



SUPER ANCHOR SAFETY®

Flex™ Anchor No. 2100

Instruction/Specification Manual 2024

ENGLISH
VERSION

!WARNING TO USER!
You are required to read and use the Instruction/Specification manual supplied at the time this device was shipped. Improper use and installation can result in serious injury or death. Follow inspection requirements before each use.

Material Specifications

Anchor Legs: 6mm Q235 Steel
Link Chain Type: 80x21.0" Length
Connector Ring: 3/8x3.0" Forged Steel
 ANSI Z359.12-09/CSA Z259.12-11
Fastener Holes: Small d. 7/32"
 Large d. 9/32"
Flex Band: 6mm Rubber Belt
Coating: Zinc Plated
Chain Stud/Chain/Connector Ring
Min. Tensile Strength:
 5,000lb(22.5kN)

Compliance: OSHA1926.502 ANSI Z359.1-07

Specified Use

Temporary installation fall protection anchorage on wood framed structures. Use for Fall Arrest, Fall Restraint, or Horizontal Line Systems.

User Specifications: 1 person max. user wt. 310lb(140kg) including tools and equipment. **Free Fall:** Max. length 6ft(1.8m). **Max Arrest force:** 1,800lb(8kN). **Energy absorber specified for the user's weight is required.**

Non-Specified Use

Do not use for window washing, suspended work, scaffold tie-off or lifting or work positioning.

Fastener Installation/Framing Requirement

Fully sheathed framing must be capable of supporting 5,000lb or 2 times the calculated fall protection load. Center anchor legs over a top chord as shown at Figs 2 and 3.

Fasteners: Use SAS supplied fasteners specified in Table 1. DO NOT substitute with other types of fasteners unless they have been engineered by a qualified person or supplied by SAS. Flush mount fasteners to anchor leg surface. Fasteners must penetrate the top chord a minimum of 2-1/4" as shown at Fig.2. Longer length screws are required when installing over roofing materials.

16d Duplex Nails: Do not reuse nails. Install off-center fasteners at a slight angle toward the top chord center as shown at Figs.3 and 5.

WS Screws: Shown at Figs. 2 and 6, use 9/16"d. holes.

WARNING! Do not reuse wood screws. Do not install screws by hammering.

Always use eye protection when installing fasteners.

(HLLS). Use lowest torque setting to avoid fastener damage. 3/8" hex driver required.

Fastener/Anchor Inspection Prior to Use

At the time of first installation check the underside of the sheathing at anchor location and inspect for blowouts as shown at Fig.4. Before using the anchor always confirm it has been installed correctly. Remove from service if any of the following conditions are present:

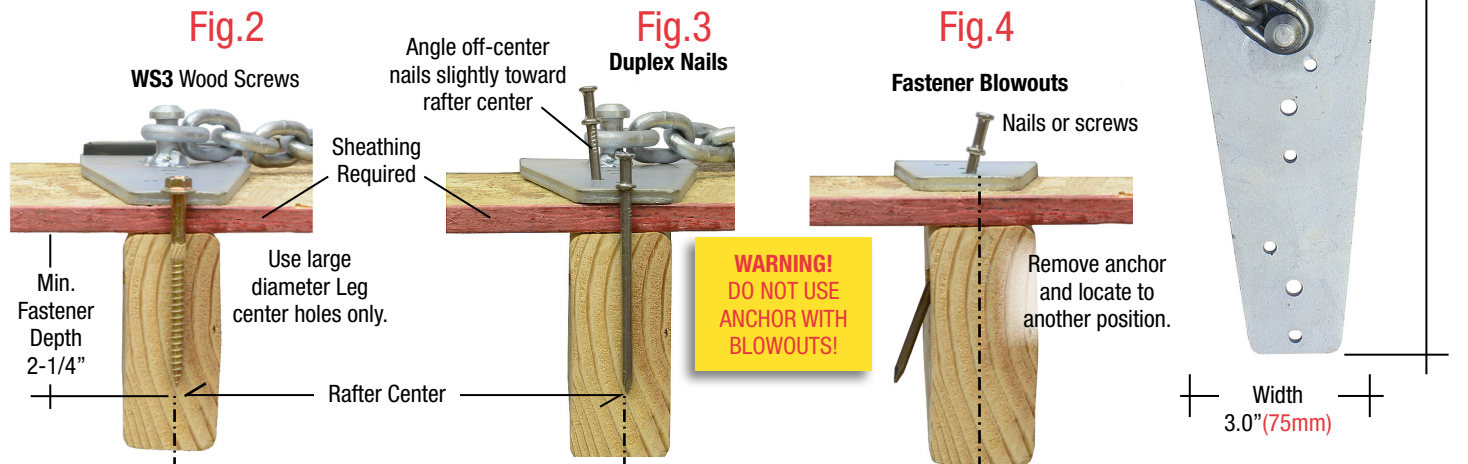
- 1) Deformation of Connector Ring, Chain Stud or cracked stud weld
- 2) Missing Rivets
- 3) Missing fasteners (see Table 1)
- 4) Fastener Blowouts
- 5) Subjected to a free fall

Table 1: SAS Supplied Fasteners

Part No.	Fasteners		▲ Max Service Load Applied	
	Min.	Type	0°- 30° Angle	Over 30°
Flex No.	12	16d Duplex Nails	2,400lb(10kN)	Fall Restraint
2100	6	WS Screws*	3,600lb(16kN)	

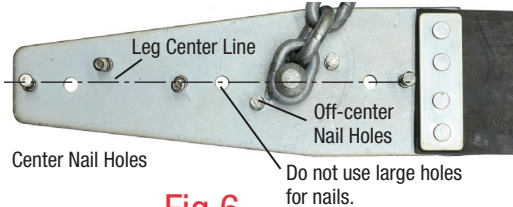
*Note 1: Single person anchor point, use 3" or 3-1/2" WS screw length.

*Note 2: HLL system requires to use 3-1/2" WS screw length.

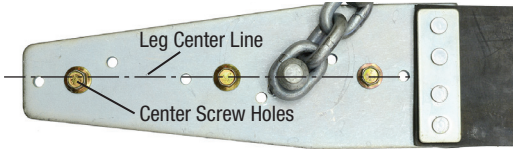


Fastener Hole Locations

Duplex Nails
6 Duplex nails are required in each anchor leg. Use only the small diameter holes. **Do not use nails for HLL.**



WS Wood Screws Required for HLLS
3 WS screws are required in each anchor leg. Use the large diameter center holes.



Horizontal Lifeline System (HLLS)

HLLS anchors must be installed over the ridge using 3-1/2" WS screws and placed at a minimum of 6ft from the gable end or an opening in the roof. Maximum spacing between anchors is 20ft. HLL must be rigged for a 30° angle as shown at Fig.8. Calculate the desired distance between top chords and use SAS No.1335 HLL shown in Table 2. Multiple leg HLL's can be rigged with an intermediate anchor as shown at Figs. 9,10. Do not work both sides of a roof surface from single or multiple leg HLL system at the same time. To work both sides of a roof surface at the same time, a second HLL system must be installed. See Table 3 for maximum number of workers per HLL leg.

Single Anchor Location/ Spacing

Space anchors approx. 8ft apart and 6ft from any gable edge, or based on the rafter length and a 30°angle service zone. Job specific service zones may be designed by a qualified or competent person (See OSHA definition).

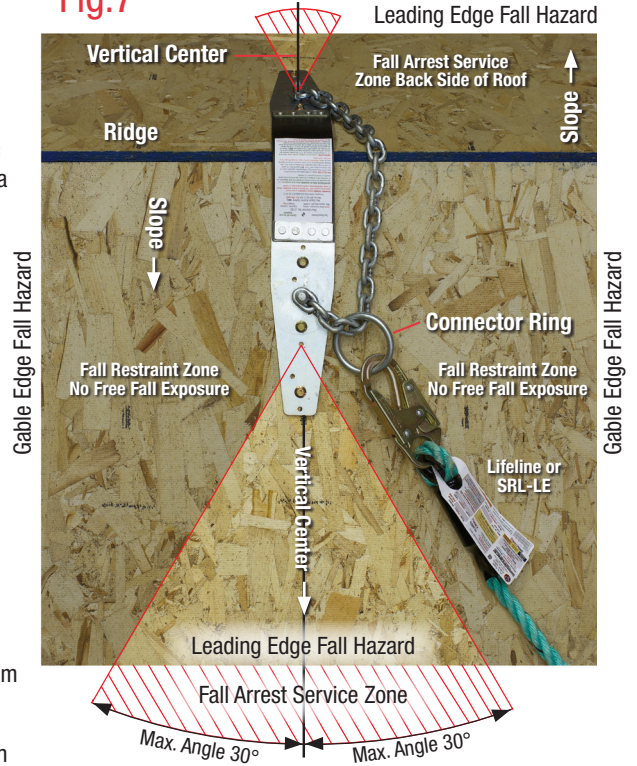
Fall Arrest Service Zone

When exposed to a free fall a worker must not travel to the left or right of vertical center outside the 30° service zone. The connector ring must be positioned as shown at Fig.7.

Fall Restraint

Areas outside the fall arrest service zone are designated fall restraint and do not allow workers to be exposed to a free fall.

Fig.7



Gable End Fig.8

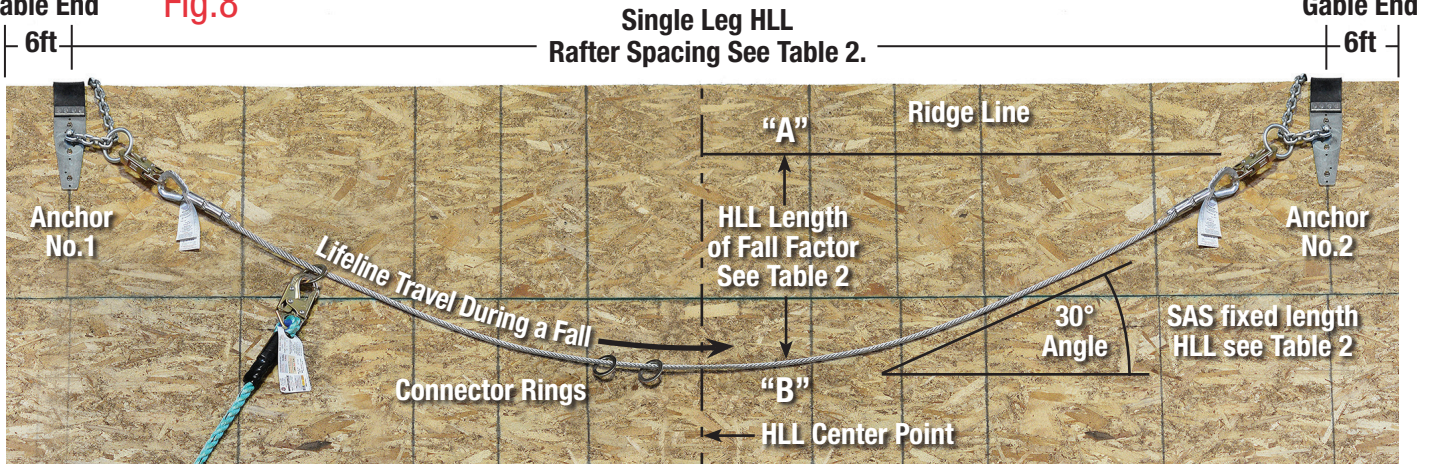


Table 2: 30° Fixed Length HLL

HLL No.	Rafter Spacing	30° Length	Fall Factor
1335-10	10ft	11-6"	34.0"
1335-12	12ft	13-6"	41.0"
1335-14	14ft	16-0"	48.0"
1335-16	16ft	18-4"	55.0"
1335-18	18ft	20-6"	62.0"
1335-20	20ft	23-0"	69.0"

Table 3: No. of Workers for each HLL Leg

Rigging Type	No. Anchors	Person per 1 Leg	Additional Leg	See Fig.
Fall Arrest	2	2		8
	3 or more	1	1	9
Fall Restraint	2	3		8
	3 or more	2	2	10

Note: When additional legs are added using a center anchor, the strength capacity for each leg is reduced.

HLL Specifications

Rigging System	Single Leg	Fig.	Multiple Leg	Fig.
Fall Arrest	1 Person	8	1 per/Leg	9
Fall Restraint	3 Persons		2 per/Leg	10

WARNING! HLL Free Fall Factor

When a fall occurs, the lifeline will travel to the HLL center point. The length between point "A" and "B" shown at Fig.8 and Table 3 must be included in the total length of a free fall to avoid striking the ground or a lower level.

Fig.9



Fig.10

