



Type B Metal Deck Fastener Specifications 08-2020

Addendum for Hinge2™/RS-20 Fall Protection Anchors

Fall Protection Specification:

User Wt. 1 person per anchor with a max. wt of 310lb including tools and equipment.

PPE: Required to use a full body harness and an energy absorber with a maximum avg. fall arrest force of 900lb.

Specification of Use

Super Anchor Safety (SAS) mfg. Hinge2 and RS-20 model fall protection anchors only and do not apply to similar type anchors mfg. by others. Consult the primary "Instruction/Specification" manual supplied with the anchor at the time of shipping. The service range for fall arrest and work positioning are specified on pages 3 and 4.

Fastener Specifications

Use only SAS supplied fasteners specified below:

- Blazer™ No. 12-14 SD Self Drilling Screws
- HeadLok™ SP Self Drilling Spade Tip

Adhere closely to the number of fasteners and the specified fastener hole (FH) positions as noted on pages 3 and 4.

Type B Metal Decking

Installation for type B metal decking gauges 18, 20 and 22, see Fig.D. Anchors must be installed over the center of the top flute as shown at Figs. E and F.

RS-20 No. 2816/2916-D/2816-S

Use for temporary or permanent installation. Use No.2816-S 100% stainless steel for installations exposed to salt air.

Hinge2 No. 3013-D / 3013-S

Temporary installation only. Must be removed after use. Install directly onto metal decking with Blazer screws. For substrates or insulation panels over 2-1/8" thick, use HeadLok screws as shown at Fig.F. May be installed in the field as shown at Fig.A or at a ridge juncture provided top flutes line up on both sides

Hinge2
No. 3013-S
430sst

Hinge2
No. 3013-D
Dacromet Coated

Fig.A

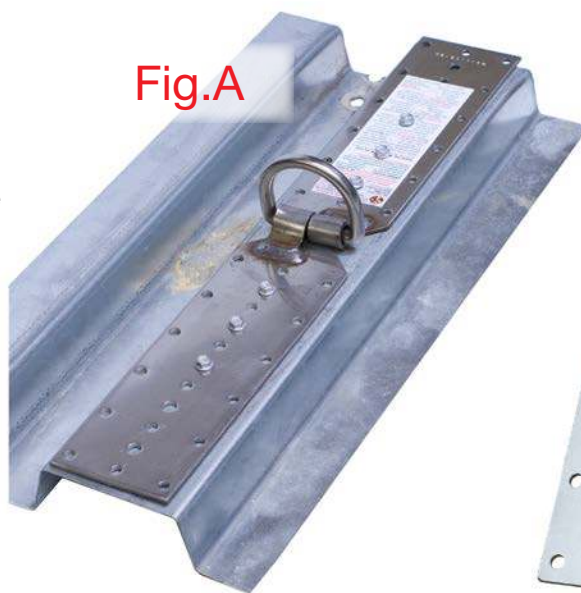


Fig.B



HeadLok Screws

Fig.C
RS-20

No. 2816-S/2816-D

Installation with HeadLok screws over insulation or substrates with a minimum thickness of 1-1/8"

Top Flute



Insulation Panel w/OSB

Fig.D Type-B Metal Decking

Typical Dimensions:

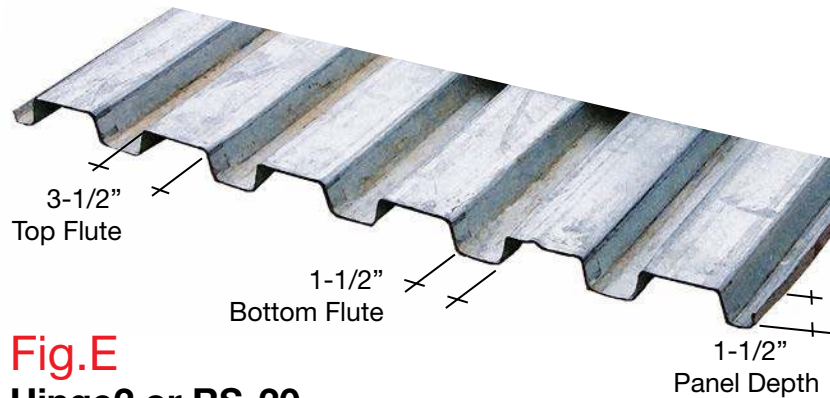
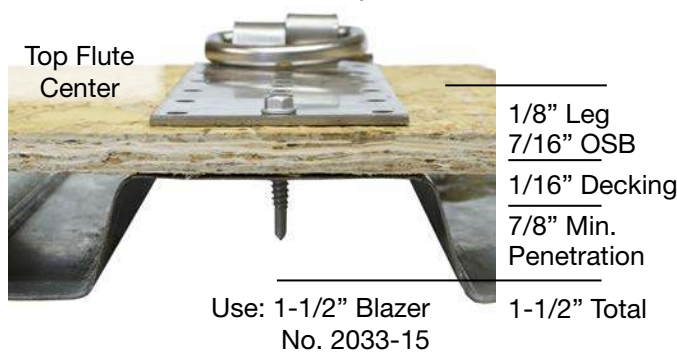


Fig.E Hinge2 or RS-20

Fastener selection example



Blazer Fastener Length Calculator

SAS Part No.	Fastener Specs.		Substrate	
	Length	△ Thread	Min."	Max."
2033-1.5	1.5"	5/8"	1/8	5/8
2033-2.0	2.0"	1-1/8"		1-1/8
2033-3.0	3.0"	2-1/8"		2-1/8

△ Net useable thread length

Metal Decking Structural Attachment

Metal decking must be attached to the supporting structure and capable of withstanding the intended fall protection load as specified in pages 3 and 4 of this manual.

Installation / Inspection

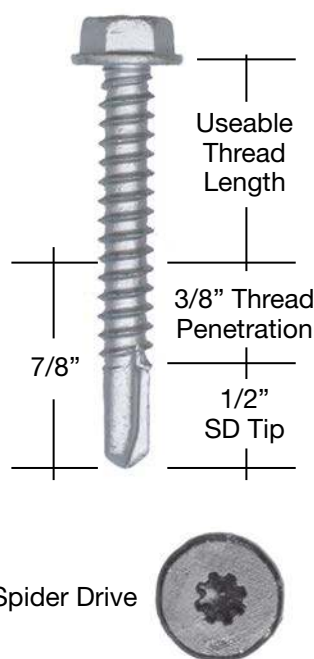
Prior to installation, the fastener length and thread penetration through the decking and substrate should be verified by a competent person.

Inspection Before Use: As shown at Figs. E/F inspect anchor locations from the underside of the metal decking to confirm the fastener count and and penetration depth as specified in this manual.

- Blazer min. thread/tip penetration = 7/8"
- HeadLok min. thread/tip penetration = 1/2"

Blazer 12-14 SD Tip

5/16" Hex Head Drive



HeadLok SP Tip

Spade tip for metal 18-22 gauge.

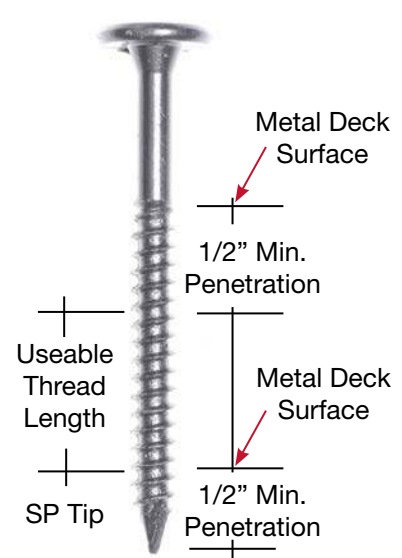
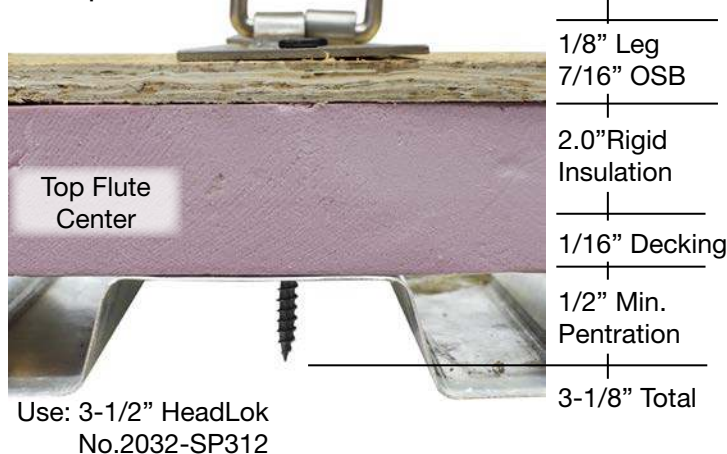


Fig.F Hinge2 or RS-20

Fastener selection example



HeadLok Length Calculator:

SAS Part No.	Fastener Specs.		Substrate	
	Length	Thread	Min."	Max."
2032-C Specify Length	2-7/8"	2.0"	1-1/4	2-3/8
	2-7/8"			
	3-1/2"			
	4-1/2"	△ 3.0"	1.0	3.0
	5.0"		2.0	4.0
	6-1/2"		2-1/2	4-1/2
	7-1/2"		4.0	6.0
	8.0"		5.0	7.0
	9.0"		5-1/2	7-1/2
	10.0"		6-1/2	8-1/2
	12.0"		7-1/2	9-1/2
			9-1/2	11-1/2

△ 3" Thread length = 2.0" substrate thickness range.

Anchor Model: Hinge2 No. 3013/3013-S

Fastener Types:

- Blazer Self Drilling Screw No.12-14
Use 3/16" and 5/16" fastener Holes
- HeadLok SP Tip self drilling screw
Use 5/16" center fastener holes only

● = Fasteners are required to be installed at locations shown as solid red circles.

18-22ga. Fig.1
Load Applied Angle "A"
3,600-5,000lb
Blazer 12-14 Screws Only

18-22ga. Fig.2
Load Applied Angle "B"
3,600lb
Blazer or HeadLok Screws

18-22ga. Fig.3
Load Applied Angle "B"
5,000lb
Blazer or HeadLok Screws

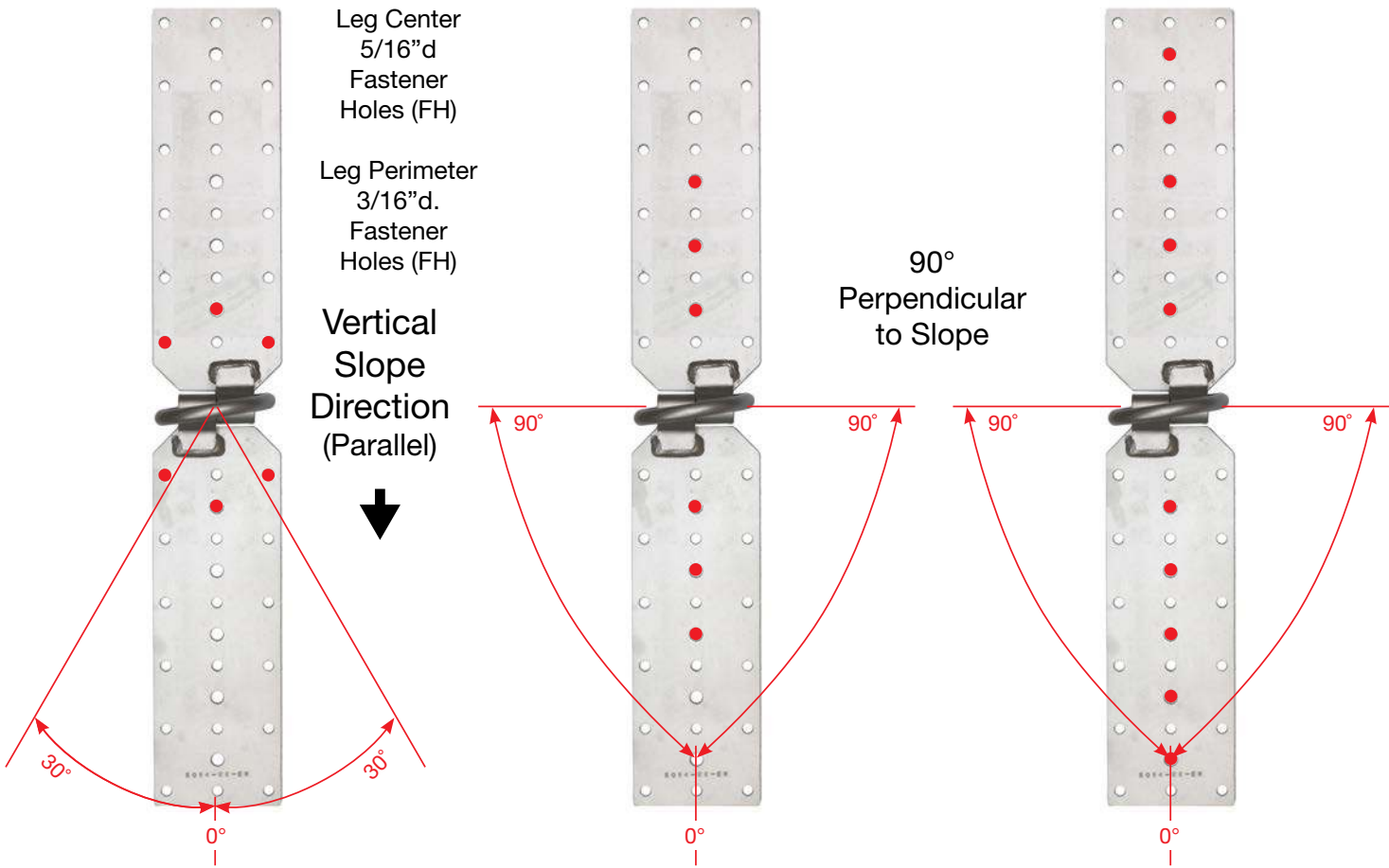


Table 1:

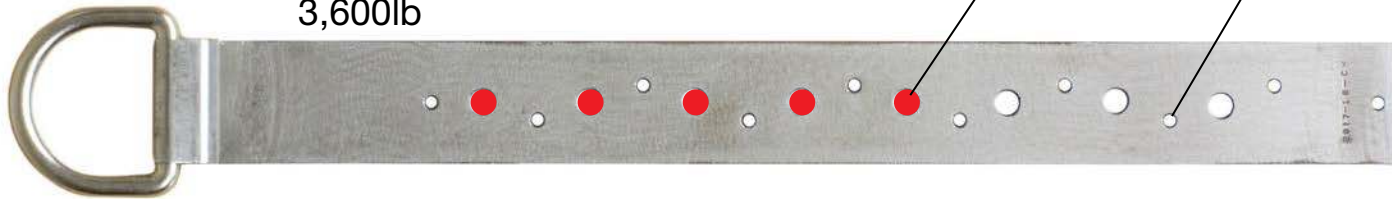
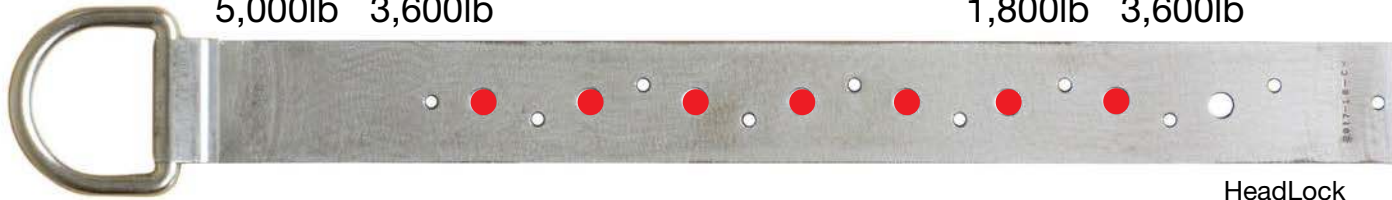
Metal Decking	Service Angle	See Fig.	Strength Rating	5/16" d. FH	3/16" d. FH	Total Fasteners
18 20 22 ga.	A 0°-30°	1	3,600lb	2	4	6
			5,000lb			
	B 0°-90°	2	3,600lb	6	Ø	6
		3	5,000lb	10	Ø	10



Anchor Model: RS-20 No. 2816/ 2816-D/2816S**Fastener Types:**

- Blazer Self Drilling Screw No.12-14
5/16" fastener holes
- Maximum substrate depth 2-1/8"
using 3.0" length screws

● = Fasteners are required to be installed at locations shown as solid red circles.
Optional: For RS-2816 single hole models use 3/16" fastener holes nearest the red circles.

Fig.1 Load Applied Angle "A"
3,600lb**Fig.2** Load Applied Angle "A"
5,000lb 3,600lb**Fig.2** Load Applied Angle "B"
1,800lb 3,600lb**Table 2:**

Metal Decking	Service Angle	See Fig.	Strength Rating	5/16"d. FH	▲3/16"d. FH	Total Fasteners
18 20 22 ga.	A 0°-30°	1	3,600lb	5	Ø	5
		2	5,000lb	7	Ø	7
	B 90°-30°	2	1,800lb	7	Ø	7

▲ For RS-2816 single hole model use the same number of fasteners.

**Fig.1**
Load Applied Angle "A"
3,600lb**Fig.2**
Load Applied Angle "A"
5,000lb**Fig.2**
Load Applied Angle "B"
1,800lb90°
Perpendicular
to Slope