# SUPER ANCHOR SAFETY®

Compliance

for use in Canada.

ANSI Z359.1/0SHA 1926.502

l'Ordre des ingénieurs du Québec

Certified by a member of

# Safety/Truss Bar Instruction/Specification Manual 2023

# **ENGLISH VERSION**

**!WARNING TO USER!** 

#### **Safety Bar Materials**

Cross-Bar: 1-1/2"x1-1/2"x1/8" square steel tube

Legs/Stem: 2.0"x 1/8" steel plate Coating: Red powder coated

Detent Pins: 3/8" sst; 14,770lb tensile strength Tethers: Mounting hardware sst w/shock cord tether

**SAS** = Super Anchor Safety \*Competent or Qualified Person: consult OSHA definition.

Bar as used in this manual applies to Safety and Truss Bars, standard or custom models.

**⊗**=Inspection Points

#### **User Specifications**

Max. User wt.: 310lb, including tools and equipment.

Max. Free Fall: 6ft.

Max. 2 Person fall arrest or fall restraint

DO NOT Use for Work Positioning

#### Installation

Prior to Use Framing: Must be capable of supporting 5,000lb or 2x the intended fall protection load as specified by OSHA 1926.502 (d)(15)(i)(ii).

Trusses: Must be fully braced as specified by the truss mfg. or project architect or engineer.

Stick Framing: Must be fully braced as specified by the project architect or engineer.

Qualified/Competent Person\*: may determine if the framing is capable of supporting the intended fall protection load.

Cross-bracing: Bars must be installed with cross-bracing in place (see Fig.8) to prevent vertical loading of the top chords that occur with falls thru open framing. See pg. 4.

Anti-Skid: When bars are installed more than a few inches above cross-bracing or sheathing, legs must be prevented from skidding (unintentional movement) using duplex nails. See Fig.9.

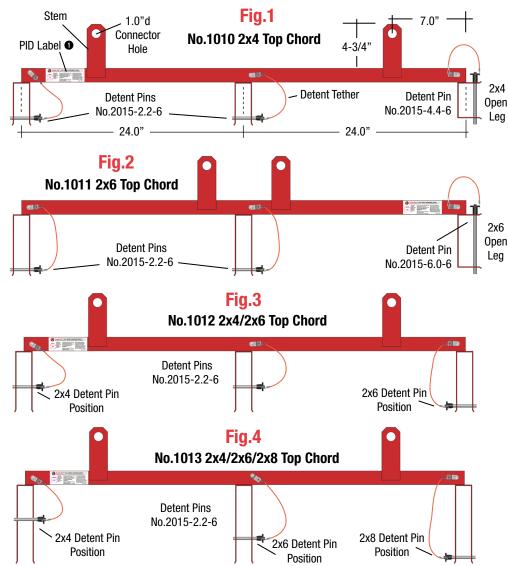
Sheathing: Cross-bracing is not required provided the bars can be positioned a few inches above installed sheathing, limiting the skid length. See Figs. 10, 19.

**Safety Bars** 

Part No.	Top Chord	Detent Pin No.	Leg Spacing
1010	2x4	2015-2.2-6 2015-4.4-6	
1011	2x6	2015.2.2-6	24.0" OC wt/12.5lb
1012	2x4/2x6	2015.2.2-6 2015-6.0-6	***************************************
1013	2x4/2x6/2x8	2015-6.0-6	wt/13.8lb

### Specification of Use

Safety and Truss Bar anchors are designed for temporary fall protection attachment to 2x size trusses or stick framed top chords. Attachment to other framing must be specified by a "Qualified or Competent Person."\*



## **Detent Pins Maintenance/Replacement**

All Bar detent pins or = sized bolts must be in place prior to use. Replacements: Order detent pins/bolts and warning labels as needed. **Top Cord Centering:** Use for anti-skid protection. Holes are 24.0" OC.



Safety/Truss Bar Manual 2023 English Version Page 2

#### Top Chord Installation/Cross-Bracing

Bar installations shown here are examples only. A qualified or Competent Person\* is required to determine bar and set back positions from fall hazards based on a Job Specific Plan (JSP). Bars may be installed in series as top chord framing advances. See Fig.8. Bars with open-end legs can be reversed if framing starts from left or right end allowing the 3rd cord to roll into place. See Figs11,12. Cross-Bracing below the bar position is required to transfer fall arrest forces over the top of the cross bracing.

#### WARNING! DO NOT use bars without cross-bracing.

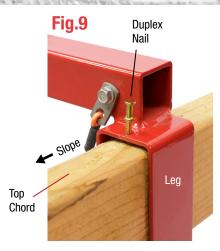
**PPE Attachment:** A max. of 2 persons can be attached to each bar provided the min. distance from the gable edge is 55.0". See Fig.8.

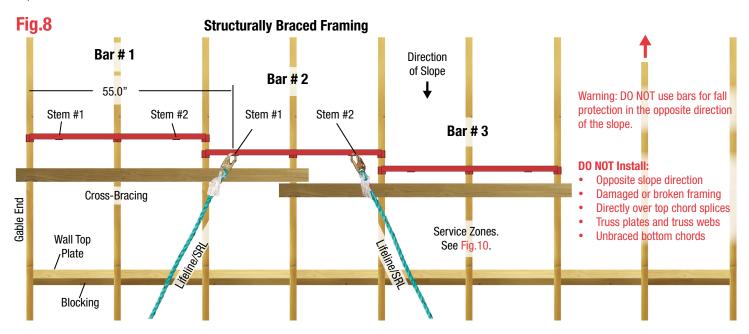
**Energy Absorber (E/A):** Workers are required to use a Personal E/A, SRL w/ integral E/A or leading-edge type SRL.

**Gable End Set Back:** The JSP will specify the min. set back from a Gable End based on the Safety Bar stem or Truss Bar tie-off strap position on the framing. See Fig.8. *SAS* recommends that only 1 person be attached to Bar#1 Stem #2 to provide a set back from the Gable End.

### **Anti-Skid Protection**

Bar legs placed above cross-bracing are required to be secured with a duplex nail or screw to prevent unintentional movement during use or in the event of a fall. The distance above cross-bracing to be determined by a Competent Person.\* WARNING! Bars subjected to static or free fall forces can skid down the framing.

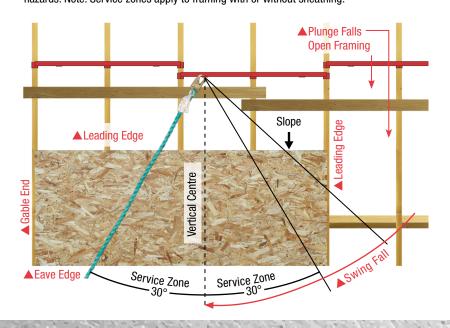




## **Fig.10**

#### Service Zones/Framing w/or wo/Sheathing

With sheathing in place, bars can be moved upslope for the second row of sheathing to be installed, allowing room for cross-bracing. Service zones should be specified by a Competent Person.\* **SAS** recommends a max. angle of 30° from vertical centre to reduce free fall lengths and swing fall hazards. Note: Service zones apply to framing with or without sheathing.



#### Safety Bar Open-End Legs

Bar's No.1010/1011 have open-end legs to allow the 3<sup>rd</sup> truss to be rolled into place.

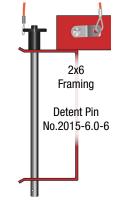
# Fig.11

Framing started from left side: position open-end leg to the right.

# **Fig.12**

Framing started from right side: position open-end leg to the left.





#### **Fall Hazards**

Open and partially sheathed framing create several types of fall hazards that require guarding. Especially critical are leading edge and plunge falls thru open framing as shown at Fig.10, and called out with red triangles. Warning! ▲ Fall Hazards. Plunge falls can result in fracture of a top chord if cross-bracing is not present.

**English Version** Page 3 Safety/Truss Bar Manual 2023

#### **Truss Bar Materials**

Cross-Bar: 1-1/2"x1/8" round steel tube

Legs: 2.0"x1/8" steel plate Coating: Blue powder coated

Bolts: 5/16"x2-1/4" grade 8 w/lock nut Detent Pins: 3/8"sst; 14,770lb tensile strength Tethers: Mounting hardware sst w/shock cord tether Tie-Off Strap: 2.0"x 6,000lb polyester webbing w/stamped zinc plated D-ring

### **Truss Bar Specifications**

Part No.	Top Chord	Attachment	Leg Spacing
2833	2x4/2x6	5/16"x2-1/4" Gr. 8 Bolt	
2833-DP	ZX4/ZX0	2015-2.2-6 Detent Pin	24.0 OC wt/6.5lb
6047-C 24"	Tie-Off	24.0" Length	

# **Fig.14**

#### **Truss Bar No.2833**

Bolt attached anchor can be left in the framing after use. Install anti-skid w/16d vinyl-coated nails. For removal, use 16d duplex nails. DO NOT cover with sheathing.



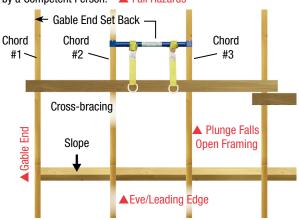
Fig.15 Sheathing covers Truss Bar.



# **Fig.16**

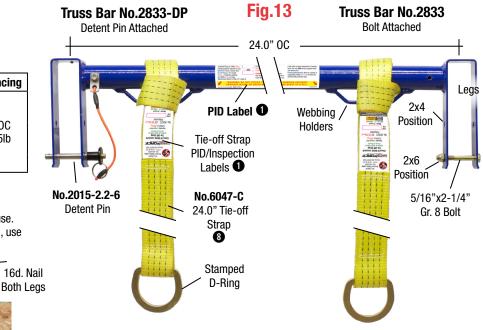
## **Truss Bar Framing Specifications**

Adhere closely to Safety Bar user specifications on pages 1 and 2. Bars should not be installed on cords #1 and #2 and used for fall protection. Gable End set back to be determined by a Competent Person.\* ▲ Fall Hazards



#### **Truss Bar Specification of Use**

Temporary fall protection only. Bar No.2833 can be left in the framing provided the tie-off straps are evacuated after use. See Fig. 15. Bar No.2833-DP attaches with detent pins for easy removal and repositioning.



#### **Anti-Skid Protection**

To prevent unintentional movement, secure both bar legs with duplex or 16d sinkers.



Warning! Bars without anti-skid protection can move position when subjected to a free fall or other force, adding to the length of fall.

#### **Fastener Packs**

Part No.	Bar Type	Fastener	No.Pcs
2021	Truss	5/16"x2-1/4" gr. 8 5/16" Lock Nut	2
2012-A	Truss Safety	16d Zinc Coated Duplex Nail	36

No.2021 Attachment Bolts



No.2012-A Duplex Nail

Weld 2

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### Safety/Truss Bar Inspection/Detent Pin Function Tests

Safety/Truss Bars and detent pins are required to be inspected prior to each use. Detent pins must pass function tests. The inspection points in this manual are intended to be used as a guideline. Annual inspections and function tests are required to be performed and recorded by a Competent Person.\* Detent Pins: Bar leg pin holes can become enlarged when subjected to tension, side loading or normal wear. Detent pins internal locking spring can break resulting in failure of the ball locks to hold position. Pass or Corrective Action <a>✓ Fail <a>✓ Remove from service immediately.</a>





**Ball Lock Test/Inspection** 

• Both ball locks must be visible. Fig.20

Any missing ball lock, test failed. ≥

Fig.22. If they don't, test failed.

and not move when pushed into the

Any ball lock movement, test failed. ⊠

· Push lock button and release. It must return

to the locked position shown at Fig.24. ✓

Does not return to lock position, test failed. ☑

• Fig.23. Release lock button.

• Depress lock button. Fig.21. Both ball locks

must retract into the shaft when pushed in.

Both ball locks must pop out of the pin shaft

Perform this test first.

**Fig.21** 



Pin Grip



Push Both Ball Locks Do Not Move

# **Visual Inspection**

- 1 PID and or detent pin labels missing. See Figs.1,6,17. Remove from service. ⊠ Request replacement labels
- DO NOT re-bend stem.

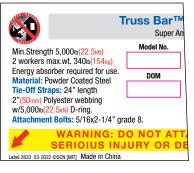
- Detent tether components missing or damaged. Fig.5. Replace tether ☑
- Tie-off strap webbing cut, abraded or broken stiches. D-ring cut, bent, or extreme rust. Fig.13. ⊠ Replace Tie-off strap. ✓

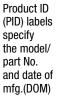
- Cracked welds Figs.25,26. ⊠ Stem or legs bent. Fig.25. ⊠ Straighten legs if welds are not cracked. ☑
- Webbing holders broken or missing. Fig.26. ⊠
- Pin grip is cracked or broken. Fig.21. Pin shaft is bent or gouged. Fig.24. ⊠

#### **PID Labels**

pin shaft. 🗹

Safety and Truss Bar PID labels are printed In English/ Spanish and English/French for use in Canada. See website for Safety/Truss Bar Manual label examples.





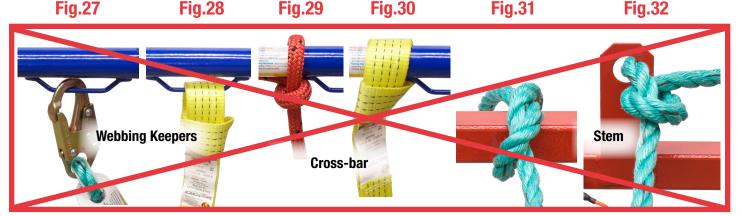




**Non-Compatible Connections** 

Make only compatible connections with snaphooks and carbiners. See Figs.8,10,13,14.

in the event of a fall. **Fig.29** Fig.30 **Fig.31 Fig.32** 



#### **Detent Pin Hole/Lock Test:**

- · Depress ball lock button and insert pin thru anchor pin hole.
- Release ball lock button and pull pin away from leg. Pin remains locked. ✓

Pin extracts from pin hole. **⋈** 

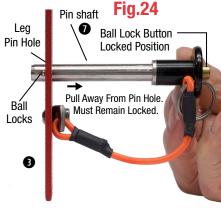
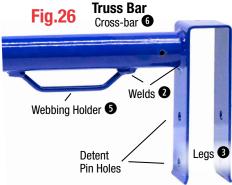


Fig.25 **Safety Bar** Stem Bent. Remove From Service.

Cross-bar



Warning! Non-compatible connections

can result in serious injury or death