All Metal Acquisitions of NW Florida, LLC

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FL 10319

Quality Assurance Program: ACTIVE /COMPLIANT Category: Roofing Sub-Category: Metal Roofing
Method 1-D Code: CURRENT FLORIDA BUILDING CODE

Product Description	Substrate	Design Uplift Pressure*		Fasteners
1 ¼" Snap Lock 24GA 13 7/8" Width 50ksi Non-Structural NON HVHZ	15/32" APA Plywood w/ joints sealed w/min. 4" approved peel and stick waterproofing Supports at max 24"o.c. spacing .OPTION TO APPLY SYP 1X4 OVE R PLYWOOD	-108.5psf @24"o.c. spacing.-123.5psf @6"o.c. spacing	Rib HT 1-3/4"	Corrosion Resistant: Fastener: (2) #10-12 Pancake Type A ¾" min penetration thru plywood Clips: CMP 1-3/4, Fixed
PBR 26GA 36"Coverage 80ksi Non-Structural NON HVHZ	15/32" APA Plywood w/ joints sealed w/min. 4" approved peel and stick waterproofing.Supports at max 24"o.c. spacing .OPTION TO APPLY SYP 1X4 OVE R PLYWOOD	-59.25psf, fastening pattern 12"-12"-12" @24"o.c. spacing -154.75psf, fastening 9"-5"-7"-5"-7"-5" @12"o.c. spacing	1 ¼" Rib HT	Corrosion Resistant: Fastener: #9-15 x 1-1/2" Woodgrip w/ sealing washing, ¼-14 x 7/8" HWH w/ sealing washer @20"o.c. at panel side laps or approved equals. ¾" min penetration thru plywood Slopes less than 3:12, lap sealant must be used in the panel side laps.
Tuff Rib 29GA 36" Coverage 80ksi Non-Structural NON HVHZ	15/32" APA Plywood w/ joints sealed w/min. 4" approved peel and stick waterproofing. Supports at max 24"o.c. spacing .OPTION TO APPLY SYP 1X4 OVE R PLYWOOD	-78.5psf, fastening pattern 9"-9"-9"-9" @24"o.c. spacing -108.5psf, fastening pattern 6"-3"-6"-3"-6"-3"-6"-3" @24"o.c.	¾" Rib thru fastened	Corrosion resistant: Fastener: #10-15 x 1-1/2" Hilo Woodgrip w/ sealing washing. ¾" min penetration thru plywood. For slopes less than 3:12, lap sealant must be used in the panel side laps
Tuff Rib 29GA 36" Coverage 80ksi Non-Structural NON HVHZ	1x4 # 2 SYP wood purlin Over 15/32" Plywood Over supports at max 24"o.c. spacing. Purlins T Thru fastened to plywood into each wood rafter W/(2) 8x3" deck Screws,min 1 5/8" Penetration w/ joints sealed w/min. 4" Approved peel and stick Waterproofing.	-108.5psf, fastening pattern 9"-9"-9"-9" @24"o.c. spacing -183.5psf, fastening pattern 6"-3"-6"-3"-6"-3"-6"-3" @24"o.c. spacing	¾" Rib thru fastened roof	Corrosion resistant: Fastener: #10-15 x 1-1/2" Hilo Woodgrip w/ sealing washing ¾" min penetration thru plywood For slopes less than 3:12, lap sealant must be used in the panel side laps
1 ¼" Snap Lock 26GA 13 7/8" Coverage 50ksi Non-Structural NON HVHZ	15/32" APA Plywood w/ joints seal w/min. 4" peel and stick waterproofing. Supports at max 24"o.c. spacing . .OPTION TO APPLY SYP 1X4 OVE R PLYWOOD	-63.5psf, @24"o.c. spacing. -78.5psf @6"o.c. spacing	Rib HT 1 3/4"	Corrosion resistant: Fastener: (2 per clip) #10-12 x 1" Pancake Type A Clips: CMP 1-3/4, Fixed 3/16" min penetration thru plywood
1.5 Mechanical Lock ALUM 0.032 Non-Structural NON HVHZ	15/32" APA Plywood w/ joints seal w/min. 4" peel-stickwaterproofing. Supports at max 24"o.c. spacing..OPTION APPLY SYP 1X4 OVE R PLYWOOD	16" width panel -78.8psf@12"o.c. -89.3psf@6"o.c. 12" width panel- over wood only -119.3psf@12"o.c.	Rib HT: 1 ½"	Corrosion resistant: Fastener: (2 per SS clip)two piece sliding #10-12 Pancake Type A Forming 180° seam, double lock mechanical seamer ¾" penetration thru plywood
1.5 Mechanical Lock ALUM 0.032 16" width Non-Structural Non-HVHZ	22GA Steel Decking 33ksi steel	-76.8psf@12"o.c, -79.3@6"o.c.	Rib HT: 1 ½"	Corrosion resistant: Fastener: (2 per SS clip) #10-16x1" Pancake self driller Two piece slider Top: 26GA SS 1 ¼" long Base: 24GA SS 3 3/8" long. Forming 180° seam, double lock mechanical seamer ¾" penetration thru steel deck
1.5 Mechanical Lock 24GA 16"width 0.024 thickness 50ksi Non-Structural NON HVHZ	33ksi steel 22GA Steel Decking	-52.5psf@24"o.c, -123.5@6"o.c.	Rib HT: 1 ¼"	Corrosion resistant: FASTENE RS piece slider Top: 26GA SS 1 ¼" long Base: 24GA SS 3 3/8" forming 180° seam, double lock mechanical seamer

OPTION TO APPLY 1 X 4 SYP OVER PLYWOOD SUBSTRATE. SAME FASTENING PATTERN AS SPECIFIED FOR PLYWOOD. FASTENER TO PENETRATE THRU PLYWOOD SUBTRATE, MIN 15/32" OR 19/32" APA PLYWOOD

7/8" Nailstrip 24GA **16" Coverage 50ksi** **Non-Structural** **NON HVHZ**	15/32" APA Plywood, supports at max 24"o.c. spacing Peel/stick 4" on seams	-56.0psf, 15 9/16"o.c. spacing -108.5psf 5 3/16"o.c. spacing	Female Rib: 7/8" tall snap lock rib Male Rib: ¾" tall rib w/slot strip 5 3/16" o.c.	Corrosion Resistant: **Fastener:** (1) #10-9 x 1" Concealor Ultra Low Profile Type A 3/16" min penetration thru plywood
5 V Crimp 26GA **50ksi 0.018" min** **24" coverage** **Non-Structural** **HVHZ**	**HVHZ**- additional 15/32" Plywood over **existing construction,** attach decking w/ no less than 8D annual ring shanknails at 6"o.c. **HVHZ**- 19/32" Plywood- **new construction** joints sealed w/min. 4" peel-stick waterproofing.	-108.5psf@12"o.c. -156.5psf@6"o.c.	3/8" Rib HT Thru fastened	Corrosion resistant: **Fastener:** #9-15x1-1/2" WoodZac w/Zac Head sealing washer or approved equal thru panel rib. ¾" min penetration
Tuff Rib 26GA **36" width** **80ksi** **Non-Structural** **Non HVHZ**	15/32" APA Plywood, joints sealed w/min. 4" approved peel and stick waterproofing. Supports at max 24"o.c.	-69.25psf@24"o.c. Type A fastening 9"-9"-9"-9" pattern -146psf@12"o.c. Type B fastening 6.5"-2.5"-6.5"-2.5"-6.5"-2.5-6.5"	4" Rib HT @ 9"o.c. Thru fastened	Corrosion resistant: **Fastener:** #9-15x1-1/2" HWH Woodgrip w/sealing washer or approved equal For slopes less than 3:12, lap sealant must be used in the panel side laps.
Tuff Rib 29GA **36" width** **80ksi** **Non-Structural** **Non HVHZ**	15/32" APA Plywood, joints sealed w/min. 4" approved peel and stick waterproofing. Supports at max 24"o.c. spacing	-71.75psf@24"o.c. Type A -146.0psf@12"o.c. Type B	4" Rib HT @ 9"o.c. Thru fastened	Corrosion resistant: **Fastener:** #9-15x1-1/2" HWH Woodgrip w/sealing washer or approved equal For slopes less than 3:12, lap sealant must be used in the panel side laps.

*Design Pressures includes safety factor=2.0

Test Reference Entity	Report#	Standard Year
Force Engineering & Testing (TST-5328)	#383-0075T-10	FM 4471-95 (FM 4471-1992)
Force Engineering & Testing (TST-5328)	#383-0032T-10A, B	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#383-0075T-10D, F	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#383-0076T-10A, B	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#383-0076T-10E	FM 4471-95 (FM 4471-1992)
Force Engineering & Testing (TST-5328)	#383-0076T-10C & D	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#383-0076T-10E	FM 4471-95 (FM 4471-1992)
Force Engineering & Testing (TST-5328)	#383-0032T-10D	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#383-0031T-10	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#115-0103T-05A-C	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#115-0103T-05D, E	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing (TST-5328)	#115-0410T-07A, B	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing(TST)-5328	#115 -0351T-06A	UL 580-94[1]/1897-98[2]) (2006[1]/2012[2])
Force Engineering & Testing(TST)-5328	#115-0217T-08B	UL 580-94[1]/1897-98[2] (2006[1]/2012[2])
Force Engineering & Testing(TST)-5328	#115-0172T-07A-C	UL 580-941/1897-982) (20061/20122)

2. *The UL580-94 test standards are equivalent to the UL580-06 test standard.*

The UL1897-98,04 test standards are equivalent to the UL1897-12 test standard.

3. *The FM 4471-95 and 4471-10 test standards are equivalent to the FM 4471-92.*

Limitations:

1. Under-layment to be compliance with Current Florida Building Code
2. Minimum slope to be compliant with CURRENT and in accordance with Manufacturer's details.
3. Products are compliant for State of Florida product approval per Rule 61G20-3
4. Fire classification is not part of this acceptance. Shear diaphragm values are outside this report.
5. Support framing in compliance w/Current Florida Building Code Chapters: 22-Steel, 23-Wood, 16-Structural Loading.
6. This report does not imply warranty, installation, recommended product use outside of this report.

Compliance Statement: These products herein evaluated by Locke Bowden, P.E. have demonstrated compliance with the CURRENT Florida Building Code with referenced documents submitted.

Certificate of Independence:

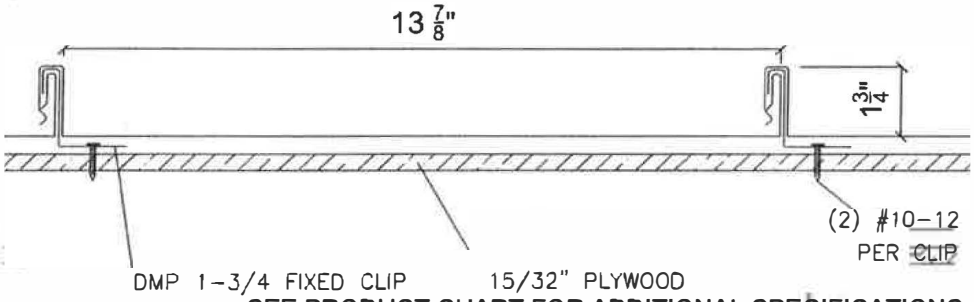
Locke Bowden, P.E. does not have, not will acquire a financial interest in any company manufacturing or distributing products under this evaluation.

Locke Bowden, P.E. is not owned, operated, or controlled by any company, manufacturer, or distributing products under this report.

LOCKE D. BOWDEN
LICENSE
No. 49704
11/30/20
STATE OF FLORIDA
PROFESSIONAL ENGINEER

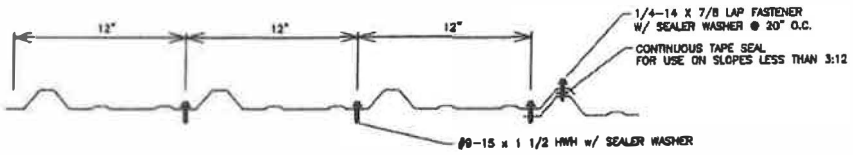
ALL METAL ACQUISITIONS DETAILS

1-3/4" SNAP LOCK 24 GA. 13 $\frac{7}{8}$" WIDE OVER $\frac{15}{32}$" PLYWOOD

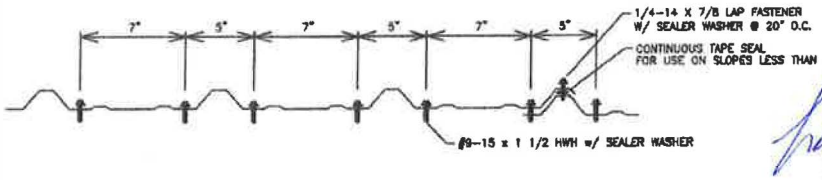


SEE PRODUCT CHART FOR ADDITIONAL SPECIFICATIONS

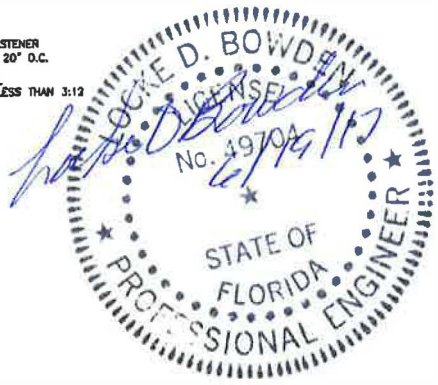
26GA PBR PANEL 36" OVER 15/32" PLYWOOD



FASTENER PATTERN TYPE 1

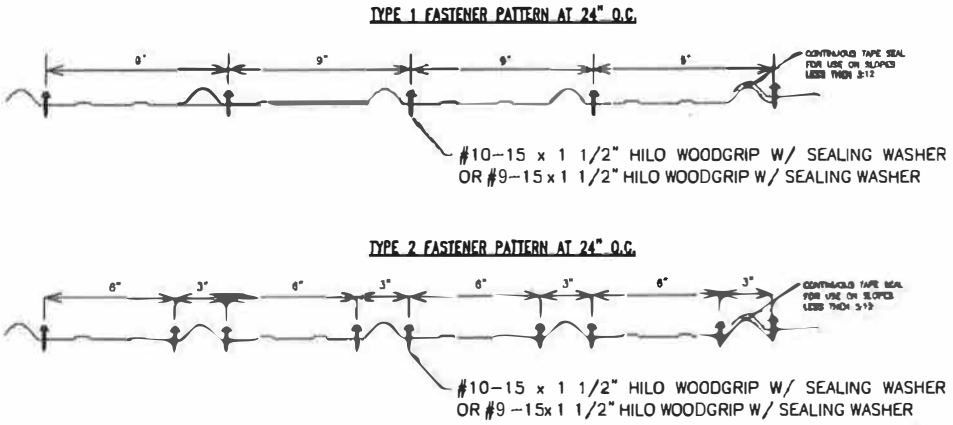


FASTENER PATTERN TYPE 2 AND AT EAVE & VALLEY

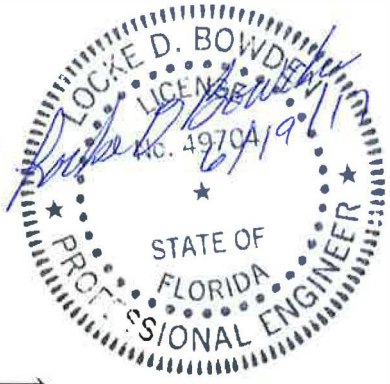


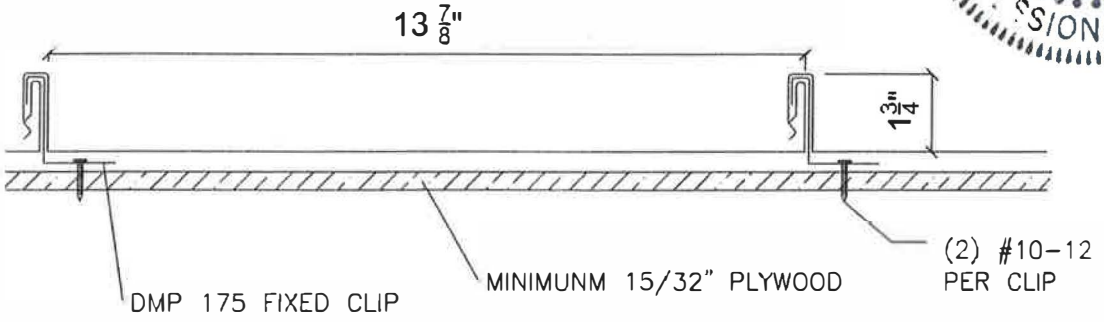
Install Details provided by Force Engineering and Testing

MIN. 29 GA. TUFF RIB PANEL OVER MIN. 15/32" PLYWOOD



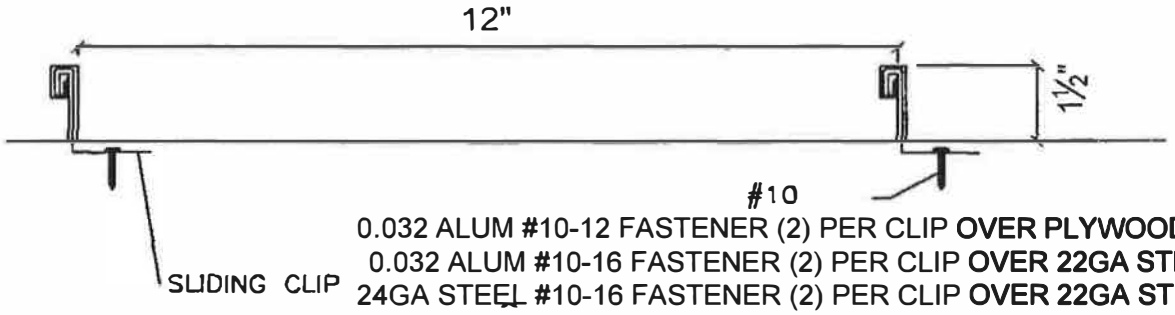
1-3/4" SNAP LOCK 26 GA. 13 $\frac{7}{8}$" WIDE OVER MINIMUM $\frac{15}{32}$" PLYWOOD





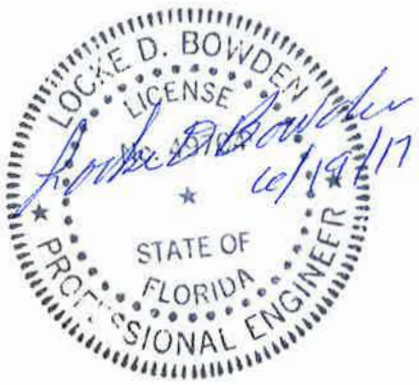
0.032 ALUM OR 24GA STEEL SSR 1.5 RIB MECHANICAL LOCK

12" OR `16" WIDTH AVAILABLE OVER PLY WOOD // 16" WIDTH OVER 22GA STEEL DECK

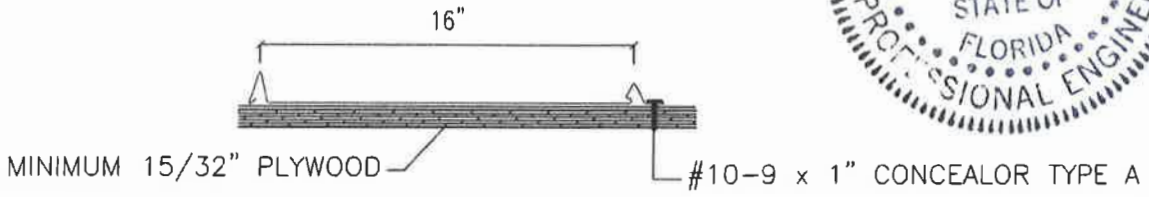


0.032 ALUM #10-12 FASTENER (2) PER CLIP **OVER PLYWOOD**
0.032 ALUM #10-16 FASTENER (2) PER CLIP **OVER 22GA STEEL DECK**
24GA STEEL #10-16 FASTENER (2) PER CLIP **OVER 22GA STEEL DECK**

7/8" NAILSTRIP 24 GA. 16" WIDE OVER MINIMUM 15/32" PLYWOOD

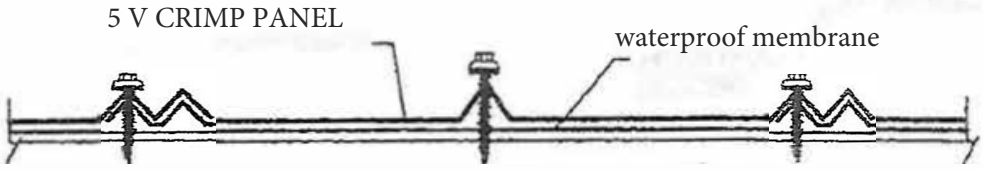


main field fastening 15- 9/16"
perimeter and corner 5-3/16"



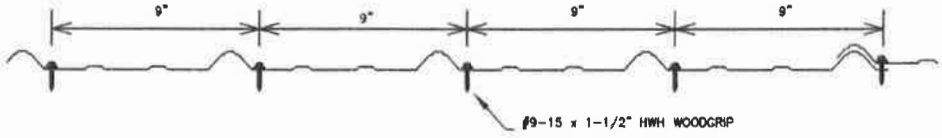
5 V CRIMP 26GA METAL ROOFING

fastener spacing: 12"o.c. main field
6" o.c. perimeter

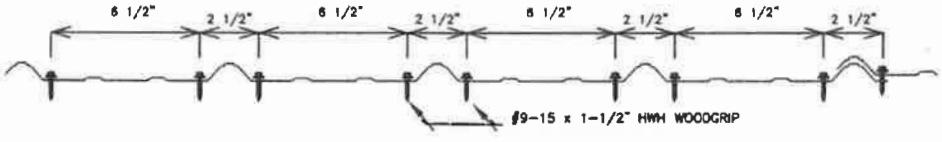


26GA RIB

FASTENER PATTERN TYPE A, AT 24" O.C.

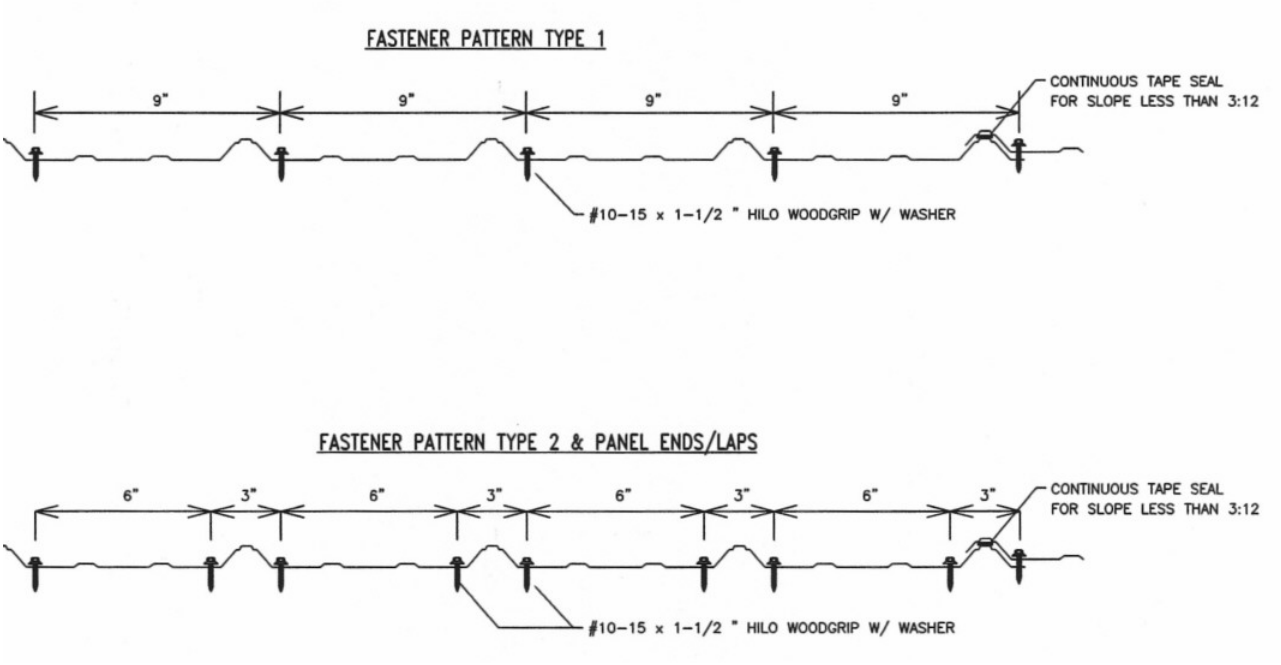


FASTENER PATTERN TYPE B, AT 12" O.C.



Install Details provided by Force Engineering and Testing

TUFF RIB 29GA OVER 1X4 PURLINS OVER 15/32" PLYWOOD



Install Details provided by Force Engineering and Testing