



# SUPER ANCHOR SAFETY®

## ARS Permanent Roof Anchor Instruction/Specification Manual 2025

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.

### Materials Specifications

**Anchor:** 14ga. and 11ga.430sst, Q235 steel, 304sst or 316sst.  
**Coating:** HDG or dacromet.  
**Temperature Range:** -30°F-120°F.  
**Min. Breaking Strength:** 5,000lb(22kN).  
**Max. Arrest Force:** 3,600lb(16kN).

**Compliance:** OSHA1926.502  
ANSI Z359.18-17 Type D  
Meets Safety Code for use in Québec.  
**Certified by a member of l'Ordre des ingénieurs du Québec.**  
**SAS = Super Anchor Safety.**  
**\*\*Qualified or Competent Person\*\* see OSHA definition.**

### Anchor Locations/Service Zones

Required to be specified by the project safety personnel, qualified or competent person.\* See Fig.18 example.

### Specified Use

- Fall arrest or fall restraint.
- Max. user wt. 310lb(140kg) including tools and equipment.
- Max. Slope 24/12.
- Do not use for work positioning, HLL systems, hoisting or lifting.

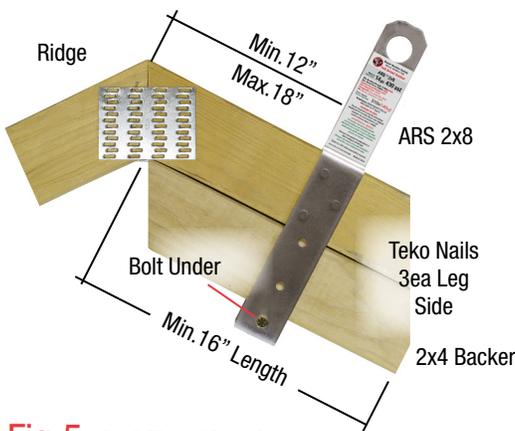
### Framing Requirements

Install onto top chords capable of supporting 5,000lb or 2 times the intended fall protection load as specified by OSHA 1926.502(d)(15)(i)(ii).  
**Fall Protection Load:** Max. fall arrest force 1,800lb times 2 = a max. in plane load of 3,600lb applied to a top chord or supporting structure. Engineering is required by a qualified or competent person.\* Install anchors below the hip or ridge as shown at Figs.4,5,14,18.

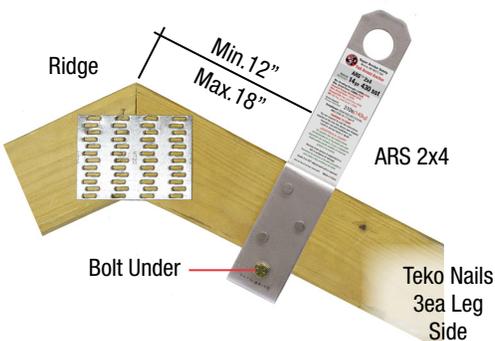
### Attachment Bolt Specifications

Attach ARS anchors with a **SAS** factory supplied 5/16" grd 8 bolt.  
**Bolt Under:** See Figs.10,11.  
**Bolt-Thru:** Drill pilot hole w/5/16" drill bit see Fig.12.  
**Teko Nails:** Anchors mfg. with teko nail holes, install 3 nails in each leg to prevent unwanted movement during use. See Fig.3.  
See teko nail warning Fig.6.

### Fig.4 2x4 Top Chord w/Backer



### Fig.5 2x4 Top Chord



### Top Chord Backer

A 2x4x16" length backer is required for bolt under ARS 2x8 and ARS Type II anchors installed onto 2x4 top chords. Attach backer to the top chord to prevent movement. See Figs.4,14.

### Teko Nail Warning Attachment Bolt Required!

In the event of a free fall, anchors attached only with teko nails will not arrest a fall resulting in serious injury or death.

**Open Framing Warning!**  
Sheathing must be in place at the anchor location prior to use for fall protection. See Fig.19  
Use SAS Safety Bars or TrussBars for open framing fall protection.

Fig.1

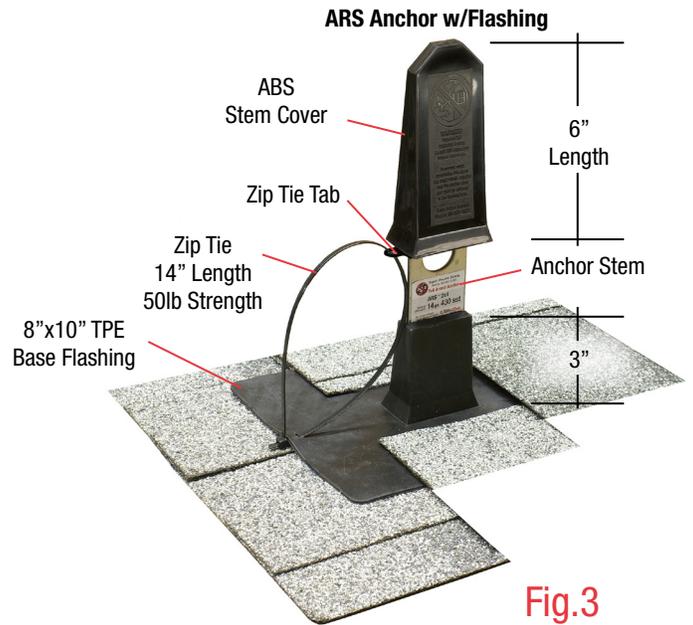


Fig.2



Fig.3

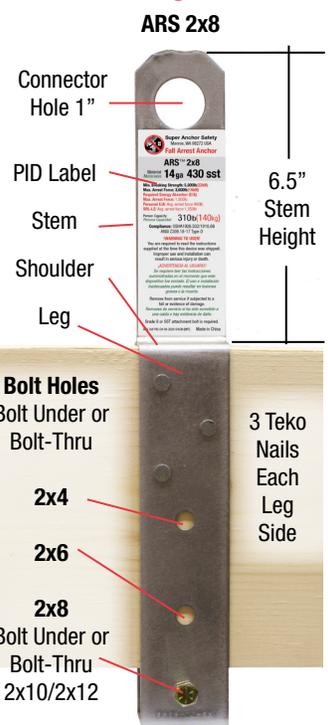


Fig.6



**Fig.7**

**ARS 2x8 Tile-Roof**

High profile roof tiles require a longer stem height to allow the connector hole to be accessible.



**Fig.8**



**Fig.9 Sheathing Penetration**



Do not install anchors directly over the top of the sheathing.

**Top Chord Compatibility**

Part No.	Model	Top Chord
1022	ARS 2x4	▲ 2x4
1006	ARS 2x8	▲▲ 2x8
2821	Tile Roof 2x8	▲▲ 2x8
1068	Type II 2x8	▲ 2x4

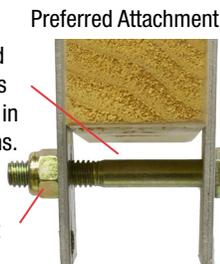
▲ Bolt through all 2x size top chords.

▲▲ Bolt under 2x4/2x6/2x8.

▲ Requires 2x4x16" backer.

**Bolt Under Top Chord**

**Fig.10**



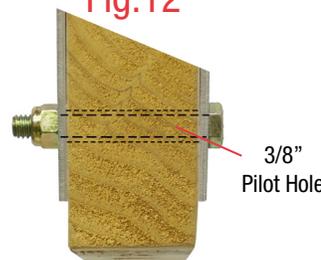
**Fig.11**



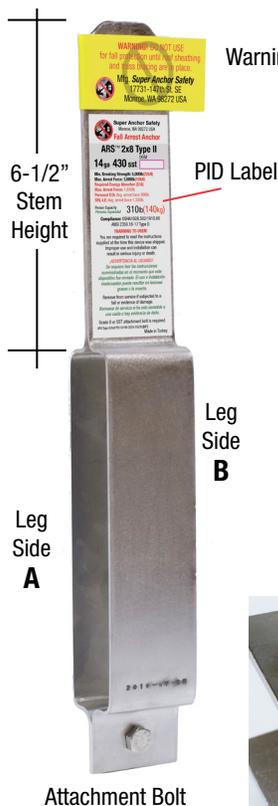
**Bolt-Thru Top Chord**

**Fig.12**

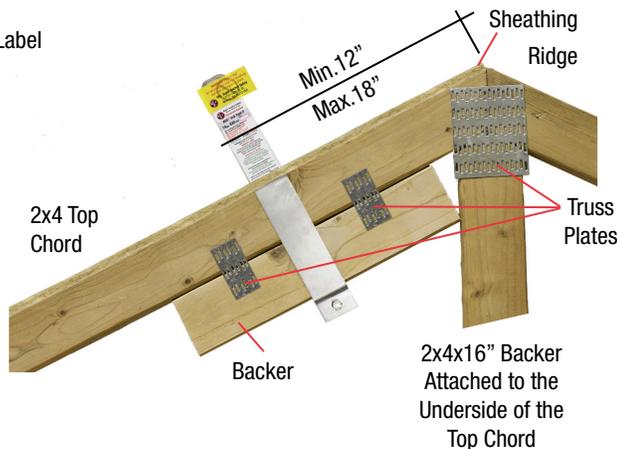
Mark Bolt Hole Location and Drill a 3/8" Pilot Hole



**Fig.13 No.1068 ARS Type II**



**Fig.14 Top Chord Backer**



**ARS Type II Installation**

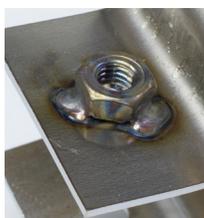
Designed for truss plant installation onto 2x4 top chords. A 2x4 backer is attached with truss plates as shown at Fig.14. Place leg A with the weld nut facing the truss assembly table. Install the attachment bolt from the top side thru leg B bolt hole as shown at Fig.17.

**Attachment to Top Chord**

Open the anchor legs enough to fit over the top chord and backer. Bolt legs together with SAS supplied 5/16"x3/4" attachment as shown at Figs.16,17.

**Warning Label:** Anchors must not be used for fall protection until sheathing is in place. A temporary warning label covers the connector hole and is easily punctured when first used. Job site safety personnel are required to confirm the anchor has been installed correctly prior to use.

**Fig.15 Leg Side A Weld Nut**



**Fig.16 Attachment Bolt**



**Fig.17 Leg Side B**



**Warning Label**

**¡ADVERTENCIA! NO EMPLEARLAS PARA PROTECCION CONTRA CAIDAS antes de que la cubierta del techo y los refuerzos de las perchas estén instaladas.**

**WARNING! DO NOT USE for fall protection until roof sheathing and truss bracing are in place.**

Mfg. **Super Anchor Safety**  
17731-147th St. SE  
Monroe, WA 98272 USA

1088-ARS Warning 08-2024-825CN (W1)

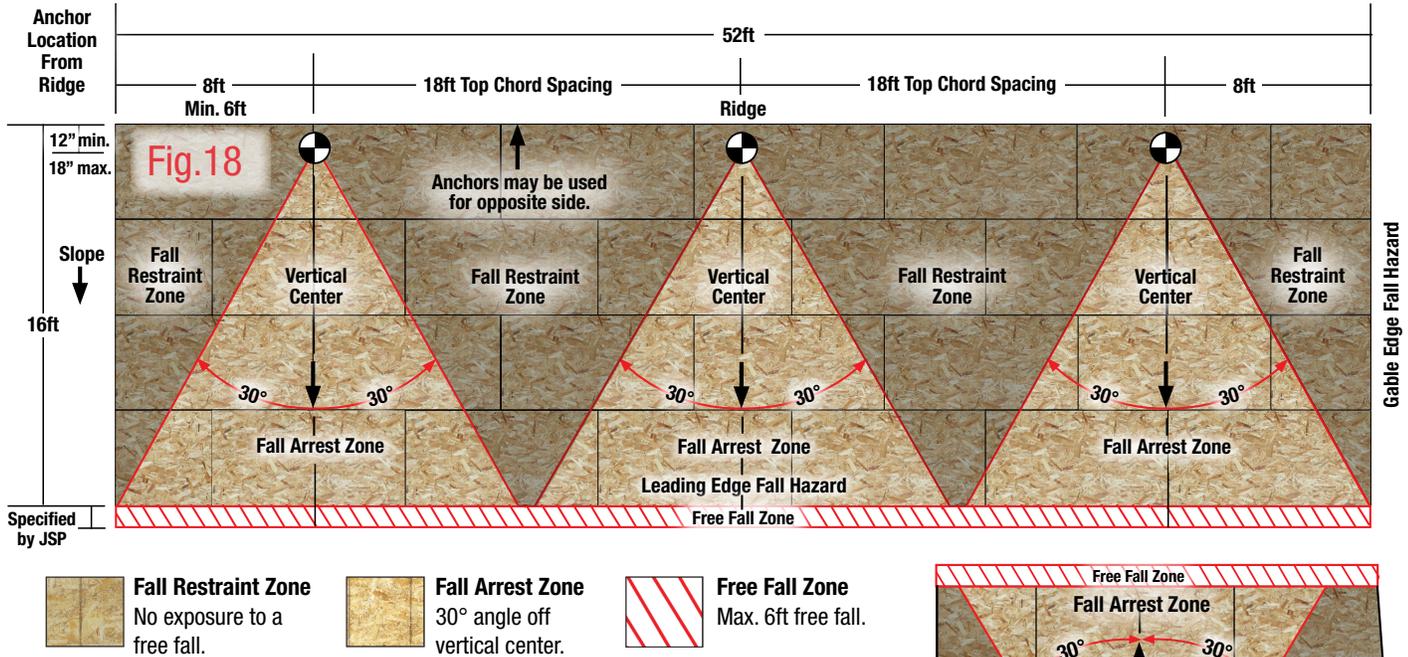
SAS Factory Supplied 5/16"x3/4" sst Attachment Bolt. Do not substitute with other types.

### Fall Protection Service Zones

Project safety personnel are required to implement a job specific fall protection plan, (JSP) identifying free fall and swing fall hazards, and instructing workers to observe fall protection service zones as shown at Fig.18. Prior to use for fall protection, sheathing is required to be installed in the area of the anchors location as shown at Figs.18,19 and 20.

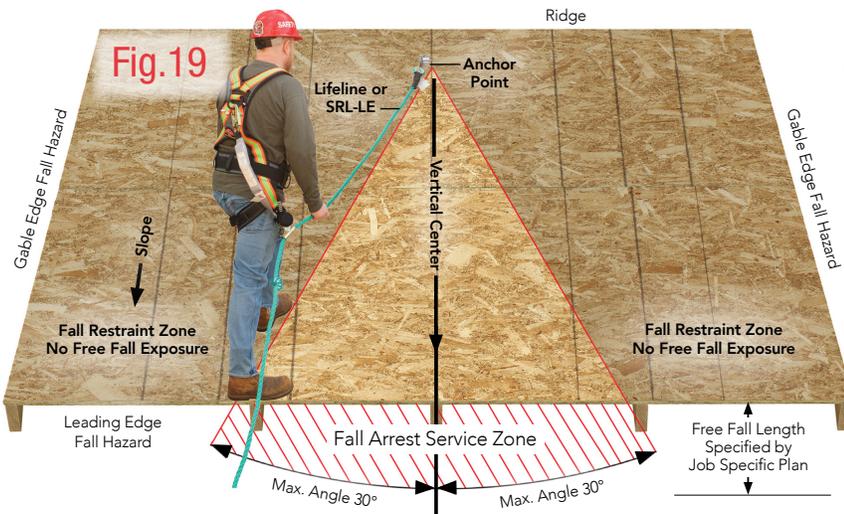
**ARS fall protection service zones are based on the following factors:**

- Rafter length and top chord spacing.
- 30° Angle off left and right of vertical center.
- Max. 3,600lb in plane load applied to the top chord.
- Anchor location from the hip/ridge min.12” max. 18” or as specified by a qualified or competent person.\*



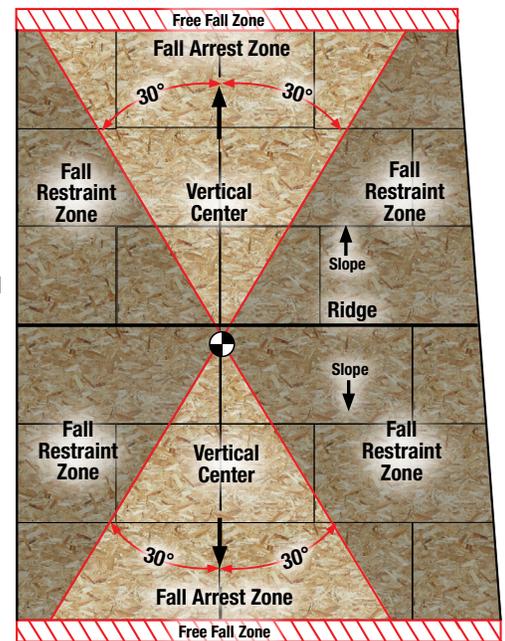
### Fall Protection System Example

Figs.19,21, are examples of a typical PPE fall protection rigging system using a vertical lifeline or SRL-LE.

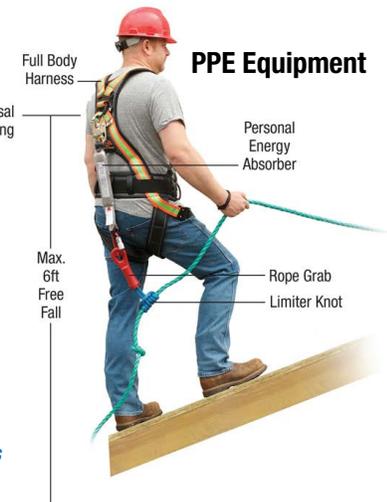


### Fig.20

ARS dual purpose anchors provide fall protection for both sides of a roof.



### Fig.21



### Energy Absorber (E/A)

Workers are required to use an OSHA or ANSI compliant E/A.

E/A Type	Max. Force	Avg. Force
Personal	1,800lb	900lb
SRL-LE	1,800lb	1,350lb

### OSHA Free Fall Length

Max.6ft based on the following PPE rigging:

- Harness dorsal D-ring height above the leading edge.
- Service length of personal E/A vertical position. See Fig.20.
- Length of lifeline slack.

### Typical Fall Hazards:

- Leading and gable edges.
- Openings in the work surface.
- Objects in a swing fall path.
- Levels below the work surface.

### Fall Protection Definitions

#### Fall Arrest OSHA 1910.140

“A system used to arrest an employee in a fall from a walking-working surface.”

#### Fall Restraint OSHA 1926.751

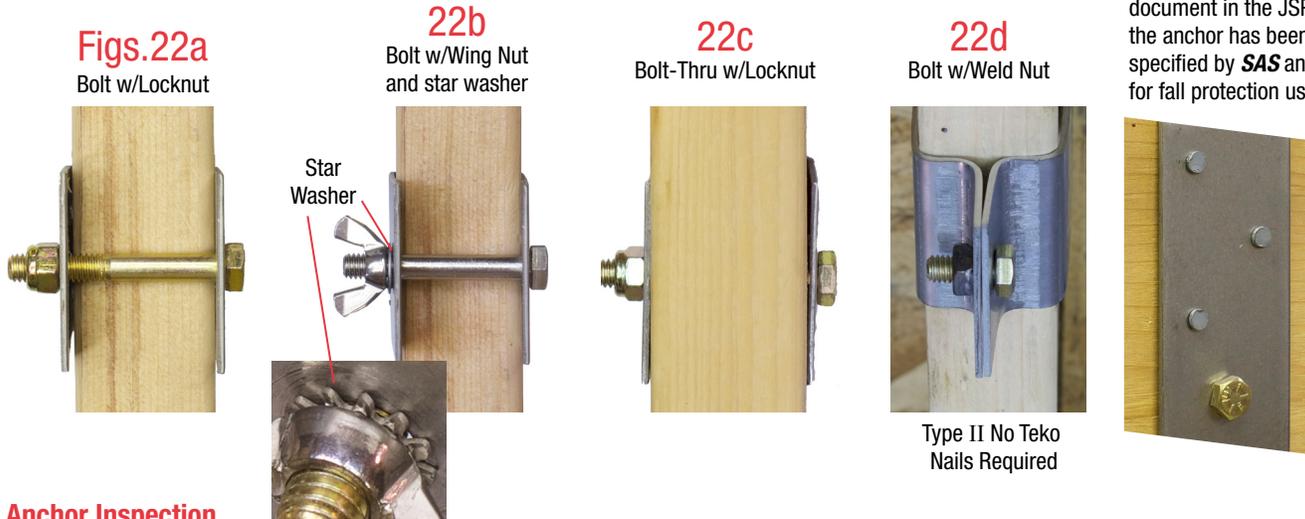
“A means of fall protection that prevents the user from falling any distance.”

## Visual Inspection

Prior to use for fall protection, inspect the underside of the top chord and confirm if the anchor attachment bolt and teko nails are installed. See Figs.22, 23.

## Installation Record

Project safety personnel\* are required to include an inspection document in the JSP, confirming the anchor has been installed as specified by **SAS** and is approved for fall protection use.



## Anchor Inspection

The following are **SAS** recommendations for basic inspection procedures. Project safety personnel\* are required to draft their own inspection program which should include the framing to which the anchor is attached. A copy of the JSP, anchor inspection and **SAS** instruction manual should be placed in the finished building for access by the property owner.

### Remove From Service. Corrective Action Required.

- Does not pass visual inspection. 
  - Figs.22. Install anchor correctly.
- Teko nails are missing. 
  - Fig.23. Install teko nails.
- PID label is missing. 
  - Figs.2,3,13. Replace anchor.
- Anchor stem if deformed. 
  - Fig.24. Replace anchor. 
    - Do not re-bend the stem.
- Subjected to a fall. 
  - Replace anchor.

## Fig.24 Damaged Anchor

Anchor stems are deformed when subjected to approx. 450lbs of force resulting from a free fall, abuse during installation, materials loading or use for work positioning. Remove from service and dispose of in a way that prevents further use. Inspect framing prior to installing a new anchor.



## Roof Flashings

Part No.	Material	Roofing	Size
2001	Black TPE	All Types	8"x10"
2018	Gray EPDM	Metal	8"x10"
2020	Alum EPDM	Tile	20"x20"
<b>Stem Covers</b>			
2007	Black ABS		
2808-G	Gray ABS		
2808-T	Terra-Cotta		

## Stem Covers

Stem covers are required to prevent water penetration thru the stem seams.

### Fig.27

No.2020 Alum EPDM Base Flashing



No.2808-T Terra-Cotta Stem Cover

### Fig.25

No.2001 TPE Base Flashing



No.2007 ABS Black Stem Cover

### Fig.26

No.2018 EPDM Base Flashing



No.2808-G ABS Gray Stem Cover

## SAS Factory Bolt Kit

Use only **SAS** bolt kits supplied with anchors at time of purchase. Use lock nuts to attach the bolt. Wing nuts should be used only in an emergency if hand tools are not available. Request replacement bolt kits if needed.

### Fig.28 No.2006 ARS Bolt Kit



## OSHA Definitions

**Work Positioning OSHA 1926.502(e)**  
 "A device, system, or PPE that is rigged to allow a worker to be supported on an elevated vertical surface, such as a wall, and work with both hands free." *Note: ARS anchors are not rated for work positioning.*

**Qualified Person OSHA 1910.140**  
 "One who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve problems relating to the subject matter, work or project."