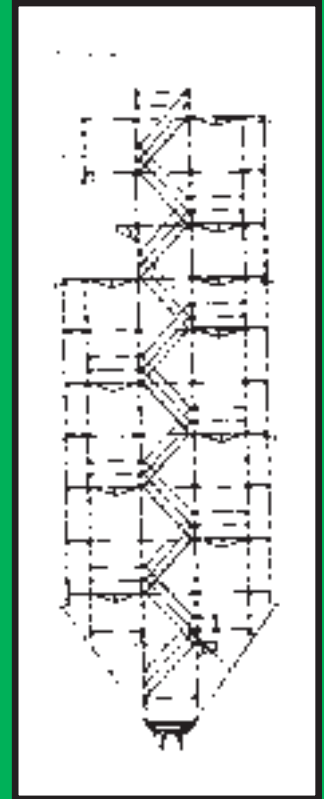
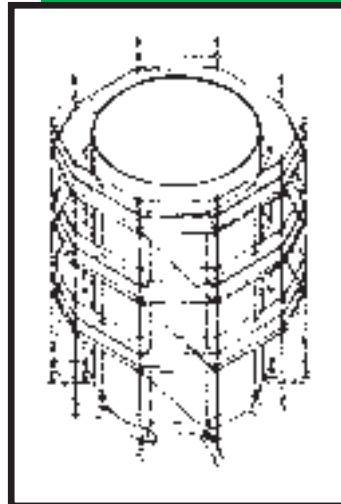
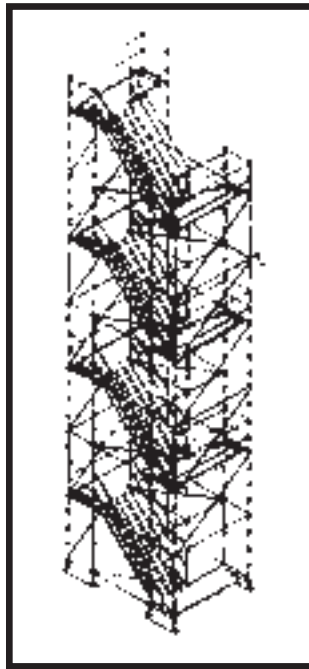




# SAFWAY SYSTEMS™ SCAFFOLD

## TECHNICAL MANUAL

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## SAFWAY SYSTEMS™ SCAFFOLD TECHNICAL MANUAL

*This Technical Manual is subject to periodic revision and updating. Before designing scaffolding with Safway Systems™ scaffold components, contact the Safway Customer Service Department at 800-558-4772 to be sure you are using the most recent revision of this manual.*

### **WARNING**

The **Safway Systems™ Scaffold Technical Manual** is intended for use by experienced scaffold engineers. Use by unqualified persons may result in **DEATH, SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE.**

Loading information contained in this Technical Manual is based upon the load-carrying capacity of the individual components. The total loads (component weight, plank weight, live load, material load, wind load, etc.) to be imposed on the scaffold assembly must be considered. All loads on individual members are transmitted to other members and ultimately to the ground. Compensation for these cumulative vertical and horizontal loads must be provided.

### **WARNING**

FALL ARREST equipment attached to scaffold MAY NOT prevent serious INJURY or DEATH if a fall occurs.

### **WARNING**

SERIOUS INJURY or DEATH can result from YOUR FAILURE to familiarize yourself, and comply with ALL applicable safety requirements of federal, state and local regulations and the Safway Systems™ Scaffold SAFETY GUIDELINES before erecting, using or dismantling this scaffold.

Safway Systems™ Scaffold is protected by U.S. Patents #4,445,307 / #4,586,842 / #4,815,563.

*THIS MANUAL IS NOT TO BE REPRODUCED IN PART OR IN WHOLE.*

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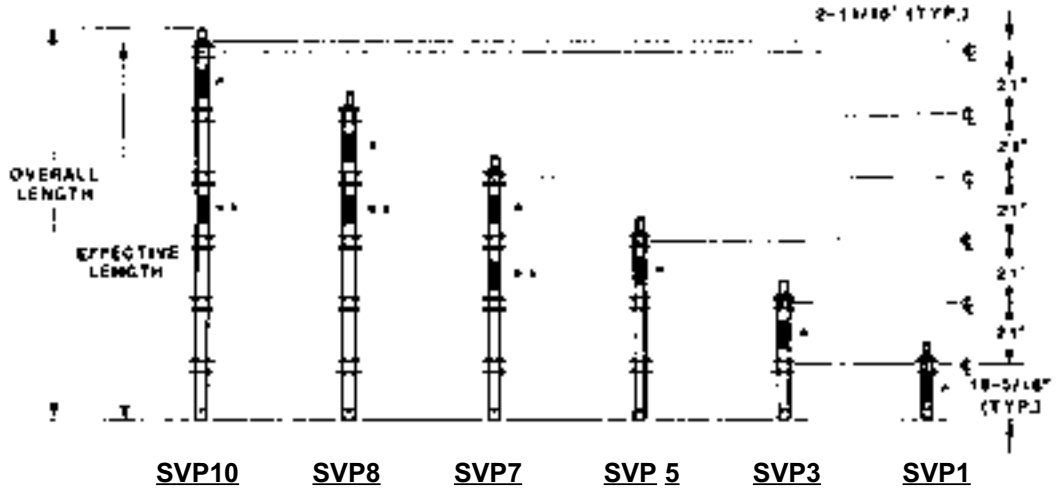
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## CHAPTER A

### ***Component Identification***

This chapter contains Safway Systems™ Scaffold Component Illustrations, dimensions and weights to be used for visual part recognition and dimensional identification. The noted weights may be used for shipping weight and/or total scaffold weight calculations.





**SAFWAY LABEL**

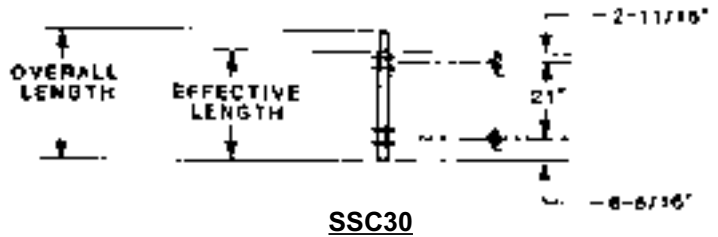
\* Part No. 7112A0003

**WARNING LABEL**

\*\* Part No. 7112A0038

<b>Safway Systems™ Vertical Post (SVP)</b>						
Part Number	SVP10	SVP8	SVP7	SVP5	SVP3	SVP1
Effective Length	10' - 0"	8' - 0"	7' - 0"	5' - 0"	3' - 0"	1' - 0"
Overall Length	11' - 0"	9' - 0"	7' - 0"	5' - 0"	4' - 0"	2' - 0"
Weight	35.8 lb.	30.2 lb.	24.6 lb.	18.8 lb.	13.2 lb.	7.5 lb.

<b>Safway Systems™ Starter Collar (SSC30)</b>	
Part Number	SSC30
Effective Length	2' - 6"
Overall Length	3' - 0"
Weight	10.7 lb.



**NOTE:**  $\text{C}$  Denotes center line of horizontal member

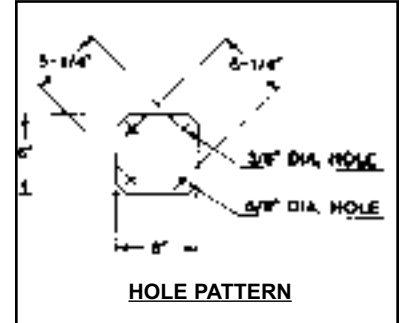
### Safway Systems™ Tubular Screw Jack (STSJ1)

Part Number	STSJ1
Maximum Extension	14†
Minimum Extension	2†
Adjustment Range	12†
Overall Height	21†
Weight	8.0 lb.

Not for use with casters.



STSJ1

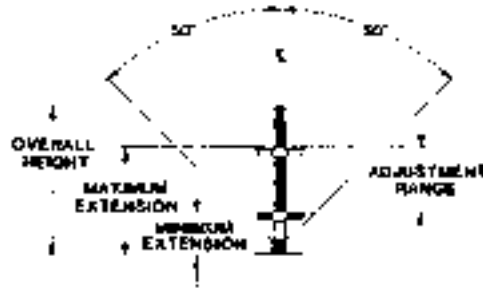


HOLE PATTERN

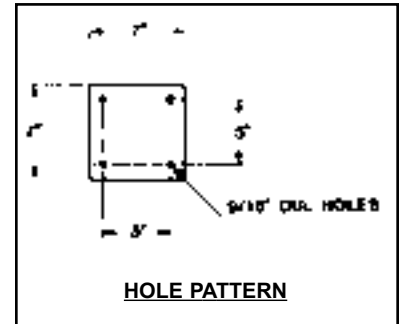
### Safway Systems™ Swivel Screw Jack (SSJ)

Part Number	SSJ
Maximum Extension	18-13/16†
Minimum Extension	6-5/16†
Adjustment Range	12-1/2†
Overall Height	24-1/2†
Weight Painted	15.4 lb.

Not for use with casters.



SSJ

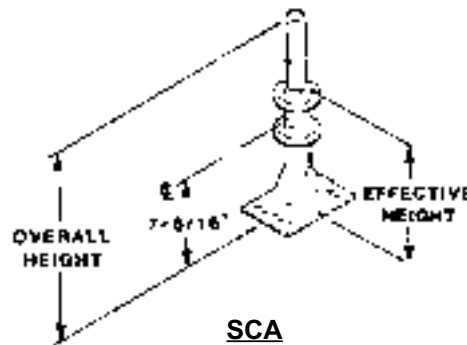


HOLE PATTERN

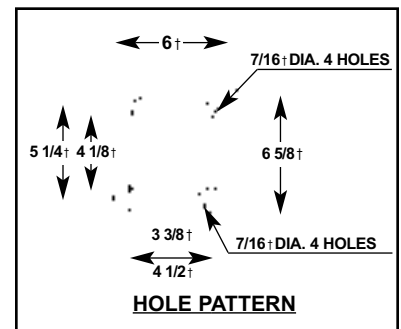
### Safway Systems™ Caster Adapter (SCA)

Part Number	SCA
Effective Height	10†
Overall Height	16†
Weight	9.6 lb.

For use with 8† and 12† diameter Safway Systems™ casters only.



SCA



HOLE PATTERN

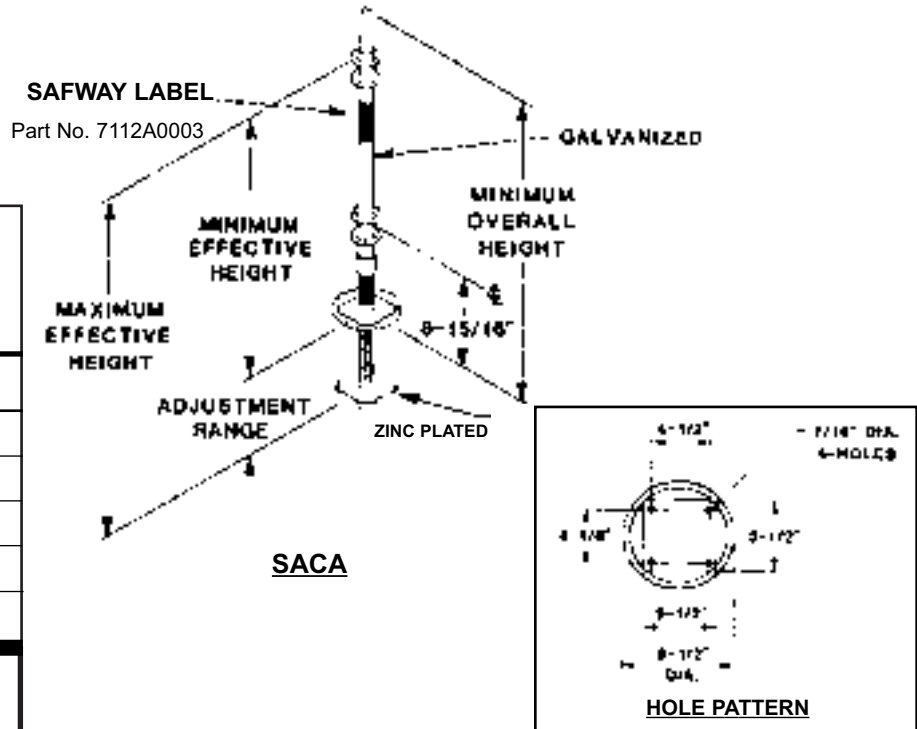
(Manufactured after to 11/97)

NOTE: ☉ Denotes center line of horizontal member

**Safway Systems™  
Adjustable  
Adapter (SACA)**

Part Number	SACA
Min. Overall Height	38-5/8"
Max. Effective Height	45"
Min. Effective Height	32-5/8"
Adjustment Range	12-3/8"
Weight	27.8 lb.

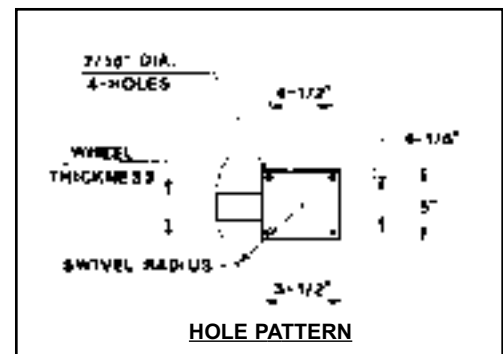
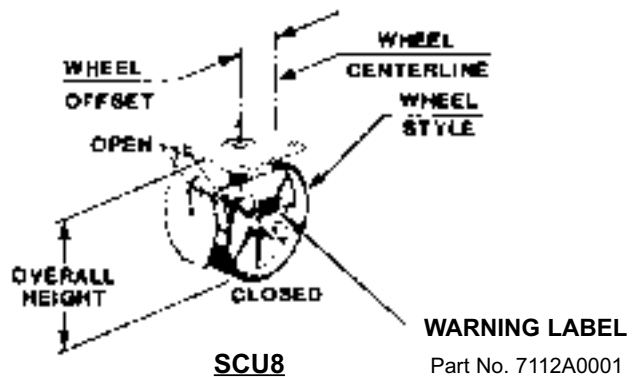
Not for use with 12+ diameter casters.  
May be used with 8+ diameter Safway  
Systems™ casters only.



**Safway Systems™ 8+ Diameter  
Casters (SCU / SCS)**

Part Number	SCU8	SCS8
Wheel Style	Urethane	Steel
Wheel Offset	2+	2+
Overall Height	9-1/2+	9-1/2+
Wheel Thickness	2+	2+
Swivel Radius	6+	6+
Weight	10.8 lb.	15.4 lb.

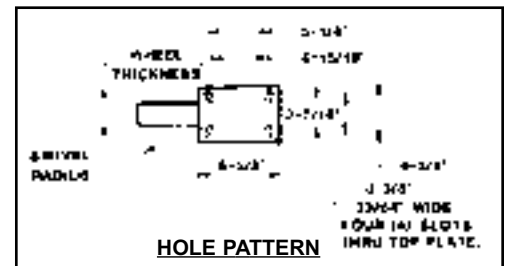
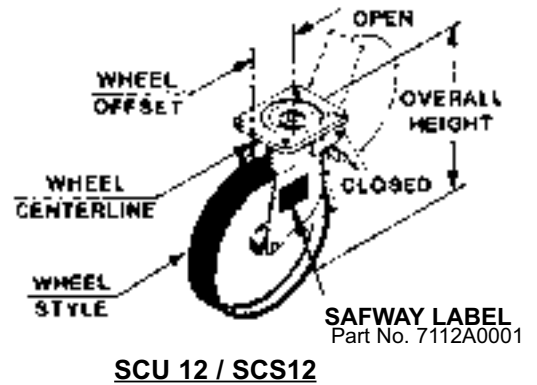
NOTE: 3/8+ 16NC bolts X 1-1/2+lg., lockwashers  
and hex nuts are provided with each caster.



**Safway Systems™ 12†  
Diameter Casters (SCU / SCS)**

Part Number	SCU12	SCS12
Wheel Style	Urethane	Steel
Wheel Offset	2-7/8†	2-7/8†
Overall Height	14-1/2†	14-1/2†
Wheel Thickness	2-7/8†	2-5/8†
Swivel Radius	8-7/8†	8-7/8†
Weight	25.2 lb.	36.7 lb.

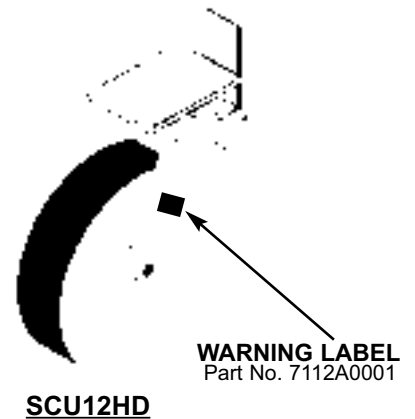
NOTE: 1/2†- 13NC bolts X 1-1/2†lg., lockwashers and hex nuts are provided with each caster.



**Safway Systems™ 12† Heavy  
Duty Diameter Caster  
(SCU12HD)**

Part Number		SCU12HD
Wheel Style		Urethane
Wheel Offset		2-7/8†
Overall Height		15-1/2†
Wheel Thickness		3†
Swivel Radius		10-5/16†
Weight		26.5 lb.

NOTE: 1/2†- 13NC bolts X 1-1/2†lg., lockwashers and hex nuts are provided with each caster.



**SL Frame Tie Tube (SLTT)**

19 1/2"

**WEIGHT: 4.4 LB.**

**SL Frame 1.90 Tie Clamp (SLTC)** For use with ST\_\_SG / STC Tubes

**WEIGHT: 3.1 LB.**

**Right Angle Clamp (CRA19)**

**WEIGHT: 2.75**

**SL Frame Tie Eye Bolt (SLTTB1)**

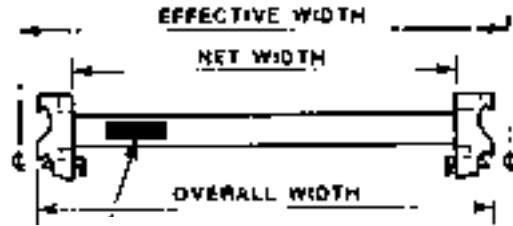
4 1/8"

**WEIGHT: 0.2 LB.**  
3/8" - 7 Thread

**SL Frame Tie Lag Shield Anchor (SLTLS1)**

1 3/4"

**WEIGHT: 0.1 LB.**  
3/8" Short

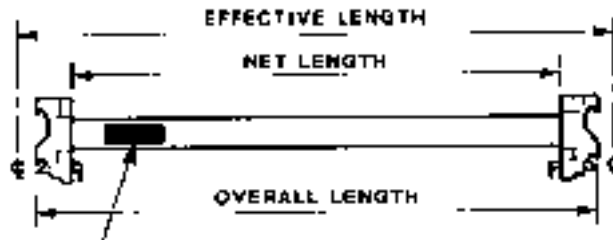


**WEDGE INSTRUCTION LABEL**

Part No. 7112A0002

**SBR**

<b>Safway Systems™ Bearer / Runner (SBR)</b>								
Part Number	SBR2	SBR33	SBR3	SBR42	SBR45	SBR4	SBR54	SBR5
Effective Width	2¢	2¢ - 9†	3¢	3¢ - 6†	3¢ - 9†	4¢	4¢ - 6†	5¢
Net Width	16 - 3/8†	25 - 3/8†	28 - 3/8†	34 - 3/8†	37 - 3/8†	40 - 3/8†	46 - 3/8†	52 - 3/8†
Overall Width	1¢ - 9-	2¢ - 6-	2¢ - 9-	3¢ - 3-	3¢ - 6-	3¢ - 9-	4¢ - 3-	4¢ - 9-
Weight	3/4†	3/4†	3/4†	3/4†	3/4†	3/4†	3/4†	3/4†



**WEDGE INSTRUCTION LABEL**

Part No. 7112A0002

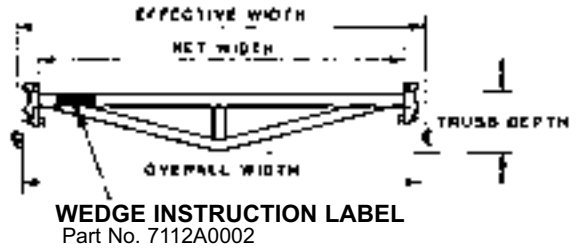
**SHR**

<b>Safway Systems™ Horizontal Runner (SHR)</b>					
Part Number	SHR6	SHR7	SHR8	SHR9	SHR10
Effective Length	6¢	7¢	8¢	9¢	10¢
Net Length	64 - 3/8†	76 - 3/8†	88 - 3/8†	100 - 3/8†	112 - 3/8†
Overall Length	5¢ - 9-	6¢ - 9-	7¢ - 9-	8¢ - 3-	9¢ - 9-
Weight	3/4†	3/4†	3/4†	3/4†	3/4†

**NOTE:** ¢ Denotes center line of vertical posts

**Safway Systems™ Truss Bearer (STB6 / STB7)**

Part Number	STB6	STB7
Effective Width	6¢	7¢
Net Width	64 - 3/8†	76 - 3/8†
Truss Depth	10†	10†
Overall Width	5¢ - 9-3/4†	6¢ - 9-3/4†
Weight	23.5 lb.	27 lb.

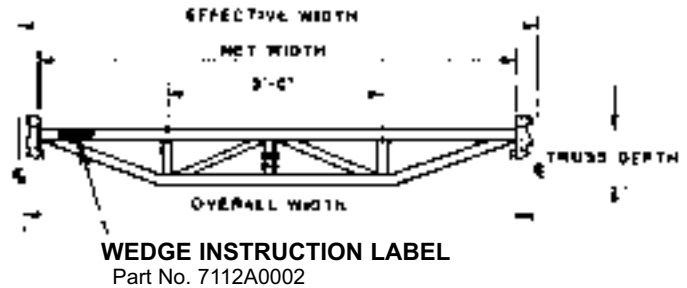


**STB6 / STB7**

**STYLE I**

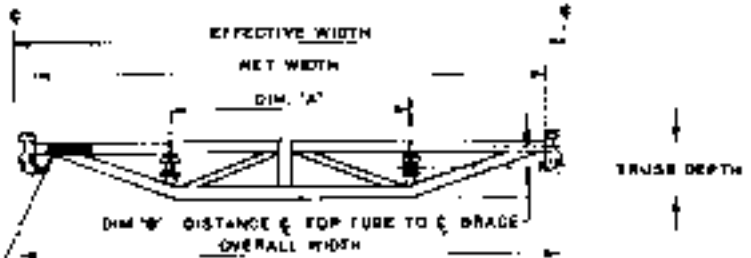
**Safway Systems™ Truss Bearer (STB8 / STB9)**

Part Number	STB8	STB9
Effective Width	8¢	9¢
Net Width	88 - 3/8†	100 - 3/8†
Truss Depth	12†	14†
Overall Width	7¢ - 9-3/4†	8¢ - 9-3/4†
Weight	42.4 lb.	47.9 lb.



**STB8 / STB9**

**STYLE II**

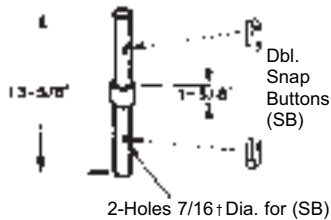


**WEDGE INSTRUCTION LABEL**  
Part No. 7112A0002

**STB10 - 18**

**STYLE III**

**Safway Systems™ Truss Bearer Coupler (STBC)**

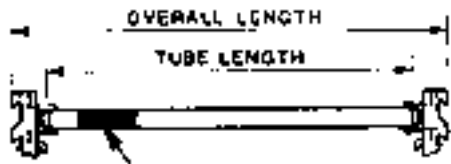


For use with style III Horizontal Truss Bearer only.

**Safway Systems™ Horizontal Truss Bearer (STB)**

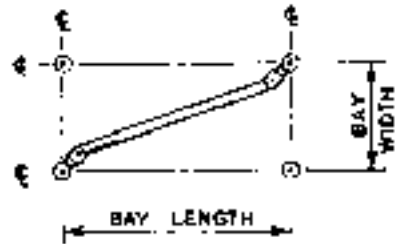
Part Number	STB10	STB12	STB14	STB16	STB18
Effective Width	10¢	12¢	14¢	16¢	18¢
Net Width	112 - 3/8†	136 - 3/8†	160 - 3/8†	184 - 3/8†	208 - 3/8†
Truss Depth	14†	16†	16†	18†	18†
Dimension "A"	4¢	6¢	6¢	8¢ - 6†	8¢ - 6†
Dimension "B"	5 - 7/8†	7 - 7/8†	7 - 7/8†	7 - 7/8†	7 - 7/8†
Overall Width	9¢ - 9-3/4†	11¢ - 9-3/4†	13¢ - 9-	15¢ - 9-	17¢ - 9-
Weight	58.2 lb.	70.2 lb.	3/4†	3/4†	3/4†

**NOTE:** ¢ Denotes center line of vertical posts



WEDGE INSTRUCTION LABEL  
Part No. 7112A0002

**SHD**



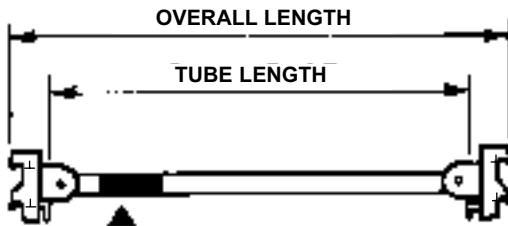
<b>Safway Systems™ Horizontal Diagonal (SHD)</b>				
Part Number	Bay Width x Bay Length	Tube Length	Overall Length	Weight
SHD33	3¢ - 3¢	41-25/32"	48-25/32"	11.4 lb.
SHD37	3¢ - 7¢	83-1/8"	90-1/8"	17.2 lb.
SHD38	3¢ - 8¢	94-15/32"	101-15/32"	18.8 lb.
SHD39	3¢ - 9¢	105-15/16"	112-15/16"	20.4 lb.
SHD310	3¢ - 10¢	117-17/32"	124-17/32"	22.1lb.
SHD425	42† - 5¢	64-5/16"	71-5/16"	14.6 lb.
SHD427	42† - 7¢	85-13/32"	92-13/32"	17.6 lb.
SHD428	42† - 8¢	96-15/32"	103-15/32"	19.8 lb.
SHD457	45† - 7¢	86-11/16"	93-11/16"	17.7 lb.
SHD459	45† - 9¢	108-34"	115-34"	20.8 lb.
SHD4510	45† - 10¢	120-1/16"	127-1/16"	22.4 lb.
SHD45	4¢ - 5¢	67-25/32"	74-25/32"	15.1 lb.
SHD47	4¢ - 7¢	88-1/32"	95-1/32"	17.9 lb.
SHD547	54† - 7¢	91"	98"	18.3 lb.
SHD549	54† - 9¢	112-7/32"	119-7/32"	21.3 lb.
SHD5410	54† - 10¢	123-7/32"	130-7/32"	22.9 lb.
SHD55	5¢ - 5¢	75-23/32"	82-23/32"	16.2 lb.
SHD57	5¢ - 7¢	94-1/4"	101-1/4"	18.8 lb.
SHD58	5¢ - 8¢	104-3/8"	111-3/8"	20.2 lb.
SHD59	5¢ - 9¢	114-7/8"	121-7/8"	21.7 lb.
SHD510	5¢ - 10¢	125-5/8"	132-5/8"	23.2 lb.
SHD77	7¢ - 7¢	109-21/32"	116-21/32"	20.5 lb.
SHD79	7¢ - 9¢	127-25/32"	134-25/32"	23.5 lb.
SHD710	7¢ - 10¢	137-17/32"	144-17/32"	24.3 lb.
SHD99	9¢ - 9¢	143-5/8"	150-5/8"	25.0 lb.
SHD910	9¢ - 10¢	152-11/32"	159-11/32"	26.2 lb.
SHD1010	10¢ - 10¢	160-9/16"	167-9/16"	27.2 lb.

**NOTE:** † Denotes center line of vertical posts. Other horizontal diagonals are available on request.

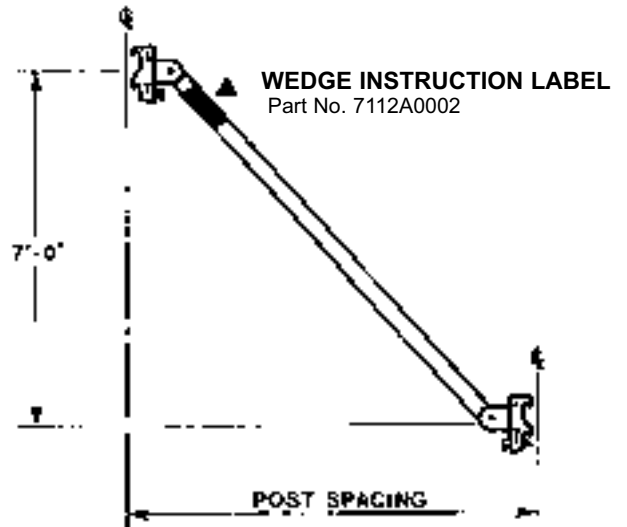




WEDGE INSTRUCTION LABEL  
Part No. 7112A0002



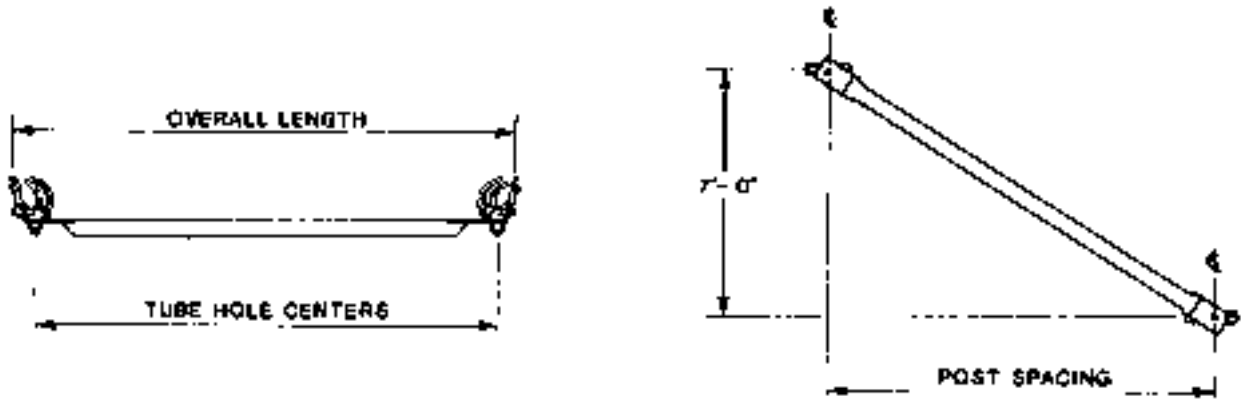
WEDGE INSTRUCTION LABEL  
Part No. 7112A0002



SDW

Safway Systems™ Vertical Diagonal (SDW)				
Part Number	Post Spacing	Tube Length	Overall Length	Weight
SDW3	3¢	7¢ - 5-11/16†	8¢ - 5/16†	18.4 lb.
SDW42	3¢ - 6†	7¢ - 7-	8¢ - 2-11/32†	18.6 lb.
SDW45	3¢ - 9†	23/32†	8¢ - 3-15/32†	18.7 lb.
SDW4	4¢	7¢ - 8-	8¢ - 4-11/16†	18.9 lb.
SDW54	4¢ - 6†	27/32†	8¢ - 7- 3/8†	19.3 lb.
SDW5	5	7¢ - 10-	8¢ - 10-11/32†	19.7 lb.
SDW6	6¢	1/16†	9¢ - 5-1/16†	20.6 lb.
SDW7	7¢	8¢ - 3/4†	10¢ - 21/32†	21.6 lb.
SDW8	8¢	8¢ - 3-	10¢ - 8-31/32†	26.2 lb.
SDW9	9¢	23/32†	11¢ - 5-7/8†	27.6 lb.
SDW10	10¢	8¢ - 10-	12¢ - 3-7/32†	29.2 lb.

NOTE: ¢ Denotes center line of vertical post



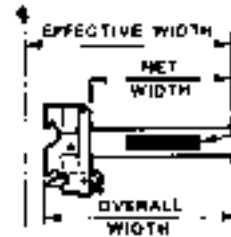
SDC

Safway Systems™ Vertical Diagonal (SDC)				
Part Number	Post Spacing	Tube Hole Centers	Overall Length	Weight
SDC3	3¢	7¢ - 7-3/8†	7¢ - 11-3/8†	16.4 lb.
SDC42	3¢ - 6†	7¢ - 9-29/32†	8¢ - 1-15/16†	16.8 lb.
SDC45	3¢ - 9†	7¢ - 11-9/32†	8¢ - 3-15/16†	17.0 lb.
SDC4	4¢	8¢ - 3/4†	8¢ - 4-3/4†	17.2 lb.
SDC54	4¢ - 6†	8¢ - 3-7/8†	8¢ - 7-7/8†	17.6 lb.
SDC5	5	8¢ - 7-7/32†	8¢ - 11-1/4†	18.1 lb.
SDC6	6¢	9¢ - 2-5/8†	9¢ - 6-5/8†	19.1 lb.
SDC7	7¢	9¢ - 10-25/32†	10¢ - 2-13/16†	20.2 lb.
SDC8	8¢	10¢ - 7-9/16†	10¢ - 11-9/16†	21.5 lb.
SDC9	9¢	11¢ - 4-13/16†	11¢ - 8-13/16†	22.2 lb.
SDC10	10¢	12¢ - 2-15/32†	12¢ - 6-1/2†	24.1 lb.

NOTE: ¢ Denotes center line of vertical post

**Safway Systems™  
Plank Bracket (SBK)**

Part Number	SBK06	SBK1
Effective Width	5-1/2†	14-1/2†
Net Width	1-5/8†	10-5/8†
Overall Width	4-1/2†	13-1/2†
Weight	2.5 lb.	3.7 lb.

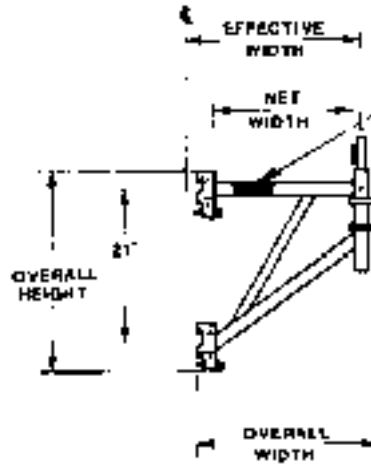


WEDGE INSTRUCTION LABEL  
Part No. 7112A0002

**SBK06 / SBK1**

**Safway Systems™  
Side Bracket (SBK)**

Part Number	SBK2	SBK33	SBK3
Effective Width	2¢	2¢ - 9†	3¢
Net Width	19 - 1/4†	28 - 1/4†	31 - 1/4†
Overall Width	24 - 15/16†	33 - 15/16†	36 - 15/16†
Overall Height	2¢ - 3-1/2†	2¢ - 3-1/2†	2¢ - 3-1/2†
Weight	19.1 lb.	21.2 lb.	21.8 lb.

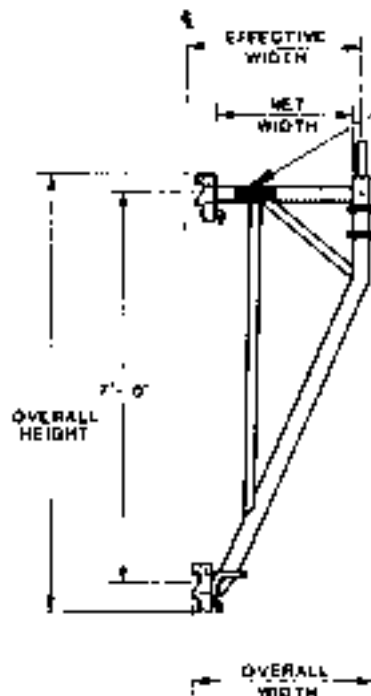


WEDGE INSTRUCTION LABEL  
Part No. 7112A0002

**SBK2 / SBK33 / SBK3**

**Safway Systems™  
Knee Out Bracket (SKO)**

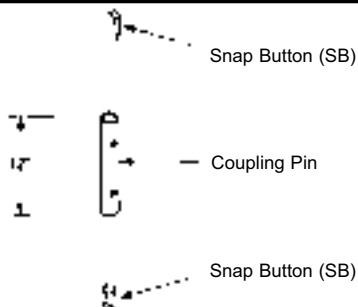
Part Number	SKO3	SKO45
Effective Width	3¢	3¢ - 9†
Net Width	31-1/4†	40-1/4†
Overall Width	36-15/16†	45-15/16†
Overall Height	7¢ - 6-1/2†	7¢ - 6-1/2†
Weight	42.6 lb.	46.2 lb.



WEDGE INSTRUCTION LABEL  
Part No. 7112A0002

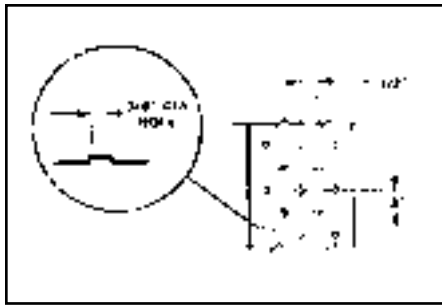
**SKO3 / SKO45**

**Removable Coupling Pin (SCP)**

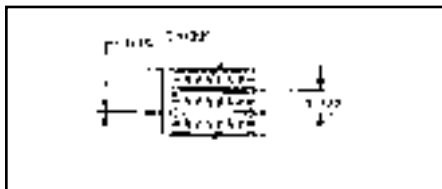
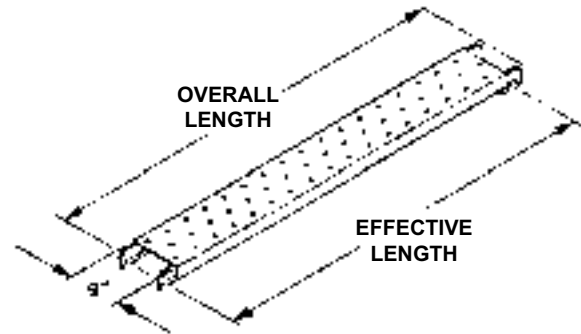


Provided with side, knee out bracket, SVP posts and SSC30 starter collar

**NOTE:** ¢ Denotes center line of vertical post

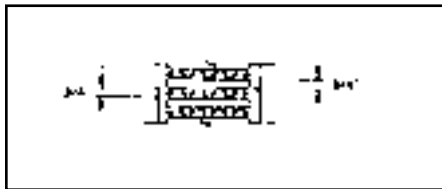
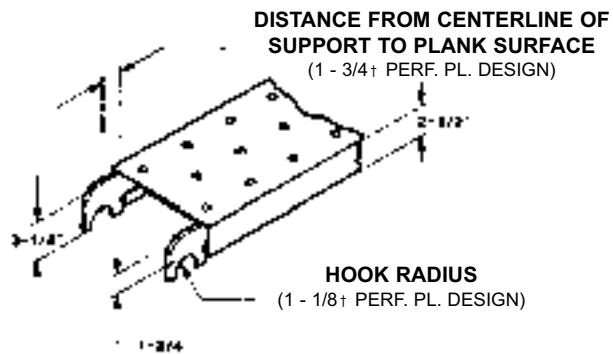


**PERFORATED PLANK**



**CLOSED SLOT PLANK**

*(Manufactured prior to 4/85)*



**OPEN SLOT PLANK**

*(Manufactured prior to 4/85)*

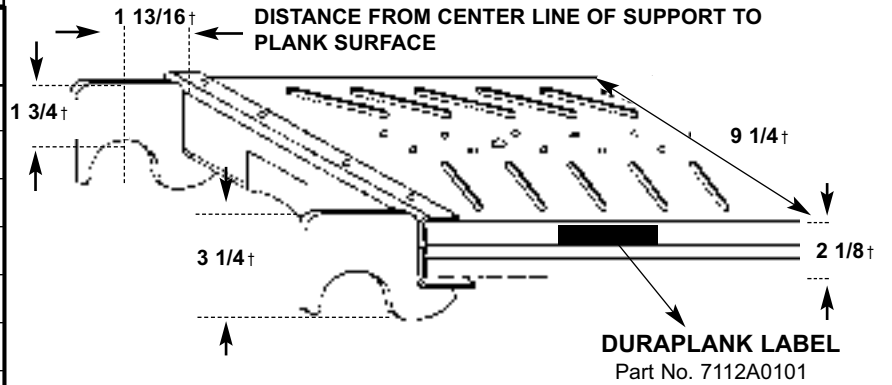
**SSP**

<b>Safway Systems™ Steel Plank (SSP) 6† &amp; 9† Galvanized</b>					
6† Part Number	9† Part Number	Effective Length	Overall Length	Perforated Plank Weight	Slot Plank Weight
SSP62	SSP2	2¢	2¢ - 3†	10.9 lb.	N/A
SSP63	SSP3	3¢	3¢ - 3†	15.1 lb.	14 lb.
SSP642	SSP42	3¢ - 6†	3¢ - 9†	17.2 lb.	16 lb.
SSP645	SSP45	3¢ - 9†	4¢	18.3 lb.	17 lb.
SSP64	SSP4	4¢	4¢ - 3†	19.3 lb.	18 lb.
SSP654	SSP54	4¢ - 6†	4¢ - 9†	21.4 lb.	20 lb.
SSP65	SSP5	5	5¢ - 3†	23.5 lb.	22 lb.
SSP66	SSP6	6¢	6¢ - 3†	27.7 lb.	26 lb.
SSP67	SSP7	7¢	7¢ - 3†	31.9 lb.	30 lb.
SSP68	SSP8	8¢	8¢ - 3†	36.1 lb.	34 lb.
SSP69	SSP9	9¢	9¢ - 3†	40.2 lb.	38 lb.
SSP610	SSP10	10¢	10¢ - 3†	44.4 lb.	42 lb.

NOTE: 6† wide planks are not shown in above illustration but are available on request. Part numbers are listed on chart. Weights shown are for 9† wide plank.

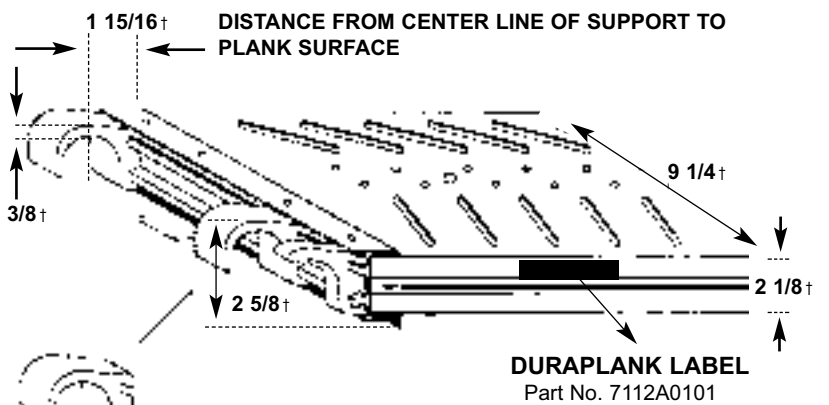
### High Hook Duraplank™ (SSPH)

High Hook Part Number	Effective Length	Weight
SSPH2	2ϕ	11.6 lb.
SSPH3	3ϕ	14.7 lb.
SSPH42	3ϕ - 6†	16.3 lb.
SSPH45	3ϕ - 9†	17.1 lb.
SSPH4	4ϕ	17.8 lb.
SSPH54	4ϕ - 6†	19.4 lb.
SSPH5	5	20.9 lb.
SSPH6	6ϕ	24.1 lb.
SSPH7	7ϕ	27.2 lb.
SSPH8	8ϕ	30.3 lb.
SSPH9	9ϕ	33.4 lb.
SSPH10	10ϕ	36.5 lb.



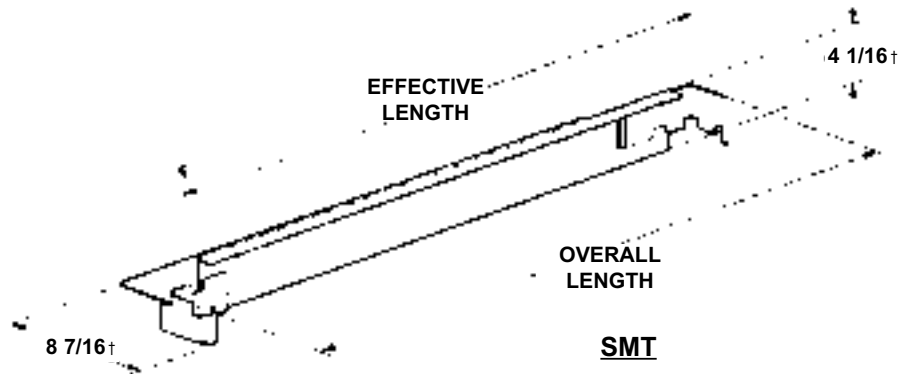
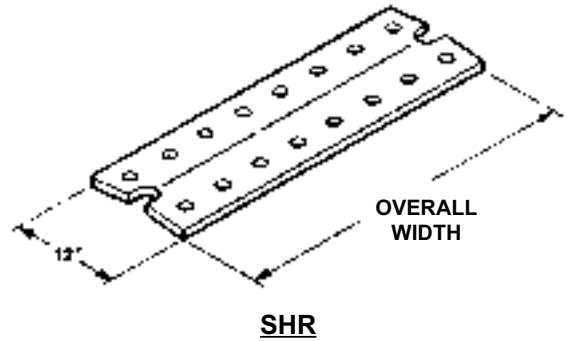
### Low Hook Duraplank™ (FSPH)

High Hook Part Number	Effective Length	Weight
FSPH2	2ϕ	13.6 lb.
FSPH3	3ϕ	16.1 lb.
FSPH42	3ϕ - 6†	17.3 lb.
FSPH45	3ϕ - 9†	17.9 lb.
FSPH4	4ϕ	18.5 lb.
FSPH54	4ϕ - 6†	19.7 lb.
FSPH5	5	20.9 lb.
FSPH6	6ϕ	23.4 lb.
FSPH7	7ϕ	25.8 lb.
FSPH8	8ϕ	28.3 lb.
FSPH9	9ϕ	30.7 lb.
FSPH10	10ϕ	33.2 lb.



<b>Safway Systems™ Plank Filler (SPF)</b>				
Part Number	SPF18	SPF2	SPF3	SPF45
Overall Width	17 - 3/4†	23 - 3/4†	35 - 3/4†	44 - 3/4†
Weight	7.6 lb.	10 lb.	14.9 lb.	18.4 lb.

NOTE: SPF18 is notched one end only.

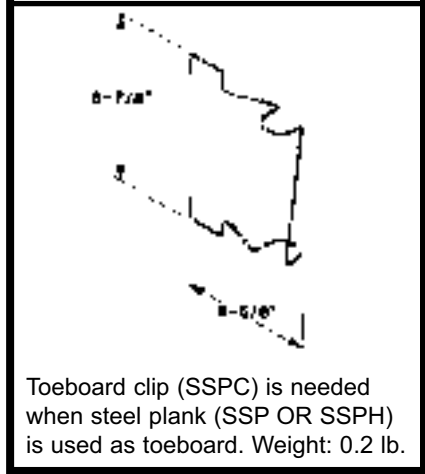


**Safway Systems™ Metal Toeboards (SMT)**

Part Number	Effective Length	Overall Length	Weight
SMT2	2¢	2¢ - 2-9/16†	7.2 lb.
SMT33	2¢ - 9†	2¢ - 11-9/16†	9.2 lb.
SMT3	3¢	3¢ - 2-9/16†	10 lb.
SMT42	3¢ - 6†	3¢ - 8-9/16†	11.4 lb.
SMT45	3¢ - 9†	3¢ - 11-9/16†	12.1 lb.
SMT4	4¢	4¢ - 2-9/16†	12.9 lb.
SMT54	4¢ - 6†	4¢ - 8-9/16†	14.3 lb.
SMT5	5¢	5¢ - 2-9/16†	15.7 lb.
SMT6	6¢	6¢ - 2-9/16†	18.6 lb.
SMT7	7¢	7¢ - 2-9/16†	21.5 lb.
SMT8	8¢	8¢ - 2-9/16†	24.3 lb.
SMT9	9¢	9¢ - 2-9/16†	27.2 lb.
SMT10	10¢	10¢ - 2-9/16†	30 lb.

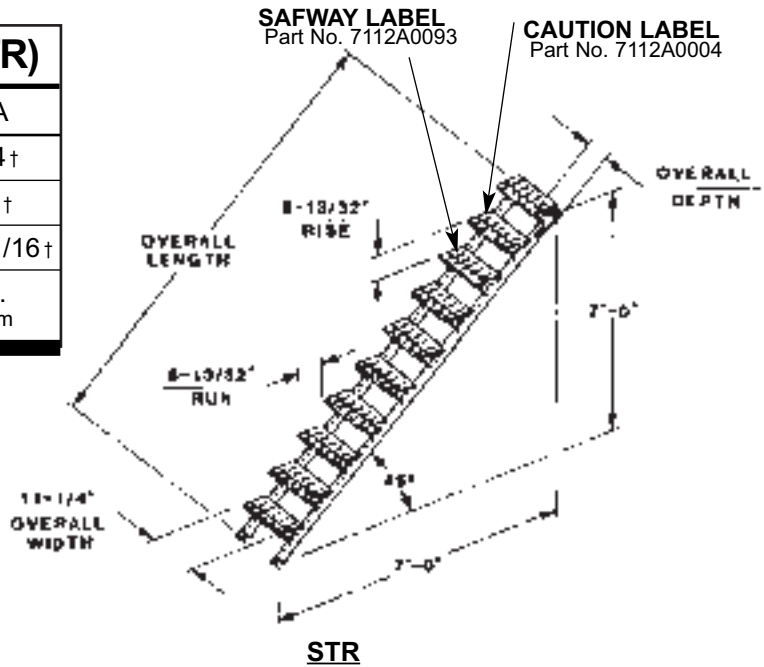
NOTE: Recommended for use with steel planks only.

**Safway Systems™ Toeboard Clip (SSPC)**

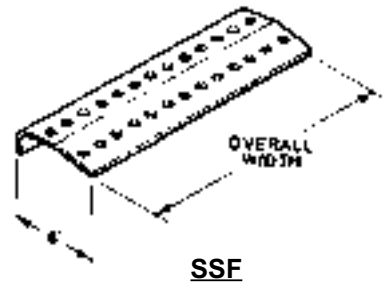


NOTE: Denotes center line of vertical post

<b>Safway Systems™ Stair Units (STR)</b>		
Part Number	STR7	STR7A
Overall Width	11 - 1/4	11 - 1/4†
Overall Depth	9 - 1/2†	9 - 1/2†
Overall Length	10ç - 1-11/16†	10ç - 1-11/16†
Weight	83.6 lb. Steel	52.4 lb. Aluminum



<b>Safway Systems™ Stair Filler (SSF)</b>			
Part Number	SSF3	SSF42	SSF54
Overall Width	2ç - 8-3/4†	3ç - 2-3/4†	4ç - 2-3/4†
Weight	10.3 lb.	10.3 lb.	13.2 lb.



**Access Ladder Unit (SAU3)**

**WEIGHT PAINTED: 9.5 LB.**

**Access Ladder Unit (SAU6)**

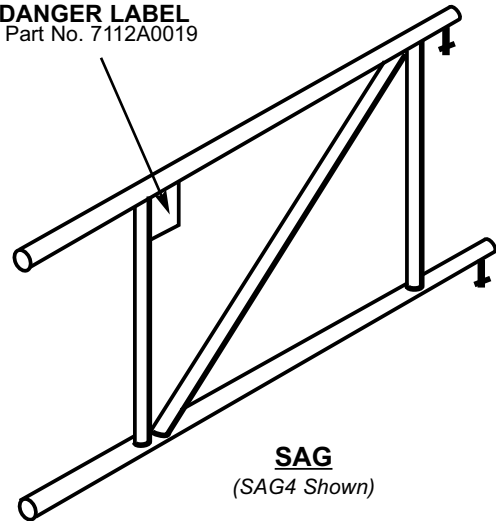
**WEIGHT PAINTED: 18 LB.**

**Access Ladder Bracket (SAUB)**

**WEIGHT PAINTED: 5.5 LB.**

<b>Safway Systems™ Access Gate (SAG)</b>		
Part Number	SAG3	SAG4
Overall Width	33† - 36†	42† - 48†
Weight Painted	8.7 lb.	12.7 lb.

**DANGER LABEL**  
Part No. 7112A0019



**Safway Systems™ Access Gate Hinge (SAGH)**

**WEDGE INSTRUCTION LABEL**  
Part No. 7112A0002

**WEIGHT: 7.7 lb.**  
Support for SAG3 & SAG4

**Safway Systems™ Access Gate Post (SAGP)**

**SAFWAY LABEL**  
Part No. 7112A0003

**WEIGHT: 19 lb.**  
For use with SAG3 or SAG4 and SAGH when the width of an intermediate level access bay exceeds 48†.

**Safway Systems™ Access Gate Unit (SAGSU)**

**SAFWAY LABEL**  
Part No. 7112A0003

**WEIGHT: 34 lb.**  
For use with SAG3 or SAG4 and SAGH when the width of the top scaffold level exceeds 48†.



**NOTES:**

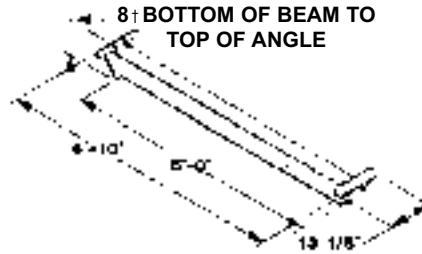
Ends of base beams and throat headers are tapered to fit 55 degree sloped boiler walls.

Base beams and throat headers are sized by their least length dimension, (under side of support plates).

Base beams and throat headers with other angles are available on request.

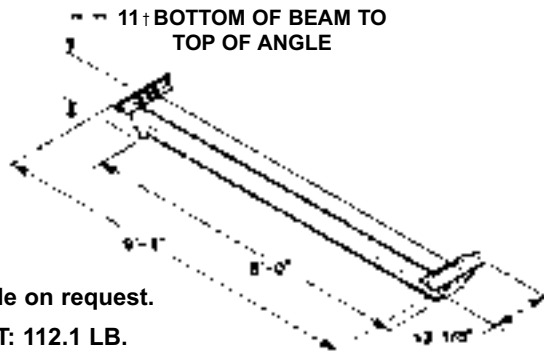
⊕ Denotes center line of posts.

**Safway Systems™ Base Beam Steel (SBB6)**



**WEIGHT PAINTED: 116.5 LB.**

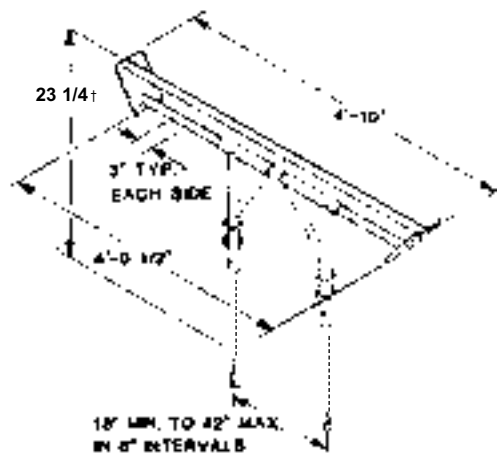
**Safway Systems™ Base Beam Aluminum (SBBA8)**



Available on request.

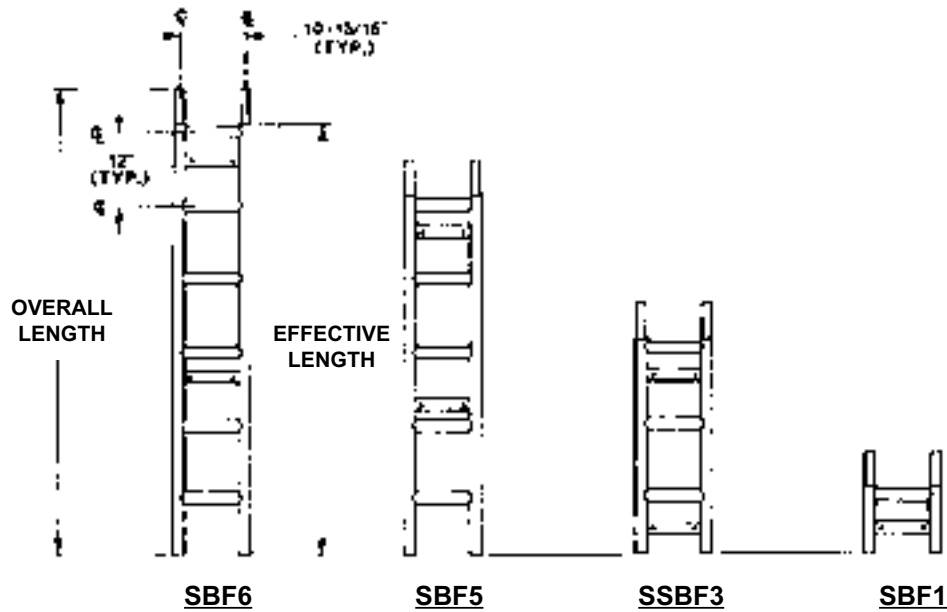
**WEIGHT: 112.1 LB.**

**Safway Systems™ Throat Header (STH4)**



**WEIGHT PAINTED: 45.2 LB.**

Use SVP\_ to extend scaffold into ashpit.



<b>Safway Systems™ Support Frame (SBF)</b>				
Part Number	SBF1	SBF3	SBF5	SBF6
Effective Length	1¢ - 1/8†	3¢	5¢	6¢
Overall Length	1¢ - 6-1/8†	3¢ - 6†	5¢ - 6†	6¢ - 6†
Weight Painted	12.2 lb.	26.2 lb.	37.8 lb.	43.5 lb.

**Support Frame Starter (SFS)**

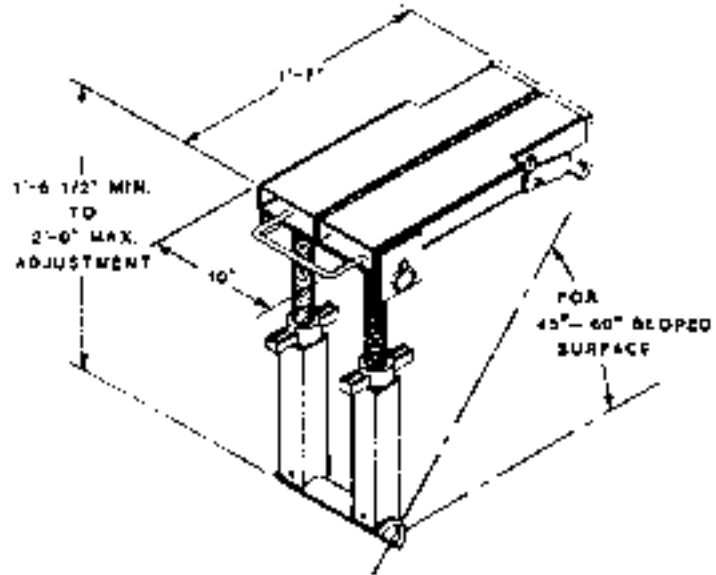
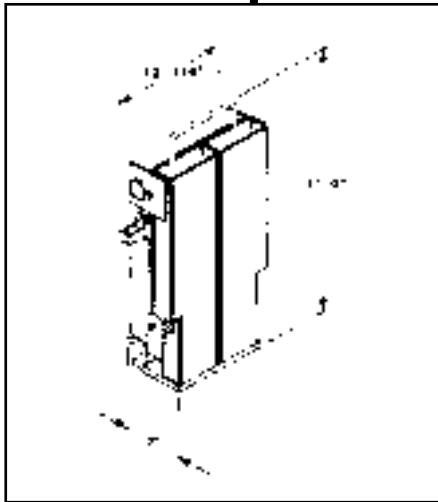
**WEIGHT PAINTED: 7.4 LB.**

**Safway Systems™ Saddle Brace (SSB10)**

**PAINTED WEIGHT: 21 lb.**

**NOTE:** ¢ Denotes center line of support frame legs.

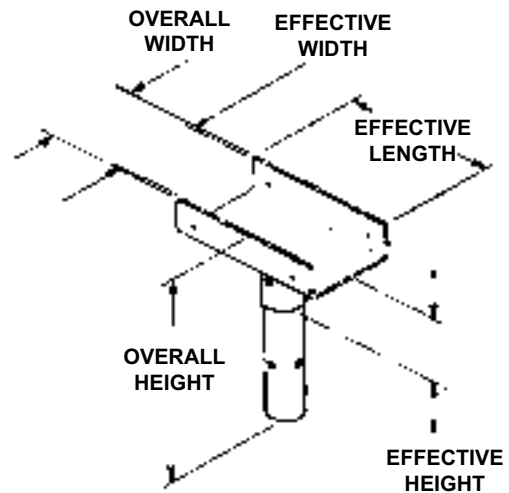
**Safway Systems™ Adjustable Support Bracket (SASB2)**



WEIGHT PAINTED: 53.1 LB.

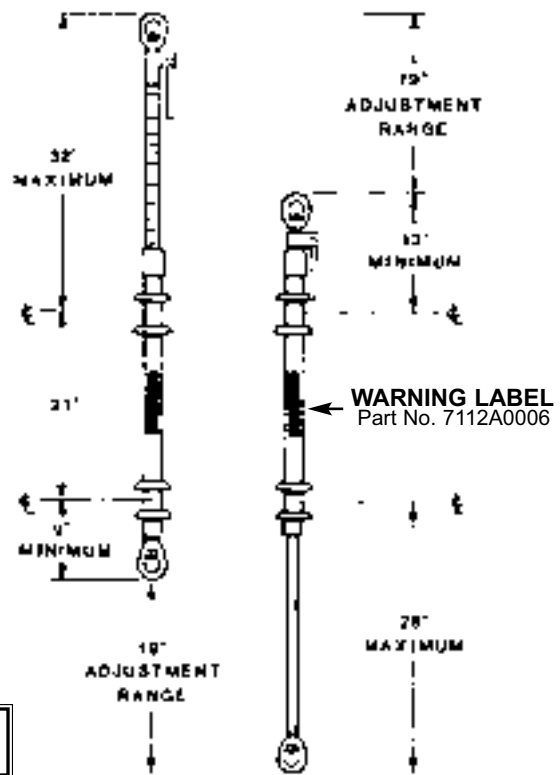
**Safway Systems™  
U-Head (SSH8)**

Part Number	SSH8
Effective Width	4†
Overall Width	4 - 3/4†
Effective Length	8†
Effective Height	3 - 3/16†
Overall Height	10 - 15/16†
Weight Painted	5.4 lb.



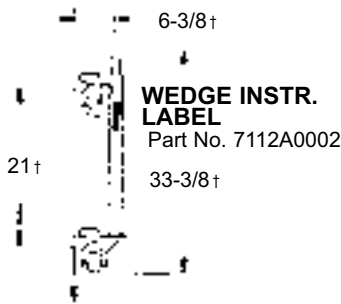
**Safway Systems™  
Suspended Adjustable  
Post (SSAP)**

Part Number	SSAP
Overall Height	62 - 3/16†
Weight	31.6 lb.



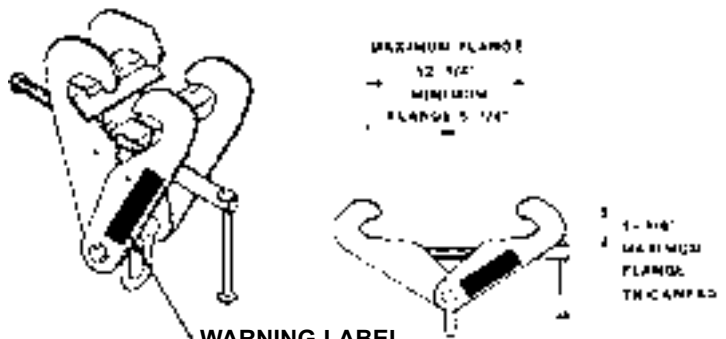
**NOTE:** ☉ Denotes center line of horizontal members.

**Safway Systems™  
External Guard Rail  
Post (SEGP)**



**WEIGHT PAINTED: 12.1 lb.**

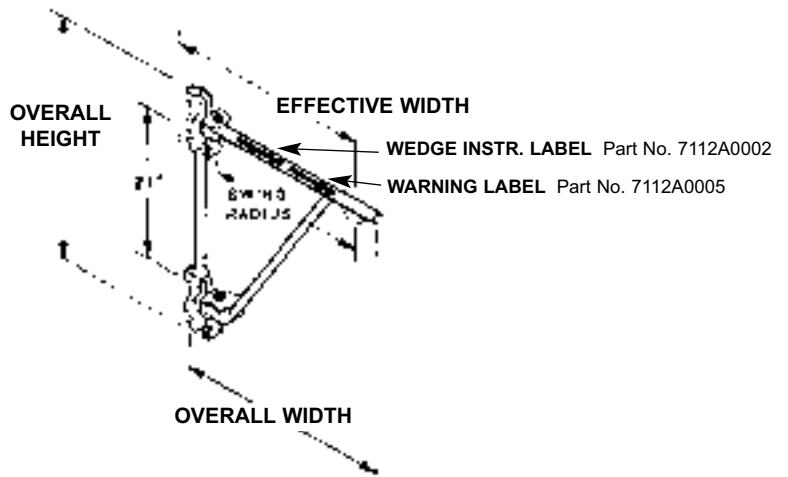
**Adjustable Beam Clamp (BCA)**



**WEIGHT PAINTED: 14.2 lb.**

**NOTE:** ☉ Denotes center line of vertical posts.

<b>Safway Systems™ Hoist Arm (SHA)</b>	
Part Number	SHA
Effective Width	24 - 5/16†
Overall Width	26 - 9/16†
Swing Radius	19†
Overall Height	2 - 3/12†
Weight	13.8 lb.



**Safway Systems™ Pry Bar Hammer (SPBH)**

Technical drawing of the Pry Bar Hammer (SPBH) showing dimensions:

- 4 - 11/16†
- 1 - 3/4†

**WEIGHT: 2.3 lb.**

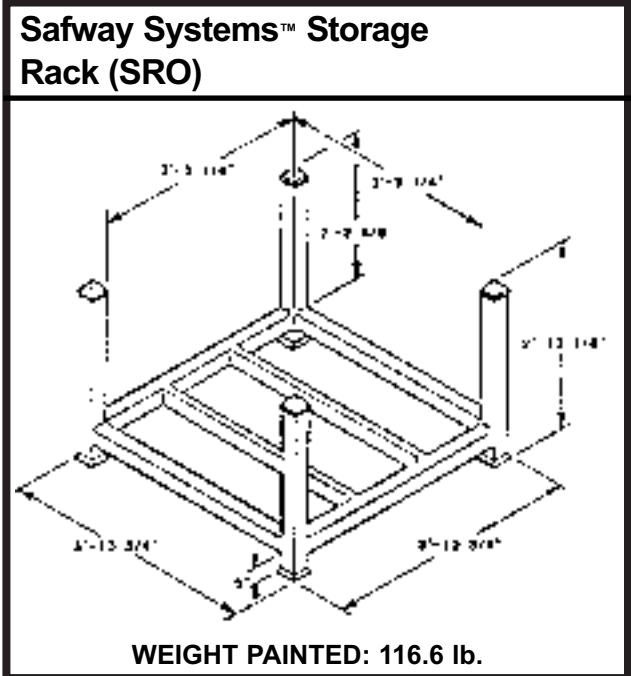
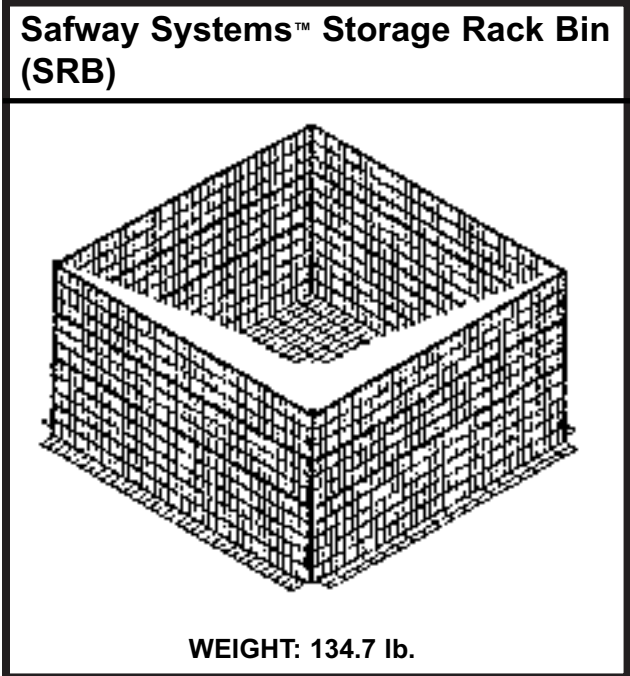
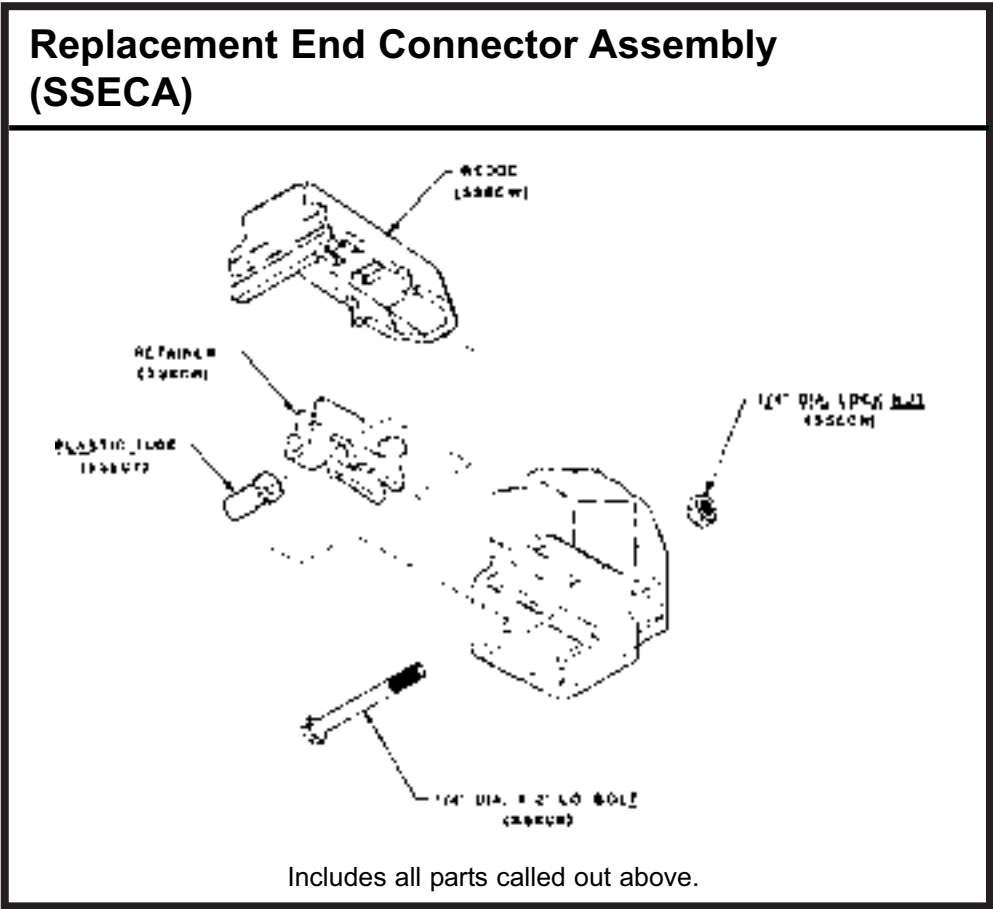
**Safway Systems™ Horizontal Square Tool (SHST)**

Technical drawing of the Horizontal Square Tool (SHST) showing dimensions:

- 2' - 5 3/8"
- 5 - 9/16"

**WEIGHT PAINTED: 6.4 lb.**

**NOTES:**  
See ORN 213 for assembly instructions



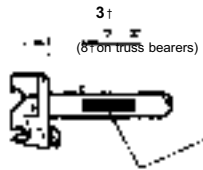
**REPLACE  
COMPONENT LABELS  
IF THEY ARE WORN,  
DEFACED OR ARE  
ILLEGABLE.**

# Safway Systems™ Labels

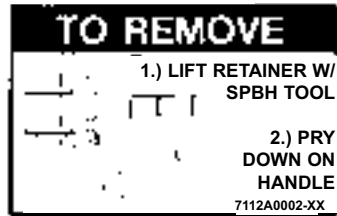
If replacement labels are needed, contact your SAFWAY dealer or manager.  
Customer Service, Safway Steel Products, P.O. Box 1991,  
Milwaukee, WI 53201  
800-558-4772

## Wedge Installation / Removal Instruction (Part No. 7112A0002)

Install one label on each Safway Systems™ Scaffold component which has one or more end fittings. Orient so that wedge in label faces same direction as wedge in fitting.

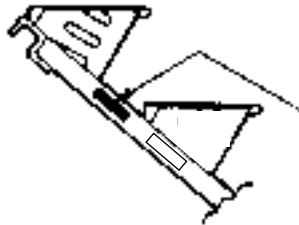


### SAFWAY SYSTEMS™ SCAFFOLD



## Stair Caution Label (Part No. 7112A0004)

Label located on outer side of one side bar on all stair units.



## Safway Label (Part No. 7112A0093)

Label located on outer side bar on all stair units.

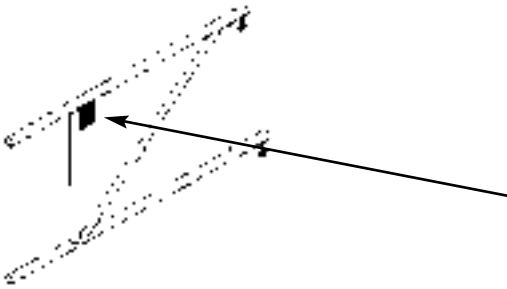









# Safway Systems™ Labels

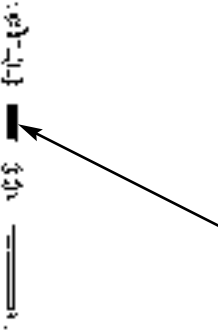

**Danger Label** (Part No. 7112A0019)

**Duraplank Label** (Part No. 7112A0101)

**Warning Label** (Part No. 7112A0006)

# Additional Labels

**Warning Label**  
**SIA/SSFI**  
 (Part No. 7112A0038)

**WARNING**

Before using, pulling up or lowering the scissor lift, CHECK WITH YOUR BOSS AS TO ITS SAFE USE.

There are places where YOU CAN BE hurt or even KILLED using scissor lifts.

REVIEW THE SAFETY GUIDELINES WITH YOUR BOSS.

**WARNING**

**Safway Label**  
 (Part No. 7112A0003)

**SAFWAY**

**SAFWAY STEEL PRODUCTS INC.**

SAFWAY STEEL PRODUCTS INC. 11 JUNE 1998

## CHAPTER B

### ***Introduction Component Allowable Loads***

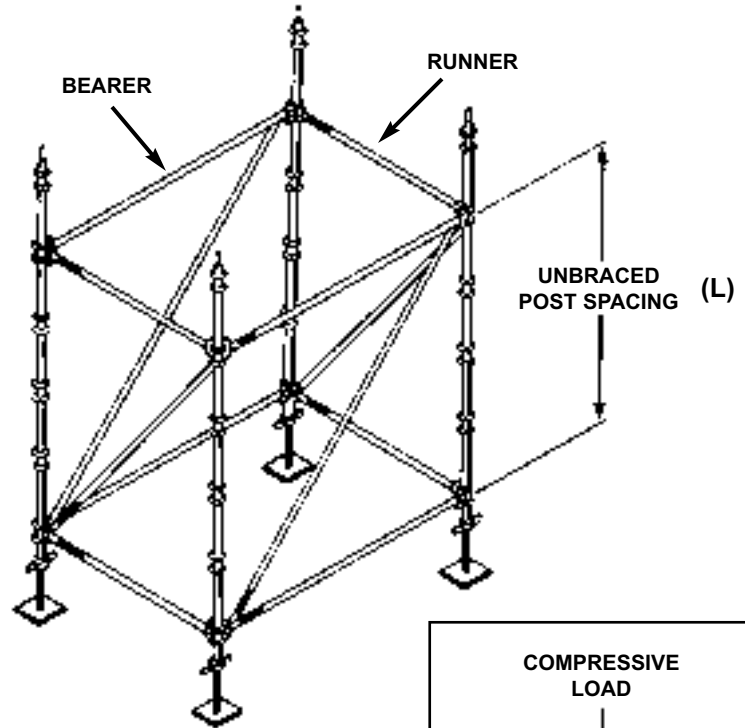
This chapter contains illustrations and load ratings for the various Safway Systems™ Scaffold Components. The load ratings are based on the capacity of the individual components only. Refer to chapter D and warnings at front of manual before computing the scaffold loads. Allowable loads specified in this chapter include safety factors required by Federal OSHA.

When designing scaffolds with unique configurations or special loading conditions, consult with Safway engineering or a professional structural engineer familiar with scaffold design prior to design finalization.

**Safway Systems™  
Vertical Post (SVP)**

Unbraced Post Length (L)	*Maximum Allowable Compressive Load when rated for scaffold use Lb.
7'	4,000
5' - 3"	5,950
3' - 6"	7,300
1' - 9"	8,100

Vertical diagonal must be installed at same increments as (L)  
\*Load is based on vertical diagonals connected to posts at bearer/runner connections.



**Safway Systems™  
Vertical Post Coupling (SCP)**



**Allowable Tension Loading  
2,000 lb.**

Post connection (SVP) components (see exploded view page A-10) are designed to resist nominal tensile loads, such as those created by uplift and/or overturning loads.

**NOTE:** When suspending (hanging) scaffold, the coupling (SCP) must be modified as shown at right.

**Safway Systems™  
(SCP)  
Modification (bolted)**



**Allowable Tension Loading  
3,500 lb.**

*If scaffold is suspended, the coupling must be modified as follows:*

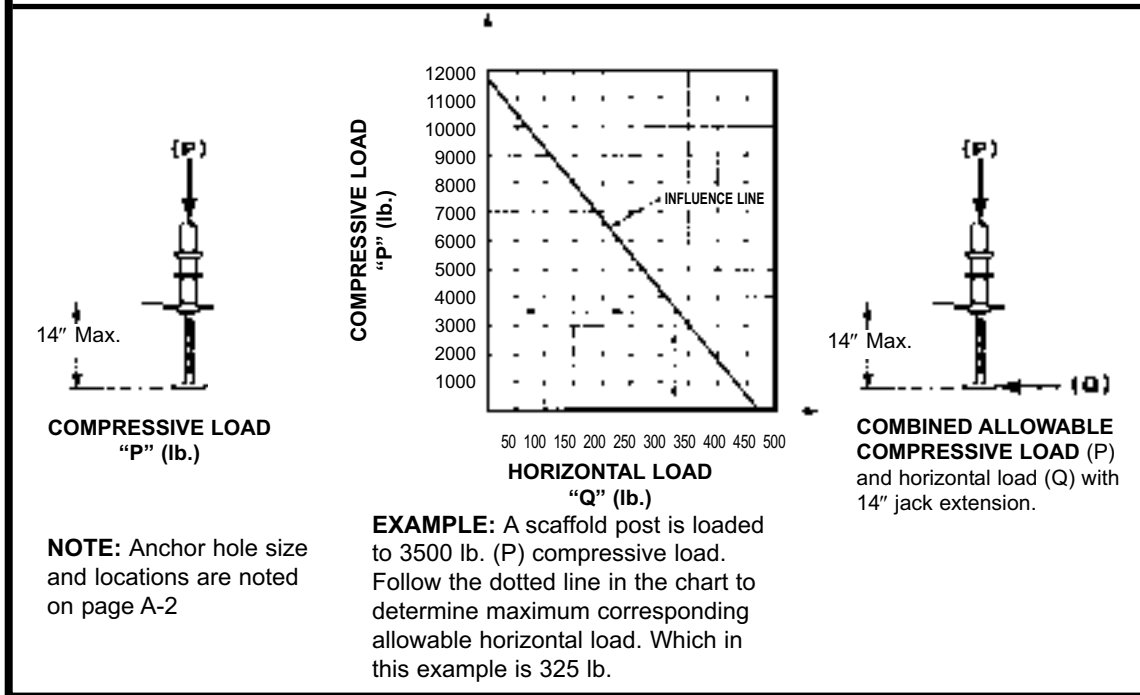
Remove snap buttons supplied with the SVP posts and replace with a 3/8" - 16 NC x 2-1/4" lg. hex. hd. bolt structural grade 5, 3/8" lock washer and a 3/8" - 16 NC hex. hd. nut.

**COMPRESSIVE  
LOAD**



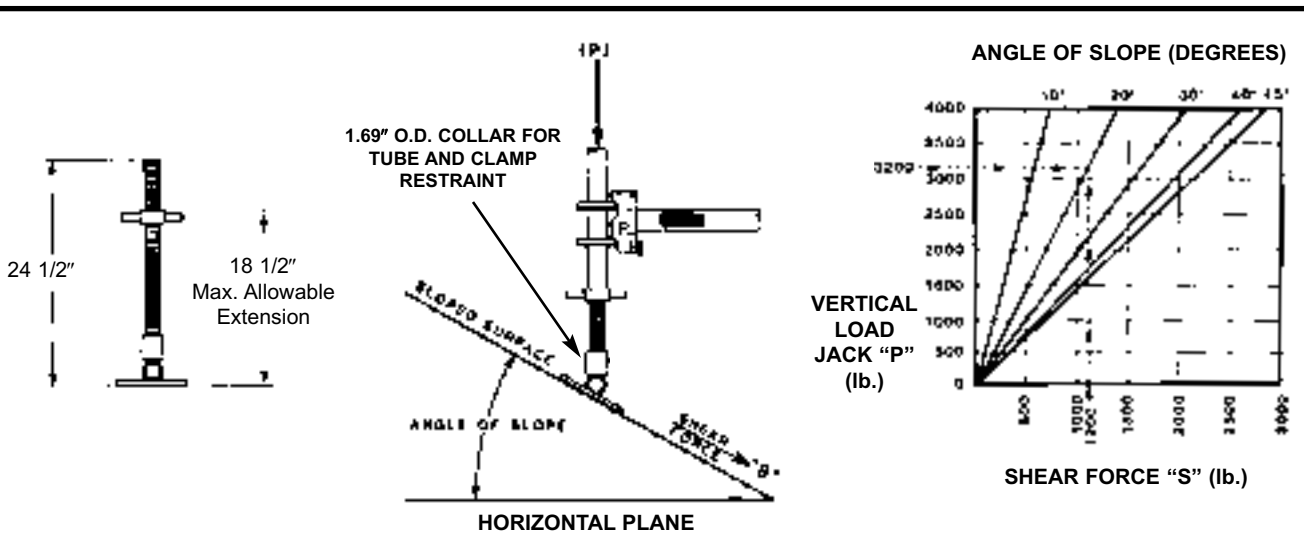
**COMPRESSIVE  
LOAD**

**Safway Systems™ Screw Jack (STSJ-1)** Maximum Extension is 14"



**NOTE:** Maximum allowable compressive load (P) when rated for scaffold use is: 11,750 lb.

**Safway Systems™ Swivel Screw Jack (SSJ)**

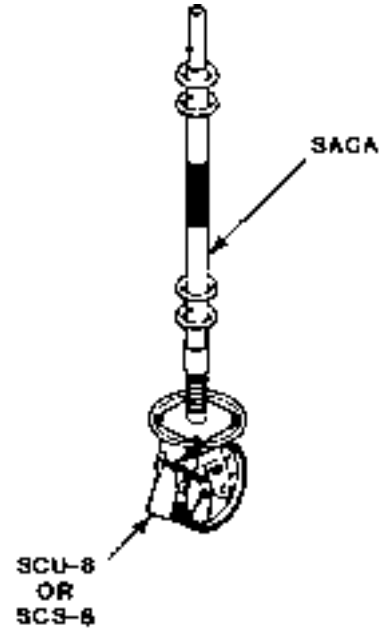


**NOTE:** Where angle exceeds 45° contact Safway Engineering Department.

**Safway Systems™ Adjustable Caster Adapter (SACA)**

Part Number	SCU8	SCS8
Wheel Style	Urethane	Steel
Allowable Rolling Load	900 lb.	900 lb.

For use with 8" diameter casters only.

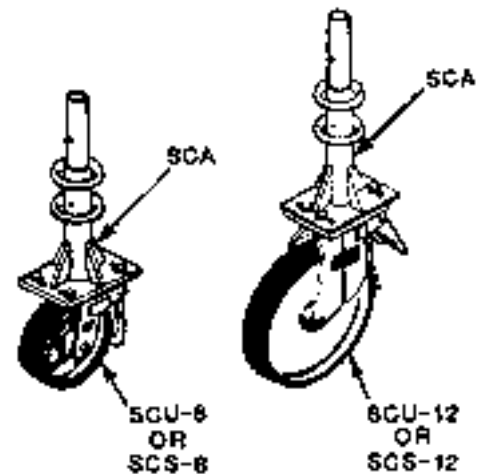


**Safway Systems™ Caster Adapter (SCA)**

Part Number	SCU8	SCS8	SCU12 & SCU12HD	SCS12
Wheel Style	Urethane	Steel	Urethane	Steel
Allowable Rolling Load	900 lb.	900 lb.	900 lb.*	900 lb.*

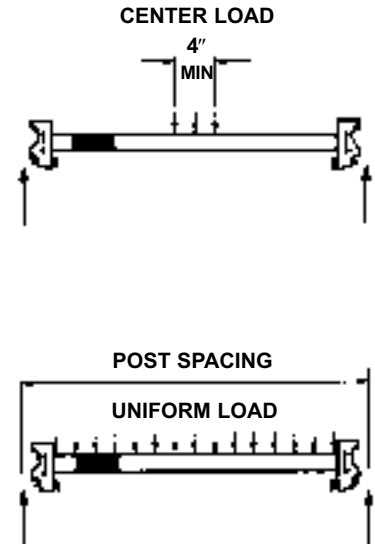
For use with either 8" or 12" diameter casters.

**\*NOTE:** Allowable caster load is 900 lb. when rolling scaffolds are braced as illustrated on the top of page D-5. However if additional horizontal bracing as illustrated also on the bottom of page D-5 is installed in each bay the allowable load may be increased to 1700 lb. This applies to the SCU12HD and SCS12 style casters only.



**Safway Systems™ Bearer / Runner (SBR)**

Part Number	Post Spacing	Allowable Center Load	Allowable Uniform Load	
			lb.	lb./FT.
SBR2	2'	1,350lb.	2,700	1,350
SBR33	2' - 9"	800 lb.	1,675	610
SBR3	3'	725 lb.	1,500	500
SBR42	3' - 6"	725 lb.	1,575	450
SBR45	3' - 9"	550 lb.	1,125	300
SBR4	4'	640 lb.	1,320	330
SBR54	4' - 6"	570 lb.	1,170	260
SBR5	5'	500 lb.	1,050	210



**CAUTION:** Only SBR or STB members must be used to support scaffold platforms .

**Safway Systems™ Bearer (SBR) Maximum Allowable Uniform Load Chart**

Span Chart	Part Number	Bearer Length	Maximum allowable bearer load in lb. /sq. ft. (Load values include live load and all dead loads, (decking, etc.))												
			Runner Length												
			2'	33"	3'	42"	45"	4'	54"	5'	6'	7'	8'	9'	10'
SBR2	2'		675	470	450	385	360	335	300	270	225	190	165	150	135
SBR33	33"		305	220	200	170	160	150	135	120	100	85	75	65	60
SBR3	3'		250	180	165	140	130	125	110	100	80	70	60	55	50
SBR42	42"		225	160	150	125	120	110	100	90	75	60	55	50	45
SBR45	45"		150	105	100	85	80	75	65	60	50	40	35	30	30
SBR4	4'		165	120	110	90	85	80	70	65	55	45	40	35	30
SBR54	54"		130	90	85	70	65	65	55	50	40	35	30	25	25
SBR5	5'		105	75	70	65	55	50	45	40	35	30	25	20	20

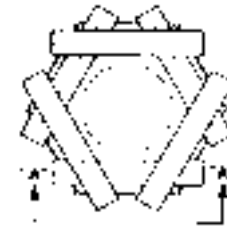
**NOTE:** This chart is based on Safway Systems™ bearer strength only. The maximum allowable deck load must be determined from either deck material strength, leg load capacity or the chart above, whichever is less.

**Safway Systems™ Single Post Circular Scaffold**

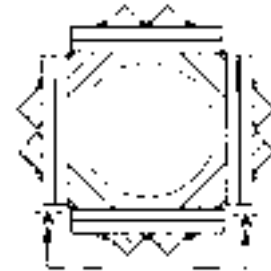
Runners are not designed to support fully decked scaffold platforms or center concentrated loads. Use (SBR) or (STB) members whenever a full deck is required. Platforms may rest on runners if platform area is located close to the posts, does not exceed dimension "h" (shown below) and the allowable load table below.



FOUR POSTS



SIX POSTS



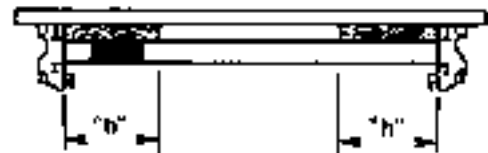
EIGHT POSTS

**Safway Systems™ Horizontal Runners (SHR)**

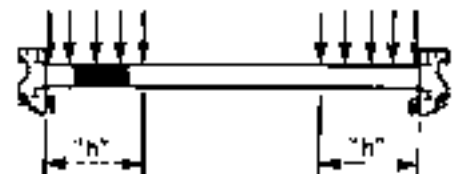
**Single Post Circular Scaffold Allowable Load**

No. of Vertical Posts in Tower	4	6	8
Loading Distance (h)	19"	22"	27"
Allowable Uniform Load on Distance (h) (lb.)	585	500	400
Allowable Uniform Load on Distance (h) (lb. / FT.)	370	270	180

**NOTE:** Dimension "h" is based on two 2" x 10" lumber planks. If wider platforms are required, contact Safway Engineering.

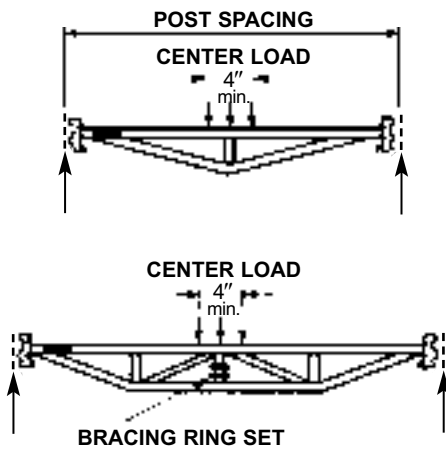


SECTION "A - A" (TYPICAL)

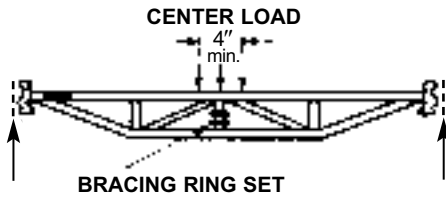
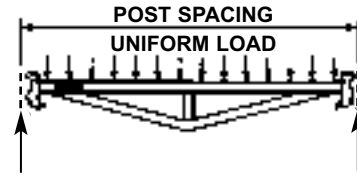


LOADING DIAGRAM FOR SECTION "A - A" (TYPICAL)

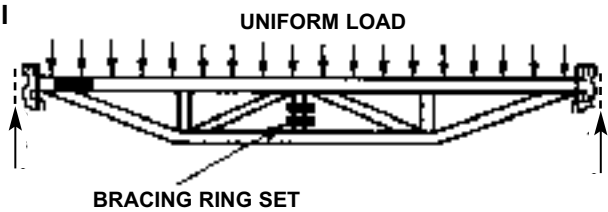




**STYLE I**



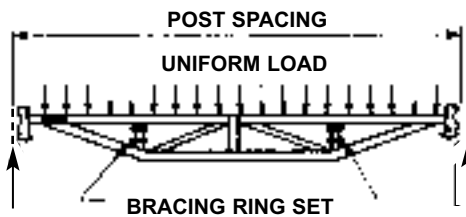
**STYLE II**



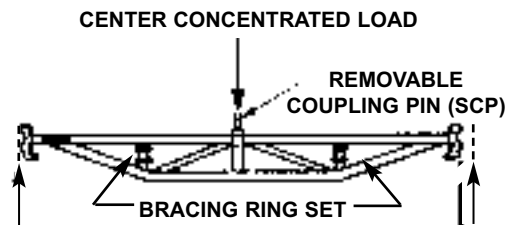
**Safway Systems™ Truss Bearers (STB) Style I and II**

Part Number	Style	Post Spacing	Allowable Center Load	Allowable Uniform Load	
				lb.	lb./ft.
STB6	I	6'	1,875 lb.	3750	625
STB7	I	7'	1,650 lb.	3300	470
STB8	II	8'	2,200 lb.	4400	550
STB9	II	9'	2,200 lb.	4400	488

**NOTE:** Style II Truss Bearer must be braced to adjacent Truss Bearers at center ring set when supporting vertical loads.



**STYLE III**



**Safway Systems™ Truss Bearers (STB) Style III**

Part Number	Post Spacing	Allowable Center Concentrated Load	Allowable Uniform Load	
			lb.	lb./ft.
STB10	10'	2,200 lb.	4,400	440
STB12	12'	2,200 lb.	4,400	367
STB14	14'	1,800 lb.	3,600	257
STB16	16'	1,800 lb.	3,600	225
STB18	18'	1,800 lb.	3,600	200

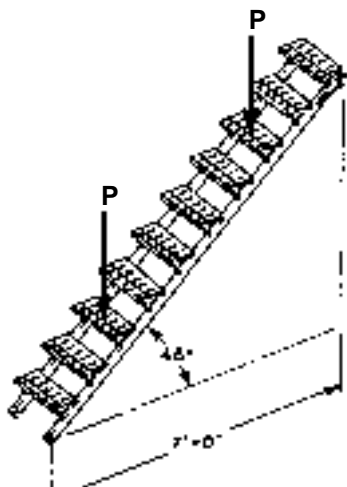
**NOTE:** Style III Truss Bearer must be braced to adjacent Truss Bearers at both bracing ring sets when supporting vertical loads.

**Safway Systems™ Truss Bearer (STB) Maximum Allowable Uniform Load Chart**

Part Number	Style Number	Truss Bearer Length	Maximum allowable platform load imposed on truss bearers in lb. / sq. ft. <i>(Platform load includes live load and all dead loads, decking, etc.)</i>												
			Runner Length												
			2'	33"	3'	42"	45"	4'	54"	5'	6'	7'	8'	9'	10'
STB6	I	6'	312	227	208	178	166	156	138	125	104	89	78	69	62
STB7	I	7'	335	171	157	134	125	117	104	94	78	67	58	52	47
STB8	II	8'	275	200	183	157	146	137	122	110	91	78	68	60	55
STB9	II	9'	244	177	162	139	130	122	108	97	81	69	61	54	48
STB10	III	10'	220	160	146	125	117	110	97	88	73	62	55	48	44
STB12	III	12'	183	134	122	104	97	91	81	73	61	52	45	40	36
STB14	III	14'	128	93	85	73	68	64	57	51	42	36	32	28	25
STB16	III	16'	112	81	75	64	60	56	50	45	37	32	28	25	22
STB18	III	18'	100	72	66	57	53	50	44	40	33	28	25	22	20

**NOTE:** This chart is based on Safway Systems™ truss bearer strength only. The maximum allowable deck load must be determined from either deck material strength, the chart above or leg load capacity, whichever is less.

**Safway Systems™ Stair Units (STR)**



**Concentrated Loads**

**PART NUMBER:** STR7 / STR7A

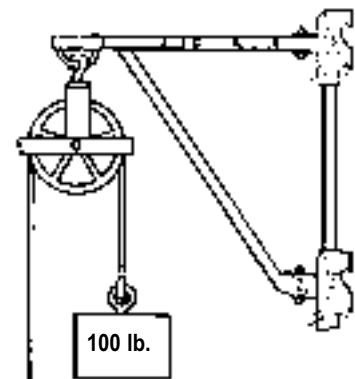
**ALLOWABLE LOAD:**  
TWO LOADS AT 350lb. STAIR UNIT  
(AS ILLUSTRATED)

**Adjustable Beam Clamp (BCA)**

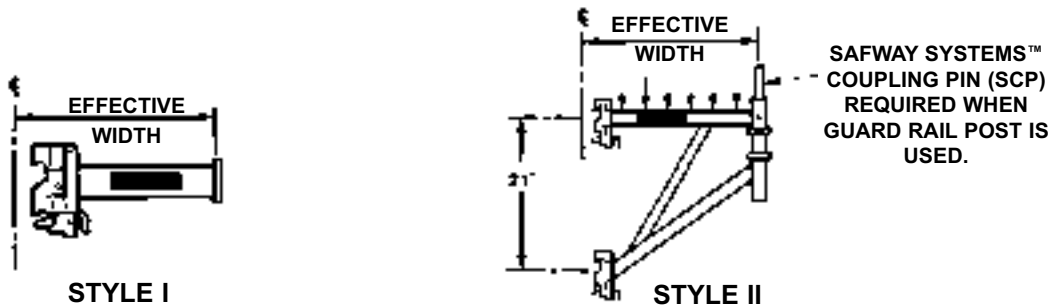


**ALLOWABLE SUSPENDED LOAD:**  
4,000 lb. Vertical Direction Only

**Safway Systems™ Hoist Arm (SHA)**



**MAXIMUM HOISTED LOAD:**  
100 lb.



SAFWAY SYSTEMS™  
COUPLING PIN (SCP)  
REQUIRED WHEN  
GUARD RAIL POST IS  
USED.

**Safway Systems™  
Side Brackets (SBK)**

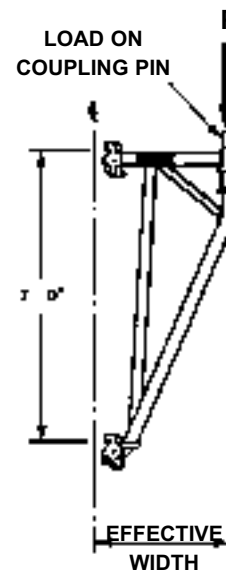
Part Number	SBK06	SBK1	SBK2	SBK33	SBK3
Style Number	I	I	II	II	II
Effective Width	5 1/2"	14 1/2"	2'	2' - 9"	3'
Allowable Uniform Load (lb.)	250	250	500	500	500

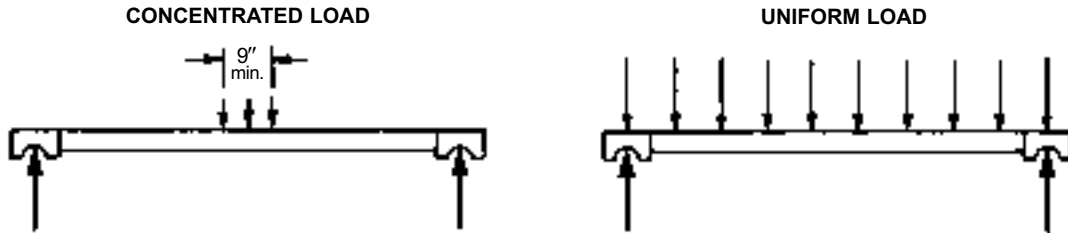
**NOTE:** Brackets are not to be used as knee-out brackets. Coupling Pin (SCP) is provided with Style II side brackets for guard rail post installation only.

**Safway Systems™  
Knee-out Bracket (SKO)**

Part Number	SKO3	SKO45
Effective Width	3'	3' - 9"
Allowable Concentrated Load "P" (lb.)	875	700

**NOTE:** These loads may be increased for certain applications. See page D-6.

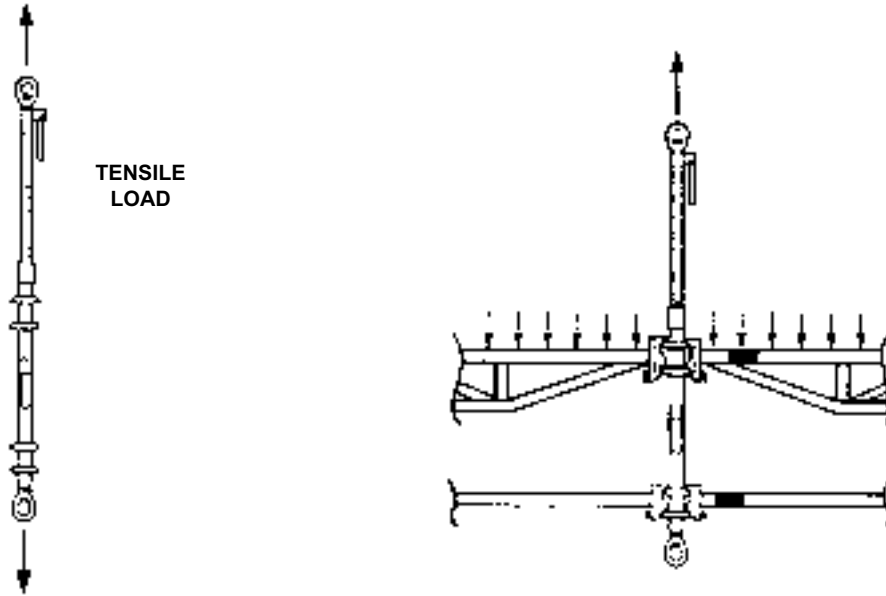




<b>Steel Plank SSP, SSPH, FSPH</b>						
Effective Length	Allowable Center Load		Allowable Uniform Distributed Load			
	Perforated SSP & FSPH, SSPH lb.	Slotted SSP	Perforated SSP & FSPH, SSPH lb. / Lin. Ft.	Slotted SSP	Perforated SSP & FSPH, SSPH lb. / Sq. Ft.	Slotted SSP
2'	770	412	472	171	630	227
3'	770	412	472	171	630	227
3' - 6"	625	347	386	147	515	196
3' - 9"	580	328	360	137	480	182
4'	550	298	311	128	415	170
4' - 6"	495	261	255	116	340	154
5'	450	233	213	93	285	124
6'	380	338	150	113	200	150
7'	325	302	105	86	140	115
8'	290	240	82	60	110	80
9'	260	220	60	49	80	65
10'	250	206	49	41	65	55

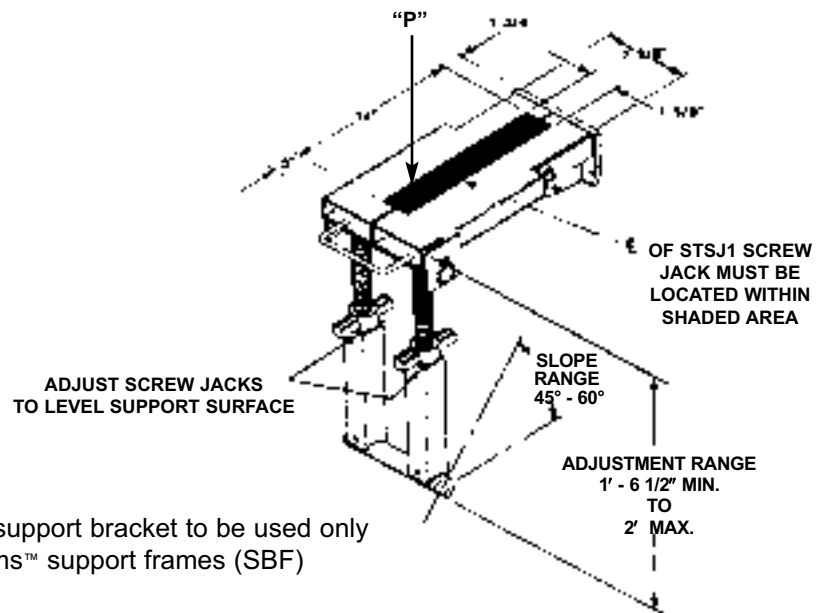
NOTE: Allowable loads above are for SSP is 9" and for SSPH & FSPH is 9 1/4" wide perforated or slot plank. Contact Safway Engineering Department for allowable loads on 6" wide planks.

**Safway Systems™ Suspended Adjustable Post (SSAP)**



**ALLOWABLE SUSPENDED LOAD: 4,000 lb.**

**Safway Systems™ Adjustable Support Bracket (SASB2)**



**NOTE:** Adjustable support bracket to be used only with Safway Systems™ support frames (SBF)

**ALLOWABLE VERTICAL LOAD: 4000 lb.**

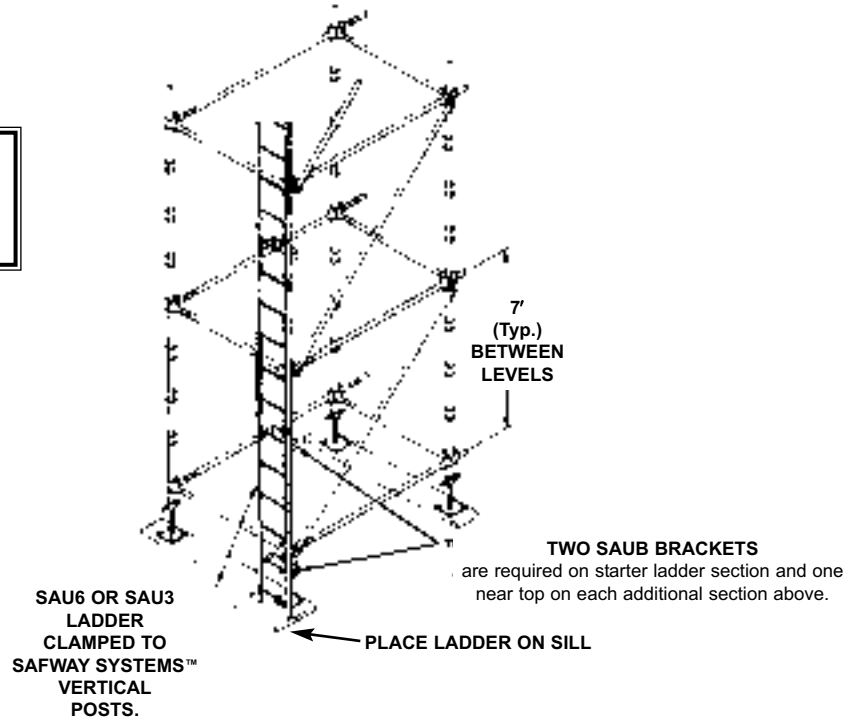
## CHAPTER C

### *Introduction Assembly Details*

This chapter contains illustrations of partially assembled scaffold components. The illustrations are provided as information to describe component fit and dimensional limitations. This chapter is not intended to be used as a guide to erect Safway Systems™ Scaffolds.

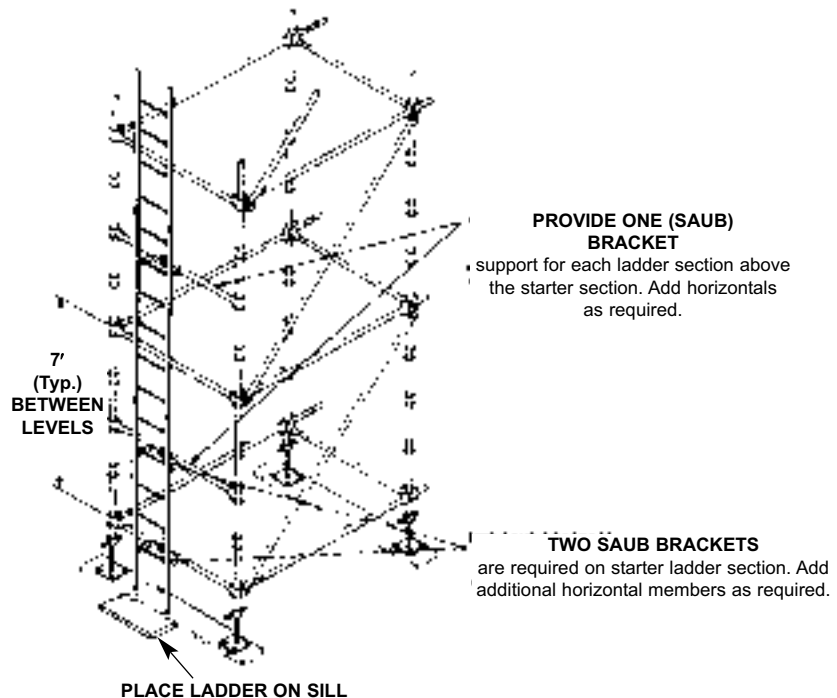
**SAU Ladder Access - Clamped to Post (SVP)**

**NOTE:**  
Install ladder on narrow side of free standing scaffolds.

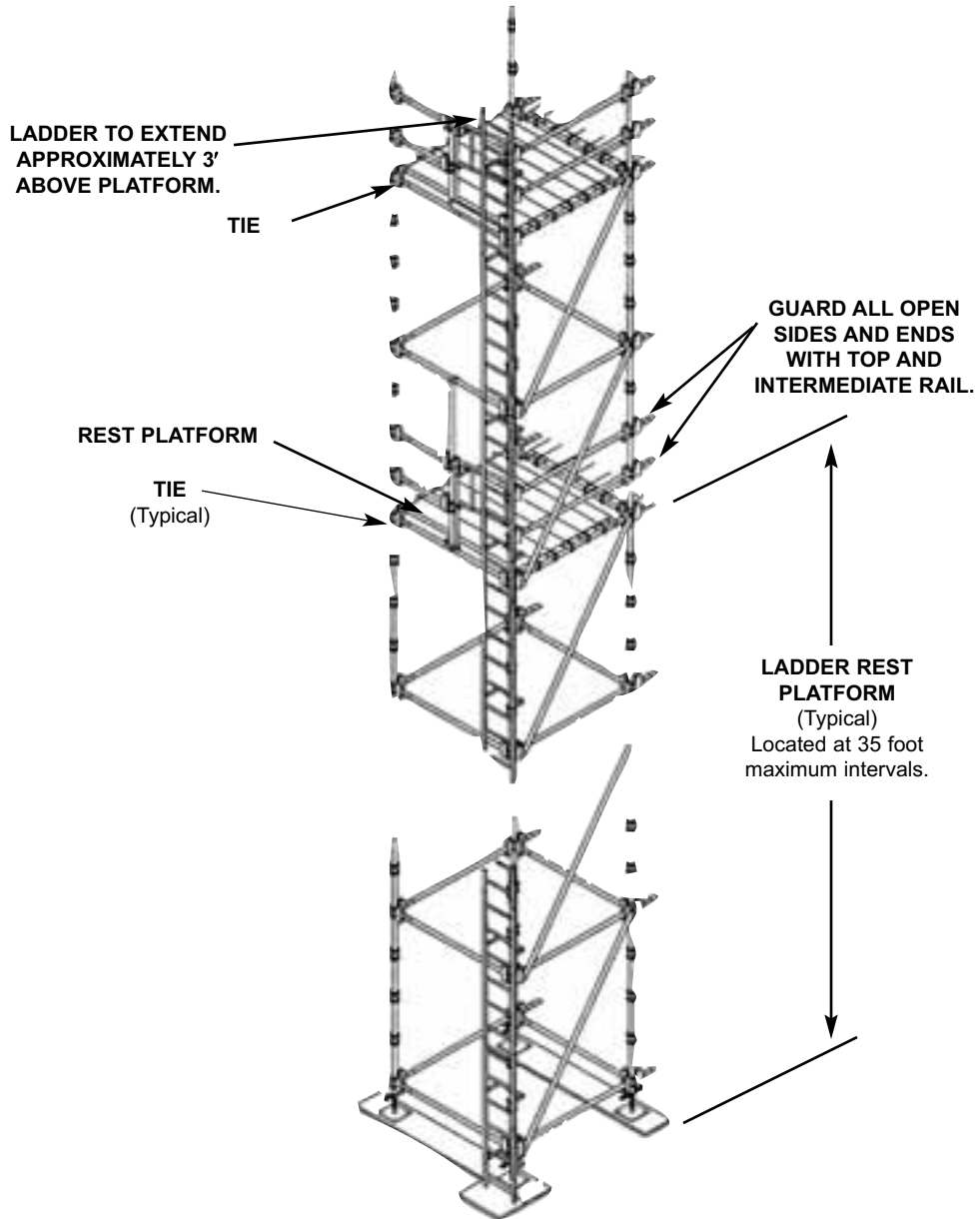


**SAU Ladder Access - Clamped to Bearer / Runners (SBR)**

**NOTE:**  
Install ladder on narrow side of free standing scaffolds.

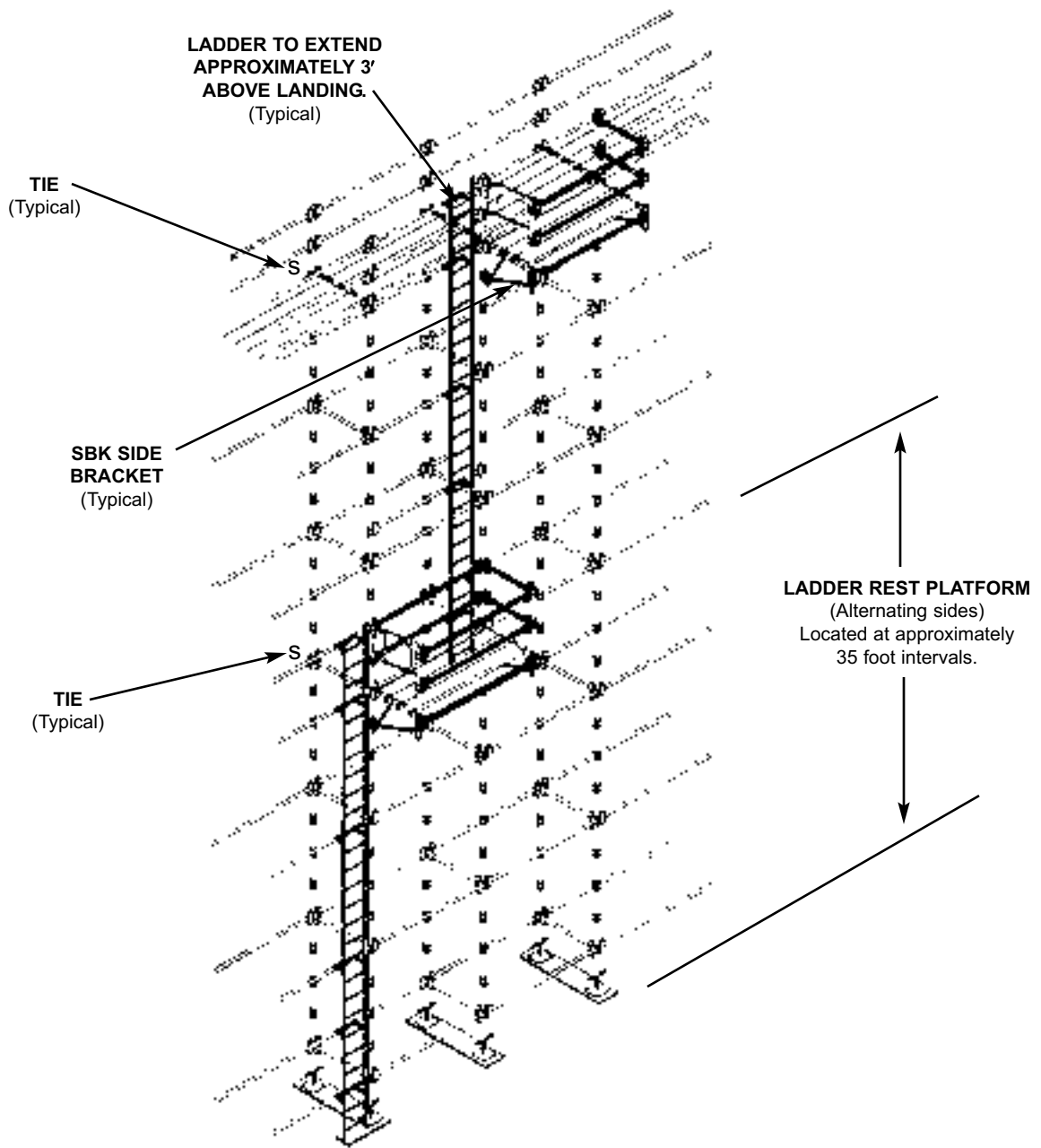


## Rest Platform

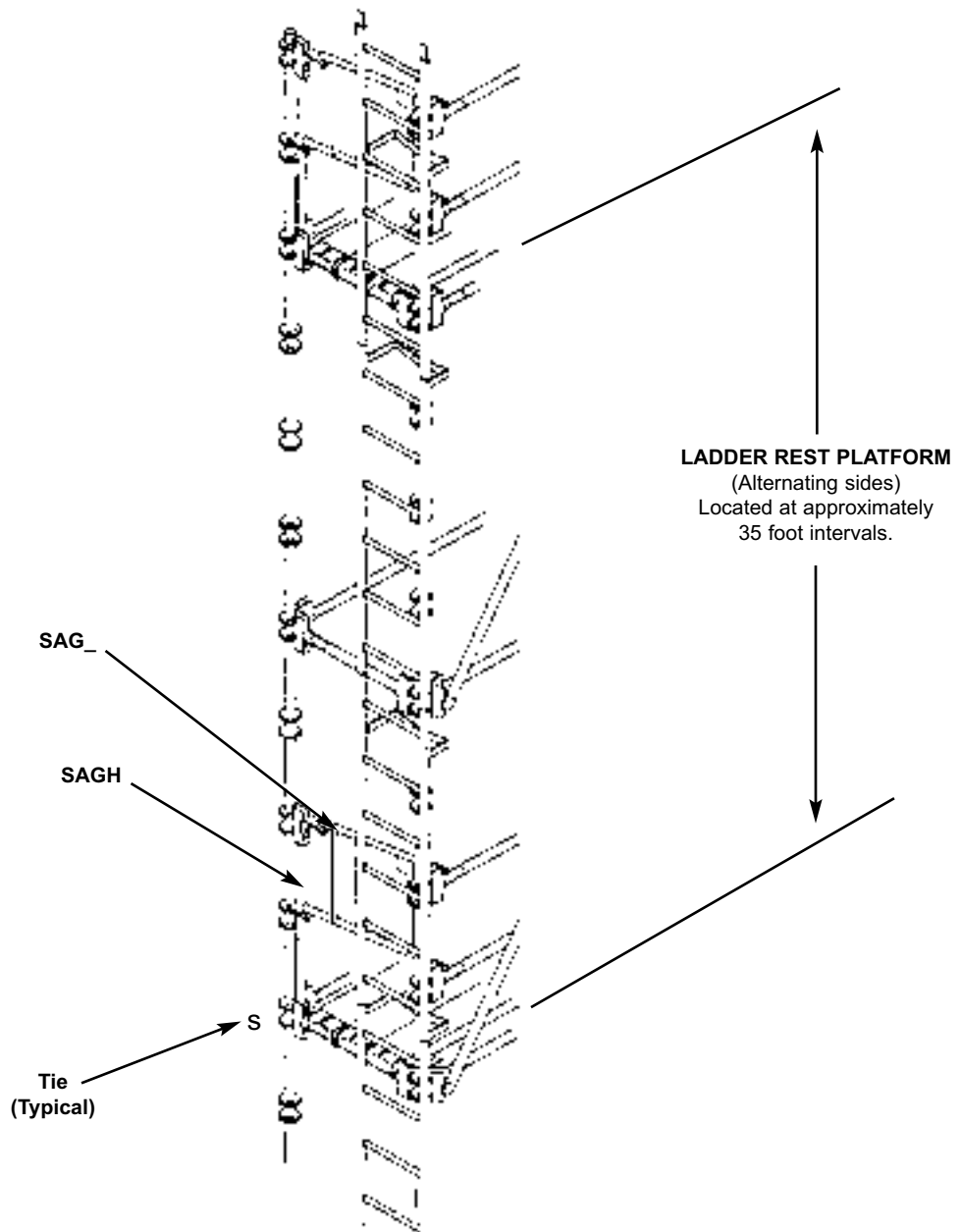




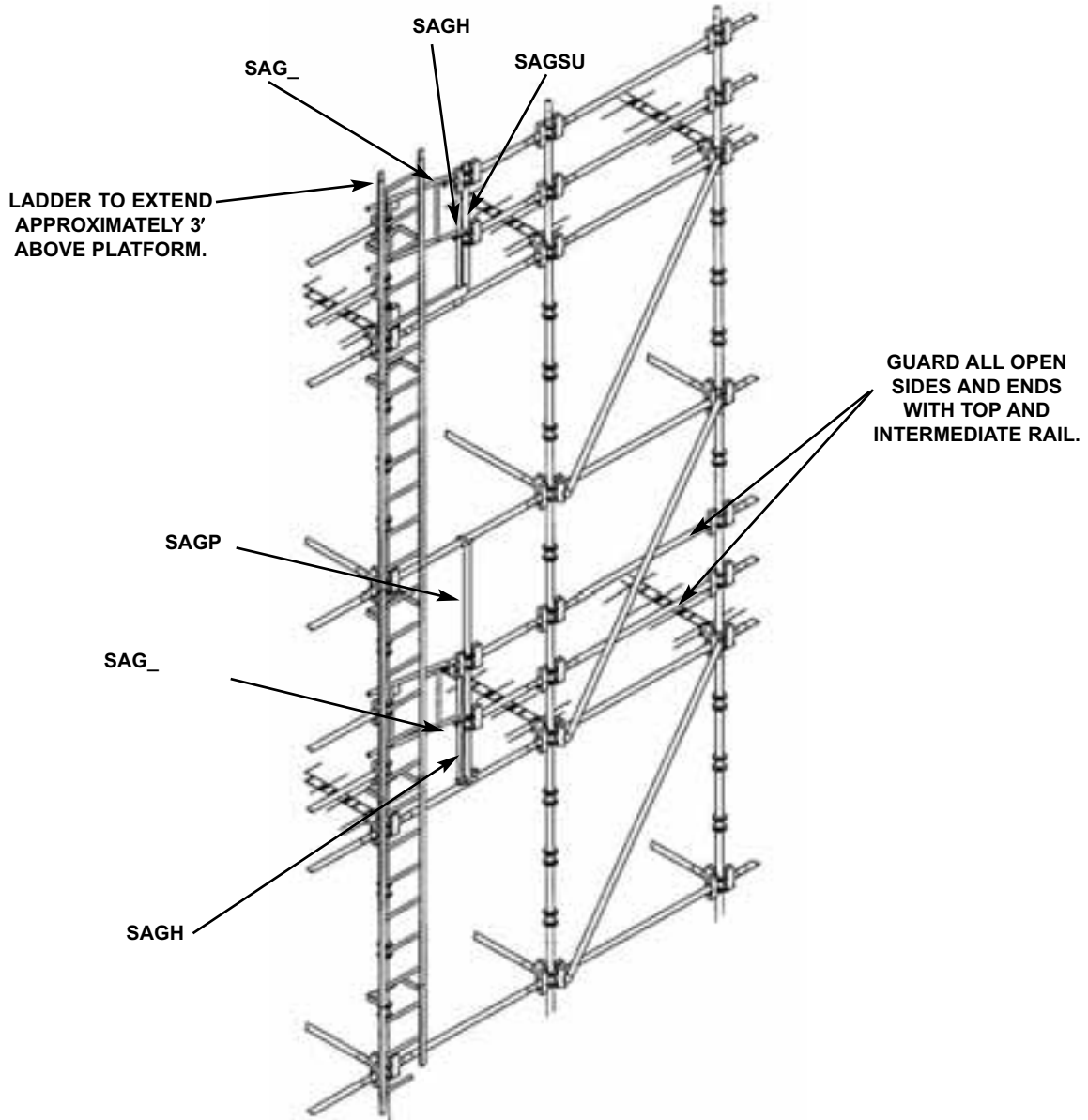
**SAU Ladder Access - Used with External Landing Platforms**



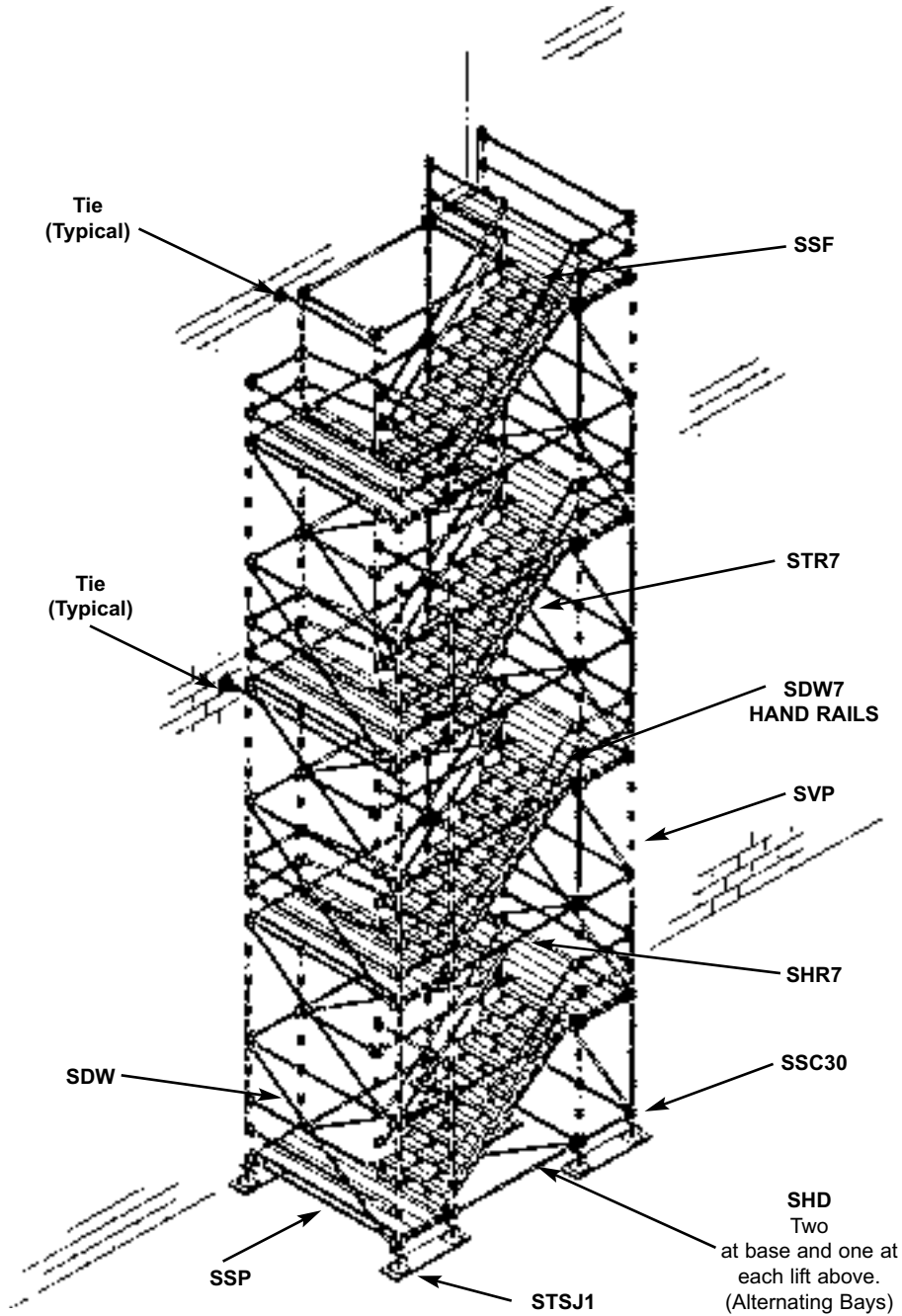
**End Access - Top and Intermediate**



### Bay Access - Top and Intermediate

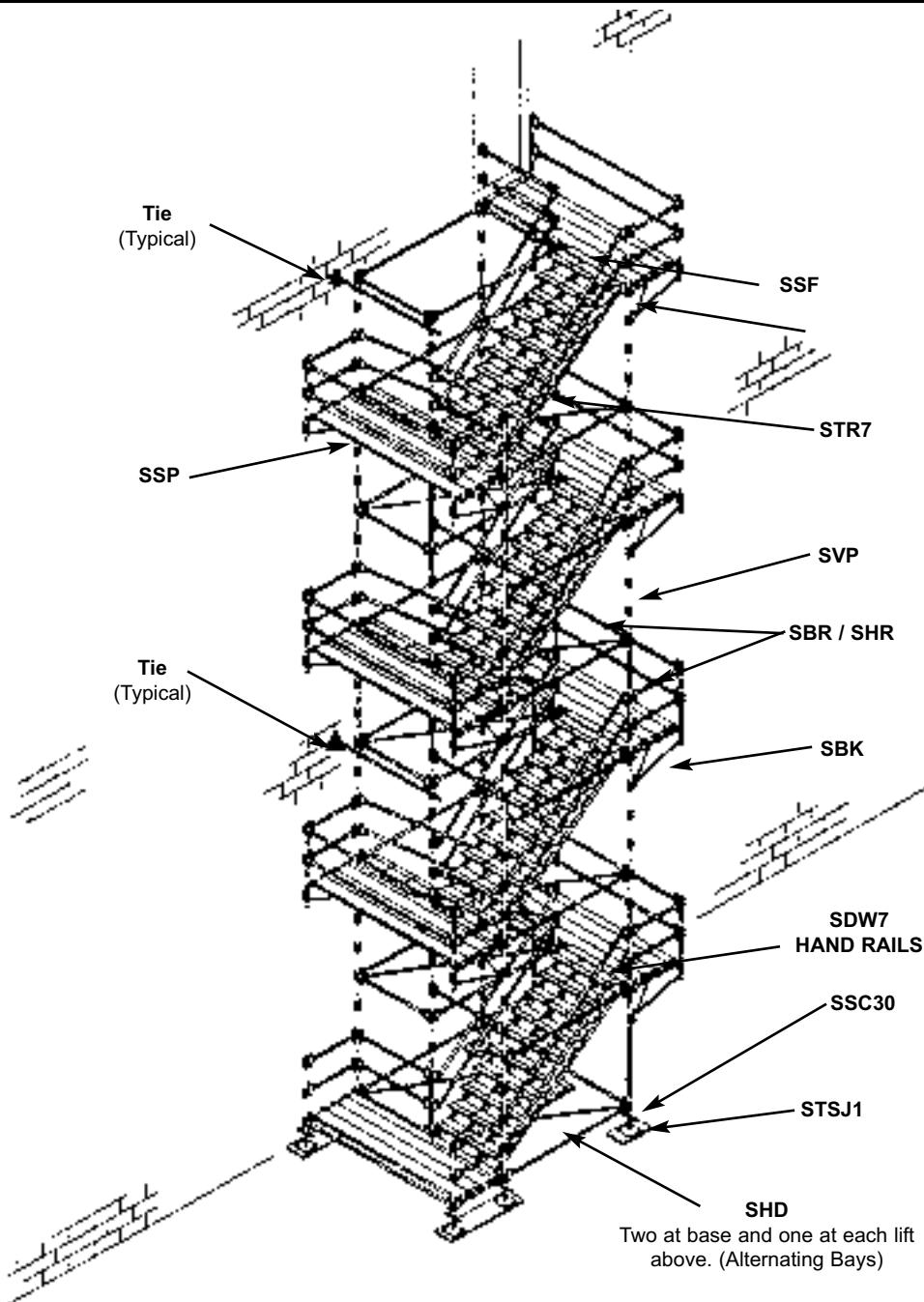


**Typical Stair Tower - with Post Supported Landings**



**NOTE: Stairs may be 2, 3 or 4 units wide. Each unit having a nominal width of 1 foot. Partial decks shown for clarity.**

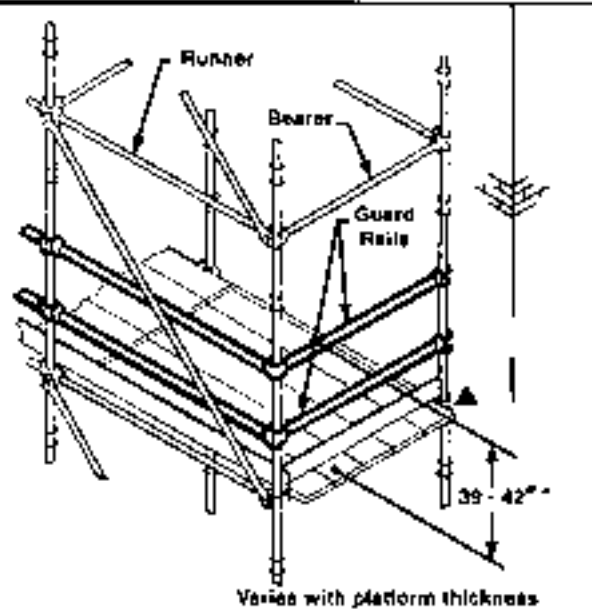
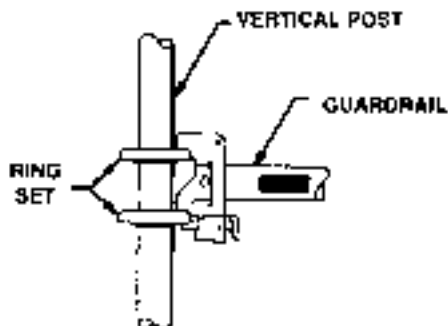
**Typical Stair Tower - with Side Bracket Supported Landings**



**NOTE: Stairs may be 2, 3 or 4 units wide. Each unit having a nominal width of 1 foot.**

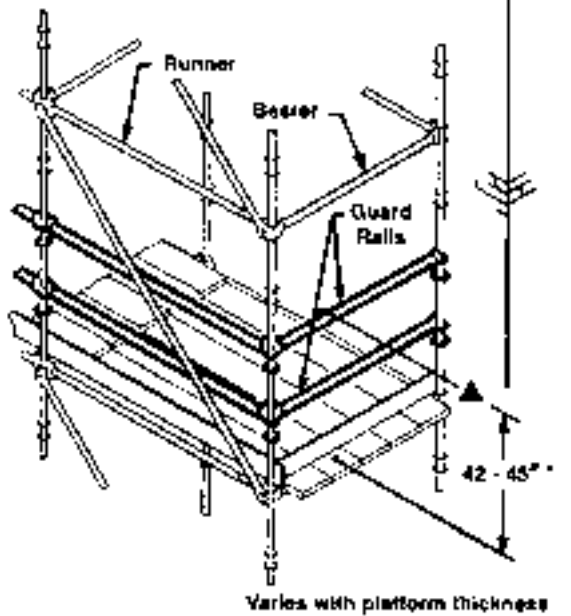
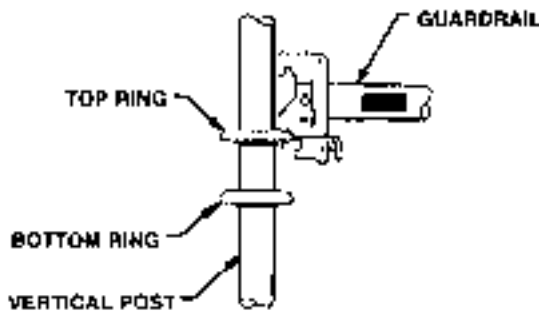
## Scaffold Guardrail Installation

### All Scaffold Locations



Attach all horizontals including guardrails, runners, bearers, side brackets and any truss bearers to both rings of a ring set on vertical posts

### Alternate Location Use When 45" Guard Rail Height is Required \*\*

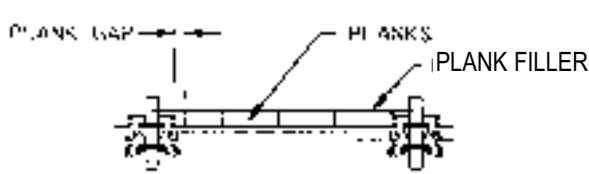


Alternate top ring attachment position for guardrails. This alternate applies to scaffold guardrails only. Other components such as runners and bearers must attach on both top and bottom ring of a ring set

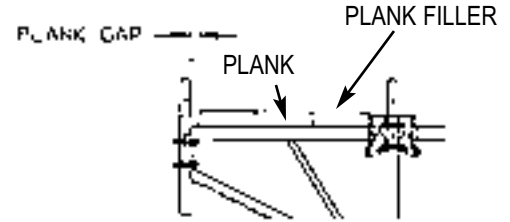
\* Top of platform to top of guardrail

\*\* Required in states such as California

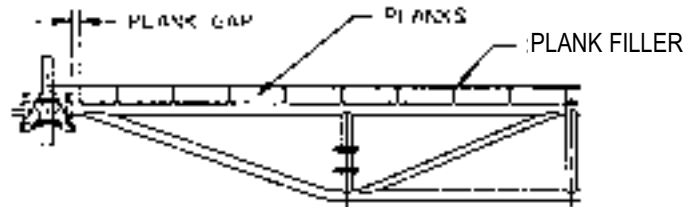
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**BEARERS / RUNNERS  
SBR / SHR**



**KNEE OUTS AND SIDE BRACKETS  
SKO / SBK**

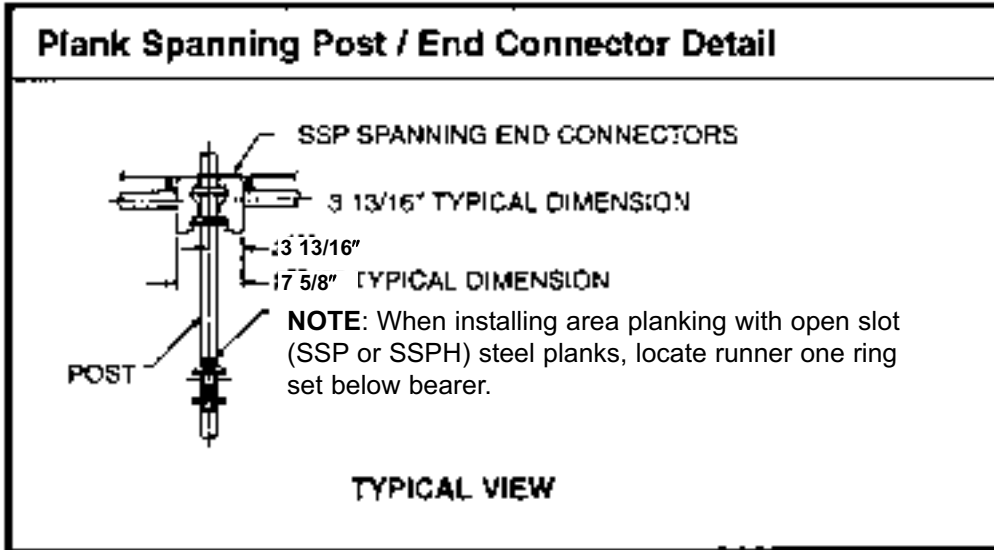


**TRUSSES  
STB**

**Plank and Filler Chart**

Part Number	Safway Systems™ Steel Planks SSP				Safway Duraplank™ FSPH & SSPH and Wood S4S				19-1/4" Platform					
	NO. of SSP-Planks (9" Wide)	Plank Gap (One Side)* (IN)	NO. and Size of SPF-Fillers				NO. of SSPH-, FSPH-Planks (9-1/4" wide or wood SSL)	Plank Gap (One Side)* (IN)	NO. and Size of SPF-Fillers				NO. of 19-1/4" decks	Plank (One Side) (IN)
			SPF-18	SPF-2	SPF-3	SPF-45			SPF-18	SPF-2	SPF-3	SPF-45		
SBR-2														
SBR-33	2	7 3/8					2	7					1	6 1/2
SBR-3	3	1 3/8			1		3	13/16			1			
SBR-42	3	7 3/8	1	1			3	6 13/16	1	1				
SBR-45	4	1 3/8				1	4	5/8				1		
SBR-4	4	4 3/8		2			4	3 5/8		2			2	1 7/8
SBR-54	5	1 3/8	1		1		5	7/16	1		1		2	7 7/8
SBR-5	5	7 3/8		1	1		5	6 7/16		1	1			
STB-6	7	1 3/8			2		7	1/16			2		3	6 5/8
STB-7	8	4 3/8		2	1		8	2 7/8		2	1			
STB-8	9	7 3/8		1	2		9	5 11/16		1	2			
STB-9	11	1 3/8			3		10	8 1/2			3		5	4 1/2
STB-10	12	4 3/8		2	2		12	2 1/8						
STB-12	15	1 3/8			4		14**	7 3/4					7	1 5/8
STB-14	17	7 3/8		1	4		17**	4 3/16					8	6 3/8
STB-16	20	4 3/8		2	4		20**	5/8						
STB-18	23	1 3/8			6		22**	6 1/4						
SBK-2	2	1 3/16		1			1	11/16					1	1 1/2

\*Plank Gaps larger than 6" can be filled with one additional SSP6 (applies only when using SSP or SSPH planks)  
 \*All scaffold platforms must be a minimum of 18" wide  
 \*Dark Shaded areas in above chart indicate plank fillers are not standard/applicable.  
 \*Light shaded areas in above chart indicate platform gaps greater than 9-1/2". These platforms are not recommended as work platforms.  
 \*GAP: Indicates differences between length of the horizontal member and available platform width in inches.  
 \*\*Consult Safway Engineering for plank fillers on the following trusses: STB-12, STB-14, STB-16 and STB-18.



### 2 x 10 (Nominal) Wood Plank Chart. Planks Installed at Angles to Bearer Member

Part Number	Number of Planks	Maximum Angle
SBR33	2	A = 37°
SBK33	2	A = 45°
SBR3 / SKO3	2	A = 45°
SBK3	3	B = 22°
SBR42	3	B = 32°
SBR45 / SKO45	3	B = 38°
SBR4	3	B = 43°
SBR4	4	C = 18°
SBR54	4	A = 33°

NOTE: Angles shown are determined with 9 1/4" theoretical plank width.



The previous pages illustrate the plank / end connector clearance when a bearer member is perpendicular to platform run. This clearance diminishes when the bearer member intersects the platform at an angle. Refer to the chart at left to determine the maximum bearer / platform angle for 2,3,&4 plank wide platforms, also see example below

#### EXAMPLE: CIRCULAR SCAFFOLD

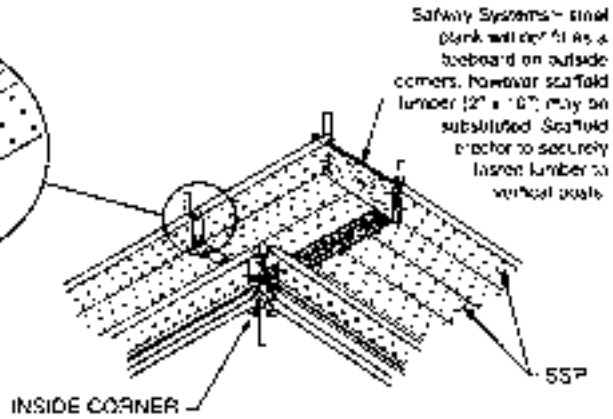
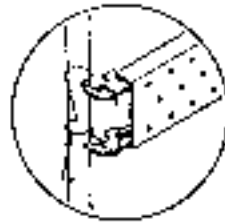




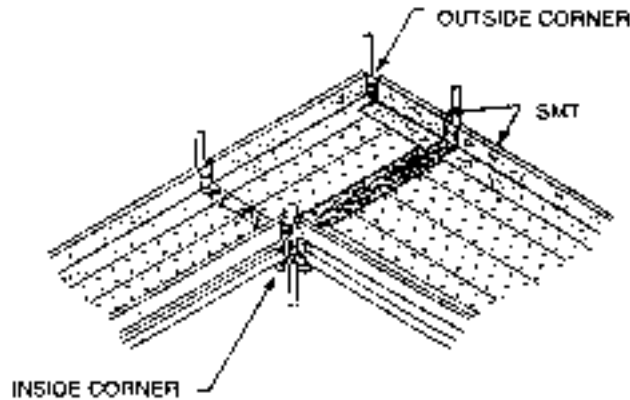
### Typical Toeboard Arrangements

**STEEL PLANK (SSP) WITH STEEL PLANK CLIP (SSPC)**

When steel planks are used as toeboards they should be fastened to vertical posts with Safway Systems™ steel plank clips (SSPC).



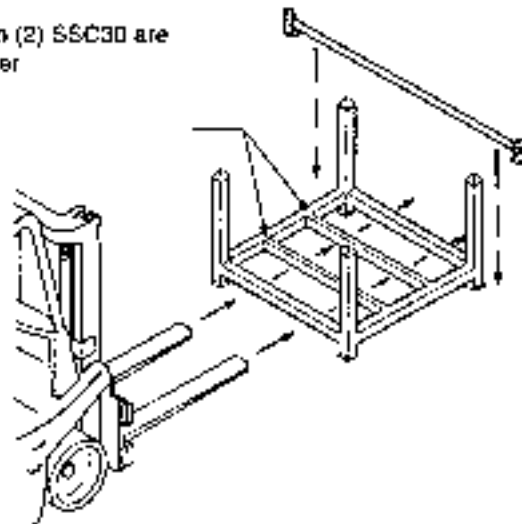
**SAFWAY SYSTEMS™ METAL TOEBOARDS (SMT)**



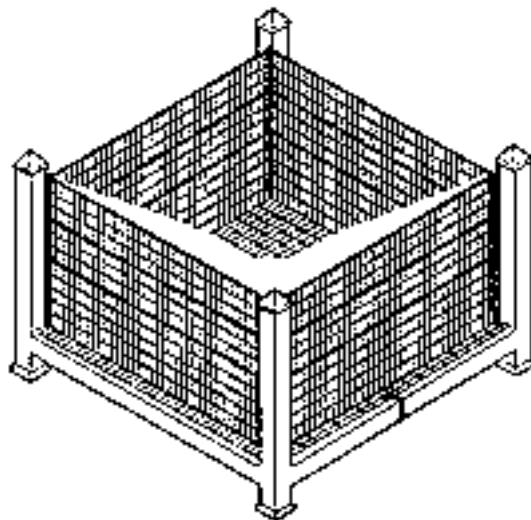
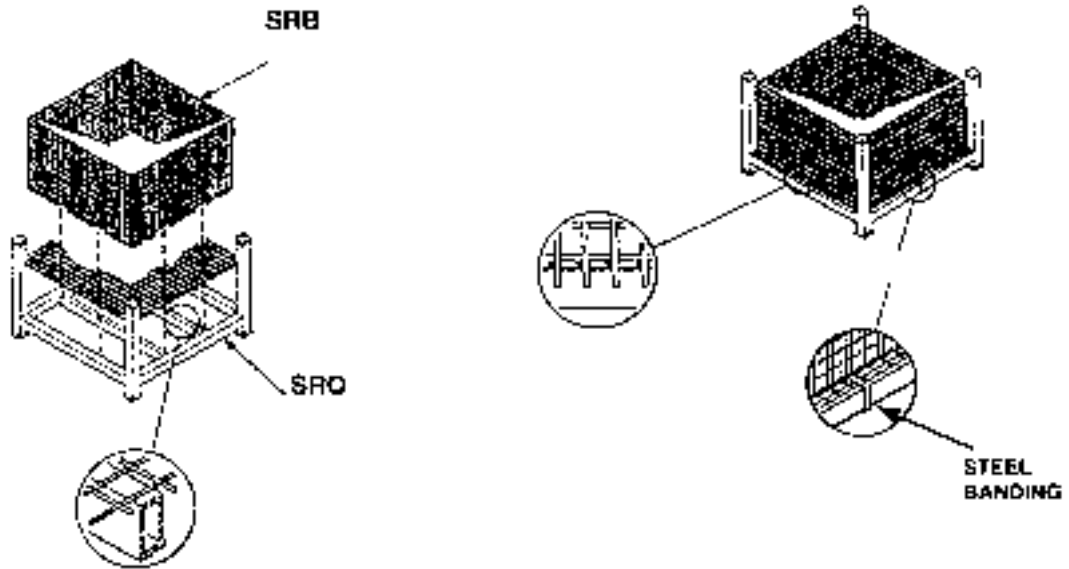
### Rack Component Capacity

Part Number	Storage Rack Capacities
SSC30	250*
SVP	125
SBR	100
SHR	100
SHD / SDW	100
SDC	150
STR7	12
SBF5/6	30
STB6/7	50
STB9/10	25
STB12/14	25
STB16/18	25

\*Capacity when (2) SSC30 are coupled together



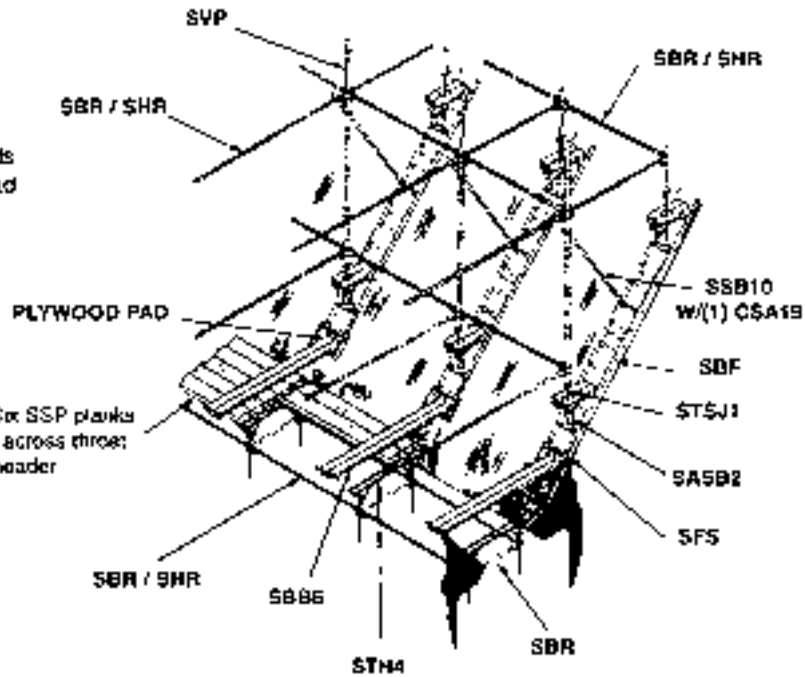
### Safway Systems™ Storage Rack / Bin Assembly



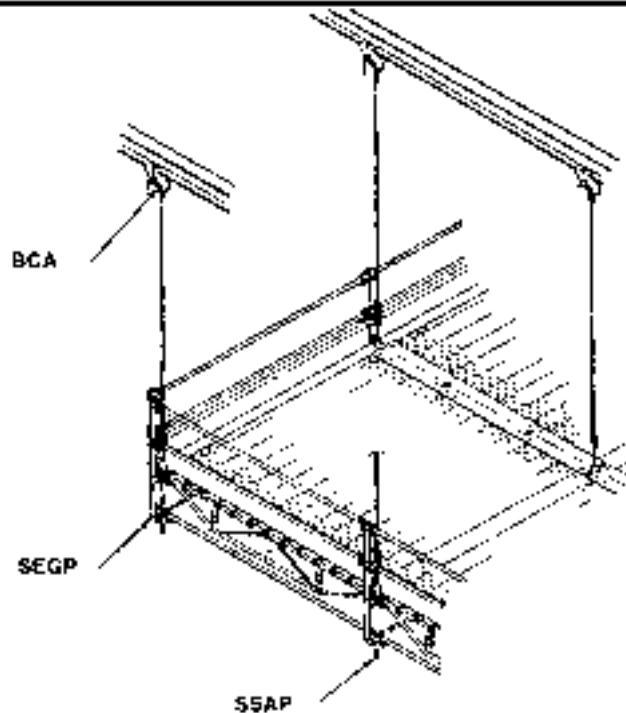
**Boiler Throat Closure & Founding System (Typical Setup)**

**NOTE:** Size of SBR & SHR varies and depends on size of boiler and load requirements

**NOTE:** Six SSP planks needed across throat header



**Safway Systems™ Suspended Adjustable Platform**



## CHAPTER D

### *Introduction Tying & Bracing*

Quantities and location of ties, guys and braces will vary depending upon the scaffold size, weight, shape and load conditions. The following general guidelines indicate minimum Safway requirements and are not all inclusive. When designing scaffolds with unique configurations or special loading conditions, consult with Safway engineering or a professional structural engineer familiar with scaffold design prior to design finalization.

When designing a square or rectangular scaffold, Safway recommends a horizontal diagonal (SHD) be included in the base design. This diagonal will aid the erector in providing a square scaffold as well as assuring hook on plank and deck will fit properly.

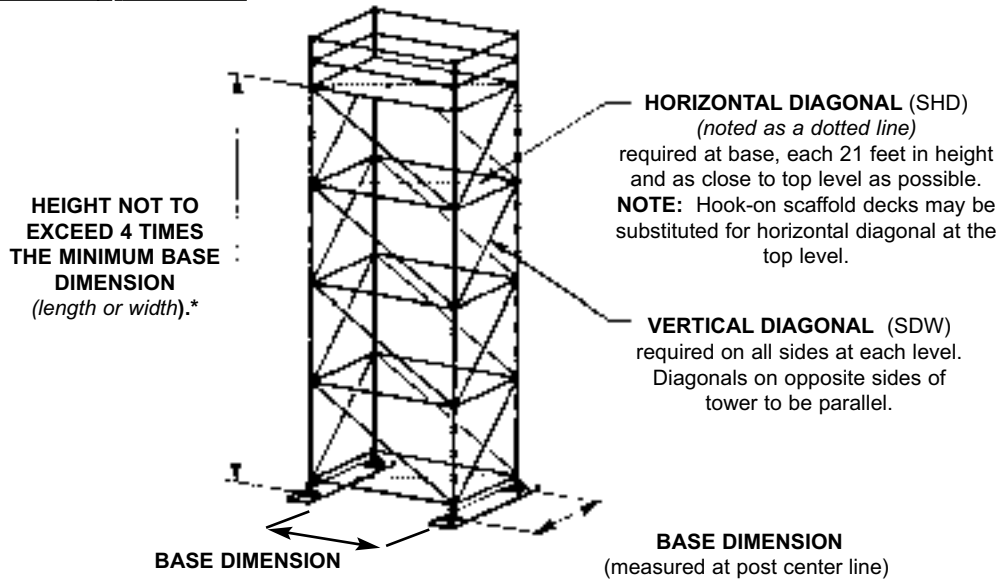
Safway tube and clamp components may be substituted for Safway Systems™ Scaffold bracing members or horizontal diagonal members. When doing so the load capacity of these components and their effect on the completed scaffold must be considered.

Assure ties, stand-offs or guys are located at runner and bearer levels only.

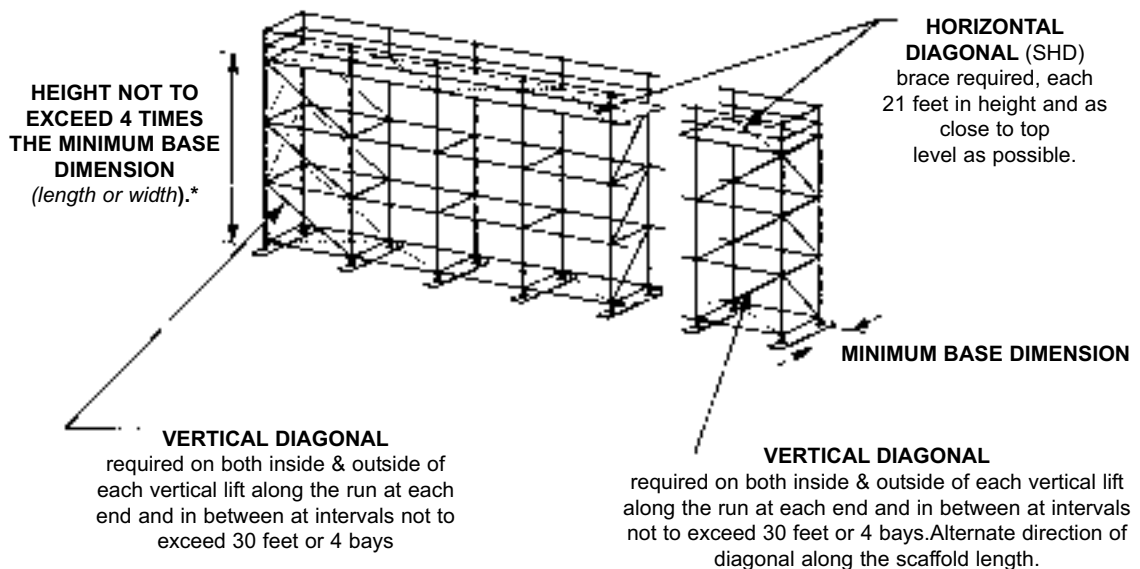
**NOTE: Proper access and platform toeboards are required on all scaffolds. These items have been eliminated from the illustrations in this chapter for clarity purposes only.**

## Free Standing Scaffold (Where ties or guy wires are not required)

### SINGLE BAY BRACING



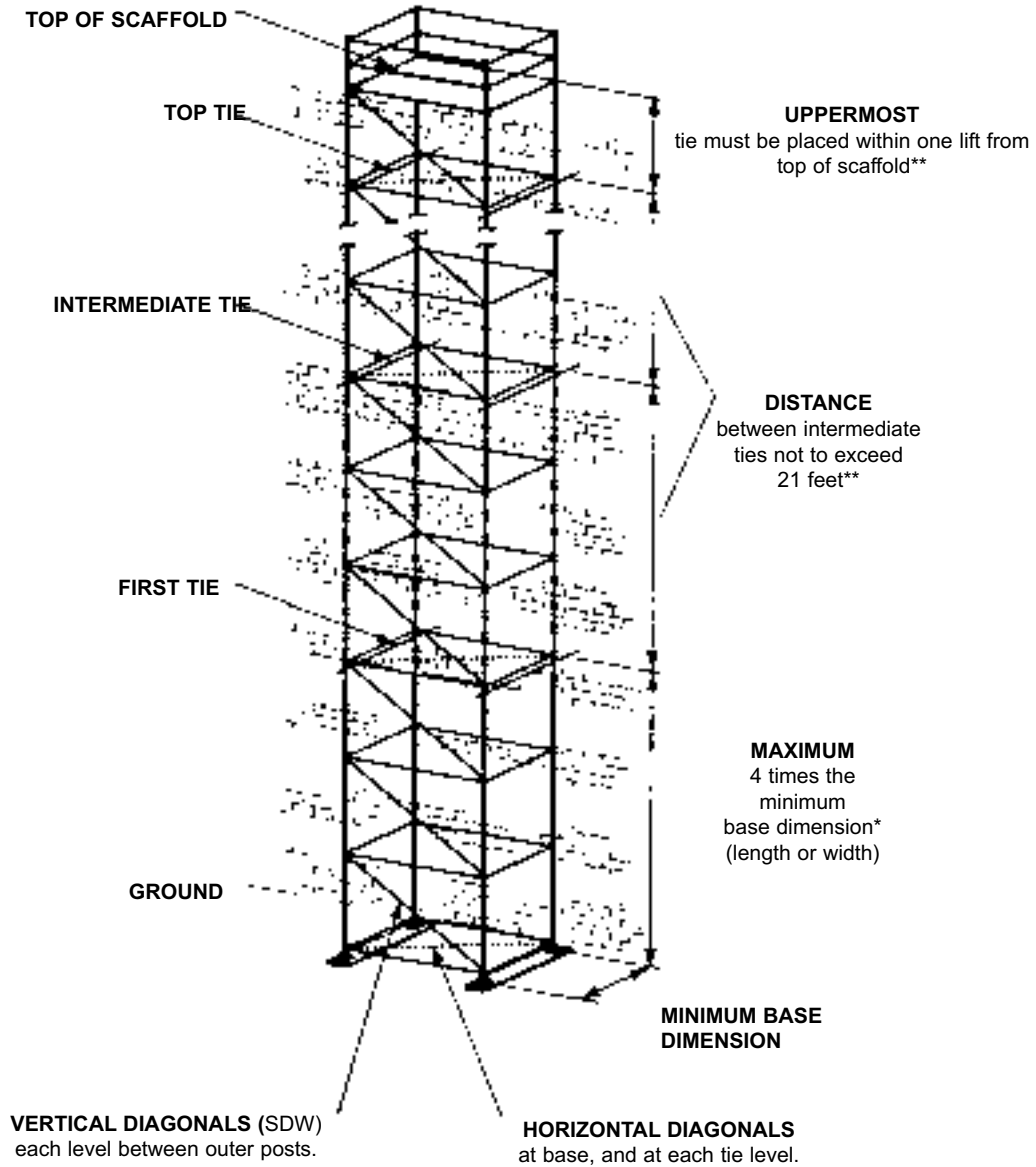
### MULTI-BAY BRACING



\* Three times the minimum base dimension (length or width) in California and some other states.  
Vertical diagonal must be installed on posts at bearer runner connections.

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## Scaffold Tower Tying & Bracing (Single Bay)



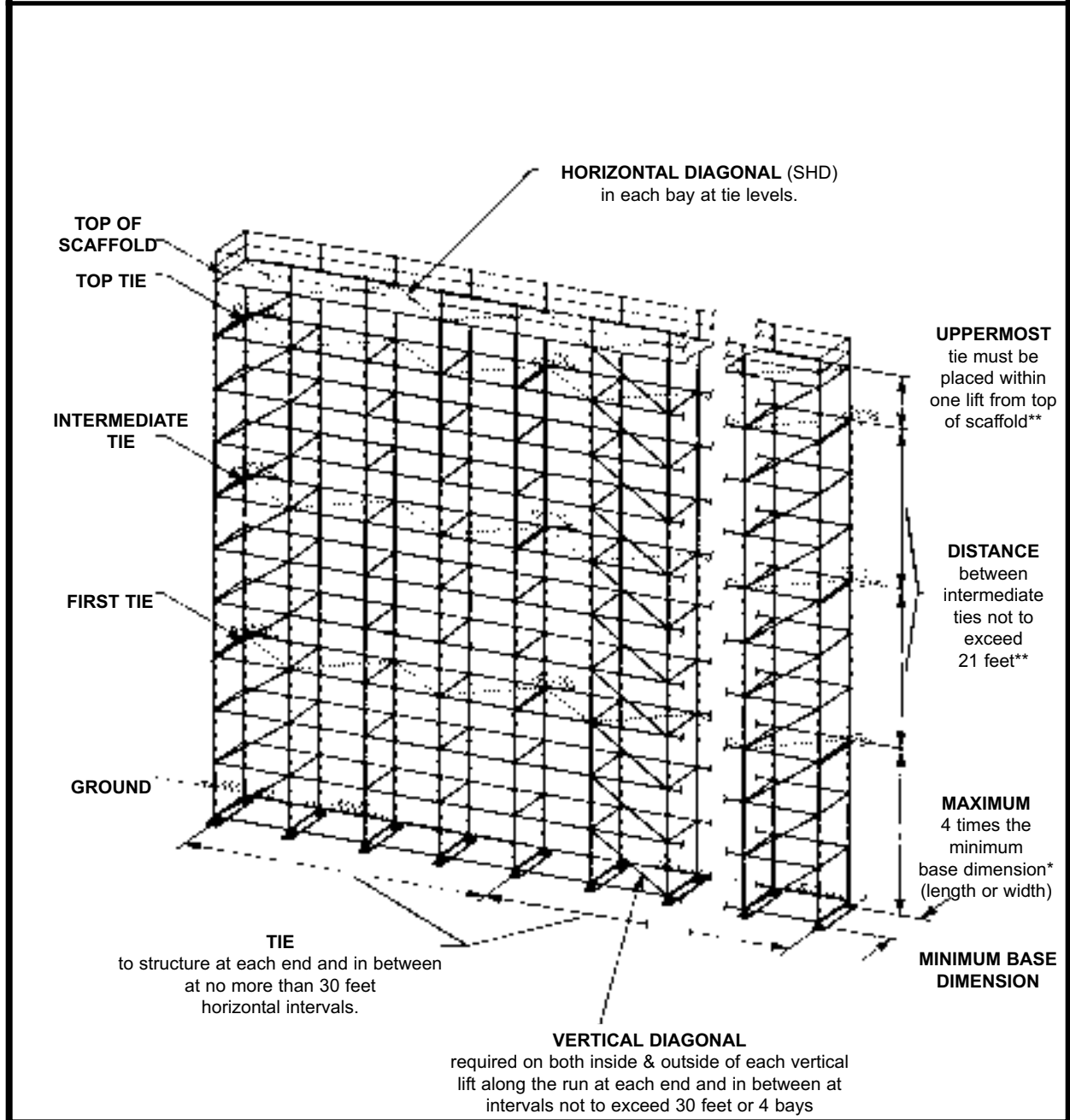
**NOTE:** All ties must be placed as close to horizontals as possible.

\* Three times the minimum base (length or width) in California and some other states.

\*\* Where field conditions preclude ties at these levels follow Safway Systems™ Scaffold Safety Guidelines.

Vertical diagonal must be installed on posts at bearer runner connections.

## Scaffold Tying & Bracing (Multi-bay)

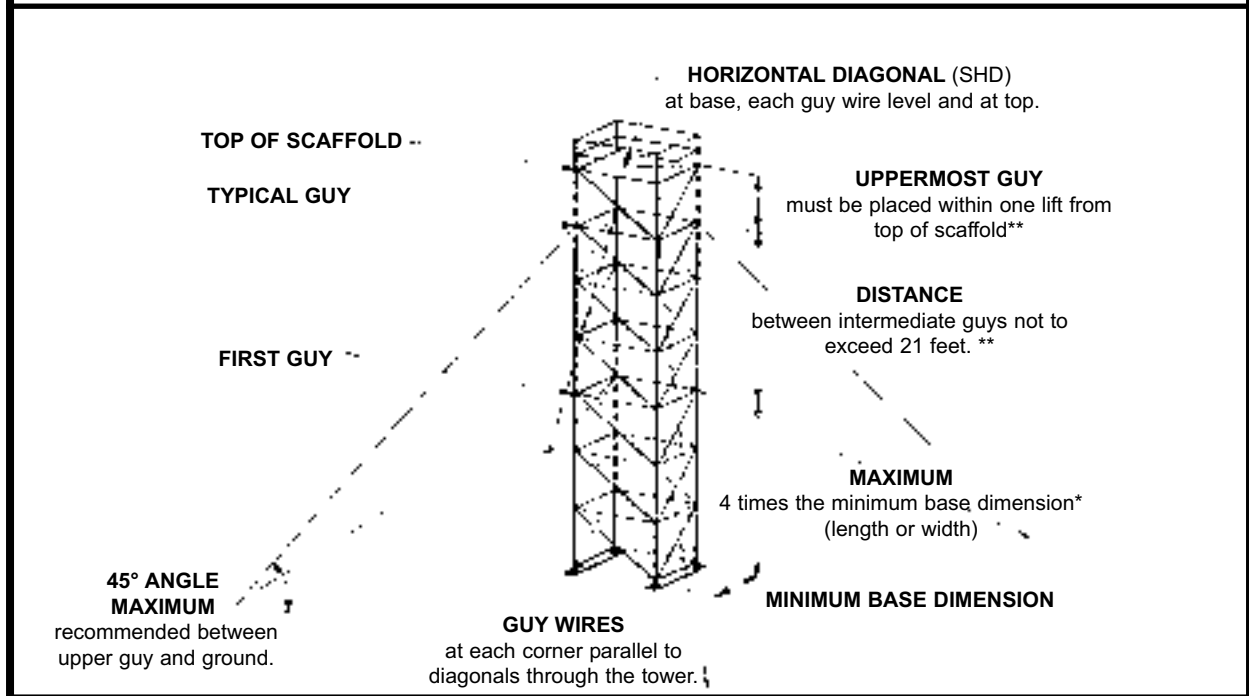


**NOTE:** All ties must be placed as close to horizontals as possible.

\* Three times the minimum base dimension in California and some other states.

\*\* Where field conditions preclude ties at these levels follow Safway Systems™ Scaffold Safety Guidelines. Vertical diagonal must be installed on posts at bearer runner connections.

## Guy Wire Restrained Scaffold (Tower)



Extreme care must be taken when designing a tower guyed from below. The applied vertical and horizontal loads and wire pre-tensioning loads must be determined and included in the scaffold design. Consult Safway Engineering or a structural Professional Engineer.

All ties must be placed as close to horizontals as possible.

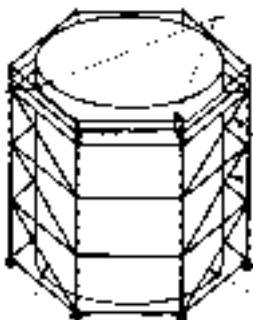
\*Three time the minimum base dimension (length or width) in California and some other states.

\*\*Where field conditions preclude tie at these levels follow Safway Systems™ Scaffold Safety Guidelines.

Vertical diagonal must be installed on posts at bearer runner connections.

## Circular Scaffold Tying & Bracing

### SINGLE POST

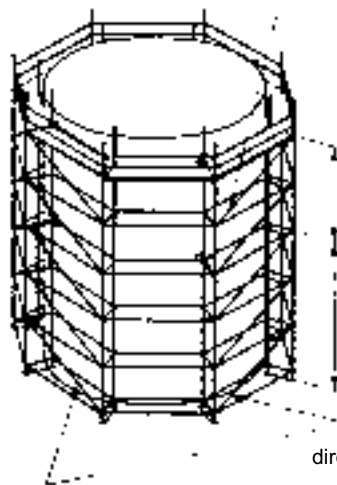


**STAND-OFF**  
or tie to each second post along vessel perimeter each 21 feet in height max. intervals

**VERTICAL DIAGONALS (SDW)**  
each second bay all levels. *Do not* alternate diagonal direction vertically.

**ALTERNATE**  
direction of diagonals in adjacent braced bays.

### DOUBLE POST



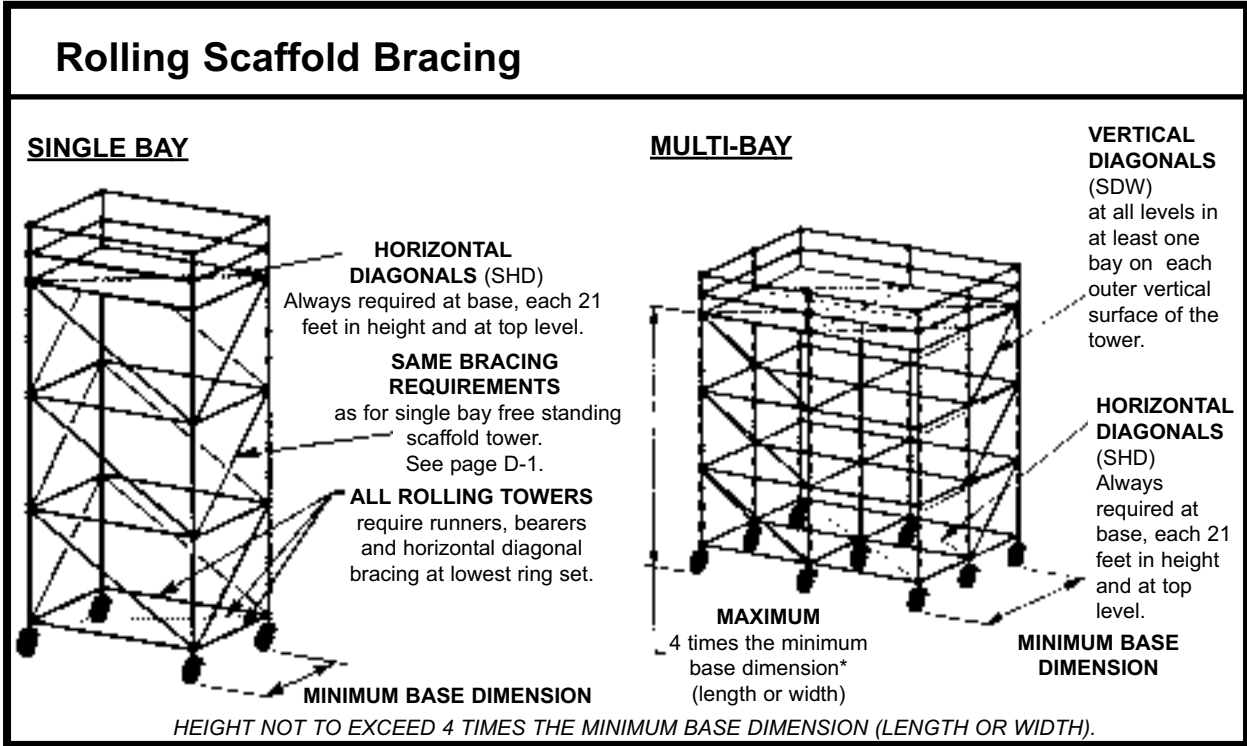
**VERTICAL DIAGONALS (SDW)**  
each second bay all levels on scaffolds with eight or less bays, and each third bay for larger scaffolds. *Do not* alternate diagonal direction vertically

**STAND-OFF**  
or tie to each second post along vessel perimeter each 21 feet in max. intervals.

**ALTERNATE**  
direction of diagonals in adjacent braced bays.

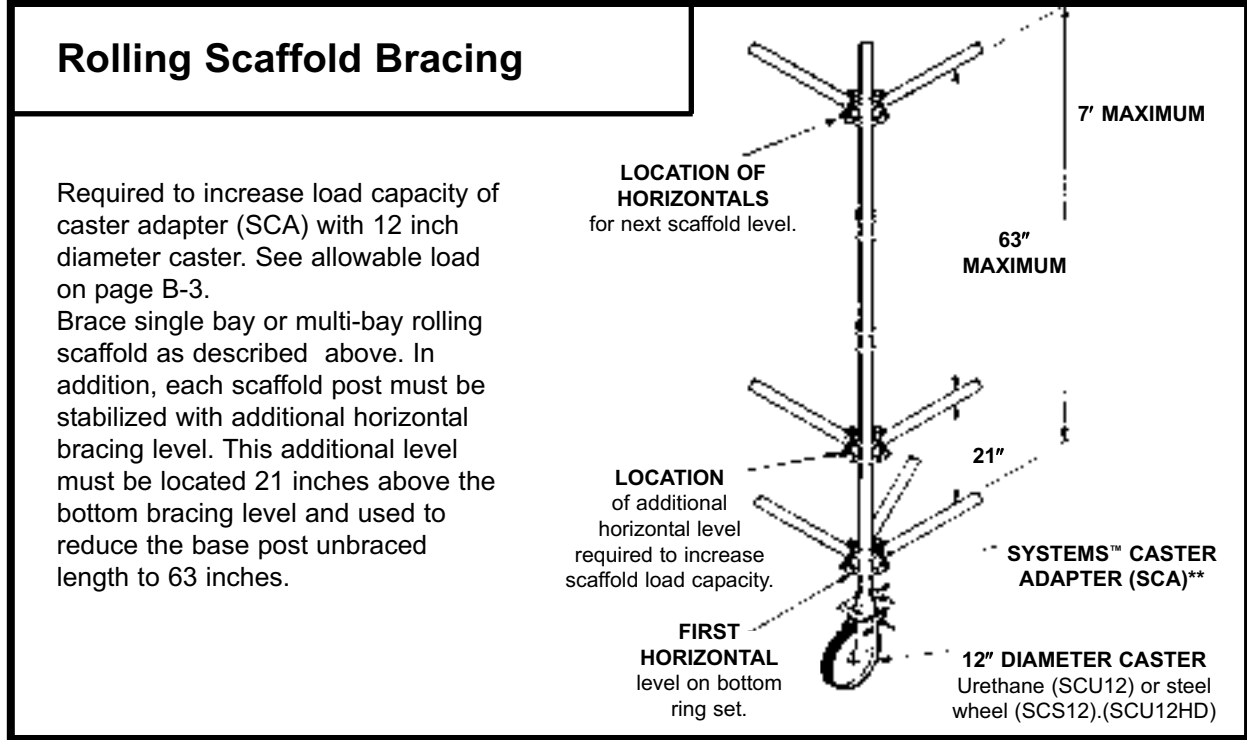
Used with permission of Safway Services, Inc.





Used with permission of Safway Services, Inc.

\* Three times the minimum base dimension in California and some other states. Always check local code.



\*\*Safway Systems™ adjustable caster adapter (SACA) can not be used for this application. Always check local code. Vertical diagonal must be installed on posts at bearer runner connections.

## Scaffolds with Knee-Out Brackets Bracing & Tying

Allowable concentrated load for knee-out brackets (SKO) are shown on page B-8. Loads in table below may be used when knee-out brackets are installed in symmetrical scaffolds as shown in figure 1 and 2, and in non-symmetrical scaffolds when auxiliary bracing is installed to prevent overturning and racking. See figure 3.

Bracing & Tying		
Part Number	SKO3	SKO45
Effective Width	3'	3' - 9"
"P" Allowable		
Concentrated Load	3325 lb.	2650 lb.

Non-symmetrical assemblies similar to figure 3 require a stand-off at (A) and a tie-in at (B) on each frame line with knee-out brackets. In addition, vertical diagonals (SDW) may be required in each frame plane. Contact Safway Engineering or a Structural Professional Engineer familiar with scaffold design prior to erecting such non-symmetrical scaffolds.

### SYMMETRICAL

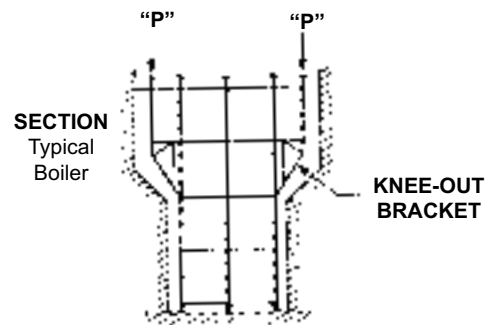


FIGURE 1

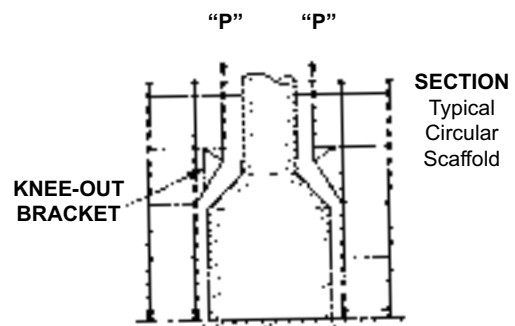


FIGURE 2

### NON SYMMETRICAL

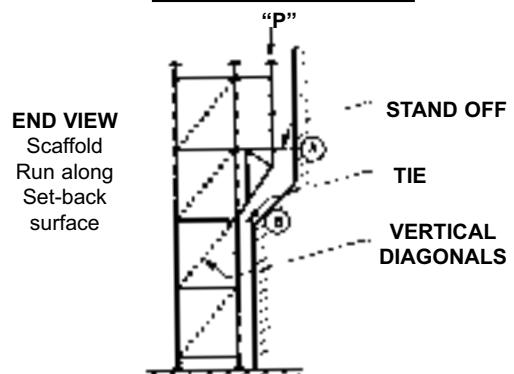


FIGURE 3

**NOTE: All Scaffolds with knee-out brackets also require bracing and tying as shown in applicable section of this chapter.**