-151.2	-170.7	-191.4	-213.2	-236.2
		60	-88.2	-103.5	-120.0	-137.8	-156.7	-177.0	-198.4	-221.0	-244.9

APPENDIX C

Gable/Hip Roofs in **Exposure D** (Roof slope between 2:12 and 12:12)											
Building Type	Zone	Mean Roof Height (ft)	Basic Wind Speed (mph)								
			120	130	140	150	160	170	180	190	200
Enclosed/ Partially Open	1	20	-44.3	-52.0	-60.3	-69.2	-78.7	-88.8	-99.6	-111.0	-123.0
		25	-45.9	-53.9	-62.5	-71.7	-81.6	-92.1	-103.3	-115.1	-127.5
		30	-47.5	-55.8	-64.7	-74.3	-84.5	-95.4	-107.0	-119.2	-132.1
		40	-50.0	-58.7	-68.1	-78.1	-88.9	-100.4	-112.5	-125.4	-138.9
		50	-52.1	-61.1	-70.9	-81.3	-92.5	-104.5	-117.1	-130.5	-144.6
		60	-53.7	-63.0	-73.1	-83.9	-95.5	-107.8	-120.8	-134.6	-149.1
	2	20	-64.6	-75.8	-87.9	-100.9	-114.8	-129.6	-145.3	-161.9	-179.4
		25	-67.0	-78.6	-91.1	-104.6	-119.0	-134.4	-150.7	-167.9	-186.0
		30	-69.4	-81.4	-94.4	-108.4	-123.3	-139.2	-156.0	-173.9	-192.6
		40	-72.9	-85.6	-99.3	-114.0	-129.7	-146.4	-164.1	-182.9	-202.6
		50	-75.9	-89.1	-103.3	-118.6	-135.0	-152.4	-170.8	-190.4	-210.9
		60	-78.3	-91.9	-106.6	-122.4	-139.2	-157.2	-176.2	-196.3	-217.6
	3	20	-76.8	-90.1	-104.5	-119.9	-136.5	-154.0	-172.7	-192.4	-213.2
		25	-79.6	-93.4	-108.3	-124.4	-141.5	-159.7	-179.1	-199.5	-221.1
		30	-82.4	-96.8	-112.2	-128.8	-146.6	-165.4	-185.5	-206.7	-229.0
		40	-86.7	-101.8	-118.0	-135.5	-154.1	-174.0	-195.1	-217.4	-240.8
		50	-90.3	-105.9	-122.8	-141.0	-160.5	-181.1	-203.1	-226.3	-250.7
		60	-93.1	-109.3	-126.7	-145.5	-165.5	-186.8	-209.5	-233.4	-258.6
Partially Enclosed	1	20	-51.8	-60.8	-70.5	-80.9	-92.1	-103.9	-116.5	-129.8	-143.8
		25	-53.7	-63.0	-73.1	-83.9	-95.5	-107.8	-120.8	-134.6	-149.2
		30	-55.6	-65.3	-75.7	-86.9	-98.9	-111.6	-125.1	-139.4	-154.5
		40	-58.5	-68.7	-79.6	-91.4	-104.0	-117.4	-131.6	-146.6	-162.5
		50	-60.9	-71.5	-82.9	-95.1	-108.2	-122.2	-137.0	-152.6	-169.1
		60	-62.8	-73.7	-85.5	-98.1	-111.7	-126.0	-141.3	-157.5	-174.5
	2	20	-72.1	-84.6	-98.1	-112.6	-128.2	-144.7	-162.2	-180.7	-200.2
		25	-74.8	-87.7	-101.7	-116.8	-132.9	-150.0	-168.2	-187.4	-207.6
		30	-77.4	-90.9	-105.4	-121.0	-137.6	-155.4	-174.2	-194.1	-215.1
		40	-81.4	-95.6	-110.8	-127.2	-144.8	-163.4	-183.2	-204.1	-226.2
		50	-84.8	-99.5	-115.4	-132.4	-150.7	-170.1	-190.7	-212.5	-235.5
		60	-87.4	-102.6	-119.0	-136.6	-155.4	-175.5	-196.7	-219.2	-242.9
	3	20	-84.3	-98.9	-114.7	-131.7	-149.8	-169.1	-189.6	-211.3	-234.1
		25	-87.4	-102.6	-118.9	-136.5	-155.4	-175.4	-196.6	-219.1	-242.7
		30	-90.5	-106.2	-123.2	-141.4	-160.9	-181.6	-203.6	-226.9	-251.4
		40	-95.2	-111.7	-129.6	-148.7	-169.2	-191.0	-214.2	-238.6	-264.4
		50	-99.1	-116.3	-134.9	-154.8	-176.2	-198.9	-223.0	-248.4	-275.2
		60	-102.2	-120.0	-139.1	-159.7	-181.7	-205.1	-230.0	-256.2	-283.9