SafLock System Scaffold®
Technical Manual

BRAND SAFWAY™

⚠ WARNING

THIS DOCUMENT 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 DOCUMENT 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 COMPLETE ASSEMBLY MUST BE CONSIDERED. ALL LOADS ON INDIVIDUAL MEMBERS ARE TRANSMITTED TO OTHER COMPONENTS AND ULTIMATELY TO THE GROUND. COMPENSATION FOR THESE CUMULATIVE VERTICAL AND HORIZONTAL LOADS MUST BE PROVIDED FOR EACH INDIVIDUAL SCAFFOLD APPLICATION.

⚠ WARNING

SERIOUS INJURY OR DEATH CAN RESULT FROM YOUR FAILURE TO FAMILIARIZE YOURSELF, AND COMPLY WITH ALL APPLICABLE SAFETY REQUIREMENTS OF PROVINCIAL REGULATIONS BEFORE ERECTING, USING OR DISMANTLING THIS SCAFFOLD.

⚠ WARNING

FALL ARREST EQUIPMENT ATTACHED TO SCAFFOLD MAY NOT PREVENT SERIOUS INJURY OR DEATH IF A FALL OCCURS.

Conversion Chart

This manual is based on metric dimensions. All Imperial dimensions have been rounded to the nearest inch for reference purposes only. When adding dimensions, use the metric dimension.

Below are the recommended Conversion Factors.

Metric Unit	Imperial Unit	Conversion Factor
Millimeters (mm)	Inch (in)	0.03937
Meters (m)	Feet (ft)	3.28084
Kilograms (kg)	Pounds (lb)	2.20462
Kilo newtons (kN)	Pounds (lb)	224.8089
Kilo newton/ meter² (kN/m²)	Pound/foot² (psf)	20.8854

Converting Metric to Imperial

(Metric Unit) × (Conversion Factor) = (Imperial Unit)

Example: 15 mm × 0.03937 = 0.59 in

Converting Imperial to Metric

(Imperial Unit) ÷ (Conversion Factor) = (Metric Unit)

Example: 10 ft ÷ 3.28084 = 3.05 m

Symbol Legend

℄ Denotes Centerline of Horizontals or Verticals

□ Material

○ Label

This document is subject to periodic revision and updating. Before designing scaffolds with SafLock System Scaffold® components, contact BrandSafway to be sure you are using the most current revision.

Contact BrandSafway for all scaffold loading not covered in this document.

THIS DOCUMENT IS NOT TO BE REPRODUCED IN PART OR IN WHOLE.

All drawings in this guide are for illustrative purposes only. This guide is intended for general information purposes only. Because of the many variables which affect the performance of the product line, some of the information in this brochure may not apply. For specific applications, contact BrandSafway.

Note: All scaffolds shall be erected, modified and dismantled only under the supervision of a Competent Person. Erection, use, maintenance and disassembly must conform to current manufacturer's instructions as well as all federal, state, provincial and local regulations. Copies of complete Safety Guidelines for these and other products are available from BrandSafway or through the Safway Literature Ordering Site.

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Component Identification

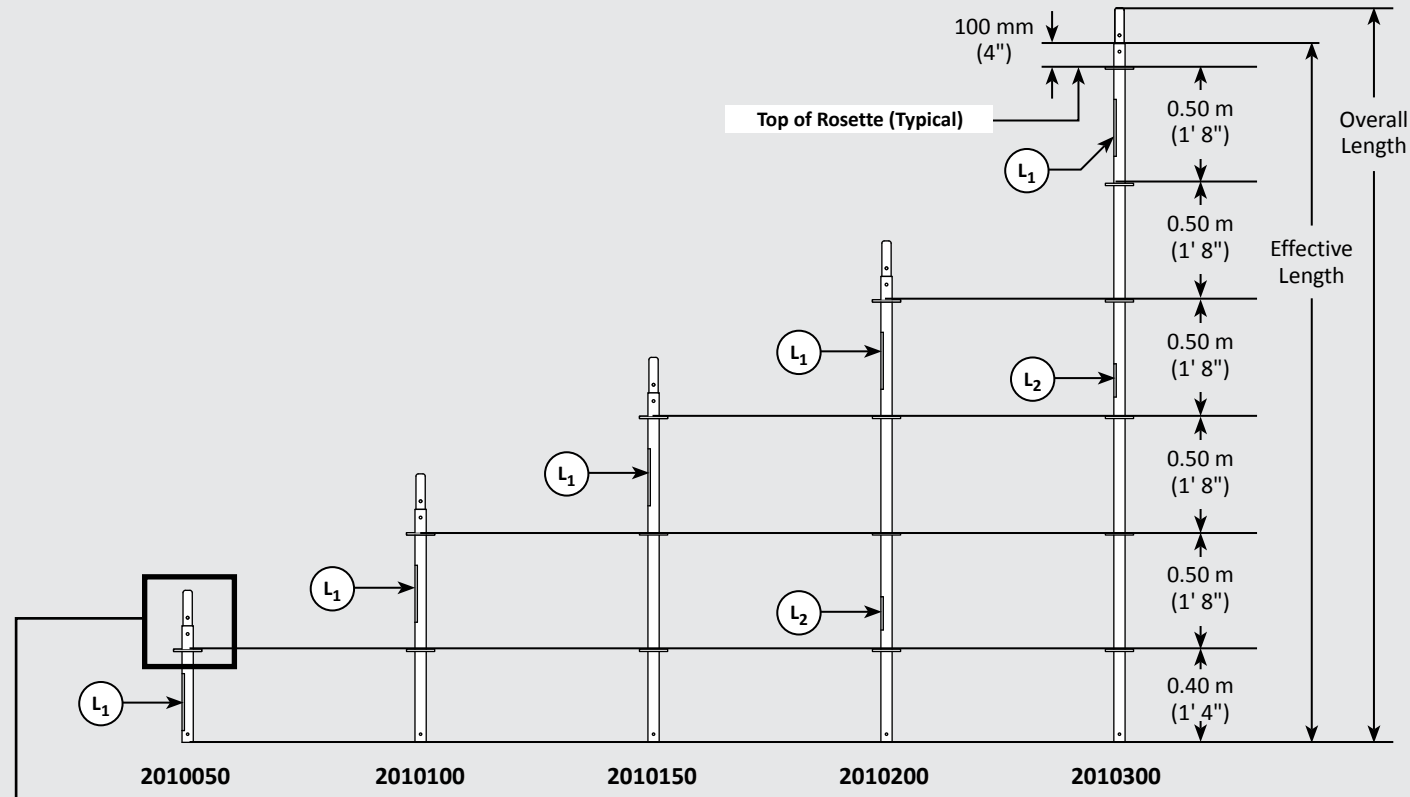
Section 1

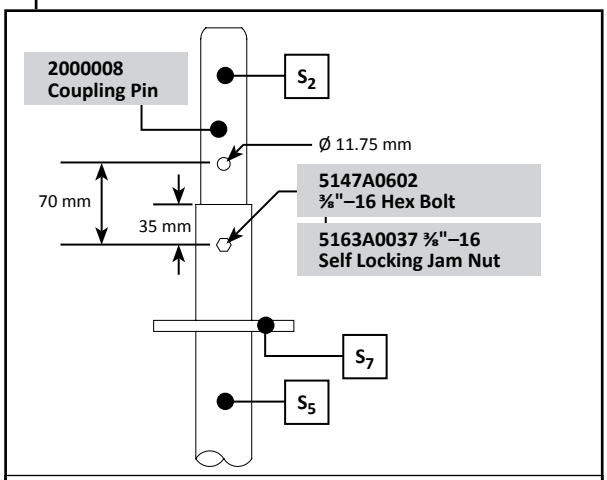
This section contains BrandSafway SafLock System Scaffold® component illustrations, dimensions and weights to be used for visual part recognition and dimensional identification. The noted weights may be used for shipping weight and/or total shipping weight calculations.

Component Identification

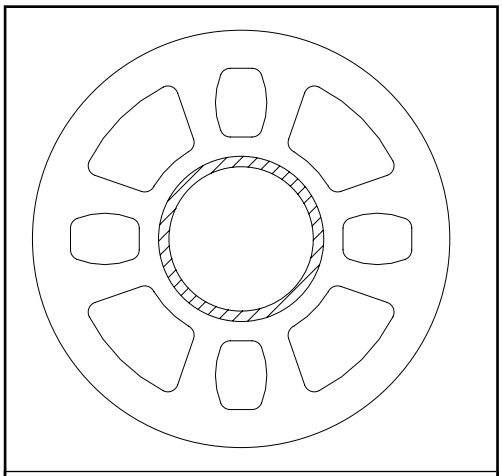
Standards

Part No.	Effective Length		Overall Length		Weight		Label	Material
	m	in	m	in	kg	lb		
2010300	3.00	9' 10"	3.15	10' 4"	14.5	31.5	L_1, L_2, L_3	S_2, S_5, S_7
2010200	2.00	6' 7"	2.15	7' 1"	9.5	20.9	L_1, L_2	S_2, S_5, S_7
2010150	1.50	4' 11"	1.65	5' 5"	7.5	16.5	L_1	S_2, S_5, S_7
2010100	1.00	3' 3"	1.15	3' 9"	5.0	11.0	L_1	S_2, S_5, S_7
2010050	0.50	1' 8"	0.65	2' 2"	2.7	6.0	L_1	S_2, S_5, S_7





Standard Pin (Detail View)

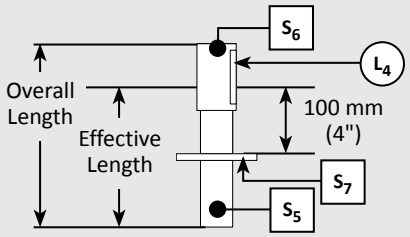


Rosette (Detail View)

Component Identification

Base Collar

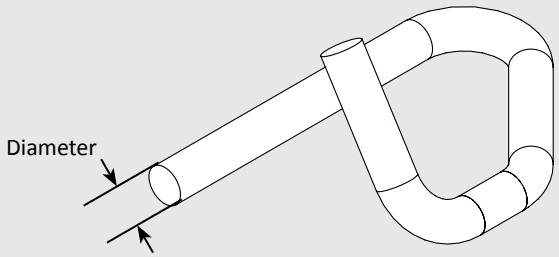
Part No.	Effective Length		Overall Length		Weight		Label	Material
	m	in	m	in	kg	lb		
2000005	0.21	8"	0.28	11"	1.9	4.1	L_4	S_5, S_6, S_7



2000005

Pigtail Pin

Part No.	Diameter		Fits Tube		Weight	
	mm	in	mm	in	kg	lb
2000006	9.5	⅜"	48.3	1.9	0.1	0.3

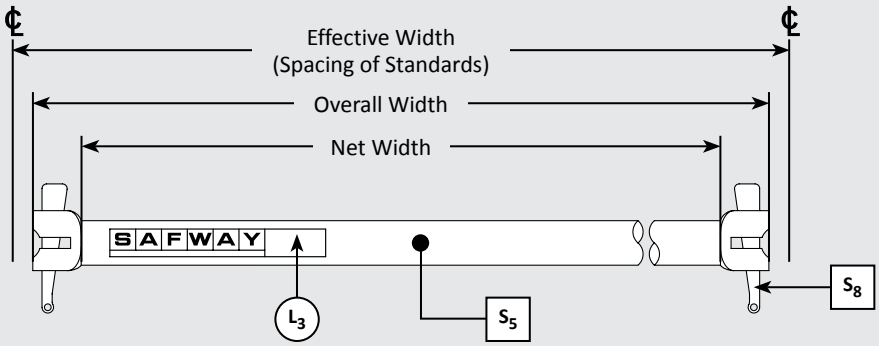


2000006

Component Identification

Ledgers

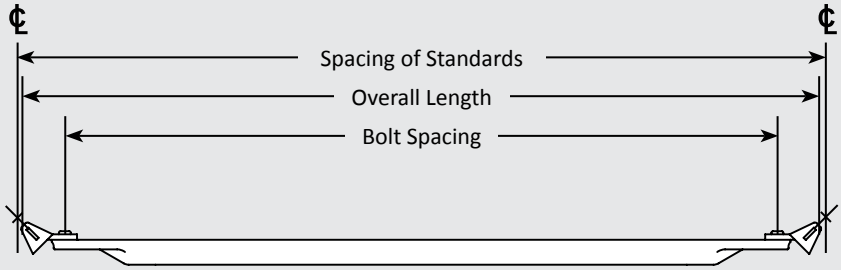
Part No.	Effective Width		Overall Width		Net Width		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2020305	3.05	10' 0"	3.00	9' 10"	2.90	9' 6"	11.9	26.2	L_3	S_5, S_8
2020213	2.13	7' 0"	2.08	6' 10"	1.98	6' 6"	8.6	18.9	L_3	S_5, S_8
2020157	1.57	5' 2"	1.52	5' 0"	1.42	4' 8"	6.6	14.5	L_3	S_5, S_8
2020115	1.15	3' 10"	1.10	3' 7"	1.00	3' 3"	5.0	11.0	L_3	S_5, S_8
2020065	0.65	2' 2"	0.60	2' 0"	0.50	1' 8"	3.3	7.2	L_3	S_5, S_8



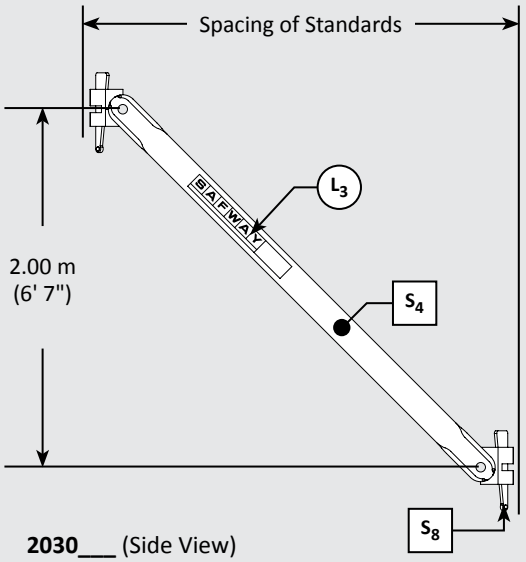
2020___

Bay Braces

Part No.	Standard Spacing		Shipping Length		Bolt Spacing		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2030305	3.05	10' 0"	3.68	12' 1"	3.52	11' 6"	10.6	23.4	L_3	S_4, S_8
2030213	2.13	7' 0"	2.96	9' 9"	2.51	9' 3"	8.9	19.5	L_3	S_4, S_8
2030157	1.57	5' 2"	2.60	8' 7"	2.45	8' 0"	7.8	17.2	L_3	S_4, S_8
2030115	1.15	3' 10"	2.37	7' 9"	2.23	7' 4"	7.4	16.2	L_3	S_4, S_8



2030___ (Plan View)

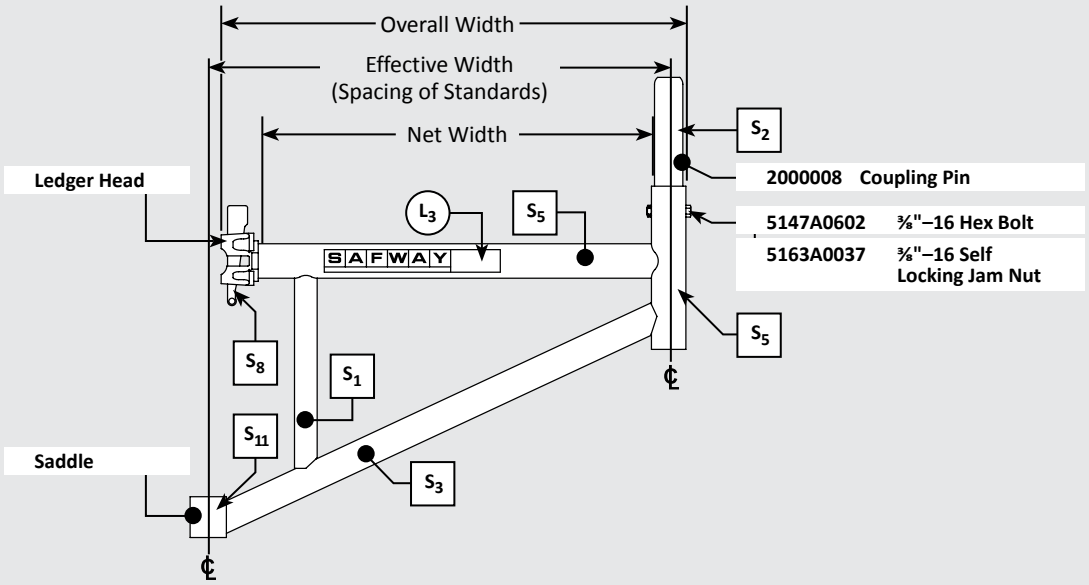


2030___ (Side View)

Component Identification

Side Brackets with Single Ledger Head

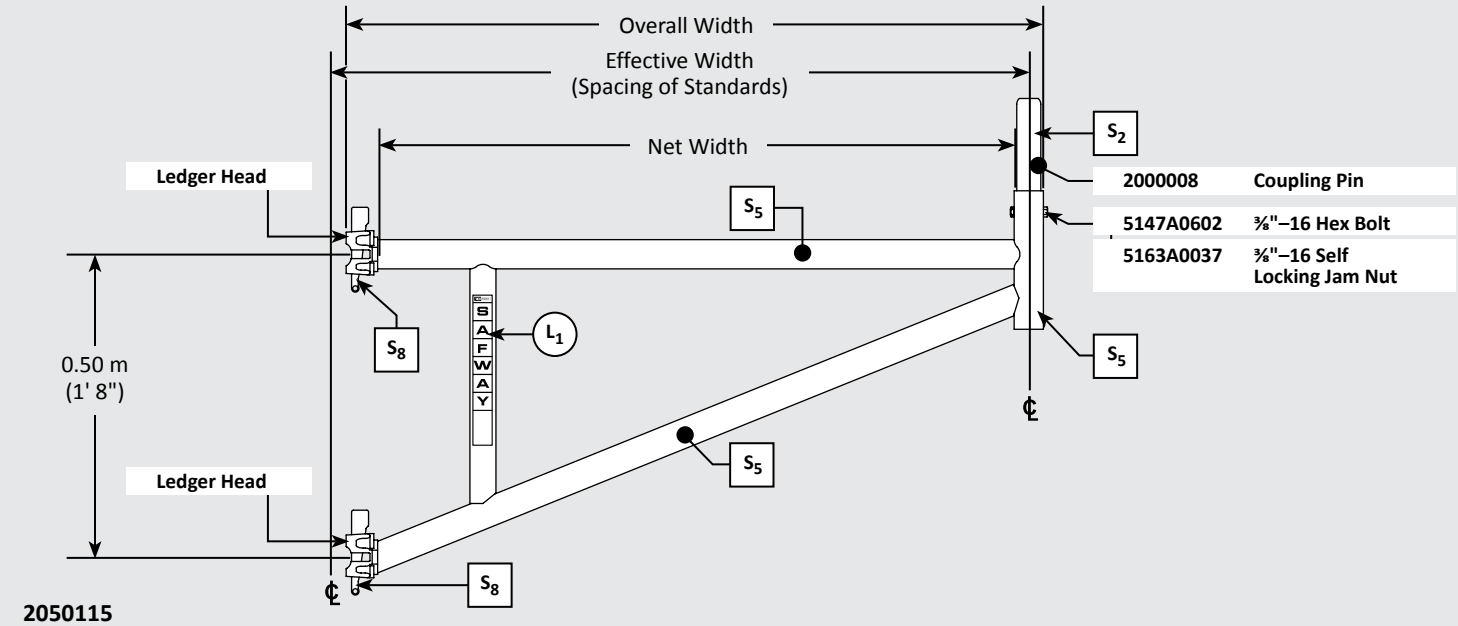
Part No.	Effective Width		Overall Width		Net Width		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2050088	0.88	2' 11"	0.88	2' 11"	0.80	2' 7"	10.0	22.0	L_3	S_1, S_2, S_3, S_5, S_8, S_{11}
2050065	0.65	2' 2"	0.65	2' 2"	0.55	1' 10"	6.9	15.3	L_3	S_1, S_2, S_3 , S_5, S_8, S_{11}



2050088 / 2050065

Side Brackets with Double Ledger Head

Part No.	Effective Width		Overall Width		Net Width		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2050115	1.15	3' 10"	1.15	3' 10"	1.05	3' 5"	12.2	26.8	L_1	S_2, S_3, S_5, S_8

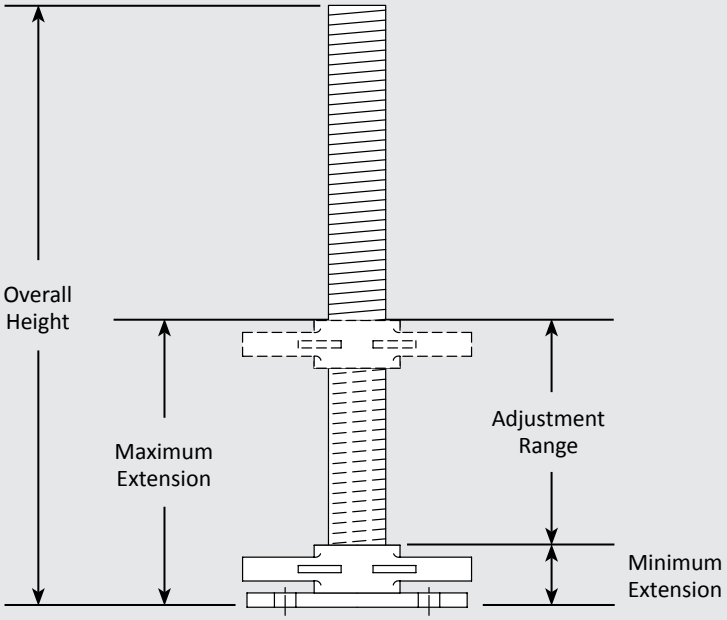


2050115

Component Identification

Hollow Core (Tubular) Screw Jack

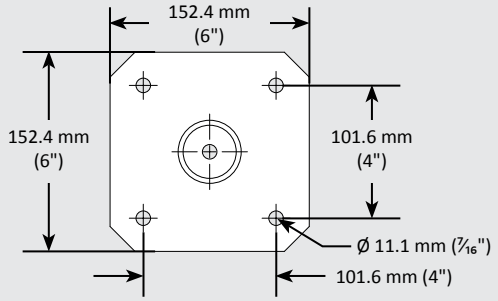
Part No.	Maximum Extension		Minimum Extension		Adjustment Range		Overall Height		Weight	
	m	in	m	in	m	in	m	in	kg	lb
2000002 (STSJ1)	0.36	14"	0.51	2"	0.31	11"	0.53	21"	3.6	8.0



2000002 (STSJ1)

Tube Specifications & Composition

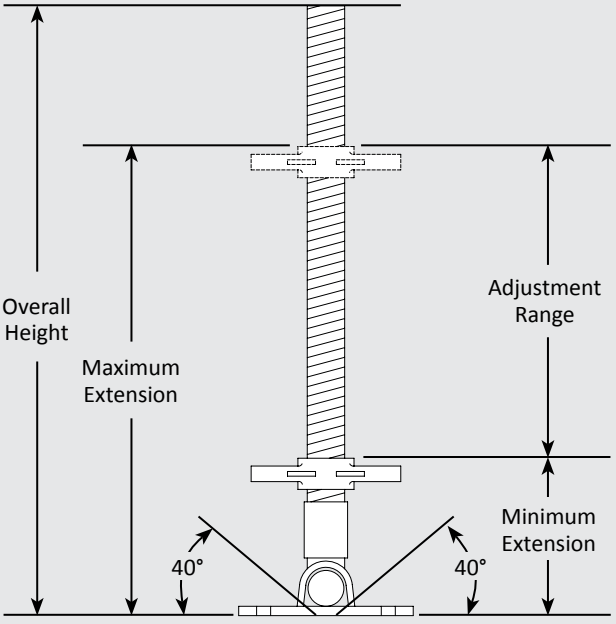
Thread:	Roll Formed; Std. 4 pitch stub ACME threads using 36.25 mm (1") basic major diameter.
Finished OD:	38.1 mm (2")
Base Plate Material:	A 36 Steel Plate
Handle Material:	Cast Steel: AISI 1025
Finish:	Hot Dipped Galvanized



2000002 (Hole Pattern)

Hollow Core (Tubular) Swivel Screw Jack

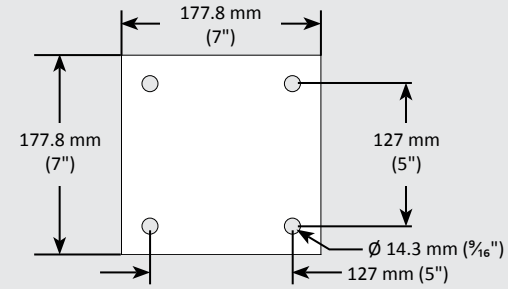
Part No.	Maximum Extension		Minimum Extension		Adjustment Range		Overall Height		Weight	
	m	in	m	in	m	in	m	in	kg	lb
2000004 (SSJ)	0.48	18 13⁄16"	0.16	6 5⁄16"	0.32	12½"	0.62	24½"	7.0	15.4



2000004 (SSJ)

Tube Specifications & Composition

Thread:	Roll Formed; Std. 4 pitch stub ACME threads using 36.25 mm (1") basic major diameter.
Finished OD:	38.1 mm (2")
Base Plate Material:	A 36 Steel Plate
Handle Material:	Cast Steel: AISI 1025
Finish:	Hot Dipped Galvanized Zinc Rich Paint

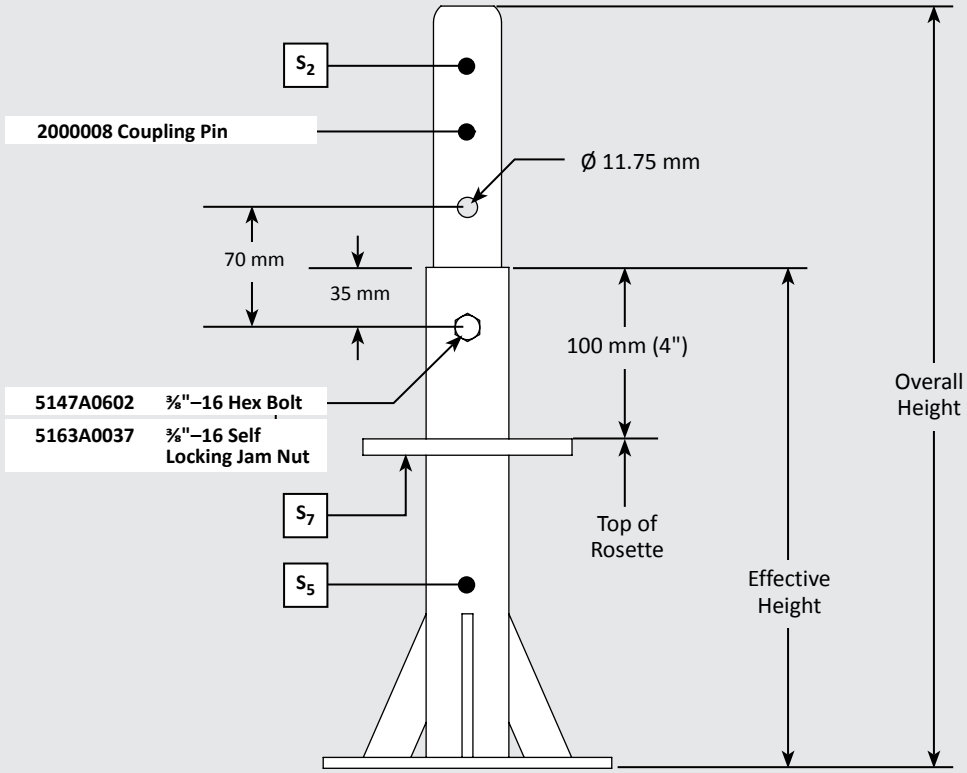


2000004 (Hole Pattern)

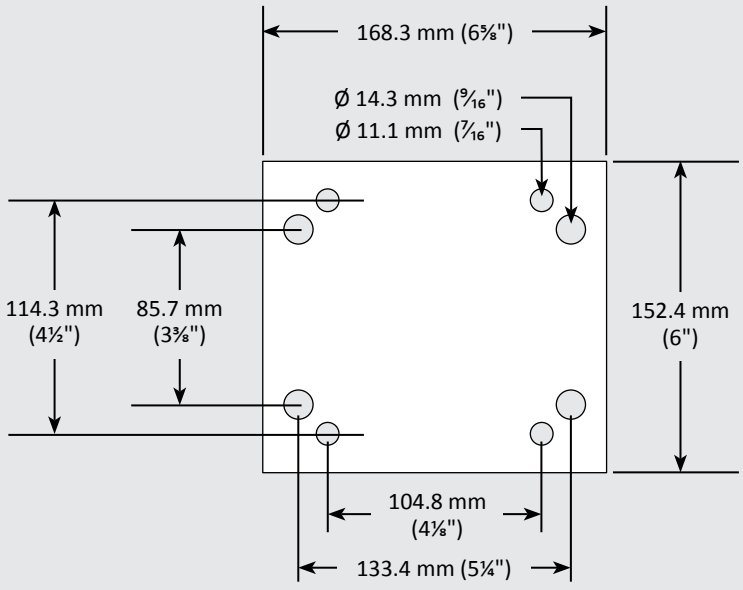
Component Identification

Caster Adapter – Fixed

Part No.	Effective Height		Overall Height		Weight		Material
	m	in	m	in	kg	lb	
2000003	0.29	11½"	0.45	17½"	4.1	9.1	S_2, S_5, S_7



2000003



2000003 (Hole Pattern)

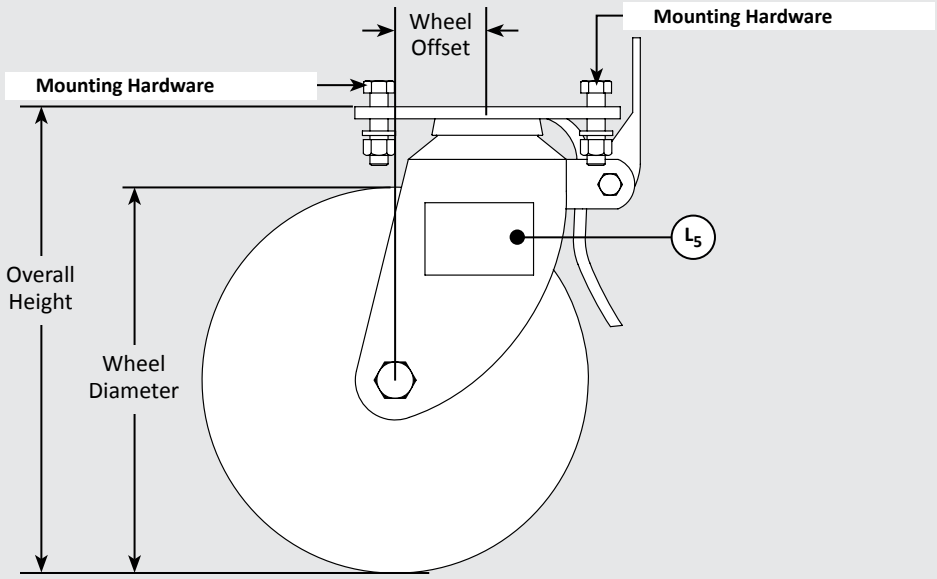
Component Identification

Casters

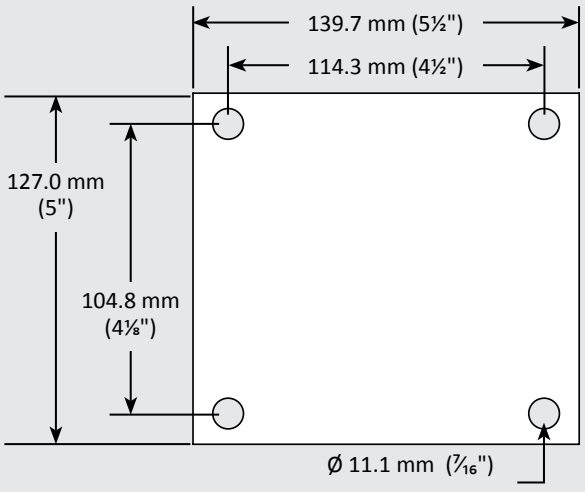
Part No.	Wheel Diameter		Overall Height		Wheel Offset		Wheel Thickness		Tread Material	Weight		Label
	m	in	m	in	m	in	m	in		kg	lb	
2000011	0.20	8"	0.24	9½"	0.05	2"	0.05	2"	Steel	7.0	15.4	L_5
2000012	0.20	8"	0.24	9½"	0.05	2"	0.05	2"	Polyurethane	4.9	10.8	L_5
2000013	0.31	12"	0.37	14½"	0.07	2⅞"	0.07	2⅝"	Cast Iron	16.6	36.7	L_5
2000014	0.31	12"	0.37	14½"	0.07	2⅞"	0.07	2⅞"	Polyurethane	11.4	25.2	L_5

Mounting Hardware

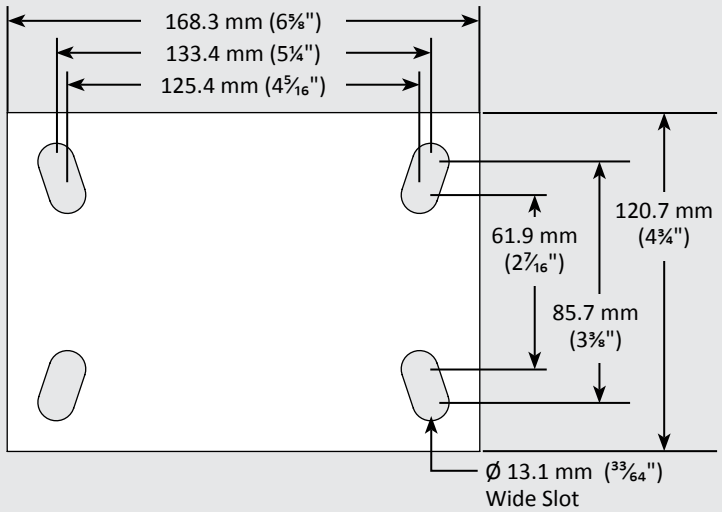
Part No.	Bolt	Nut	Lock Washer
2000011	5143A0601	5163A0001	5182A0001
2000012	5143A0601	5163A0001	5182A0001
2000013	5143A0801	5163A0002	5182A0002
2000014	5143A0801	5163A0002	5182A0002



20000_



2000011 / 2000012 (Hole Pattern)

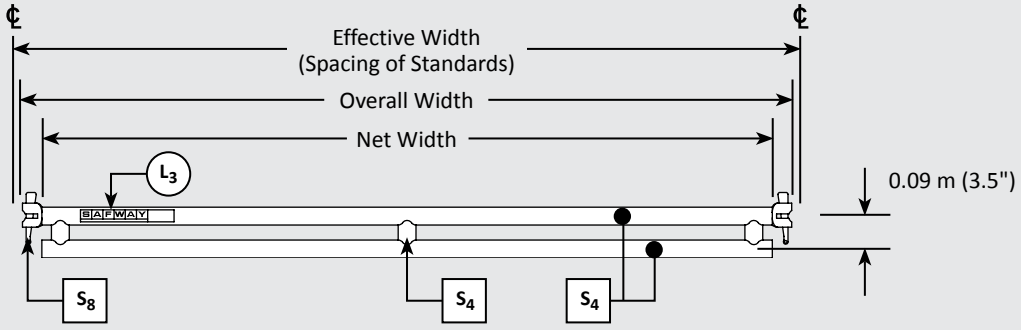


2000013 / 2000014 (Hole Pattern)

Component Identification

Truss Ledgers

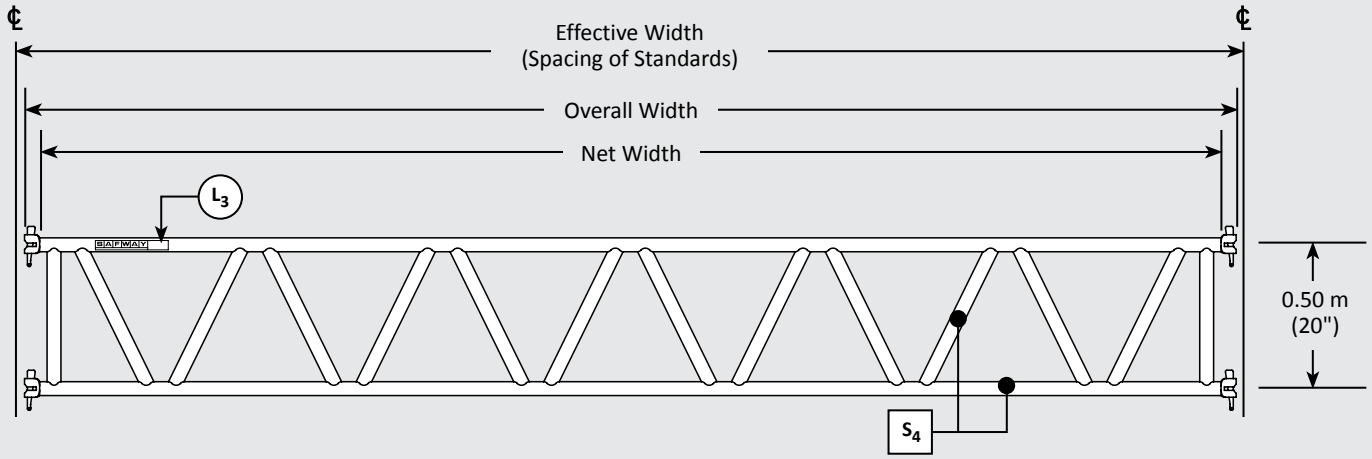
Part No.	Effective Width		Overall Width		Net Width		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2060305	3.05	10' 0"	3.00	9' 10"	2.90	9' 6"	22.7	50.0	L_3	S_4, S_8
2060213	2.13	7' 0"	2.08	6' 10"	1.98	6' 6"	15.9	35.0	L_3	S_4, S_8
2060157	1.57	5' 2"	1.52	5'	1.42	4' 8"	11.33	25.0	L_3	S_4, S_8



2060213 / 2060305

Double Truss Ledgers

Part No.	Effective Width		Overall Width		Net Width		Weight		Label
	m	in	m	in	m	in	kg	lb	
2060852	8.52	28' 0"	8.47	27' 10"	8.37	27' 5"	96.9	213.6	L_3
2060639	6.39	21' 0"	6.34	20' 10"	6.24	20' 6"	72.6	160	L_3
2060518	5.18	17' 0"	5.13	16' 10"	5.03	16' 6"	58.8	129.7	L_3
2060426	4.26	14' 0"	4.21	13' 10"	4.11	13' 6"	48.4	106.7	L_3

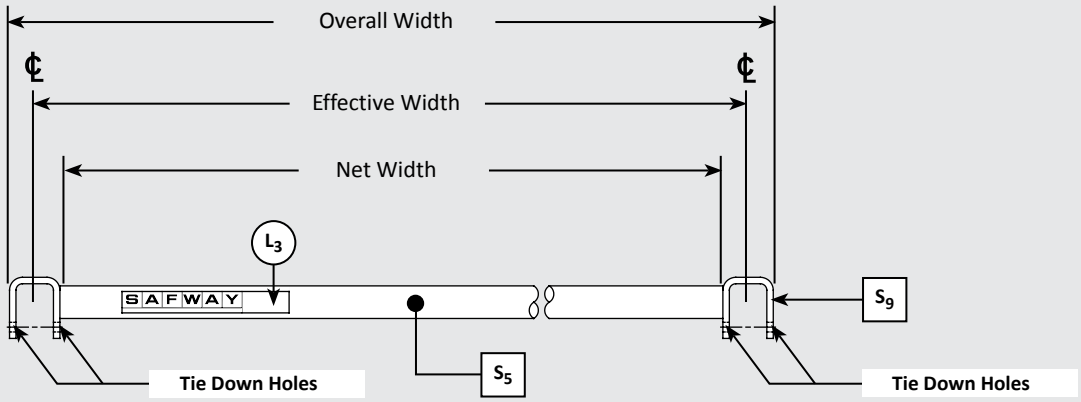


2060426 / 2060518 / 2060639 / 2060852

Component Identification

Transoms

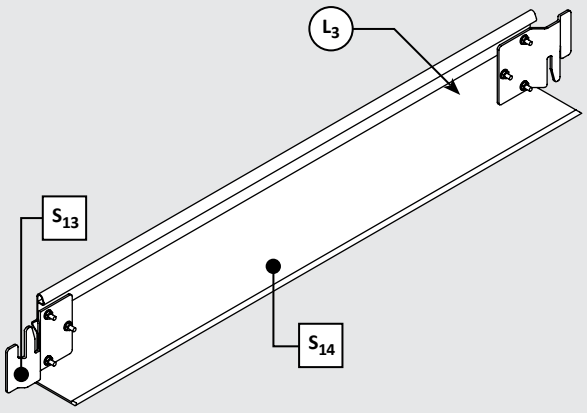
Part No.	Effective Width		Overall Width		Net Width		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2040213	2.13	7' 0"	2.21	7' 3"	2.06	6' 9"	8.6	19.1	L_3	S_5, S_9
2040157	1.57	5' 2"	1.65	5' 5"	1.50	4' 11"	7.7	16.9	L_3	S_5, S_9
2040115	1.15	3' 10"	1.23	4' 0"	1.08	3' 6"	4.3	9.5	L_3	S_5, S_9
2040065	0.65	2' 2"	0.73	2' 5"	0.58	1' 11"	6.1	13.5	L_3	S_5, S_9



2040____

Toeboards

Part No.	Effective Length		Overall Length		Weight		Label
	m	in	m	in	kg	lb	
7000305	3.05	10' 0"	3.10	10' 2"	11.3	24.9	L_3
7000213	2.13	7' 0"	2.18	7' 2"	8.0	17.7	L_3
7000157	1.57	5' 2"	1.62	5' 4"	6.0	13.3	L_3
7000115	1.15	3' 10"	1.20	4' 0"	4.5	10.1	L_3
7000065	0.65	2' 2"	0.70	2' 4"	2.8	6.1	L_3



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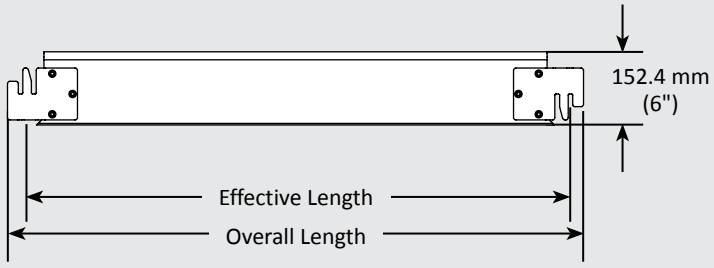
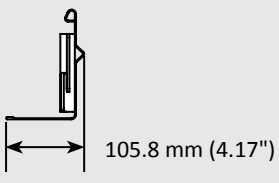


7000____ (Inside View)



7000____ (Side View)

Component Identification

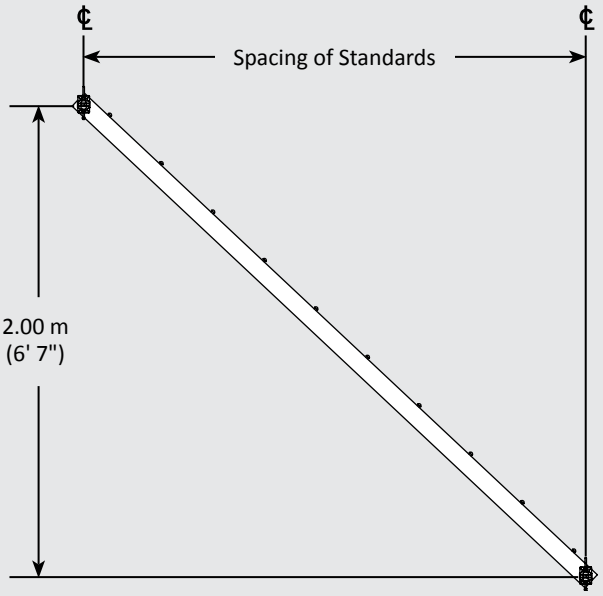
Stair Stringer

Part No.	Standard Spacing		Shipping Length		Weight	
	m	in	m	in	kg	lb
2080213	2.13	7' 0"	2.99	9' 10"	20.4	45

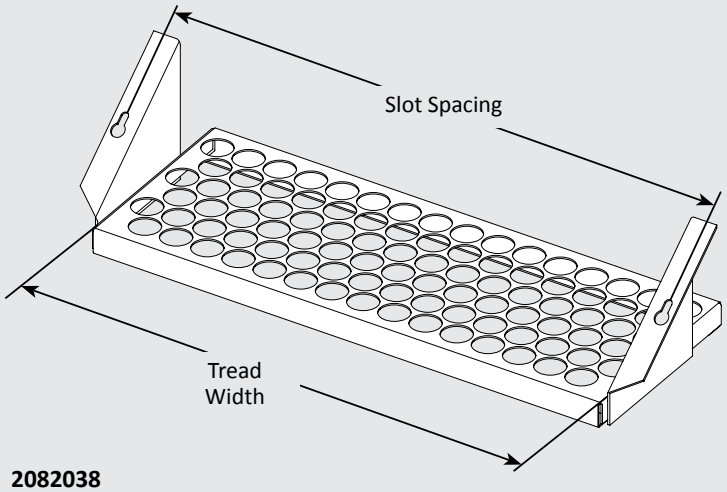
Note: A stair unit requires 2 stair stringers and 10 stair treads.

Stair Tread

Part No.	Tread Width		Slot Spacing		Weight	
	m	in	m	in	kg	lb
2082038	0.81	32"	0.86	34"	7.5	16.6



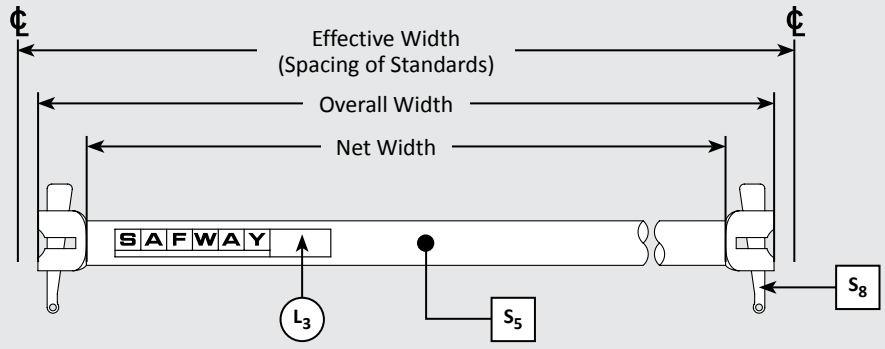
2080213



2082038

Stair Tread Ledger

Part No.	Effective Width		Overall Width		Net Width		Weight		Label	Material
	m	in	m	in	m	in	kg	lb		
2020107	1.07	3' 6"	1.02	3' 4"	0.91	3' 0"	4.4	9.6	L_3	S_5, S_8

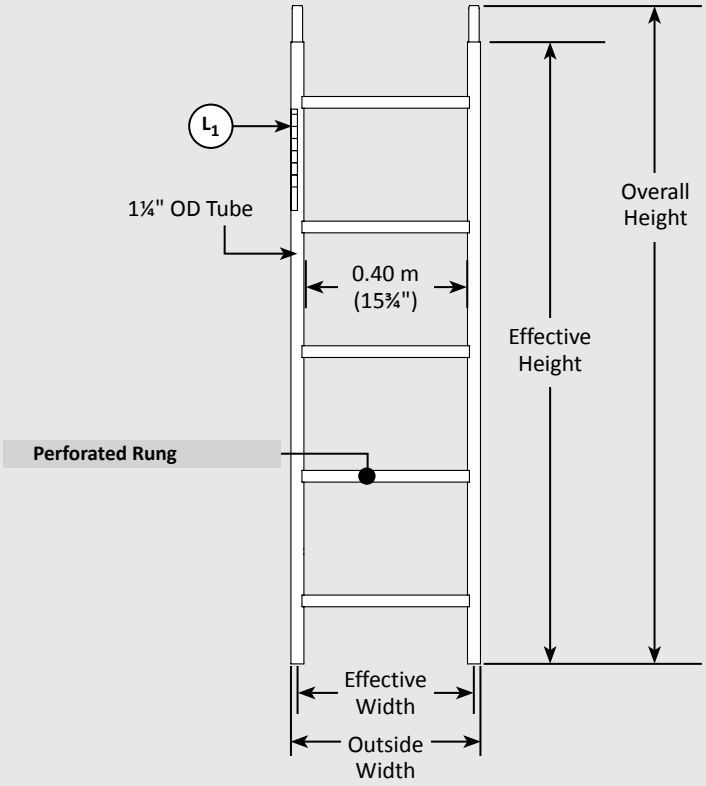


2020107

Component Identification

Access Ladder

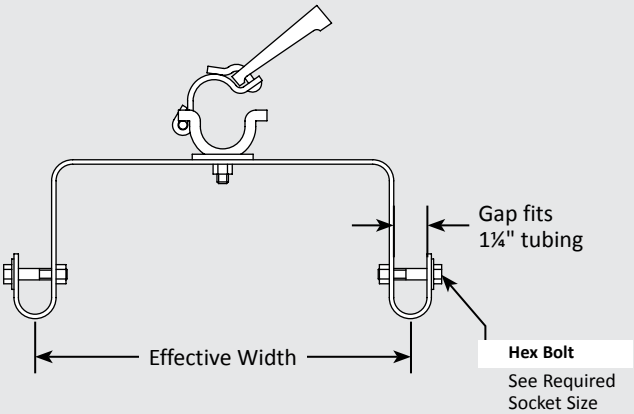
Part No.	Overall Height		Effective Height		Outside Width		Effective Width		Weight		Label
	m	in	m	in	m	in	m	in	kg	lb	
1091157	1.61	5' 4"	1.52	5' 0"	0.46	18¼"	0.43	17"	6.1	13.5	L_1
1091091	1.02	3' 4"	0.91	3' 0"	0.46	18¼"	0.43	17"	3.8	8.3	L_1



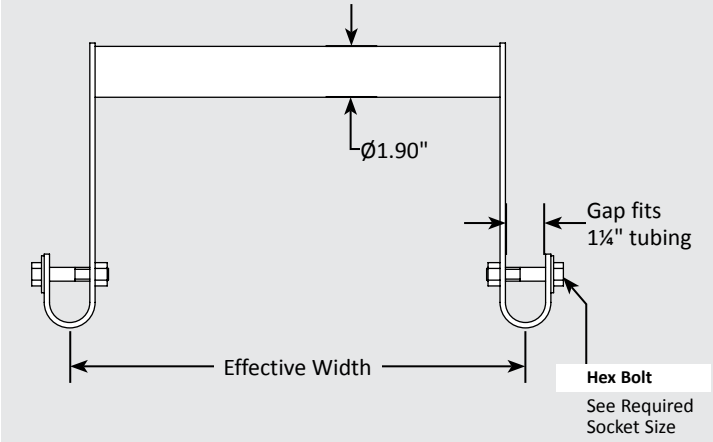
1091___

Access Ladder Bracket

Part No.	Effective Width		Weight		Required
	m	in	kg	lb	Socket Size
1093090	0.43	17"	2.8	6.2	¾"
1080000	0.43	17"	2.9	6.5	¾"



1093090

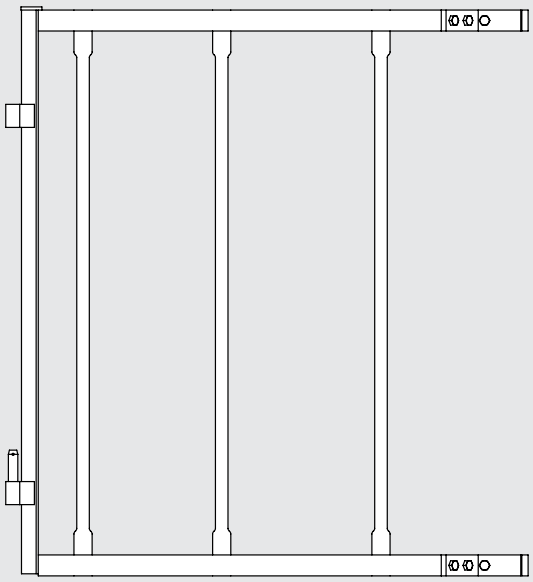


1080000

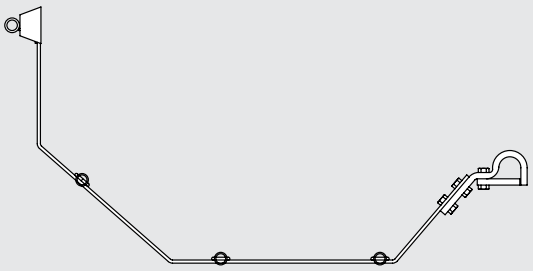
Component Identification

Ladder Cages

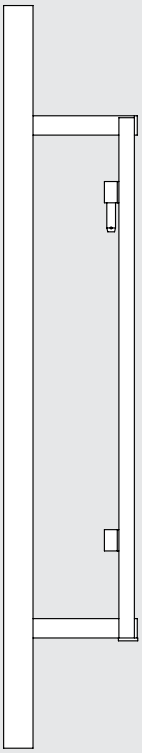
Part No.	Description	Weight kg	Weight lb
1086000	Half Ladder Cage	7.8	17.3
1087000	Exit Ladder Cage	5.6	12.3



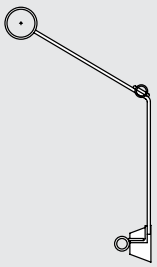
1086000



1086000 (Top View)



1087000

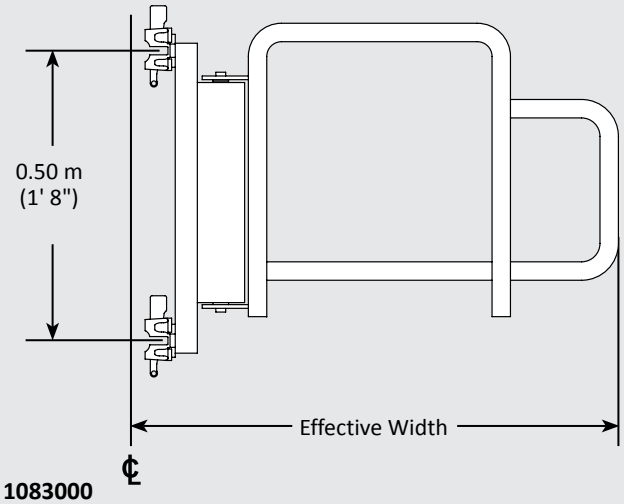


1087000 (Top View)

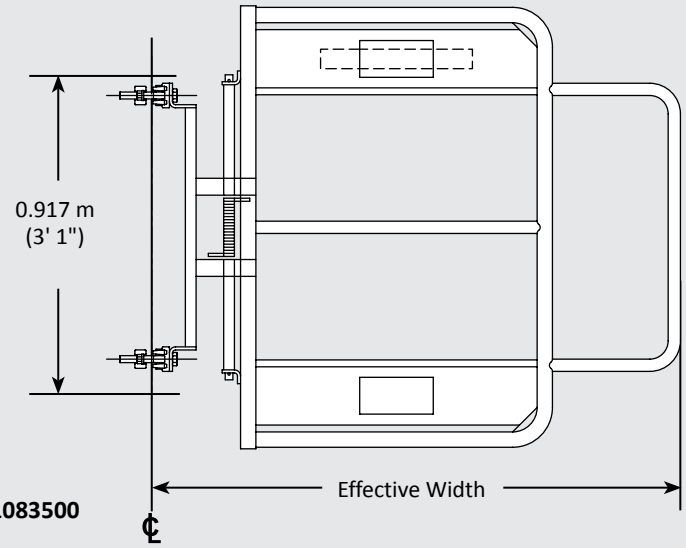
Component Identification

Access Gates

Part No.	Effective Width		Weight	
	m	in	kg	lb
1083000	1.09	3' 7"	9.1	20
1083500	0.98	3' 2"	12.2	26.9



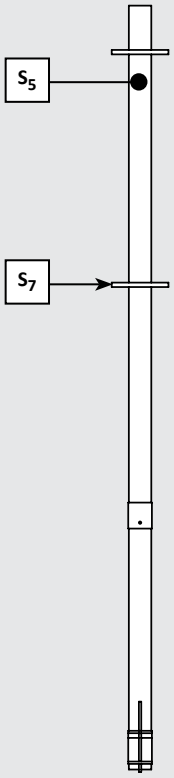
1083000



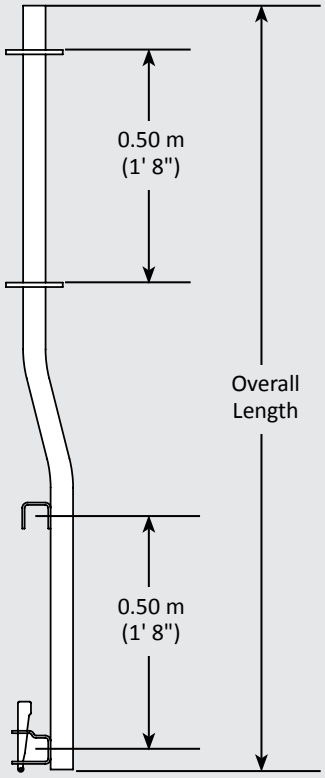
1083500

Guardrail Standard

Part No.	Overall Length		Weight		Material
	m	in	kg	lb	
2010500	1.64	5' 5"	8.0	17.6	S_5, S_7



2010500

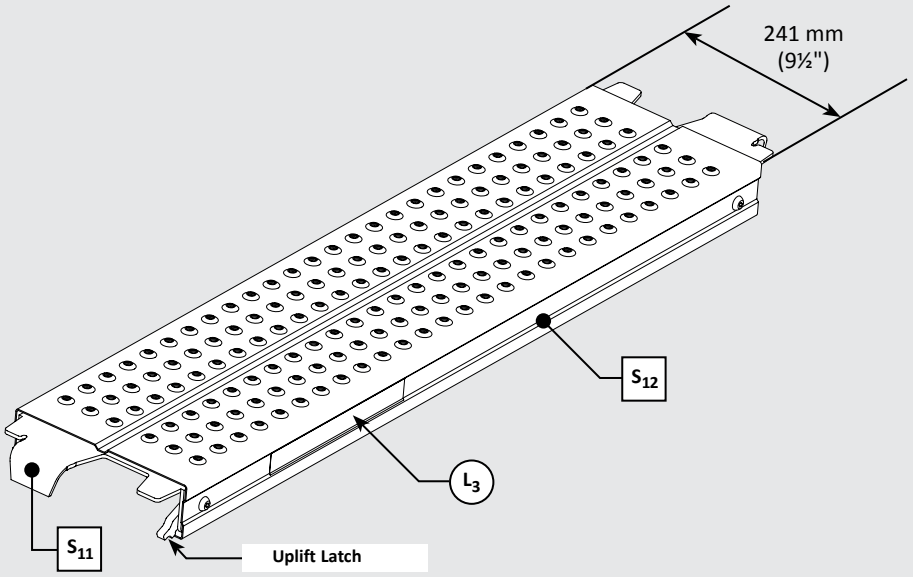


2010500 (Side View)

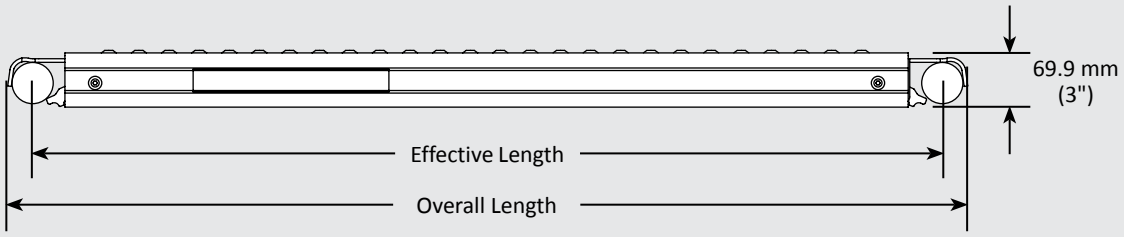
Component Identification

Steel Planks

Part No.	Effective Length		Overall Length		Weight		Label
	m	in	m	in	kg	lb	
6095305	3.05	10' 0"	3.11	10' 2"	18.1	40	L_3
6095213	2.13	7' 0"	2.19	7' 2"	12.7	28	L_3
6095157	1.57	5' 2"	1.63	5' 4"	10.1	22.2	L_3
6095115	1.15	3' 10"	1.21	4' 0"	7.8	17.3	L_3
6095065	0.65	2' 2"	0.71	2' 4"	5.0	11.1	L_3



6095____

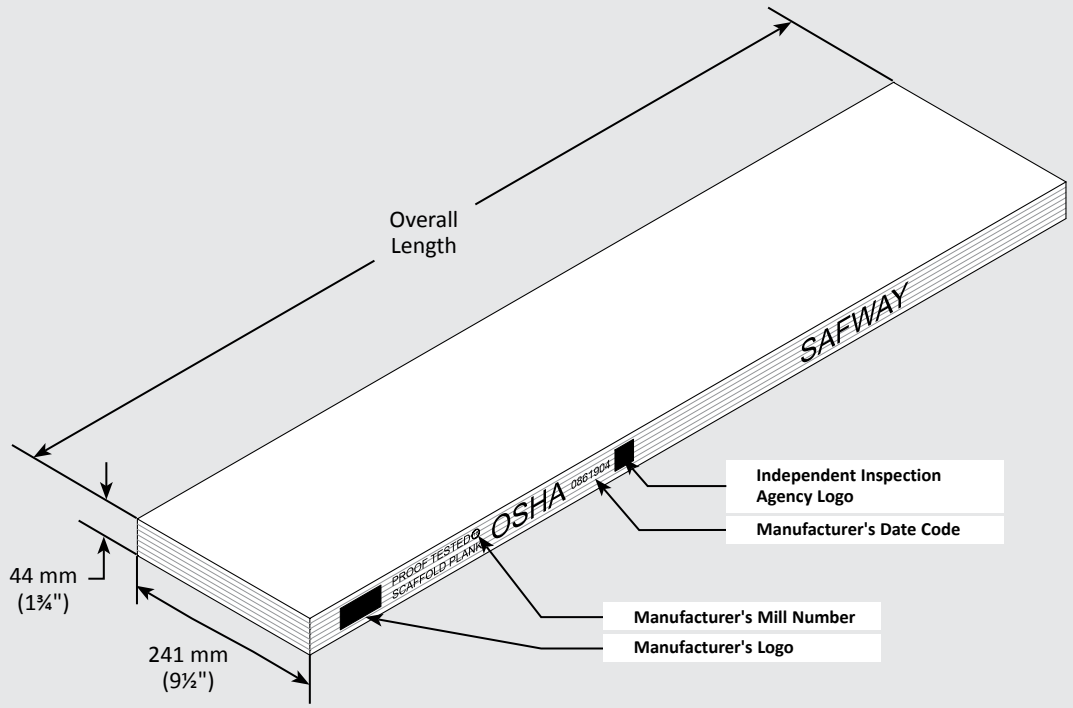


6095____ (Plan View)

Component Identification

Laminated Veneer Lumber (LVL)

Part No.	Overall Length		Weight	
	m	in	kg	lb
5300368	3.66	12' 0"	17.4	38.4
5300305	3.05	10' 0"	14.5	32
5300243	2.44	8' 0"	11.6	25.6
5300182	1.83	6' 0"	8.7	19.2
5300157	1.52	5' 0"	7.3	16
5300122	1.22	4' 0"	5.8	12.8
5300091	0.91	3' 0"	4.4	9.6
5300061	0.61	2' 0"	2.9	6.4

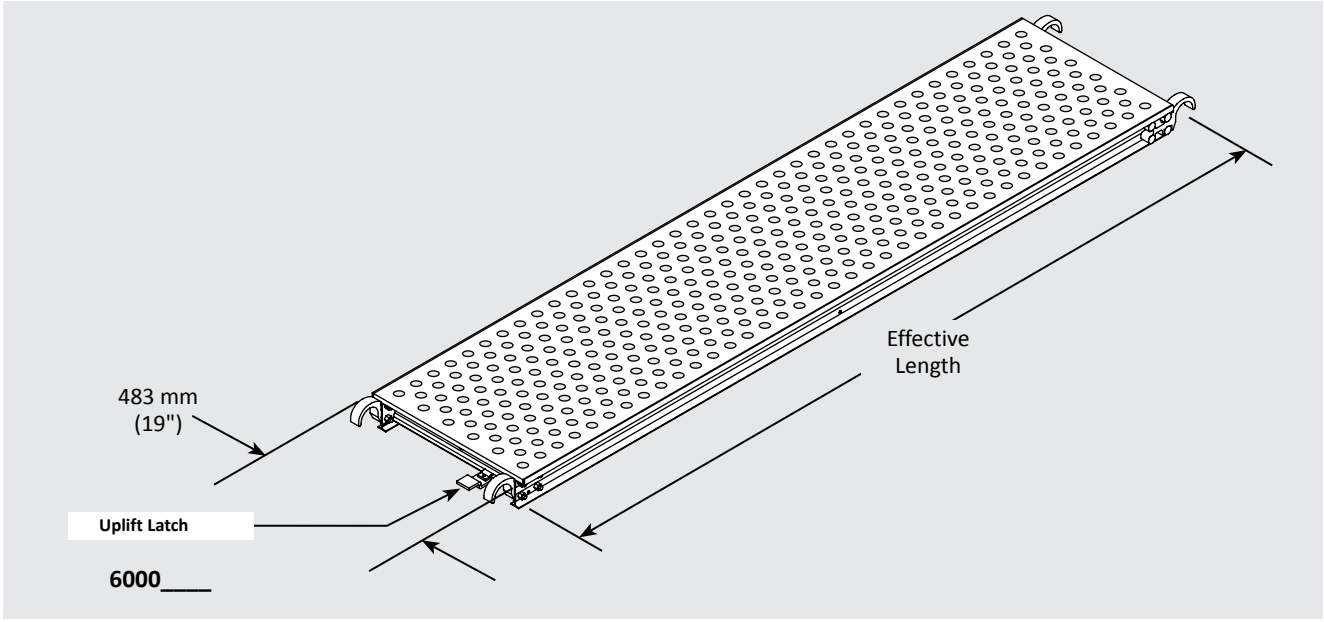


5300____ (Recommended Markings Shown)

Component Identification

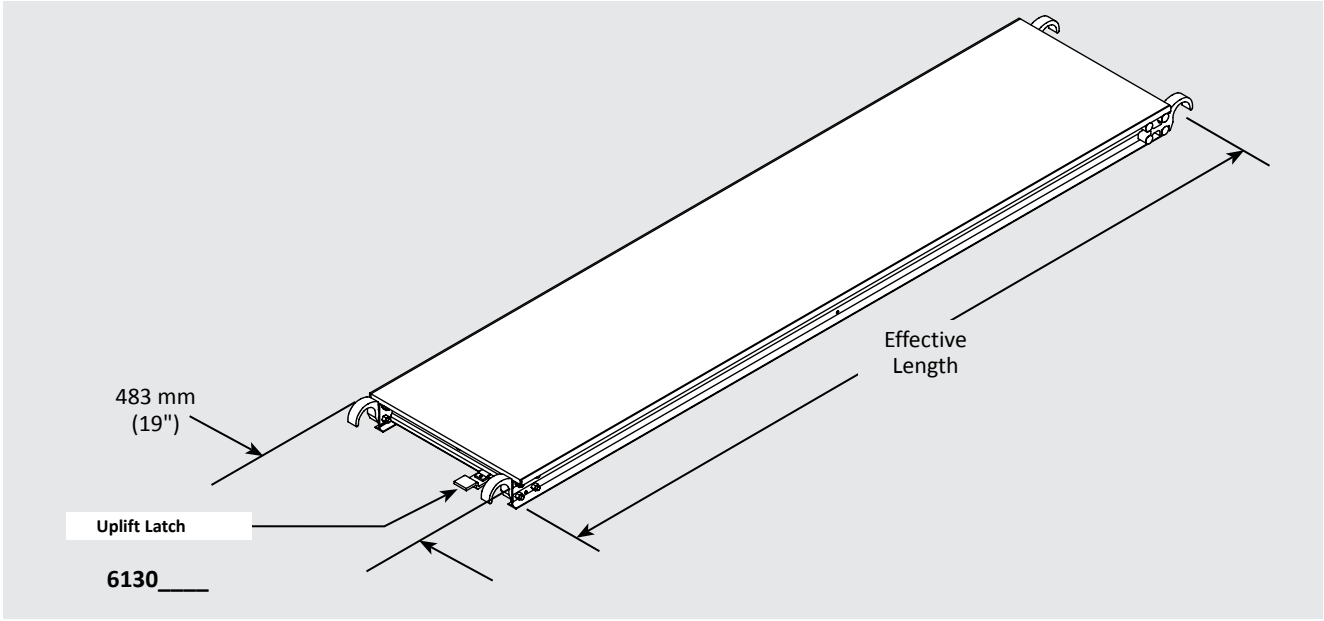
Aluminum Decks – Galvanized Steel Top

Part No.	Effective Length		Weight	
	m	in	kg	lb
6000305	3.05	10' 0"	22.7	50.0
6000213	2.13	7' 0"	16.4	36.2



Aluminum Decks – Plywood Top

Part No.	Effective Length		Weight	
	m	in	kg	lb
6130305	3.05	10' 0"	20.0	44.1
6130213	2.13	7' 0"	12.7	28.0



Component Identification

Wedge Clamps

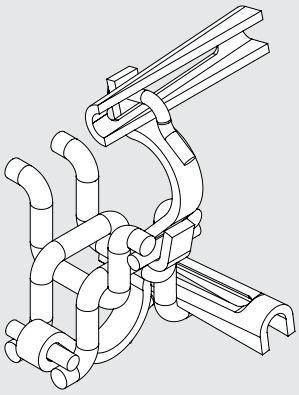
Part No.	Description	Weight kg	Weight lb
4000001	Right Angle Wedge Clamp, 1.90" x 1.90"	1.5	3.3
4000002	Swivel Wedge Clamp, 1.90" x 1.90"	1.7	3.8
4000003	Joiner Clamp	1.1	2.5
2070003	Right Angle Clamp/End Fitting	1.5	3.3
2070004	Swivel Clamp/End Fitting	1.5	3.3

Single purpose clamps fit 48.3 mm (1.90") O.D. tube.

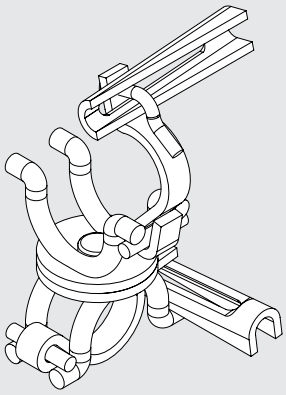
Wedge Clamp Specifications & Composition

Material: Base material to Euro Standard

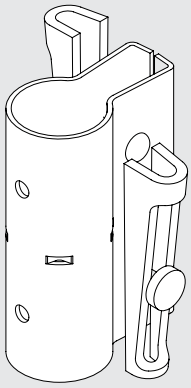
Finish: Hot Dipped Galvanized or Sherardized Galvanized



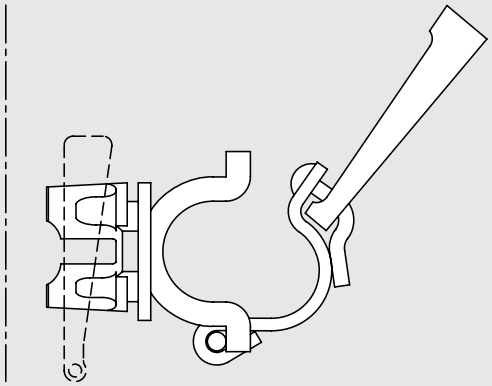
4000001



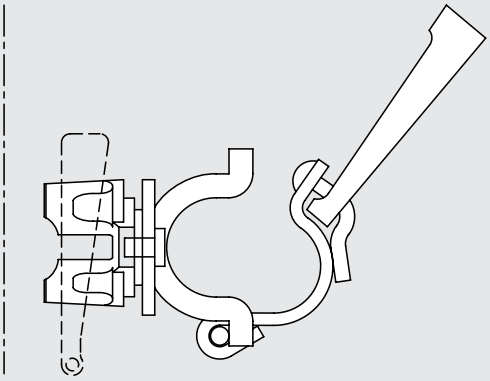
4000002



4000003



2070003



2070004

Component Identification

Bolt Clamps – Dual Purpose

Part No.	Description	Weight kg	Weight lb
CRA19	Right Angle Clamp	1.3	2.8
CSA19	Swivel Clamp	1.6	3.5

Dual Purpose Clamps fit 48.3 mm (1.90") and 42.9 mm (1.69") O.D. tubes.

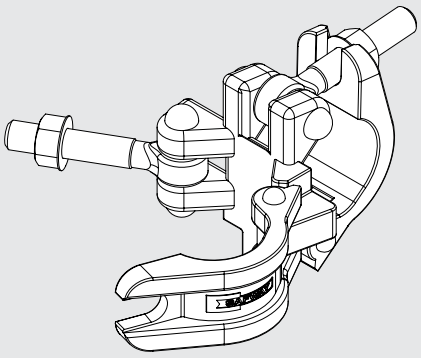
Beam Clamp

Part No.	Description	Weight kg	Weight lb
CRA2B	Beam Clamp, 1.90"	1.5	3.2

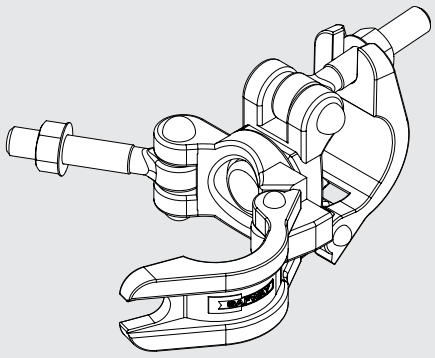
Clamp Specifications & Composition

Material: Forged, low carbon steel
Class 8.8 (Bolt)
Class 5 (Nut)

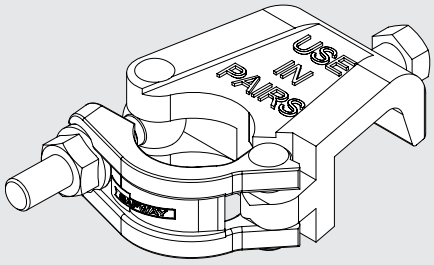
Finish: Hot Dipped Galvanized (Body, Caps)
Zinc plated, yellow dichromate (Bolt, Nut)



CRA19



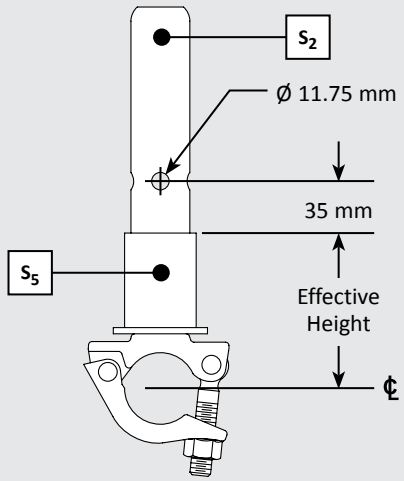
CSA19



CRA2B

Spigot

Part No.	Effective Height mm	Effective Height in	Weight kg	Weight lb	Material
2000007	105	4"	1.7	3.7	S_2, S_5



2000007

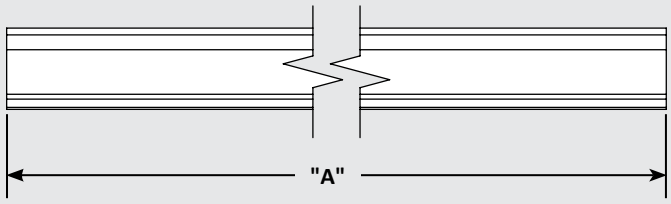
Component Identification

Aluminum Beam

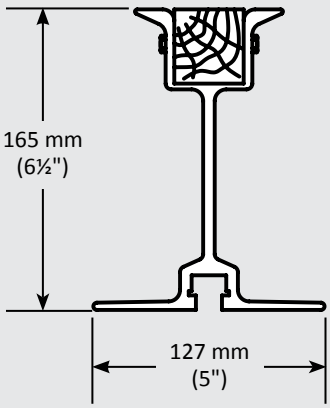
Part No.	Length "A" m	in	Weight kg	lb
7106091	0.91	3'	5.4	12.0
7106122	1.22	4'	7.3	16.0
7106157	1.52	5'	9.1	20.0
7106182	1.83	6'	10.9	24.0
7106213	2.13	7'	12.7	28.0
7106228	2.29	7' 6"	13.6	30.0
7106243	2.44	8'	14.5	32.0
7106274	2.74	9'	16.3	36.0
7106305	3.05	10'	18.1	40.0
7106320	3.20	10' 6"	19.1	42.0
7106335	3.35	11'	20.0	44.0
7106368	3.66	12'	21.8	48.0
7106426	4.27	14'	25.4	56.0
7106456	4.57	15'	27.2	60.0
7106486	4.88	16'	29.0	64.0
7106518	5.18	17'	30.8	68.0
7106547	5.49	18'	32.7	72.0
7106578	5.79	19'	34.5	76.0
7106610	6.10	20'	36.3	80.0
7106639	6.40	21'	38.1	84.0
7106669	6.71	22'	39.9	88.0
7106728	7.32	24'	43.5	96.0
7106762	7.62	25'	45.4	100.0
7106793	7.92	26'	47.2	104.0
7106853	8.53	28'	50.8	112.0

Aluminum Beam Stringer

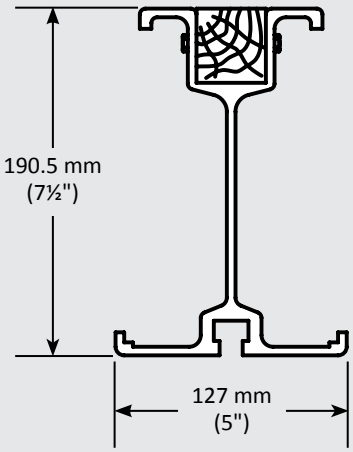
Part No.	Length "A" m	in	Weight kg	lb
7107122	1.22	4'	9.1	20.0
7107152	1.52	5'	11.3	25.0
7107182	1.83	6'	13.6	30.0
7107213	2.13	7'	15.9	35.0
7107243	2.44	8'	18.1	40.0
7107305	3.05	10'	22.7	50.0
7107335	3.35	11'	24.9	55.0
7107368	3.66	12'	27.2	60.0
7107395	3.96	13'	29.5	65.0
7107426	4.27	14'	31.8	70.0
7107486	4.88	16'	36.3	80.0
7107547	5.49	18'	40.8	90.0
7107610	6.10	20'	45.4	100.0
7107639	6.40	21'	47.6	105.0
7107669	6.71	22'	49.9	110.0
7107700	7.01	23'	52.2	115.0
7107728	7.32	24'	54.4	120.0
7107762	7.62	25'	56.7	125.0
7107793	7.92	26'	59.0	130.0



7106___/7107___



7106___ (End View)

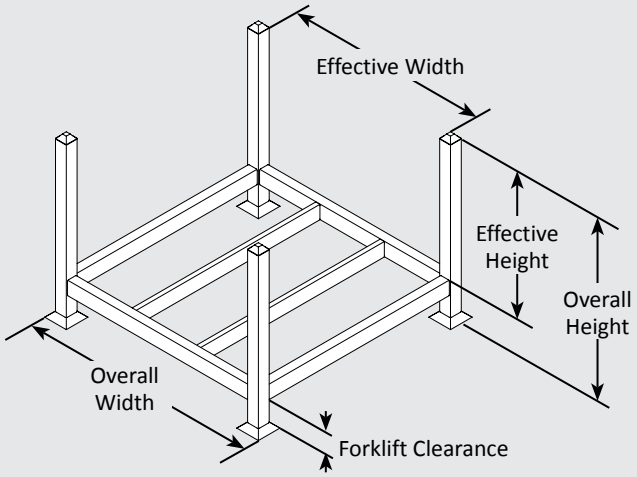


7107___ (End View)

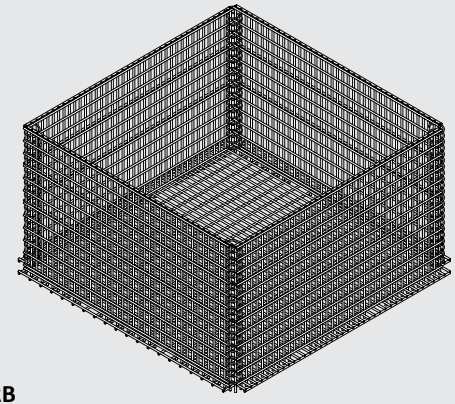
Component Identification

Storage Rack and Bin

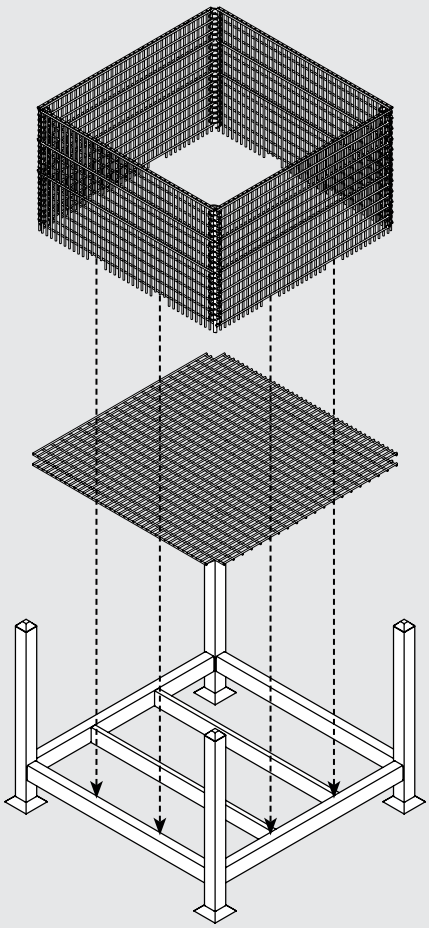
Part No.	Overall Height		Overall Width		Effective Height		Effective Width		Forklift Clearance		Weight	
	m	in	m	in	m	in	m	in	m	in	kg	lb
SRO	0.88	2' 10⅛"	1.18	3' 10⅜"	0.67	2' 2⅝"	1.00	3' 3¼"	0.13	5"	58.0	128.0
SRB	-	-	-	-	-	-	-	-	-	-	60.0	132.0



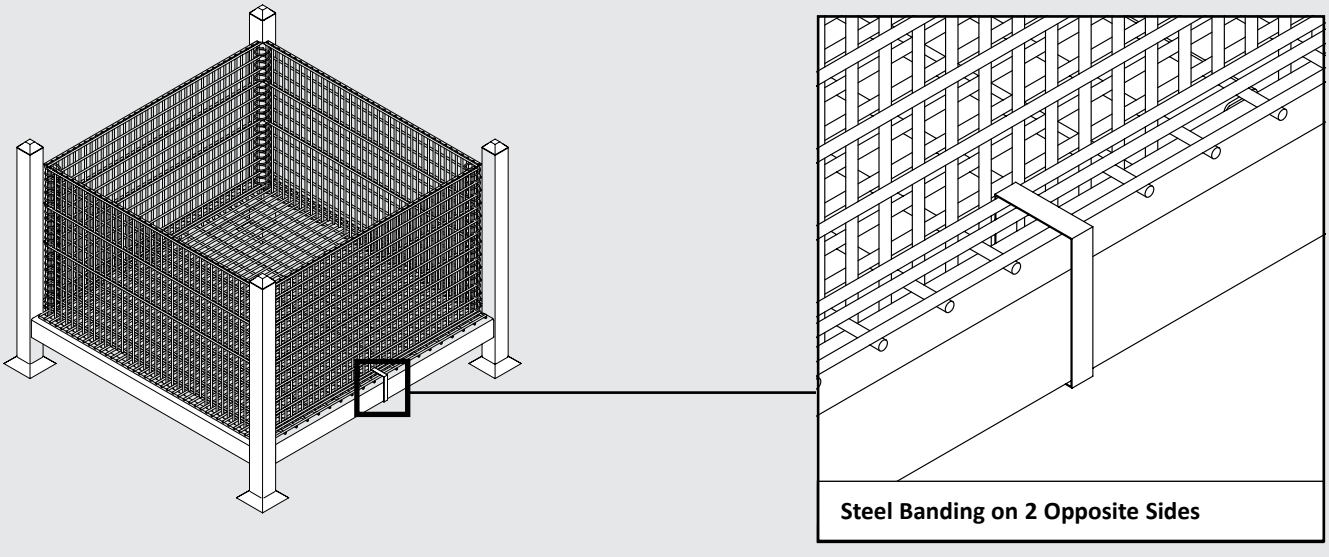
SRO



SRB



SRO / SRB Assembly

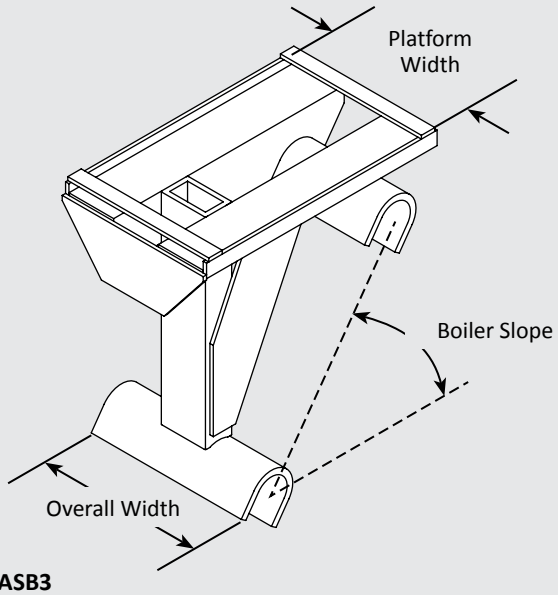


Component Identification – Boiler Founding System

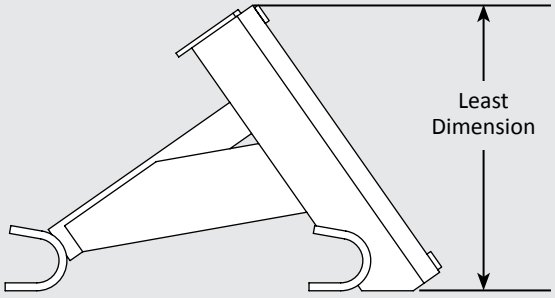
Systems™ Fixed Support Bracket

Part No.	Platform Width		Overall Width		Least Dimension		Boiler Slope	Weight	
	m	in	m	in	m	in		kg	lb
SASB3	0.19	7½"	0.21	8⅜"	0.29	11¼"	55°	12.3	27.1

Note: Only the SSJ can be used on the SASB3.



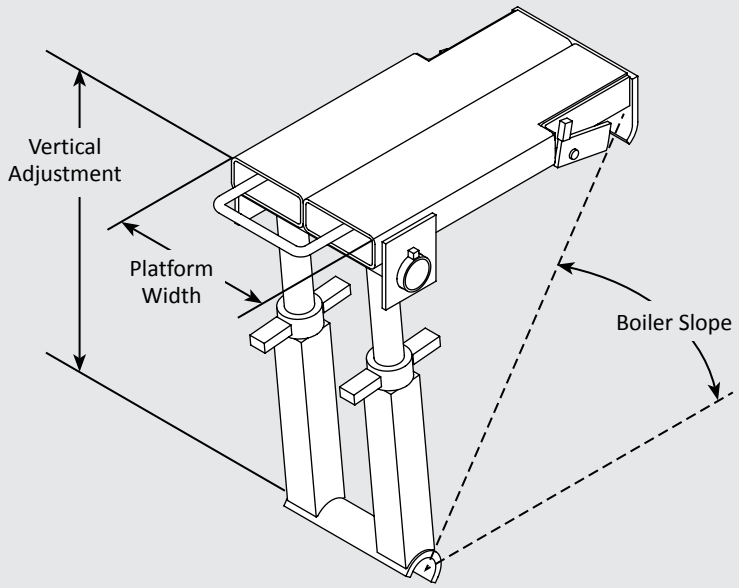
SASB3



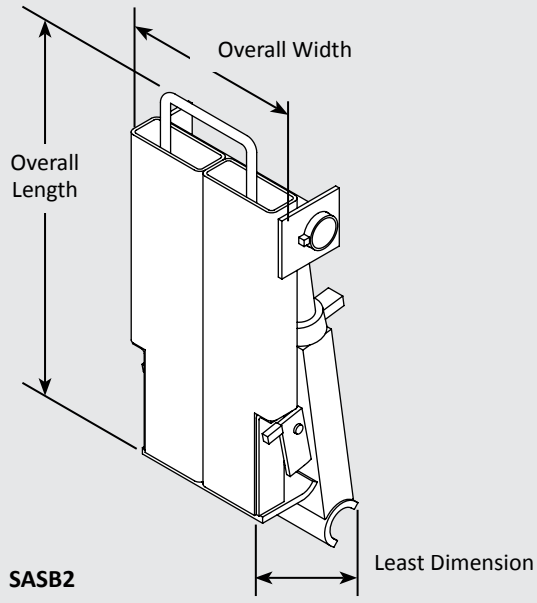
SASB3 (Side View)

Systems™ Adjustable Support Bracket

Part No.	Platform Width		Overall Width		Least Dim.		Vert. Adjustment		Overall Length		Boiler	Weight	
	m	in	m	in	m	in	m	in	m	in	Slope	kg	lb
SASB2	0.25	10"	0.31	12¼"	0.18	7"	0.47–0.61	18½"–24"	0.48	19"	45°– 60°	23.7	52.3



SASB2 (Extended)



SASB2

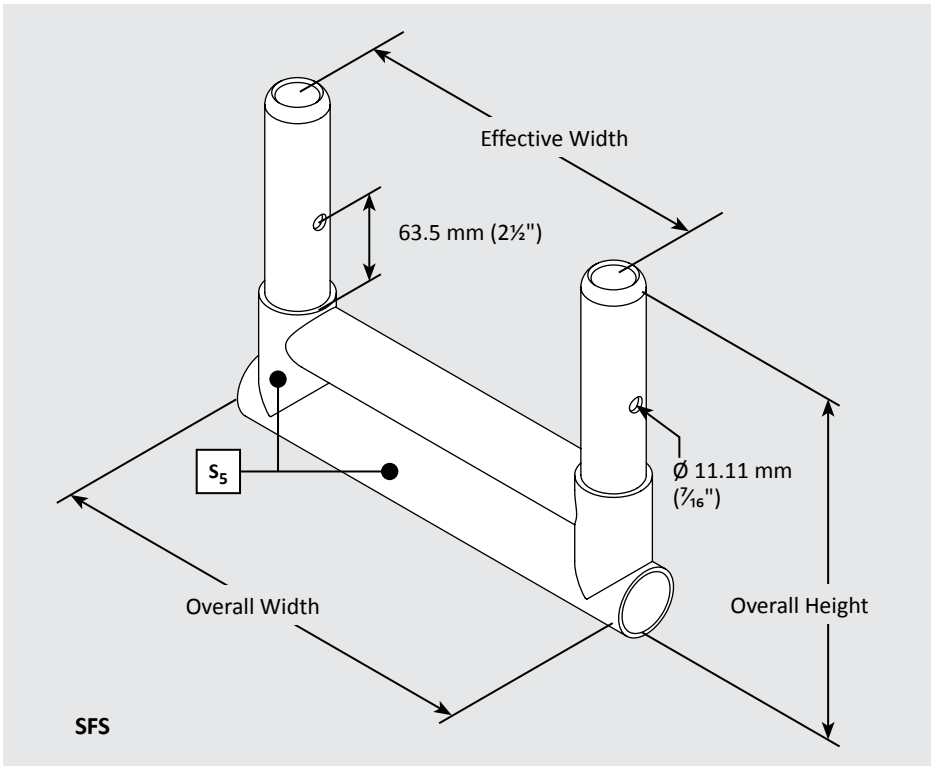
Component Identification – Boiler Founding System

Systems™ Support Frame Starter

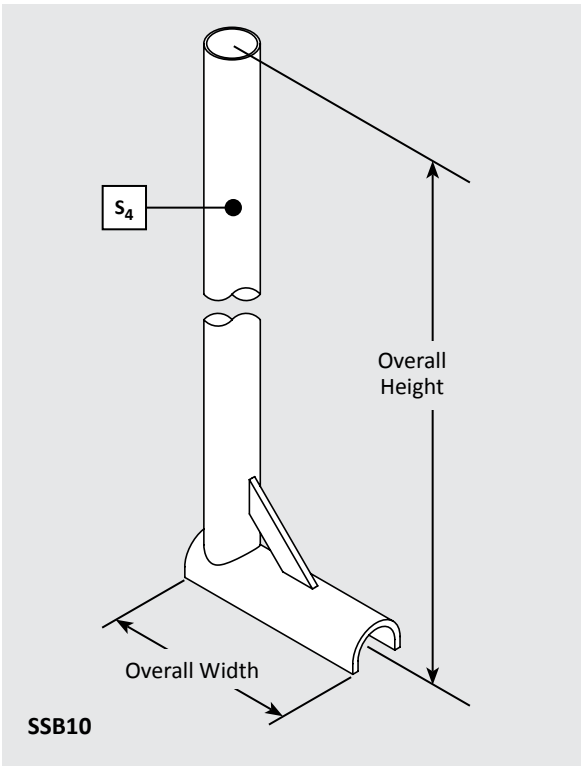
Part No.	Overall Width		Effective Width		Overall Height		Weight	
	m	in	m	in	m	in	kg	lb
SFS	0.34	13 3/16"	0.28	10 15/16"	0.26	10 3/16"	3.7	8.1

Systems™ Saddle Brace

Part No.	Overall Width		Overall Height		Weight	
	m	in	m	in	kg	lb
SSB10	0.20	8"	2.91	114½"	10.5	23.1



SFS

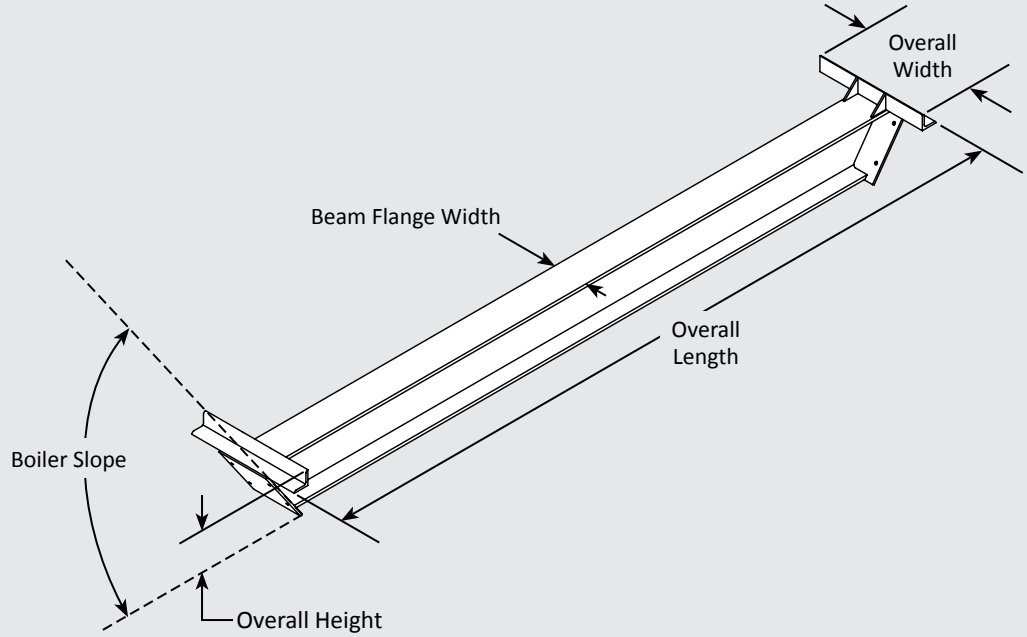


SSB10

Component Identification – Boiler Founding System

Systems™ Base Beams

Part No.	Overall Length		Overall Height		Overall Width		Beam Flange Width		Boiler Slope	Weight	
	m	in	m	in	m	in	m	in		kg	lb
SBB6	2.14	84 7/16"	0.21	8¼"	0.33	13⅛"	0.10	4"	55°	58.2	128.2
SBBA8	2.74	107⅞"	0.29	11 9/16"	0.33	13⅛"	0.20	8"	55°	48.7	107.3

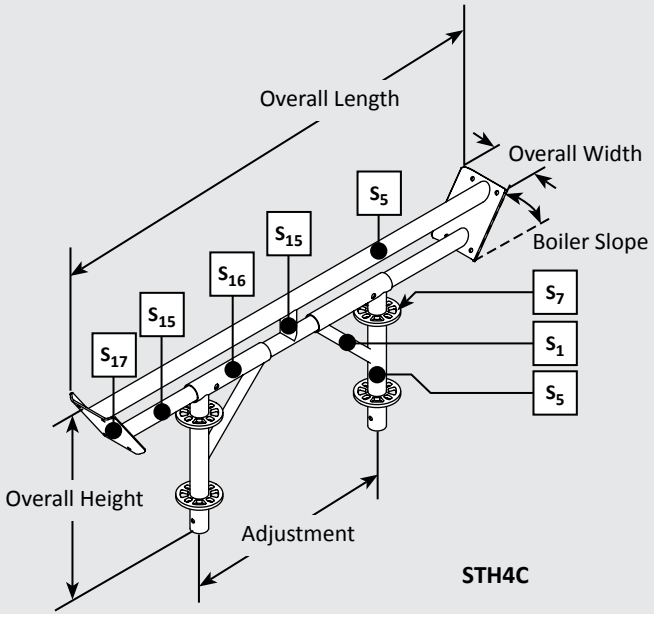


SBB__

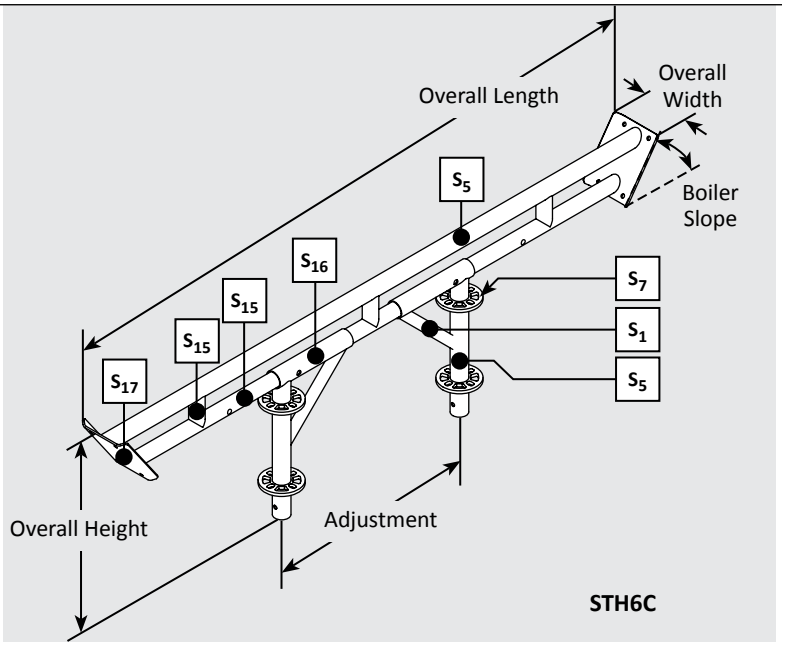
Throat Headers

Part No.	Overall Length		Overall Height		Overall Width		Boiler Slope	Weight	
	m	in	m	in	m	in		kg	lb
STH4C	1.45	57"	0.61	24"	0.17	6½"	55°	18.3	40.2
STH6C	1.96	77"	0.61	24"	0.17	6½"	55°	21.6	47.5

Adjustments can be made in the following increments: 650 mm (25 19/32") and 730 mm (28¾").
STH6C also has an adjustment of 1150 mm (45 9/32").



STH4C



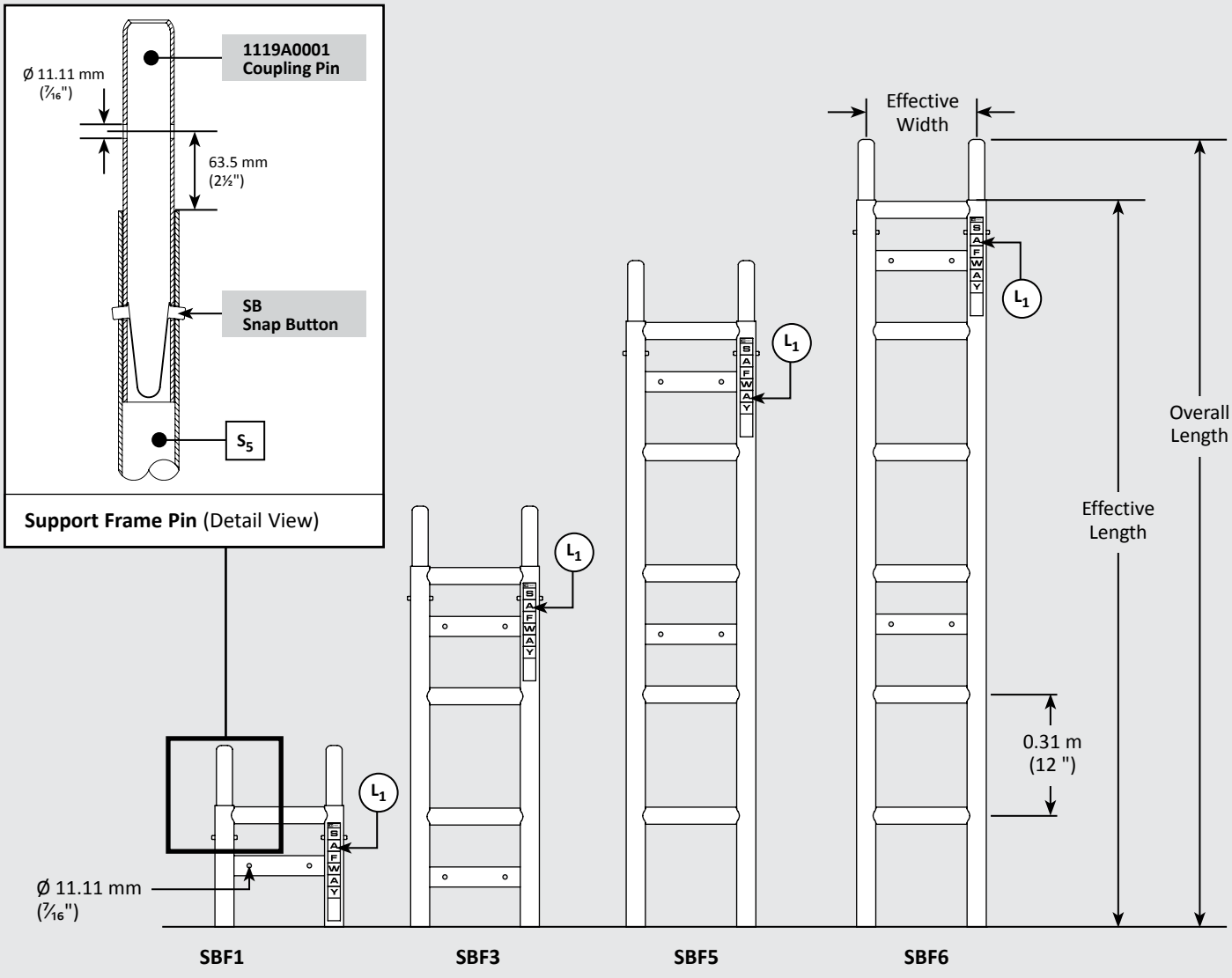
STH6C

Component Identification – Boiler Founding System

Systems™ Support Frames

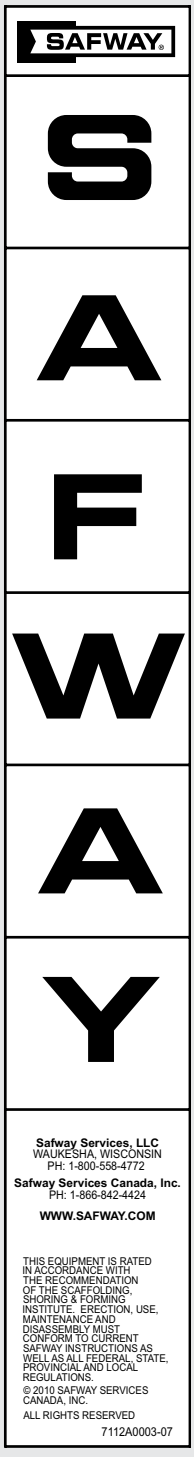
Part No.	Effective Length		Overall Length		Effective Width		Weight		Label
	m	in	m	in	m	in	kg	lb	
SBF6	1.83	72"	1.98	78"	0.28	10 15/16"	21.7	47.8	L_1
SBF5	1.52	60"	1.68	66"	0.28	10 15/16"	18.7	41.3	L_1
SBF3	0.91	36"	1.07	42"	0.28	10 15/16"	12.8	28.3	L_1
SBF1	0.31	12"	0.46	18"	0.28	10 15/16"	5.9	13.0	L_1

Note: BrandSafway Systems™ Support Frames are not to be used as access ladders.

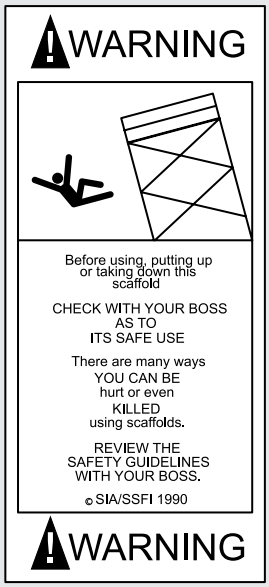


Label Identification

**REPLACE COMPONENT LABELS IF THEY ARE WORN, DEFACED OR ARE ILLEGIBLE.
IF REPLACEMENT LABELS ARE NEEDED, CONTACT YOUR LOCAL BRANDSAFWAY BRANCH.**

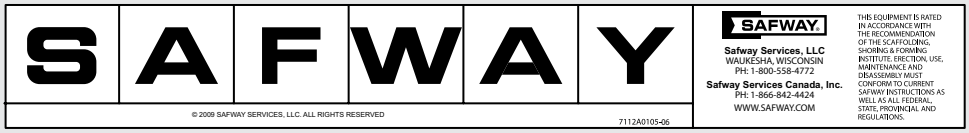


L_1 (7112A0003)



L_2 (7112A0038)

L_5 (7112A0001)



L_3 (7112A0105)

L_4 (7112A0093)

Engineering Data & Component Allowable Loads

Section 2

This chapter contains illustrations and load ratings for the various BrandSafway SafLock System Scaffold® Components. The allowable loads shown in this section have a safety factor of 4:1. When using a safety factor of 3:1, multiply the allowable loads by ⁴⁄₃.

Engineering Data

Steel Tube (S_1, S_2, S_3)

	S_1 Metric	S_1 Imperial	S_2 Metric	S_2 Imperial	S_3 Metric	S_3 Imperial
OD	31.7 mm	1.250"	39.69 mm	1.563"	41.3 mm	1.625"
Wall	2.2 mm	0.086"	3.0 mm	0.12"	2.4 mm	0.095"
Area	203 mm^2	0.314 in^2	351 mm^2	0.544 in^2	295 mm^2	0.456 in^2
Yield	344.7 Mpa	50,000 psi	413.7 Mpa	60,000 psi	344.7 Mpa	50,000 psi
Tensile	448.2 Mpa	65,000 psi	482.6 Mpa	70,000 psi	482.6 Mpa	70,000 psi
Elongation (min.)	23 %	23 %	5 %	5 %	20 %	20 %
Section Modulus	1404 mm^3	0.086 in^3	2987 mm^3	0.1823 in^3	2705 mm^3	0.1650 in^3
Moment of Inertia	22,290 mm^4	0.0535 in^4	59,000 mm^4	0.1426 in^4	55,829 mm^4	0.1341 in^4
Radius of Gyration	10.481 mm	0.4126"	12.998 mm	0.5118"	13.766 mm	0.5419"

Steel Tube (S_4, S_5, S_6)

	S_4 Metric	S_4 Imperial	S_5 Metric	S_5 Imperial	S_6 Metric	S_6 Imperial
OD	48.3 mm	1.90"	48.3 mm	1.90"	60.3 mm	2.375"
Wall	2.4 mm	0.095"	3 mm	0.12"	4.8 mm	0.188"
Area	346 mm^2	0.538 in^2	433 mm^2	0.671 in^2	833 mm^2	1.291 in^2
Yield	344.7 Mpa	50,000 psi	344.7 Mpa	50,000 psi	482.6 Mpa	70,000 psi
Tensile	482.6 Mpa	70,000 psi	482.6 Mpa	70,000 psi	551.6 Mpa	80,000 psi
Elongation (min.)	23 %	23 %	20 %	20 %	5 %	5 %
Section Modulus	3784 mm^3	0.2316 in^3	4.6 x 10^3 mm^3	0.281 in^3	10.7 x 10^6 mm^3	0.6551 in^3
Moment of Inertia	91.39 x 10^3 mm^4	0.2199 in^4	111.1 x 10^3 mm^4	0.2669 in^4	323,800 mm^4	0.778 in^4
Radius of Gyration	16.25 mm	0.639"	16.021 mm	0.6307"	19.712 mm	0.776"

Steel Tube (S_{15}, S_{16})

	S_{15} Metric	S_{15} Imperial	S_{16} Metric	S_{16} Imperial
OD	42.9 mm	1.6"	50.8 mm	2.0 "
Wall	2.41 mm	0.095"	2.4 mm	0.095"
Area	307 mm^2	0.476 in^2	367 mm^2	0.5685 in^2
Yield	344.7 Mpa	50,000 psi	220.6 Mpa	32,000 psi
Tensile	482.6 Mpa	70,000 psi	310.2 Mpa	45,000 psi
Elongation (min.)	20%	20%	15%	15%
Section Modulus	2940 mm^3	0.179 in^3	4229 mm^3	0.258 in^3
Moment of Inertia	63.119 x 10^3 mm^4	0.157 in^4	107.42 x 10^3 mm^4	0.258 in^4
Radius of Gyration	14.34 mm	0.564"	17.12 mm	0.6743"

Engineering Data

Aluminum Tube (6061-T6)

	A_1 Metric	Imperial
OD	48.3 mm	1.900"
Wall	3.7 mm	0.145"
Area	518 mm^2	0.799 in^2
Yield	241.3 Mpa	35,000 psi
Tensile	262 Mpa	38,000 psi
Elongation: min.	8 %	8 %
Section Modulus	5374 mm^3	0.326 in^3
Moment of Inertia	129.79 x 10^3 mm^4	0.3099 in^4
Radius of Gyration	15.829 mm	0.6226"

Rosette (S_7)

	Metric	Imperial
Material	* 9.5 mm ± 0.3 mm	ASTM A36 Steel Plate ⅜" ± 0.012"
Minimum Yield	262 Mpa	38,000 psi
Tensile	–	–

Wedge (S_8)

	Metric	Imperial
Material	* 6.1 mm – 6.2 mm	C1018 Steel Plate ¼" ± 0.012"
Minimum Yield	–	–
Tensile	–	–

Formed Flat (S_9)

	Metric	Imperial
Material	* 9.5 mm	ASTM A36 Steel Plate ⅜"
Minimum Yield	262 Mpa	38,000 psi
Tensile	–	–

Cast Steel (S_{10})

	Metric	Imperial
Material	*	ASTM A27 Casting Steel Grade 70 - 36, Class 2
Minimum Yield	250 Mpa	36,000 psi
Tensile	485 Mpa	70,000 psi

Formed Flat (S_{11}, S_{17})

	S_{11} Metric	Imperial	S_{17} Metric	Imperial
Material	* 6.35 mm	ASTM A36 Steel Plate ¼"	* 4.75 mm	ASTM A 569 on 1010 HRS 3⁄16"
Minimum Yield	262 Mpa	38,000 psi	179 Mpa	26,000 psi
Tensile	–	–	–	–

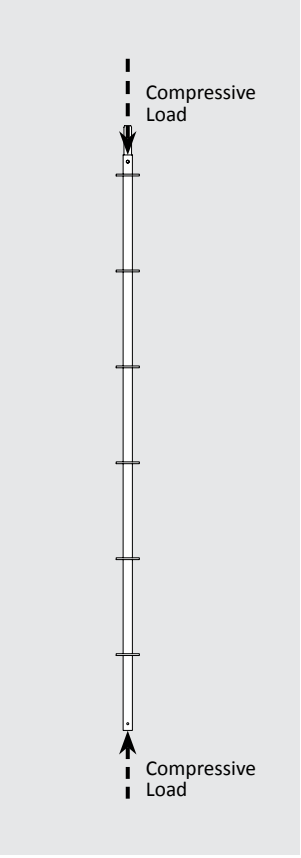
*Equal or better than Imperial specification shown.

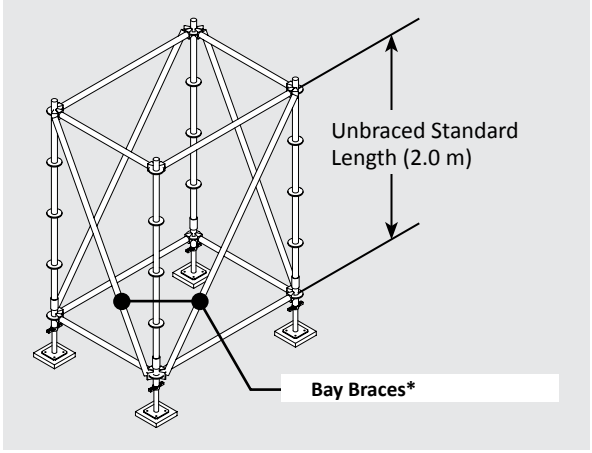
Component Allowable Loads

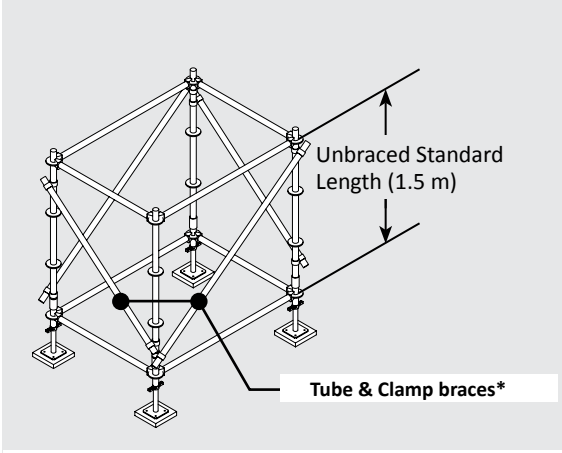
Standards

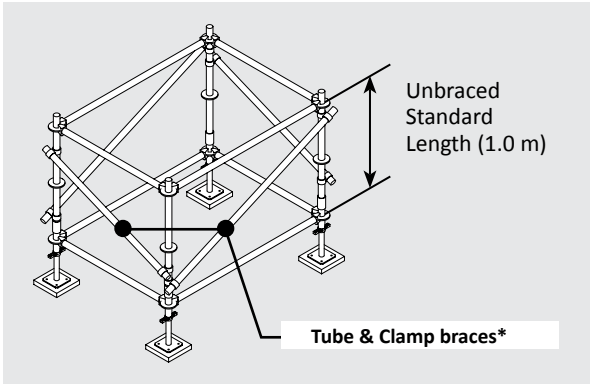
Unbraced Standard Length (m)	Maximum Allowable Compressive Load* (when rated for scaffold use) kN	lb
2.0	20.0	4,500
1.5	24.5	5,500
1.0	30.4	6,840

*Bay Braces or Tube & Clamp diagonal braces must be installed at the same vertical increments as the ledgers. Load is based on Bay Braces or Tube & Clamp diagonal braces connected to standards at the same levels as ledgers. Refer to **Section 3: Tying & Bracing** of this manual for specific bracing requirements.





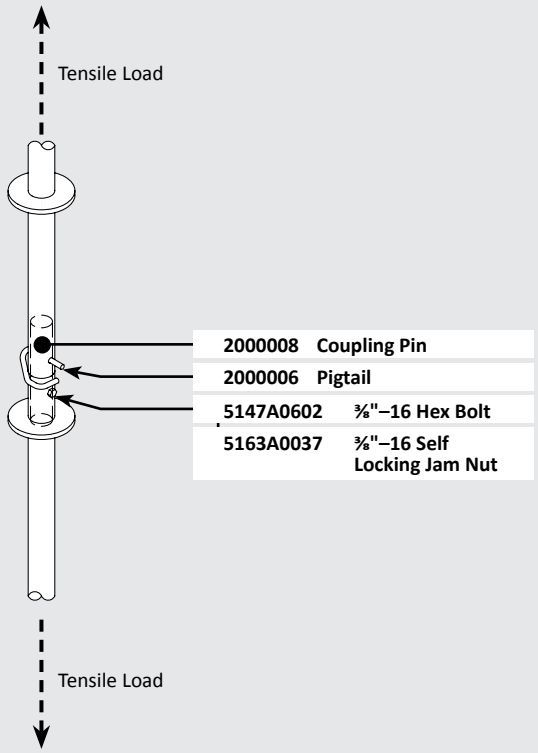




Component Allowable Loads

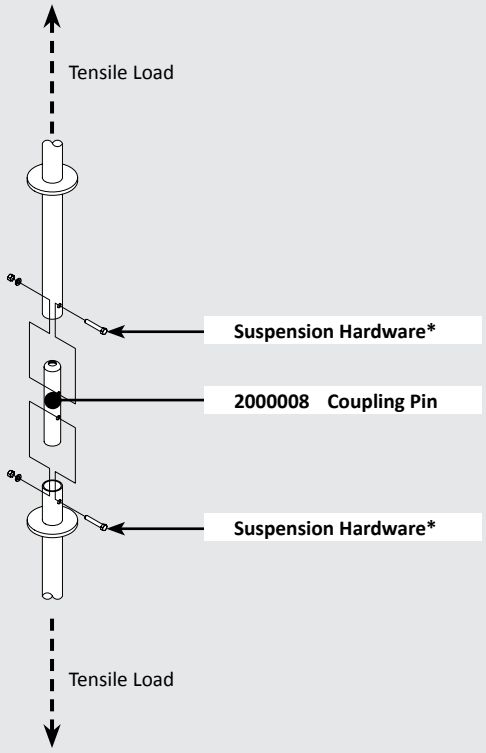
Standard Coupling Pin Tensile Loads

Coupling Type	Maximum Allowable Tensile Load	
	kN	lb
Typical Standard Coupling Pin	4.9	1,100
Suspension Standard Coupling Pin	6.7	1,500



Typical Standard Coupling Pin

Standard coupling pin connection components are designed to resist nominal tensile loads, such as those created by uplift and/or overturning loads.

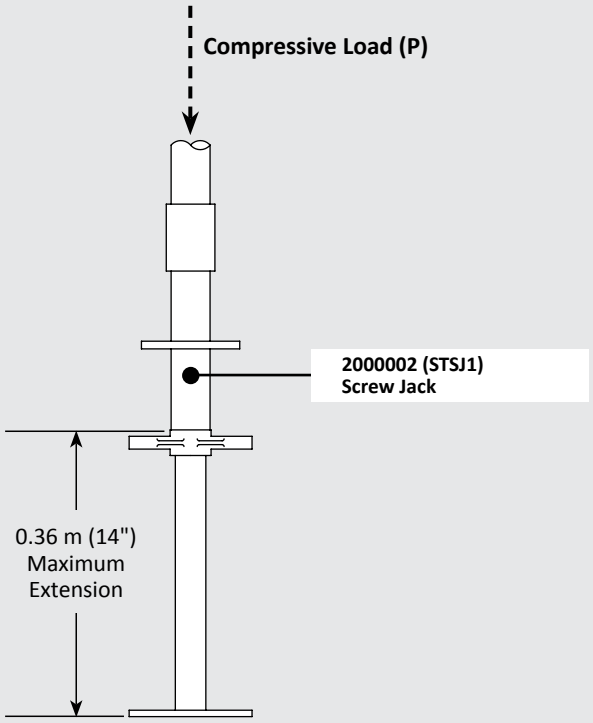


Suspension Standard Coupling Pin

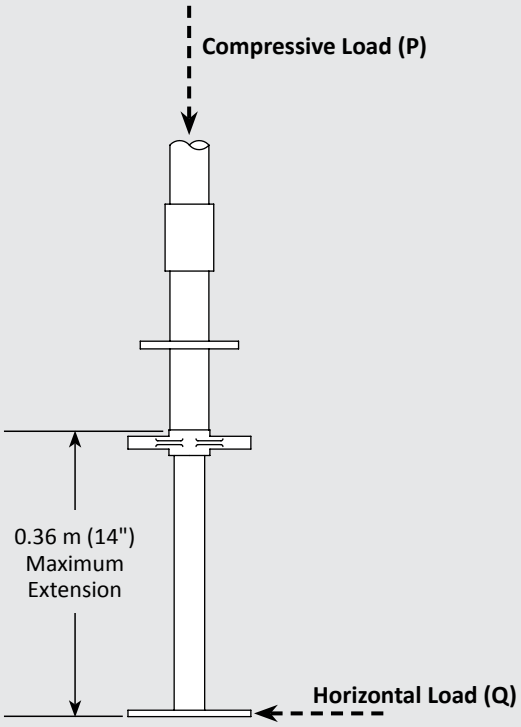
*When suspending (hanging) scaffold, the coupling pin must be bolted using Suspension Hardware as follows: Use two ⅜" 16 NC x 2¼" long hex head bolts, structural grade 5, ⅜" lock washers and ⅜" 16 NC hex nuts.

Component Allowable Loads

Hollow Core (Tubular) Screw Jack



Allowable Load
(Compressive load only)

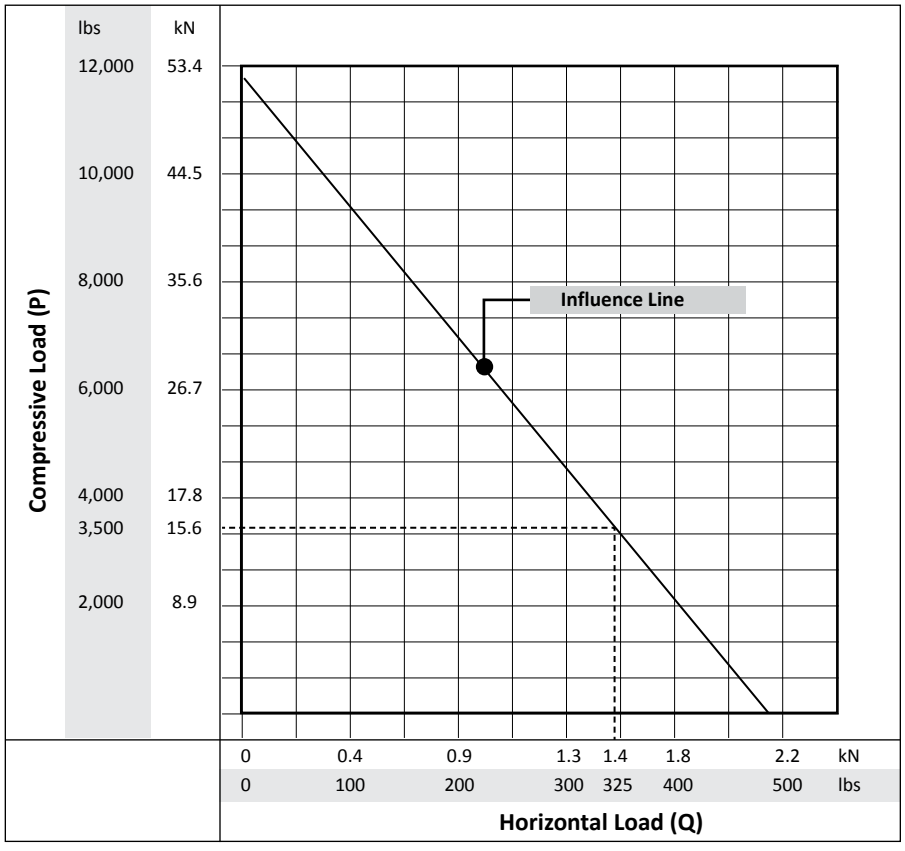


Combined Allowable Load
(Compressive Load (P) and Horizontal Load (Q))

Note: Maximum allowable compressive load (P) when rated for scaffold use is 52.3 kN (11,750 lb).

Follow the dotted line in the chart to determine the maximum corresponding horizontal load. Anchor hole size and locations for Screw Jacks (STSJ1) are noted on page 13.

Example: A scaffold standard is loaded to a compressive load (**P**) of 15.6 kN (3,500 lb). Following the dotted line in the chart, the maximum corresponding horizontal load would be 1.4 kN (325 lb).



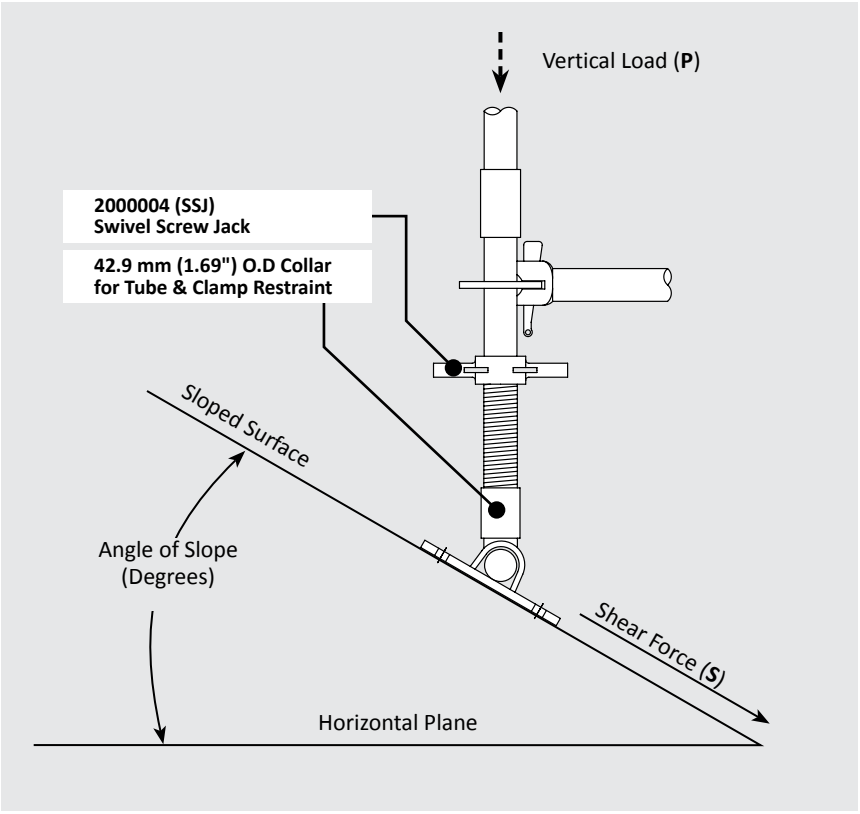
Component Allowable Loads

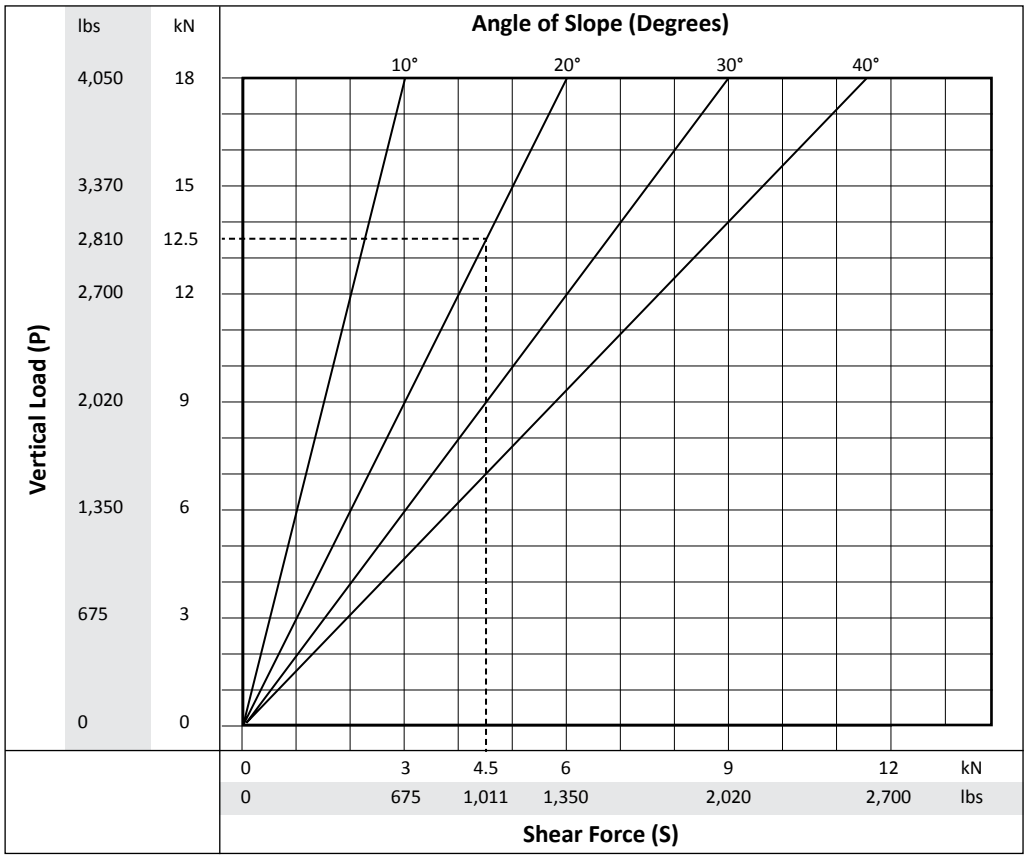
Hollow Core (Tubular) Swivel Screw Jack

The Swivel Jack (SSJ) must be anchored to the sloped surface or restrained. Anchors, bolts or restraints must resist four times the Shear Force determined from the chart. Anchor hole size and locations are noted on page 13.

Example: A scaffold standard supports a load of 12.5 kN (2810 lb) on a 20° slope. A corresponding 4.5 kN (1011 lb) Shear Force must be resisted as indicated by dotted lines and arrows.

Note: Contact BrandSafway Engineering Department when slope exceeds 40°.

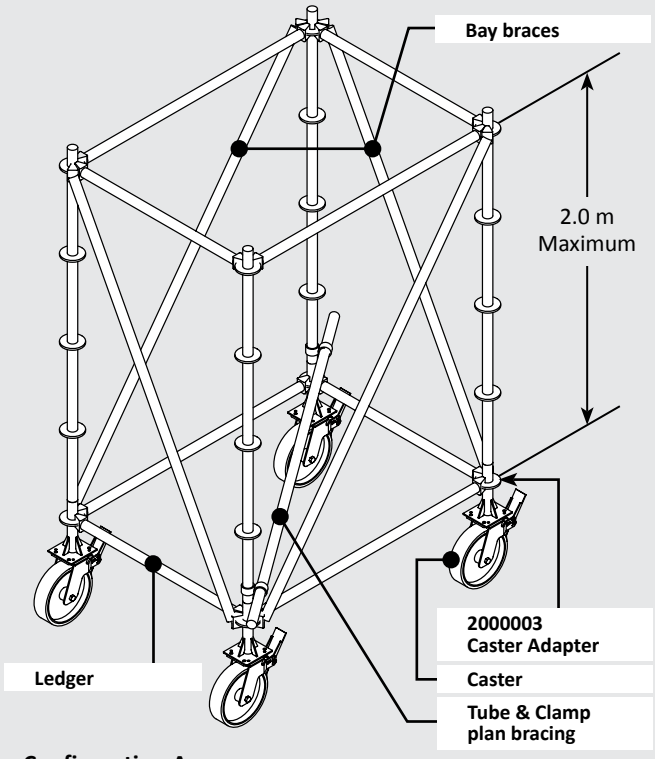




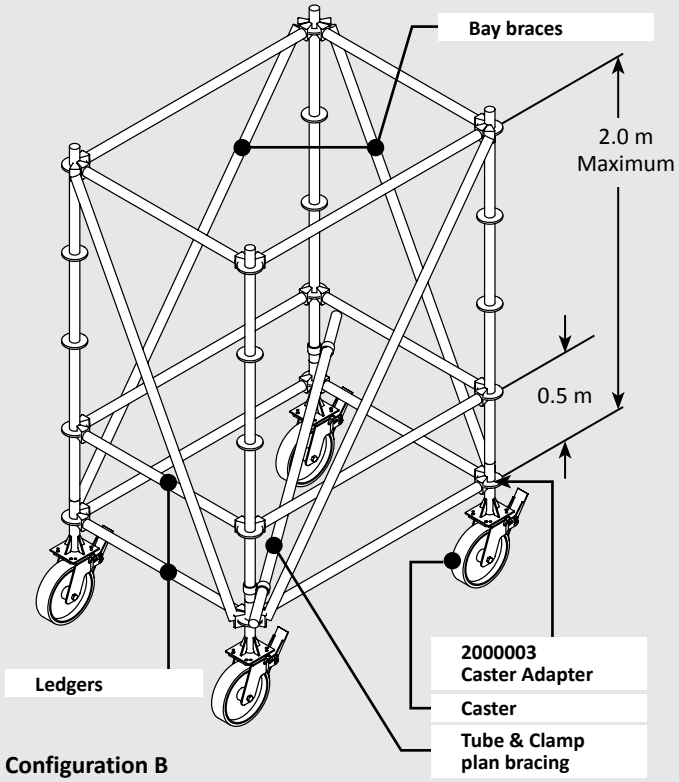
Component Allowable Loads

Casters

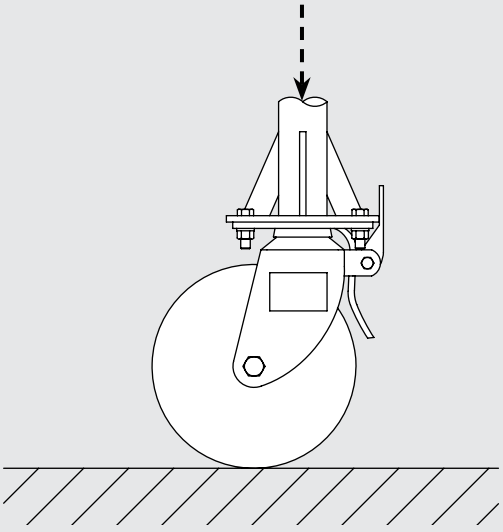
Part No.	Configuration A Allowable Rolling and Static Compressive Load		Configuration B Allowable Rolling and Static Compressive Load	
	kN	lb	kN	lb
2000011	4	900	4	900
2000012	4	900	4	900
2000013	4	900	7.6	1,700
2000014	4	900	7.6	1,700



Configuration A



Configuration B



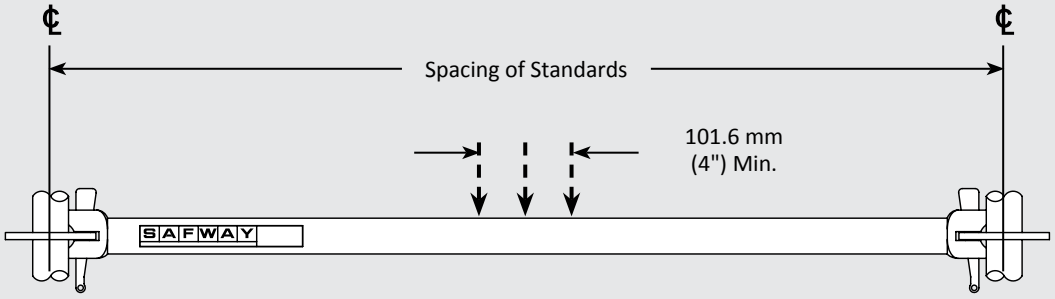
Compressive Load

Component Allowable Loads

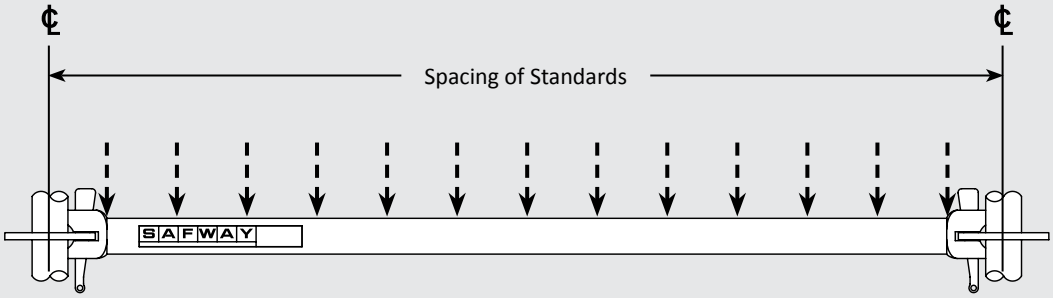
Ledgers

Part No.	Ledger Length		Allowable Center Load		Allowable Uniform Load	
	m	in	kN	lb	kN/m	lb/ft
2020305*	3.05	10' 0"	1.1	250	0.7	50
2020213*	2.13	7' 0"	1.6	360	1.5	105
2020157	1.57	5' 2"	2.3	510	2.9	200
2020115	1.15	3' 10"	2.8	640	4.7	320
2020065	0.65	2' 2"	5.6	1,250	17.5	1,200

*Ledgers with an effective width of 2.13 m and 3.05 m are **not** intended for fully planked work platforms. Use truss ledgers when fully planked work platforms are required.



Center Load



Uniform Load

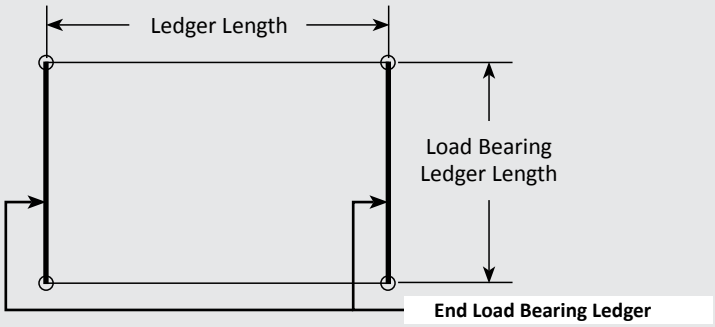
Component Allowable Loads

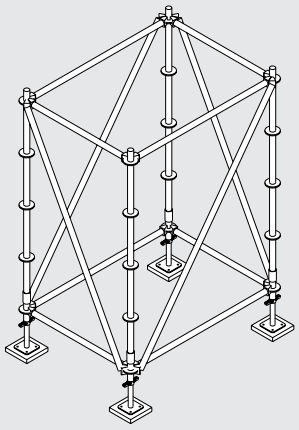
Ledgers (cont'd)

Single Bay Scaffold (Configuration A)

Part No.	Load Bearing Ledger Length		Ledger Length (m) 0.65		1.15		1.57		2.13		3.05	
			Maximum Allowable Ledger Load Chart*									
	m	in	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²
2020157	1.57	5' 2"	8.9	186	5	105	3.7	77	2.7	57	1.9	40
2020115	1.15	3' 10"	14.5	302	8.2	171	6	125	4.4	92	3.1	64
2020065	0.65	2' 2"	53.8	1,125	30.4	636	22.3	466	16.4	343	11.5	240

Note: This chart is based on ledger strength only. The maximum allowable platform load must be determined from either platform material strength, standard load capacity or the chart above, whichever is less.
*Load values include live load and all dead loads, decking, etc.



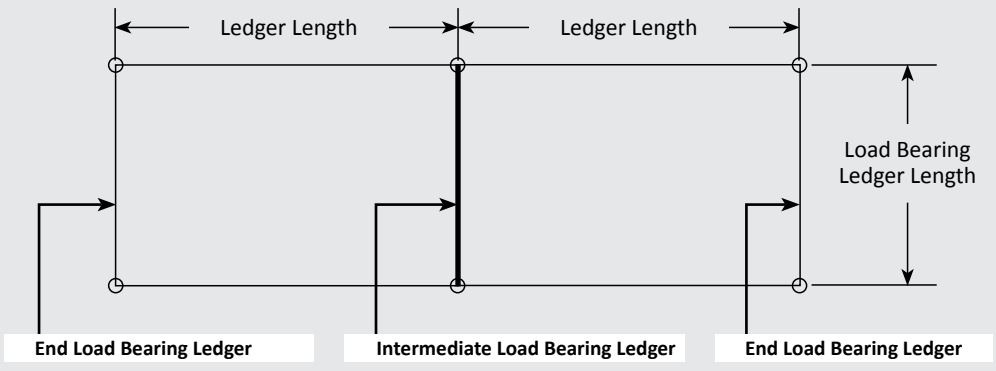


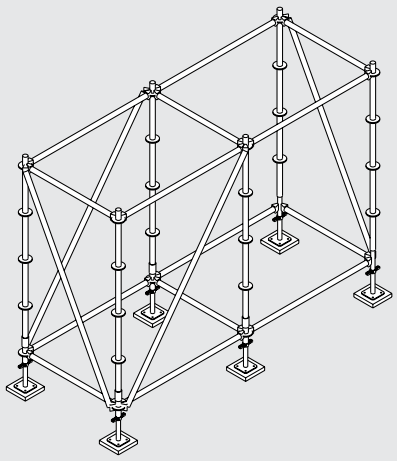
Configuration A (Single Bay Scaffold)

Multi-Bay Scaffold (Configuration B)

Part No.	Load Bearing Ledger Length		Ledger Length (m) 0.65		1.15		1.57		2.13		3.05	
			Maximum Allowable Ledger Load Chart*									
	m		kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²
2020157	1.57	5' 2"	4.5	93	2.5	53	1.8	39	1.4	28	1	20
2020115	1.15	3' 10"	7.2	151	4.1	85	3	63	2.2	46	1.5	32
2020065	0.65	2' 2"	26.9	562	15.2	318	11.1	233	8.2	172	5.7	120

Note: This chart is based on ledger strength only. The maximum allowable platform load must be determined from either platform material strength, standard load capacity or the chart above, whichever is less. Capacity for multi-bay scaffold is governed by intermediate load bearing ledger.
*Load values include live load and all dead loads, decking, etc.





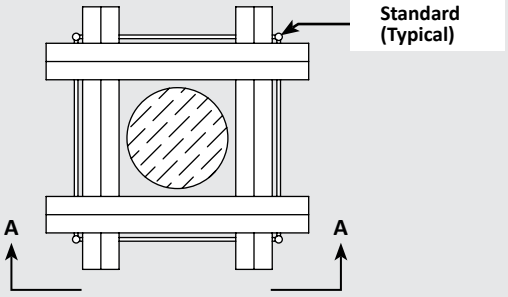
Configuration B (Multi-Bay Scaffold)

Component Allowable Loads

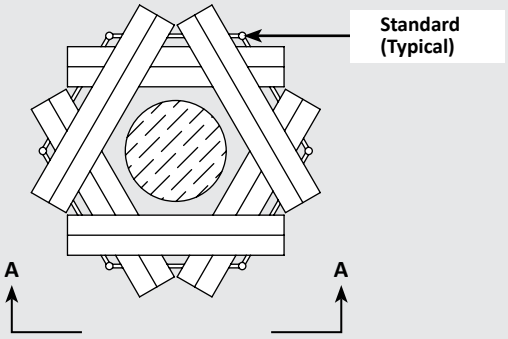
Ledgers – Single Standard Circular Scaffold Allowable Loads

Number of Standards in Tower	Loading Distance (h) m	in	Allowable Uniform Load on Distance h kN	lb	kN/m	lb/ft
4	0.48	19"	2.6	585	5.4	370
6	0.56	22"	2.2	500	4.0	270
8	0.69	27"	1.8	400	2.6	180

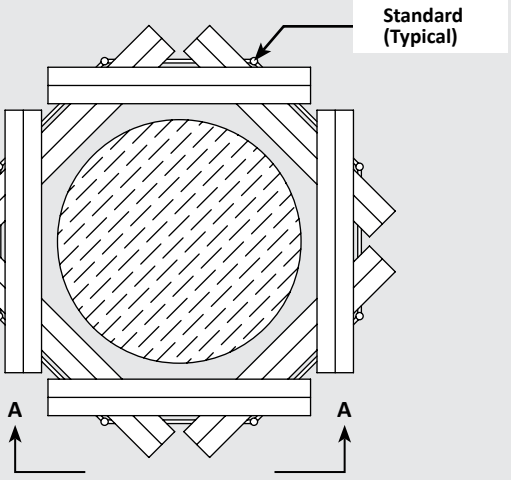
Note: This chart is based on ledger strength only. The Maximum Allowable Platform Load must be determined from either platform material strength, standard load capacity or the chart above, whichever is less.



Four Standards

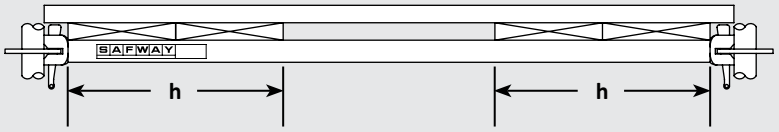


Six Standards



Eight Standards

Loading Diagram for Section A-A (Typical)



Section A-A (Typical)

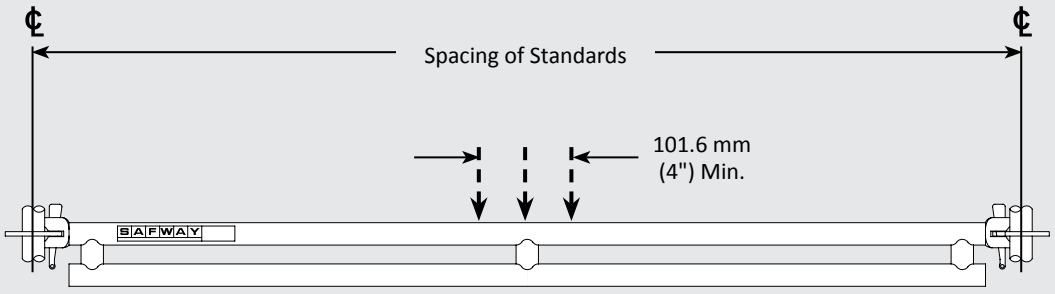
Ledgers with an effective width of 2.13 m and 3.05 m are not designed to support fully decked scaffold platforms or center concentrated loads. Use ledgers or truss ledgers whenever a full deck is required. Platforms may rest on ledgers with an effective width of 2.13 m and 3.05 m if the platform area is located close to standards. However, they may not exceed dimension "**h**" and the allowable load table shown above.

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

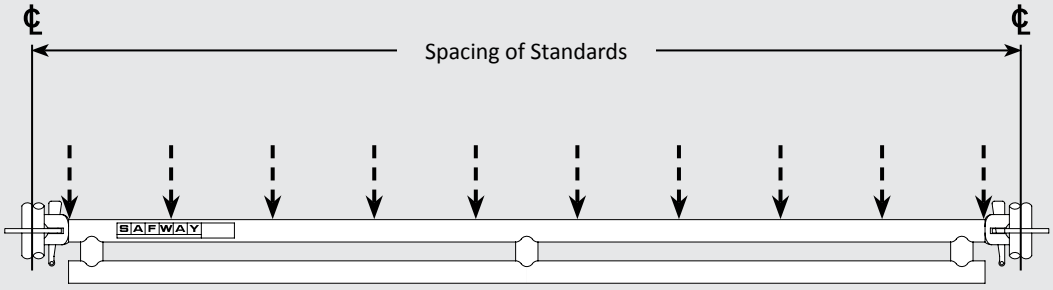
Component Allowable Loads

Truss Ledgers

Part No.	Truss Ledger Length		Allowable Center Load		Allowable Uniform Load	
	m	in	kN	lb	kN/m	lb/ft
2060305	3.05	10' 0"	6.5	1,460	5.4	367
2060213	2.13	7' 0"	8.9	2,000	10.4	714
2060157	1.57	5' 2"	8.9	2,000	14.59	1000



Center Load



Uniform Load

Component Allowable Loads

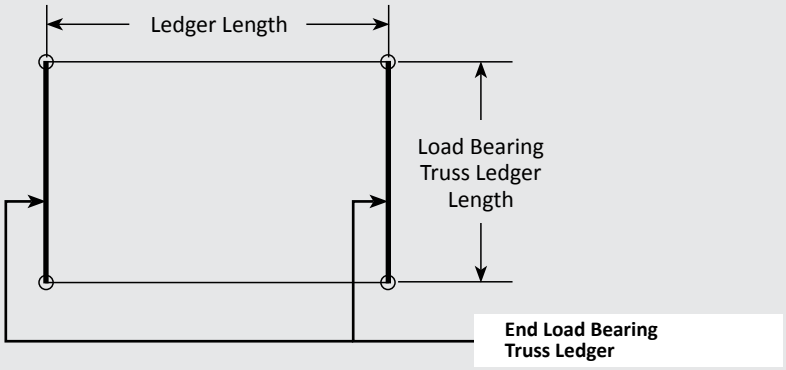
Truss Ledgers (cont'd)

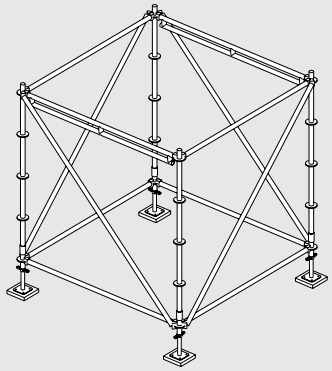
Single Bay Scaffold (Configuration A)

Part No.	Load Bearing Truss Ledger Length		Ledger Length (m) 0.65		1.15		1.57		2.13		3.05	
			Maximum Allowable Truss Ledger Load Chart*									
	m	in	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²
2060305	3.05	10' 0"	16.6	347	9.4	196	6.9	144	5.1	106	3.5	74
2060213	2.13	7' 0"	32	668	18.1	378	13.2	277	9.8	204	6.8	142

Note: This chart is based on truss ledger strength only. The maximum allowable platform load must be determined from either platform material strength, leg load capacity or the chart above, whichever is less.

*Load values include live load and dead load, decking, etc.





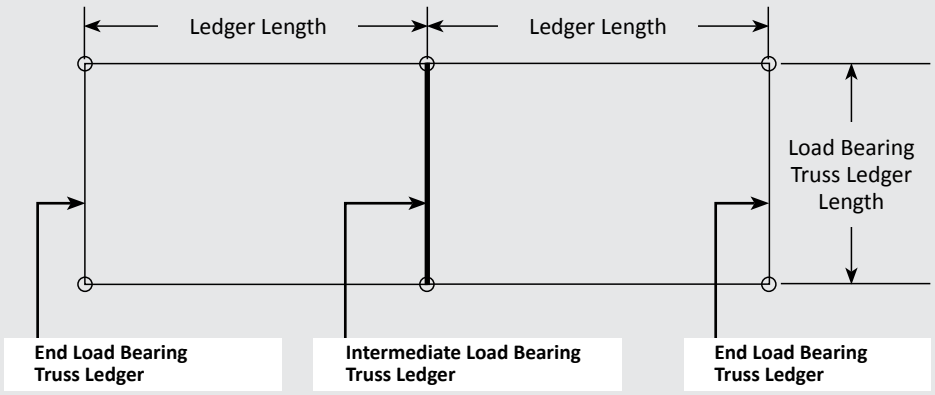
Configuration A (Single Bay Scaffold)

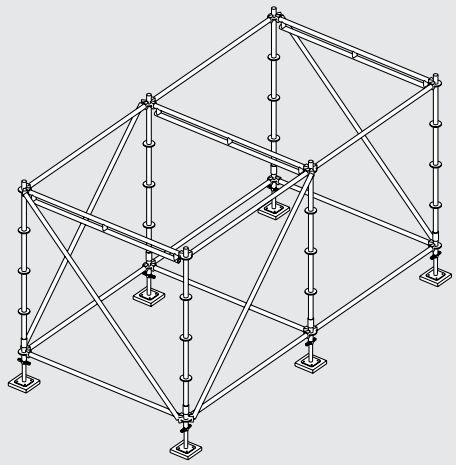
Multi-Bay Scaffold (Configuration B)

Part No.	Load Bearing Truss Ledger Length		Ledger Length (m) 0.65		1.15		1.57		2.13		3.05	
			Maximum Allowable Truss Ledger Load Chart*									
	m	in	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²	kN/m²	lb/ft²
2060305	3.05	10' 0"	8.3	174	4.7	98	3.4	72	2.5	53	1.8	37
2060213	2.13	7' 0"	16.0	334	9.0	189	6.6	138	4.9	102	3.4	71

Note: This chart is based on truss ledger strength only. The maximum allowable platform load must be determined from either platform material strength, leg load capacity or the chart above, whichever is less. Capacity for multi-bay scaffold is governed by intermediate load bearing truss ledger.

*Load values include live load and dead load, decking, etc.





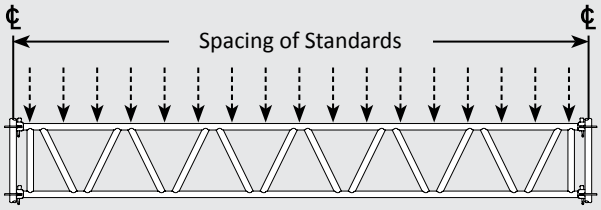
Configuration B (Multi-Bay Scaffold)

Component Allowable Loads

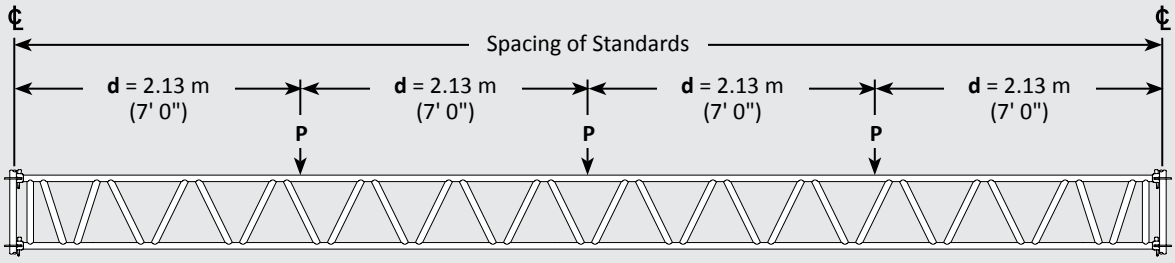
Double Truss Ledgers

Part No.	Length		Allowable Uniform Load		Multiple Concentrated Point Loads					
	m	in	kN/m	lb/ft	Config.	Qty. of Load Points	Equal Spacing (d) m	Equal Spacing (d) in	Allowable Load at Each Point (P) kN	Allowable Load at Each Point (P) lb
2060852*	8.52	28' 0"	0.29	20	A	3	2.13	7' 0"	0.76	170
2060639*	6.39	21' 0"	0.88	60	B	2	2.13	7' 0"	2.0	450
2060518	5.18	17' 0"	0.95	65	C	1	2.59	8' 6"	4.4	1,000
2060426	4.26	14' 0"	2.0	140	D	1	2.13	7' 0"	4.4	1,000

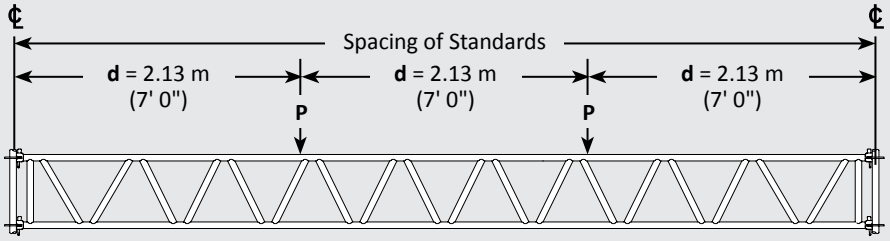
Note: This chart is based on double truss ledger strength only. The maximum load must be determined from either platform material strength, standard load capacity or the chart above, whichever is less.
*Contact BrandSafway Engineering for additional bracing requirement to increase load capacity.



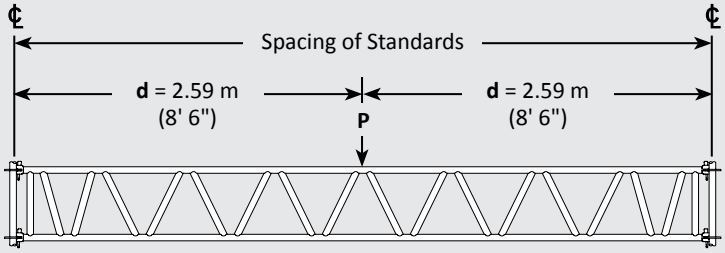
Uniform Load



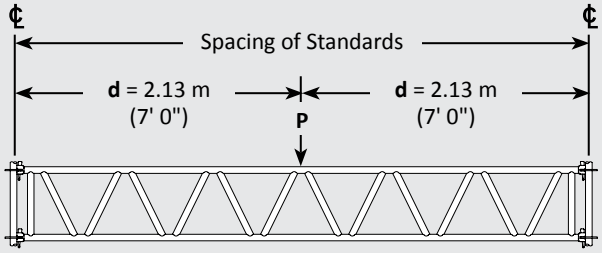
Configuration A



Configuration B



Configuration C (Load Mid-Span)



Configuration D (Load Mid-Span)

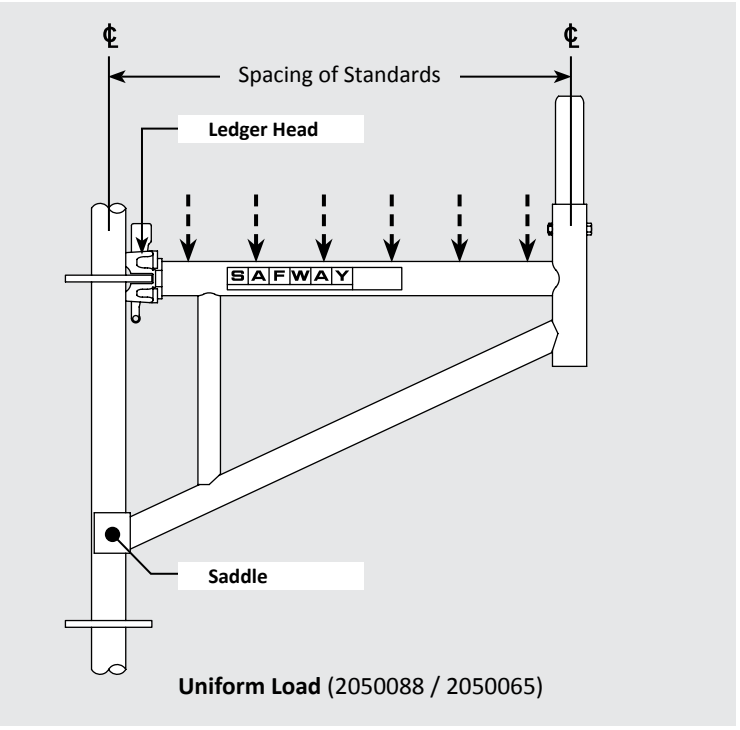
Component Allowable Loads

Side Brackets with Single Ledger Head

Part No.	Length		Allowable Uniform Load	
	m	in	kN	lb
2050088	0.88	2' 11"	4.9	1,100
2050065	0.65	2' 2"	4.9	1,100

Note: This chart is based on side bracket strength only. The maximum allowable platform load must be determined from either platform material strength, standard load capacity or the chart above, whichever is less.

Side brackets shall not be used to support standards unless designed by an engineer. Coupling Pin (2000008) is provided with side brackets for guardrail post installation only.



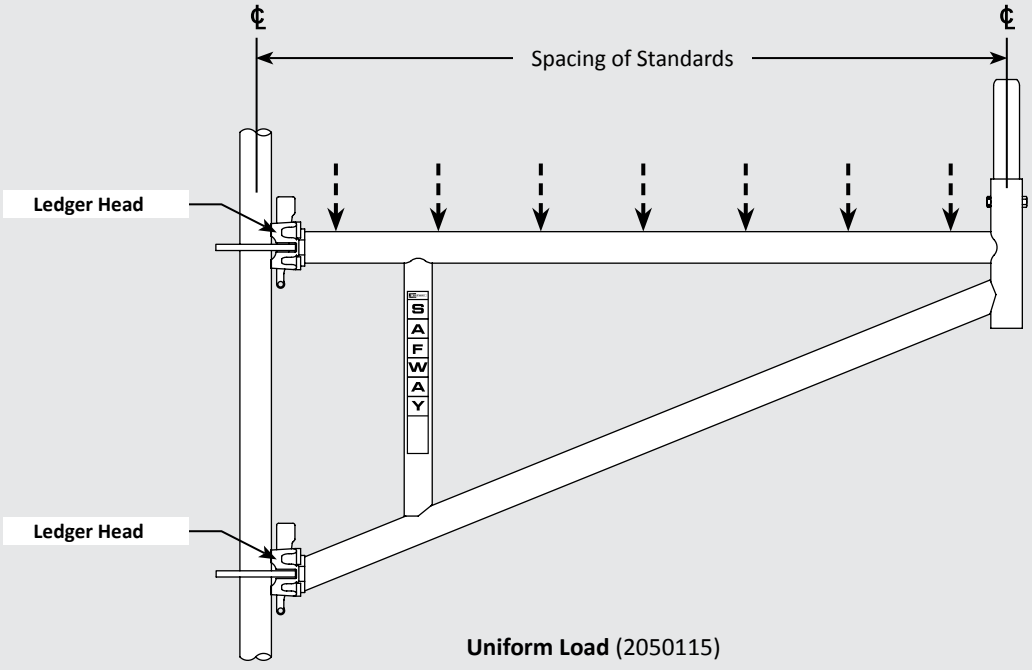
Uniform Load (2050088 / 2050065)

Side Brackets with Double Ledger Heads

Part No.	Length		Allowable Uniform Load	
	m	in	kN	lb
2050115	1.15	3' 10"	4.9	1,100

Note: This chart is based on side bracket strength only. The maximum allowable platform load must be determined from either platform material strength, standard load capacity or the chart above, whichever is less.

Side brackets are not to be used to support standards unless designed by an engineer. Coupling Pin (2000008) is provided with side brackets for guardrail post installation only.



Uniform Load (2050115)

Component Allowable Loads

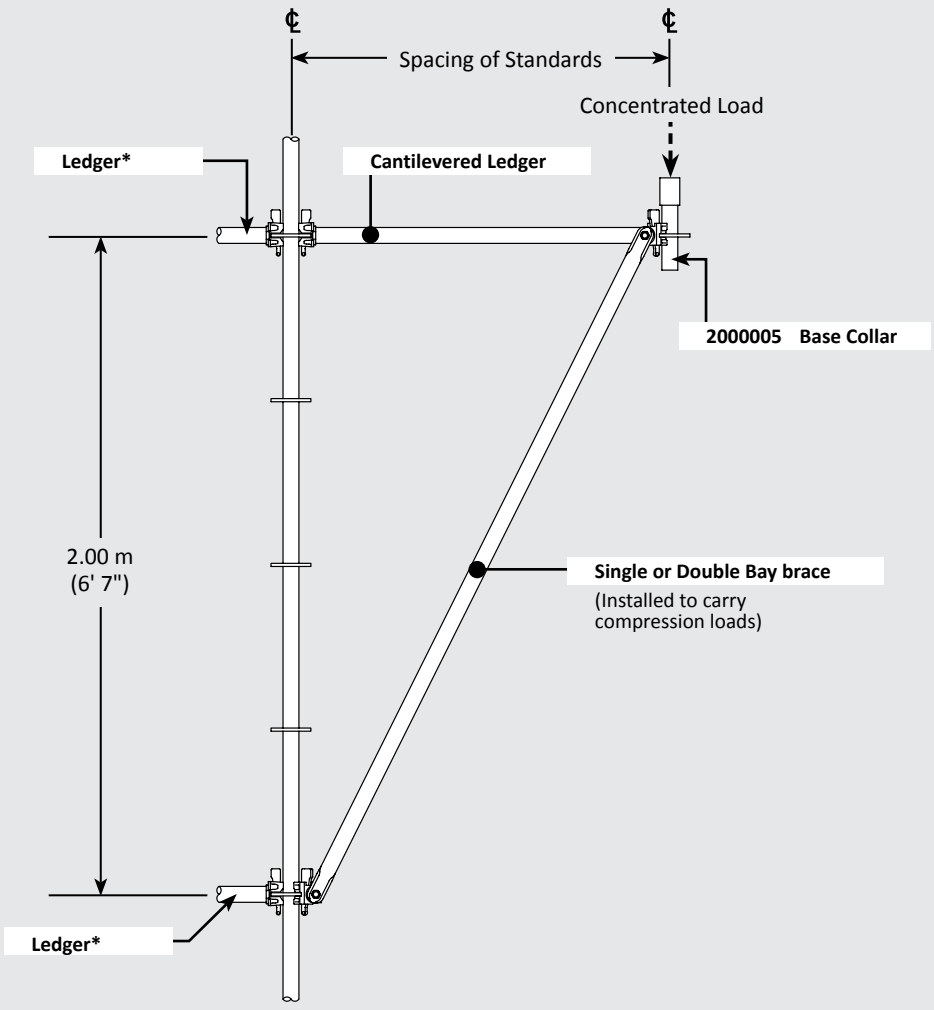
Cantilever Assembly Components

Part No.	Cantilevered Ledger Length		Allowable Concentrated Load Single Bay Brace		Double Bay Brace	
	m	in	kN	lb	kN	lb
2020213	2.13	7' 0"	1.9	420	2.6	580
2020157	1.57	5' 2"	2.2	490	3.6	800
2020115	1.15	3' 10"	2.4	540	4.8	1,080

*Ledgers must be installed at same increments as bay brace(s) and cantilevered ledger to provide bracing to the standard.

Scaffold must be properly tied and/or of adequate size to prevent it from overturning.
See pages 60-61 for tying of scaffolds utilizing cantilevered assembly components.

Note: Allowable Concentrated Loads are the same when bay braces are installed to carry tension loads rather than compression loads.



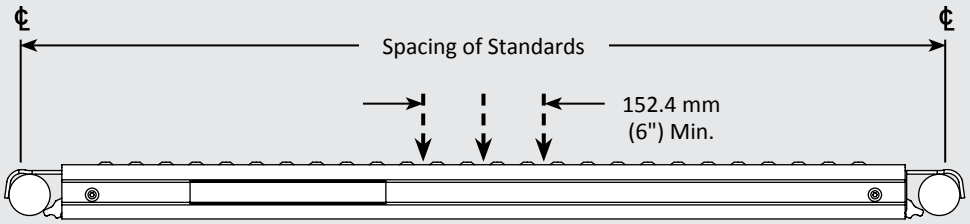
Concentrated Load

Component Allowable Loads

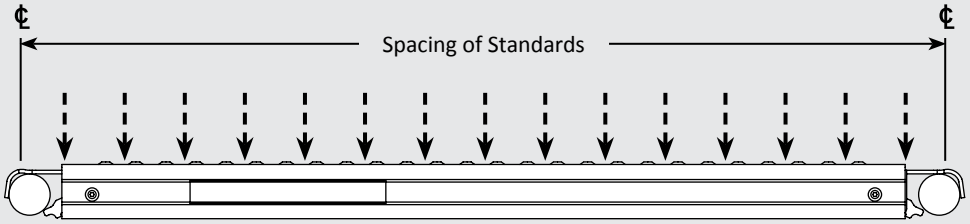
Steel Planks

Part No.	Plank Length		Allowable Center Load		Allowable Uniform Load		Equivalent Platform Load	
	m	in	kN	lb	kN/m	lb/ft	kN/m^2	lb/ft^2
6095305	3.05	10' 0"	1.1	250	0.6	40	2.4	50
6095213	2.13	7' 0"	1.6	350	1.2	79	4.8	100
6095157	1.57	5' 2"	1.6	350	1.2	79	4.8	100
6095115	1.15	3' 10"	1.6	350	1.2	79	4.8	100
6095065	0.65	2' 2"	1.6	350	1.2	79	4.8	100

Note: This chart is based on steel plank strength only. The maximum allowable platform load must be determined from either ledger strength, standard load capacity or the chart above, whichever is less.



Center Load



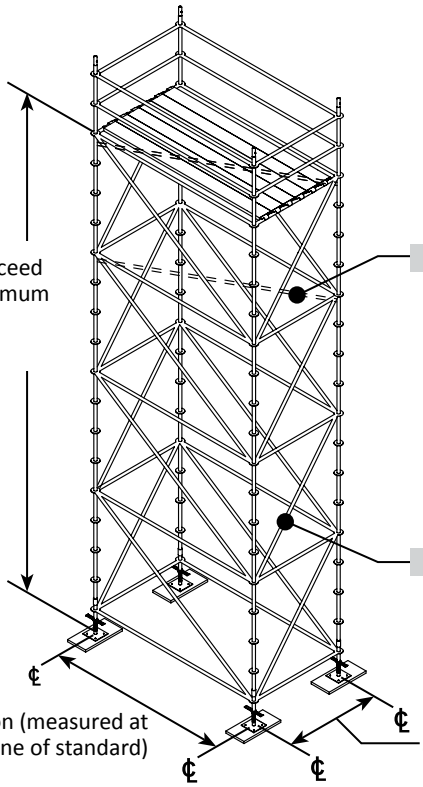
Uniform Load

Tying & Bracing

Section 3

Free Standing Scaffold – Single Bay Bracing Where Ties or Guy Wires are Not Required

*Bay braces must be installed on standards at ledger connections.



Horizontal Diagonal

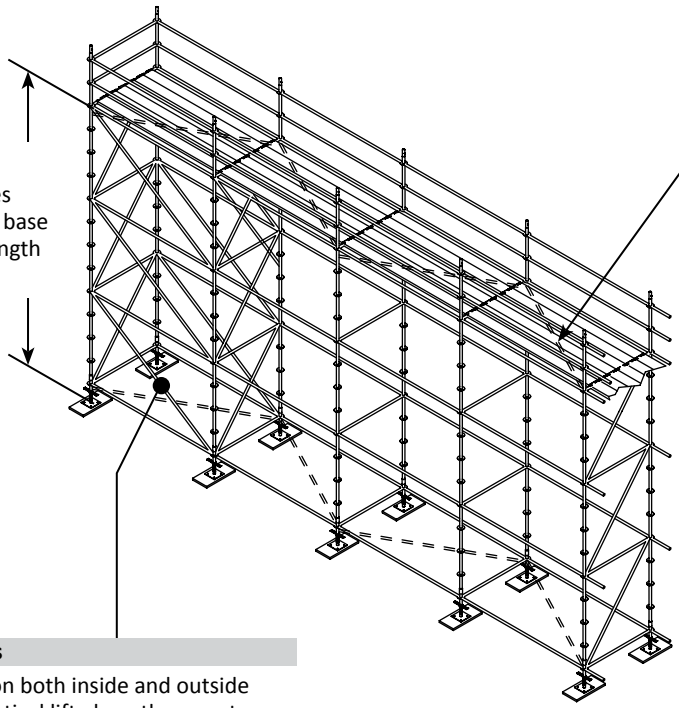
At base, every 3 lifts, and as close to top level as possible. Note: Hook-on scaffold decks may be substituted for horizontal diagonal at the top level.

Bay Braces

Required on all sides at each level. Diagonals on opposite sides of tower to be parallel.*

Free Standing Scaffold – Multi-Bay Bracing Where Ties or Guy Wires are Not Required

*Bay braces must be installed on standards at ledger connections.

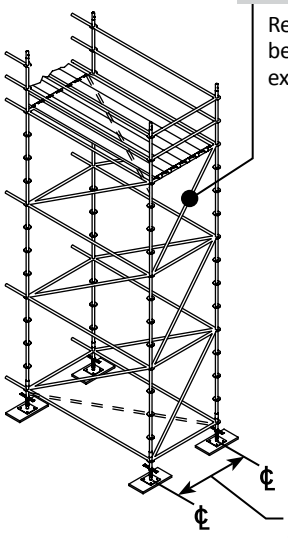


Horizontal Diagonal

At base, every 3 lifts, and as close to top level as possible. Note: Hook-on scaffold decks may be substituted for horizontal diagonal at the top level.

Transverse Bay Braces

Required at each end and in between at intervals not to exceed 9 m (30') or four bays.

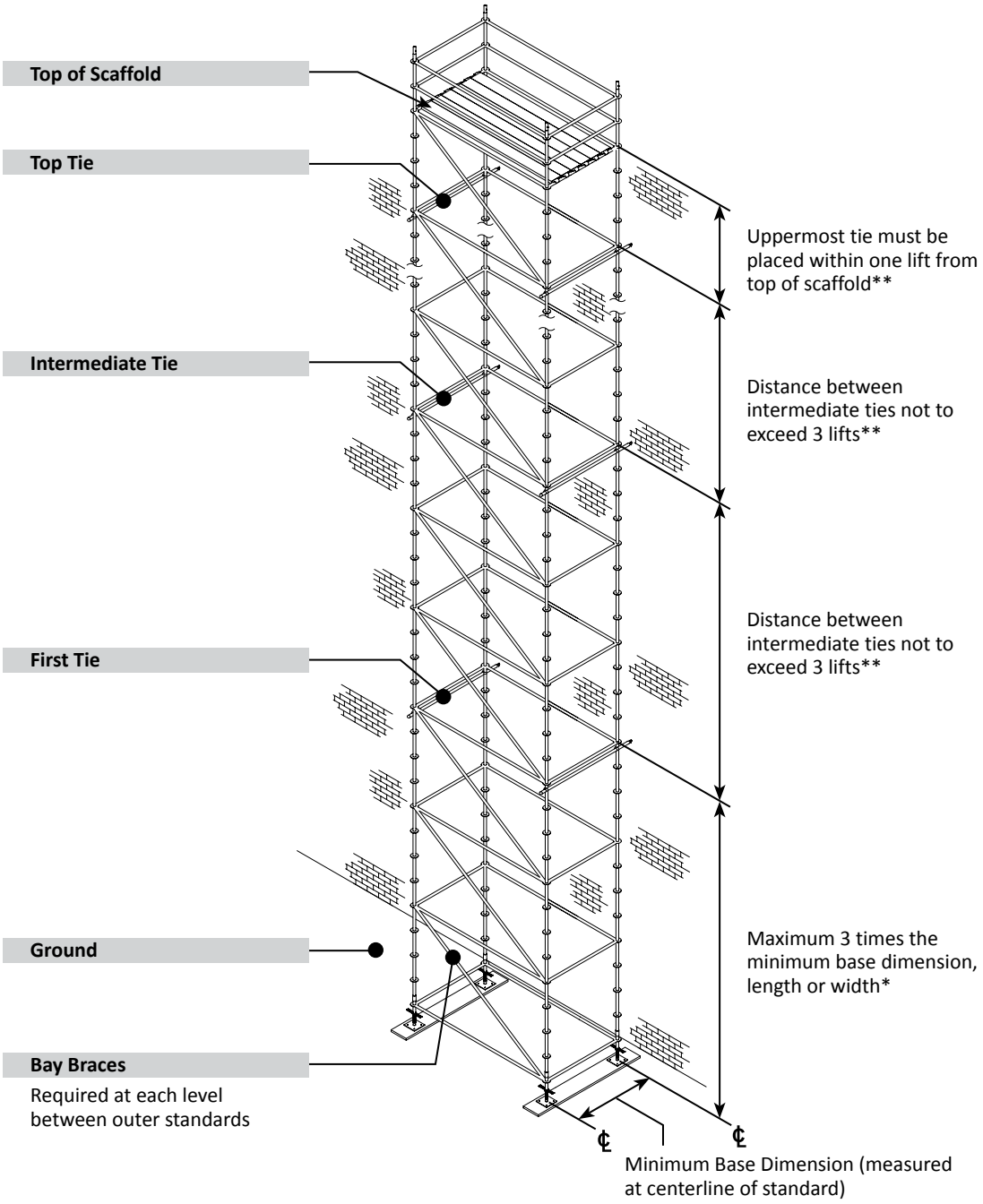


Bay Braces

Required on both inside and outside of each vertical lift along the run at each end and in between at intervals not to exceed 9 m (30') or four bays. Alternate direction of diagonal along the scaffold length.*

Tying & Bracing

Wall Tied Scaffold – Single Bay Bracing

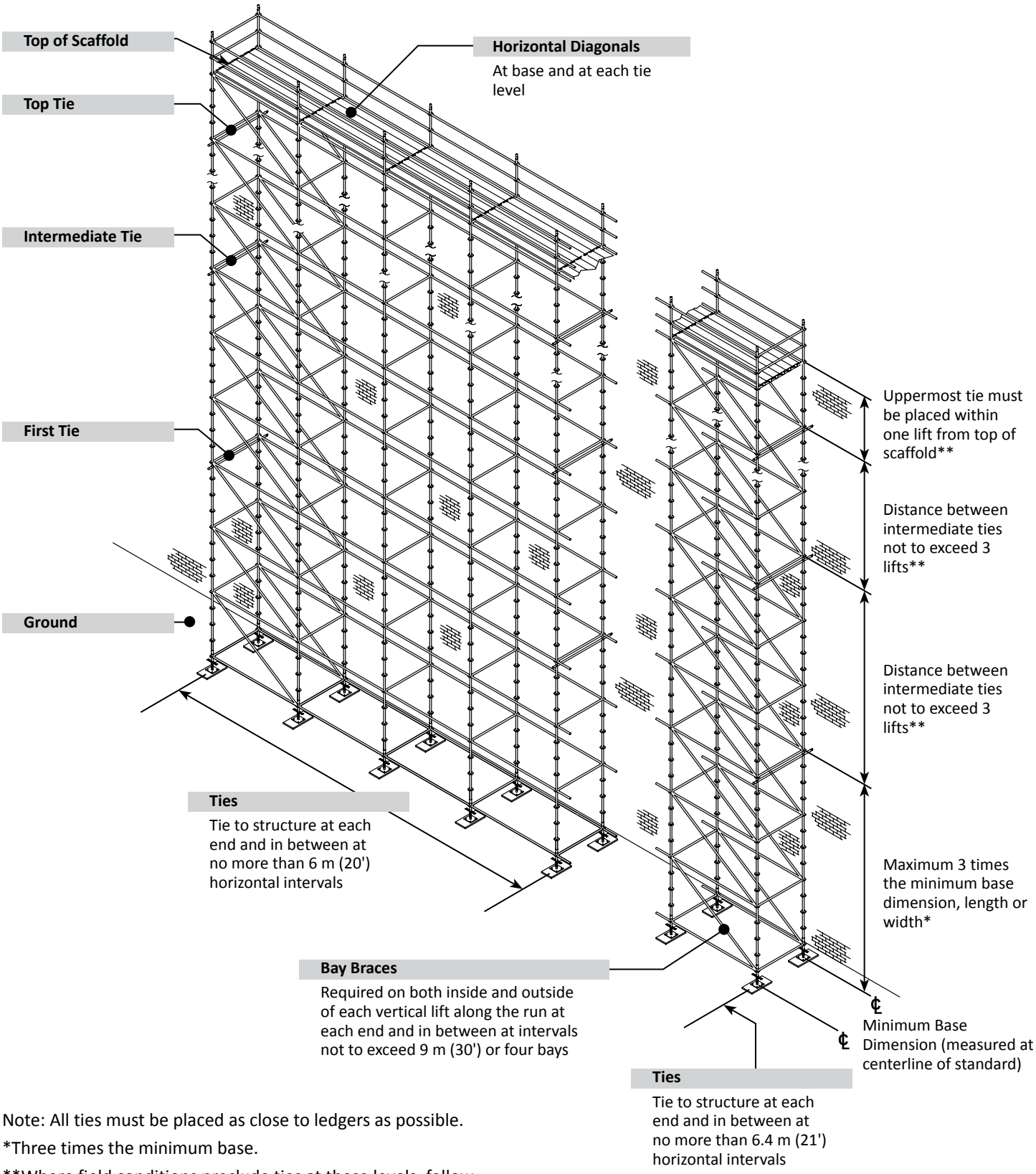


Note: All ties must be placed as close to ledgers as possible.

*Three times the minimum base.

**Where field conditions preclude ties at these levels, follow provincial and site regulations. Bay braces must be installed on standards at ledger connections.

Wall Tied Scaffold – Multi-Bay Bracing

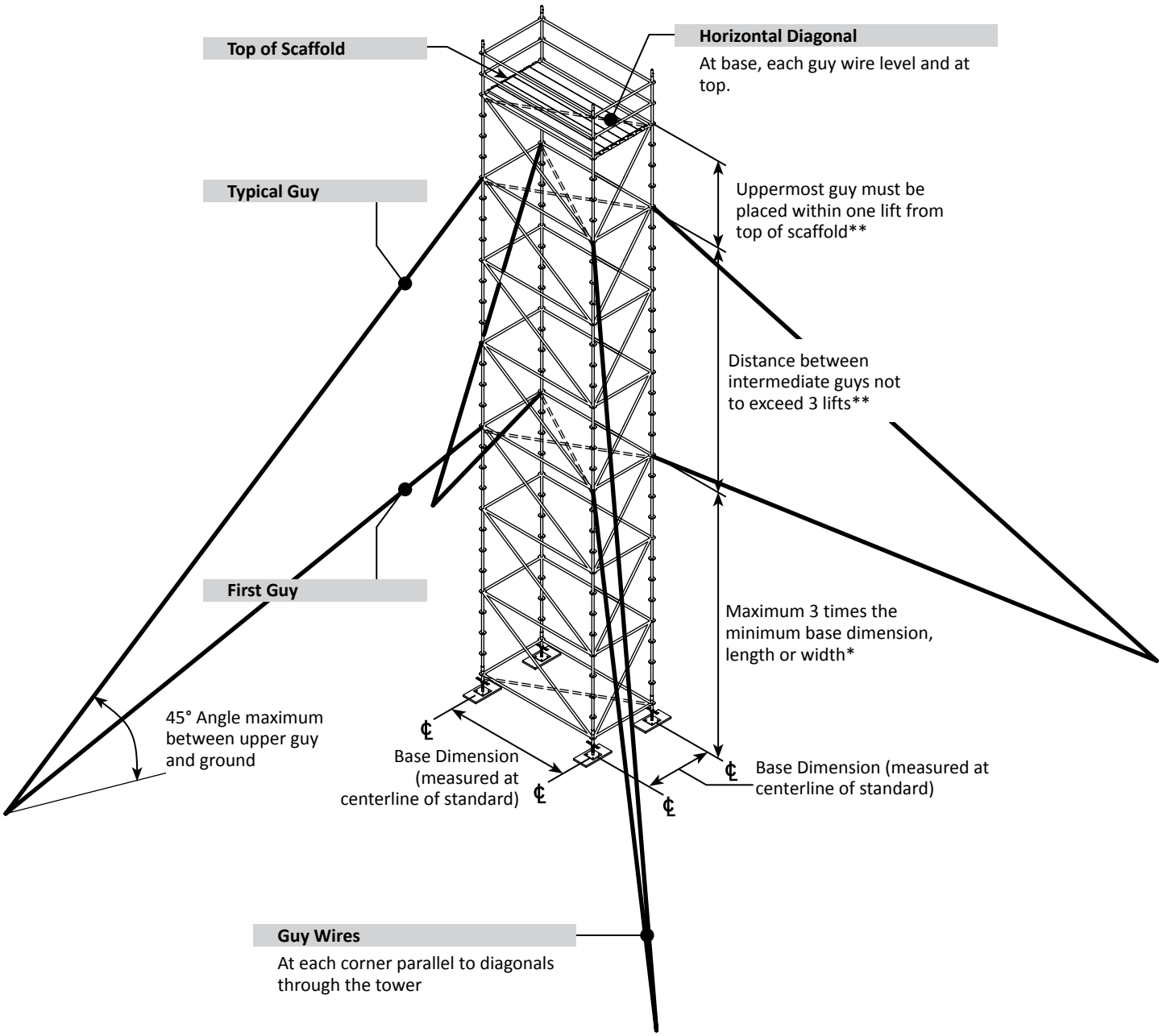


Note: All ties must be placed as close to ledgers as possible.

*Three times the minimum base.

**Where field conditions preclude ties at these levels, follow provincial and site regulations. Bay braces must be installed on standards at ledger connections. Contact BrandSafway Engineering department for alternate bracing methods.

Guy Wire Restrained Scaffold Tower



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

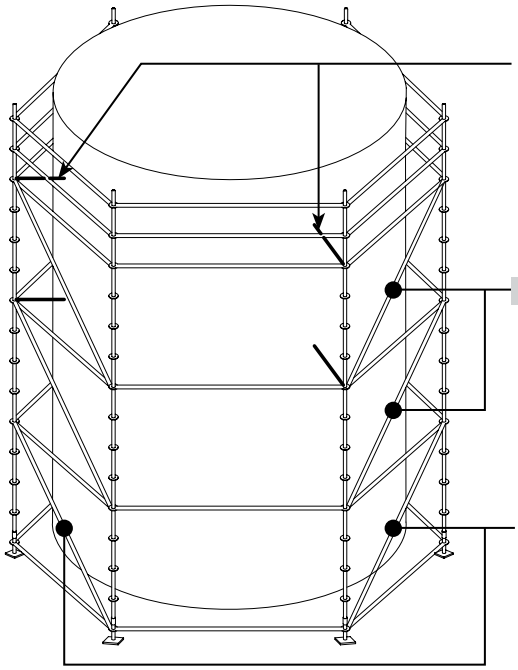
All ties must be placed at ledger locations.

*Three times the minimum base.

** Where field conditions preclude ties at these levels follow provincial and site regulations. Bay braces must be installed on standards at ledger connections.

Tying & Bracing

Circular Scaffold Tying and Bracing – Single Standard



Maximum of 8 standards in any Single Standard Circular Scaffold. Stand-off or tie at each second standard along vessel perimeter every 2 lifts or in maximum height intervals of 4.0 m (13').

Bay Braces

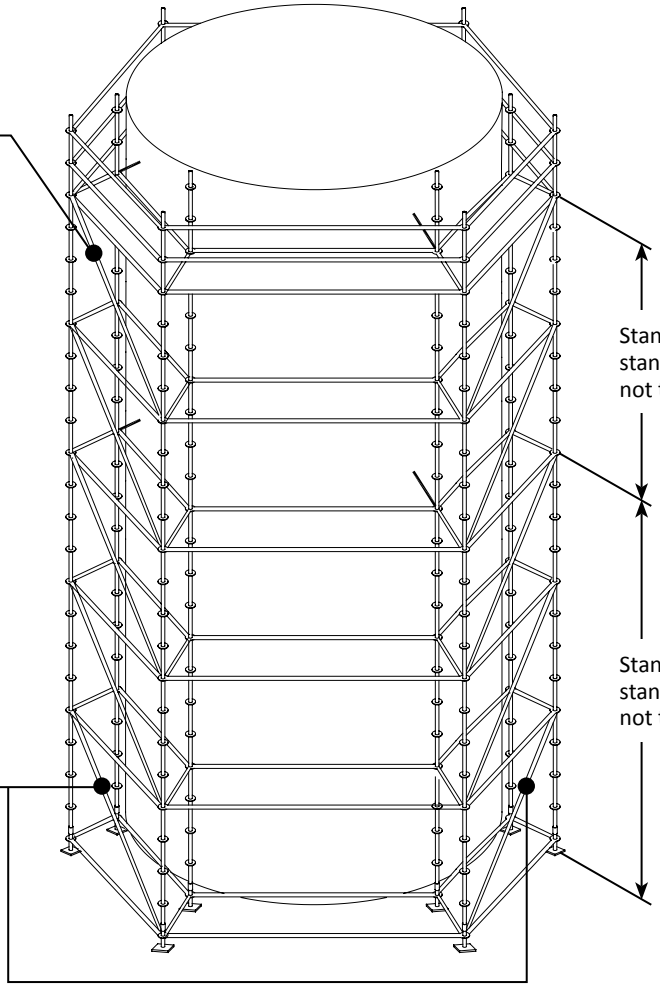
Required at each second bay all levels. Do not alternate diagonal direction vertically.

Alternate direction of diagonals in adjacent braced bays

Circular Scaffold Tying and Bracing – Double Standard

Bay Braces

Required at 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 at every second standard along vessel perimeter not to exceed 3 lifts

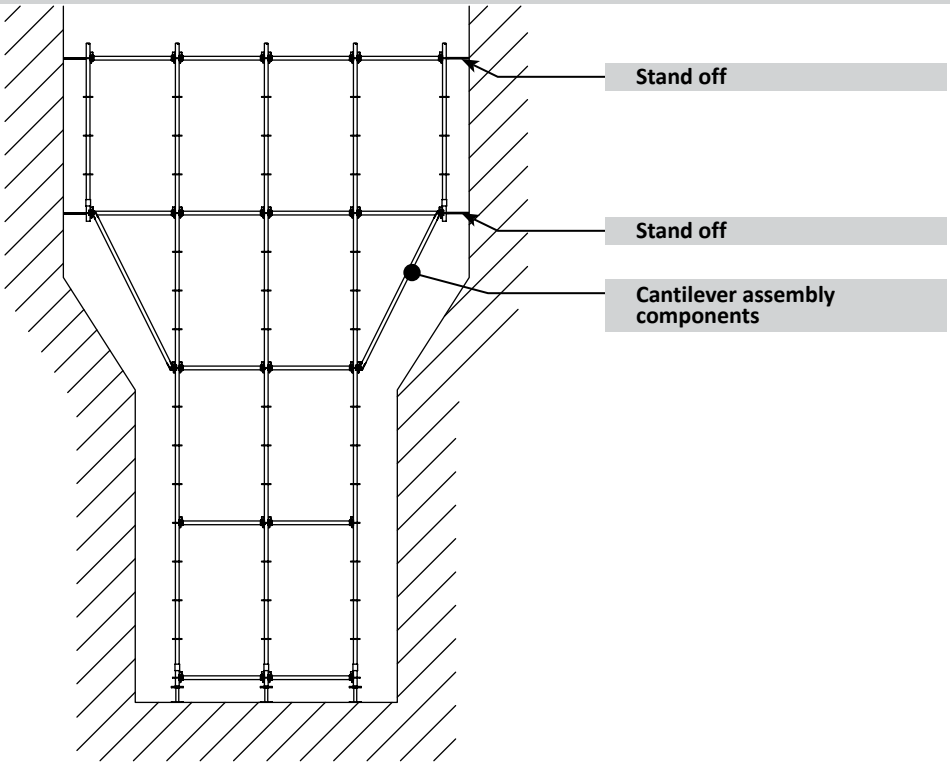
Stand-off or tie at every second standard along vessel perimeter not to exceed 3 lifts

Alternate direction of diagonals in adjacent braced bays

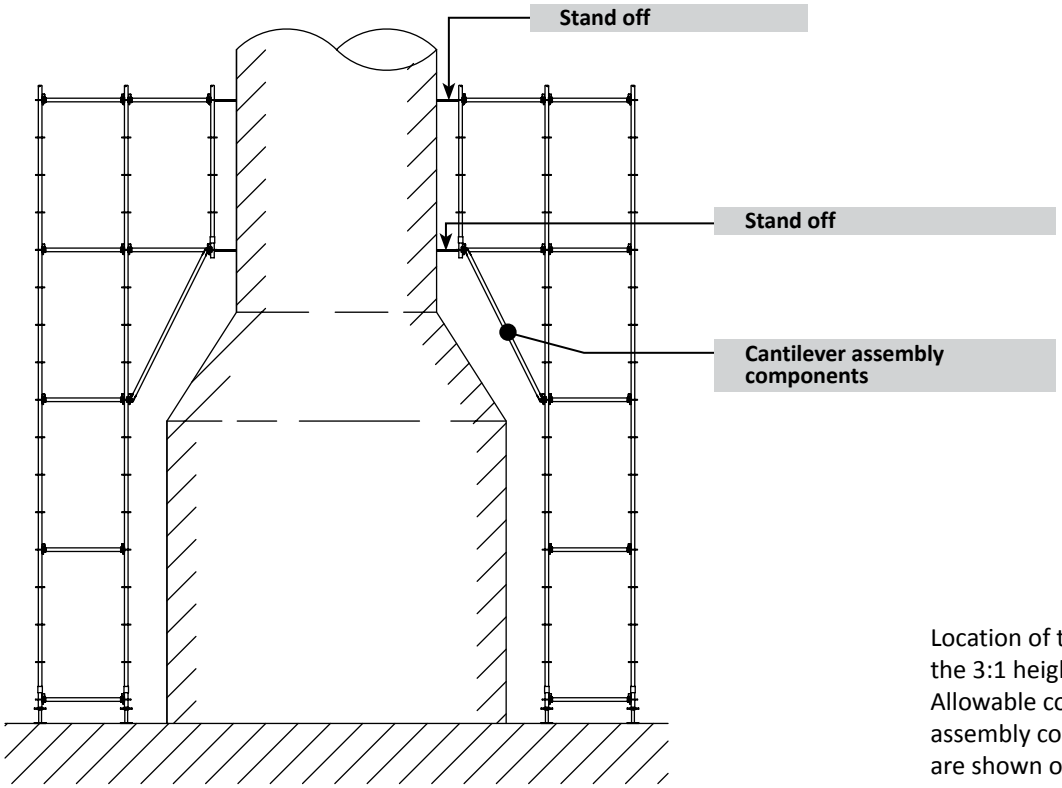
Tying & Bracing

Symmetrical Scaffolds with Cantilever Assemblies

Typical Boiler Scaffold (Section View)



Typical Circular Scaffold (Section View)

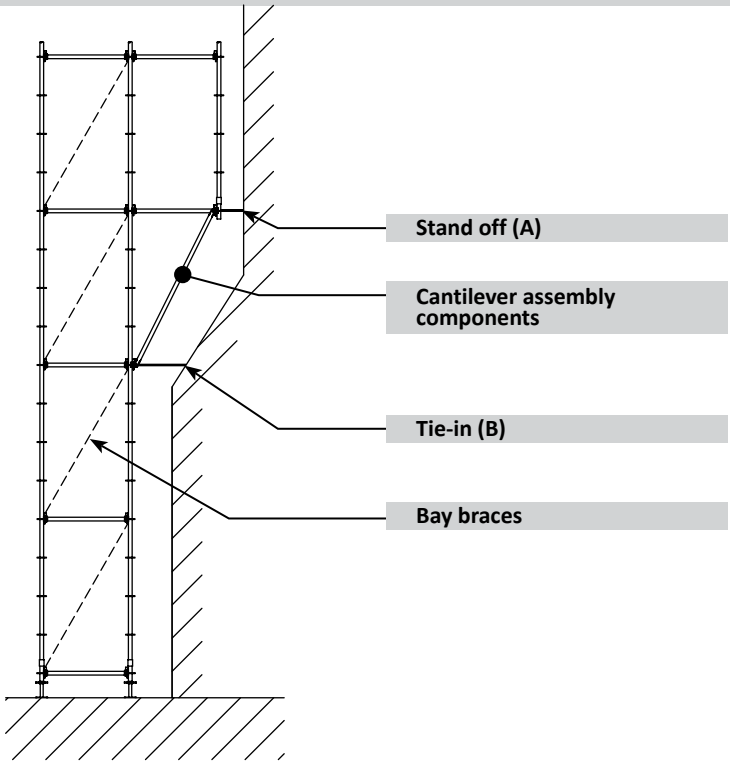


Location of ties/stand offs must comply with the 3:1 height-to-minimum base width ratio. Allowable concentrated loads for cantilever assembly components installed on scaffolds are shown on page 51.

Note: All scaffolds with cantilever assembly components also require bracing and tying as shown in applicable sections of this manual.

Non-symmetrical Scaffolds with Cantilever Assemblies

Scaffold Run Along Set-back Surface (End View)



Non-symmetrical assemblies similar to this figure require a stand-off at **A** and a tie-in at **B** on each frame line with cantilever assembly components. In addition, bay braces may be required in each frame plane. Contact BrandSafway Engineering or a structural Professional Engineer familiar with scaffold design prior to erecting such non-symmetrical scaffolds.

Note: All scaffolds with cantilever assembly components also require bracing and tying as shown in applicable sections of this manual.

Assembly Details

Section 4

Assembly Details

Ladder Installation

Typical Ladder Installation

2010500 Guardrail Standard

1083000 Access Gate

1093090 Access Ladder Bracket

1091157 Access Ladder

Tube & Clamp

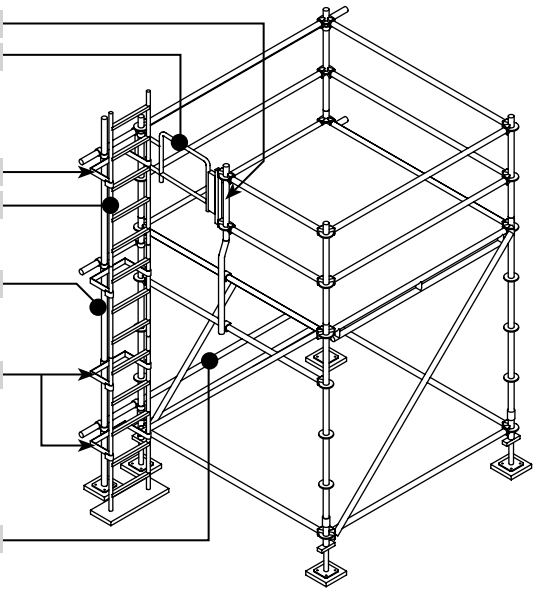
For Access Ladder Bracket attachment

Access Ladder Brackets

Two Access Ladder Brackets are required on the starter ladder section. One bracket is also required near the top of **each** additional section.

Tube & Clamp

For Access Ladder Bracket attachment



Typical Ladder Installation – Ladder Cage

2010500 Guardrail Standard

1083000 Access Gate

1093090 Access Ladder Bracket

Ladder Cage

Tube & Clamp

For Access Ladder Bracket attachment

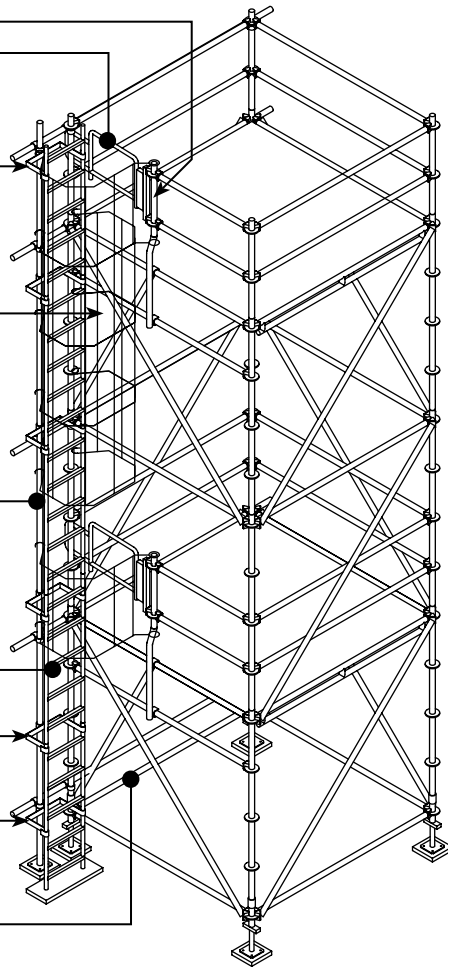
1091157 Access Ladder

Access Ladder Brackets

Two Access Ladder Brackets are required on the starter ladder section. One bracket is also required near the top of **each** additional section.

Tube & Clamp

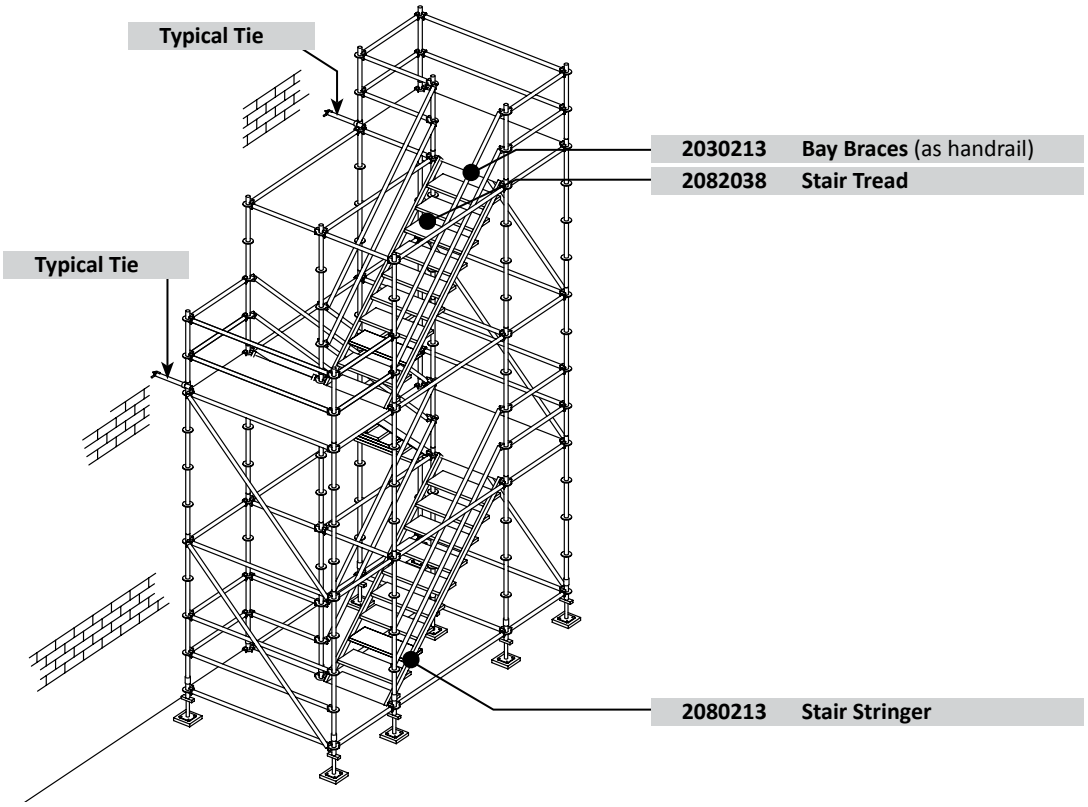
For Access Ladder Bracket attachment



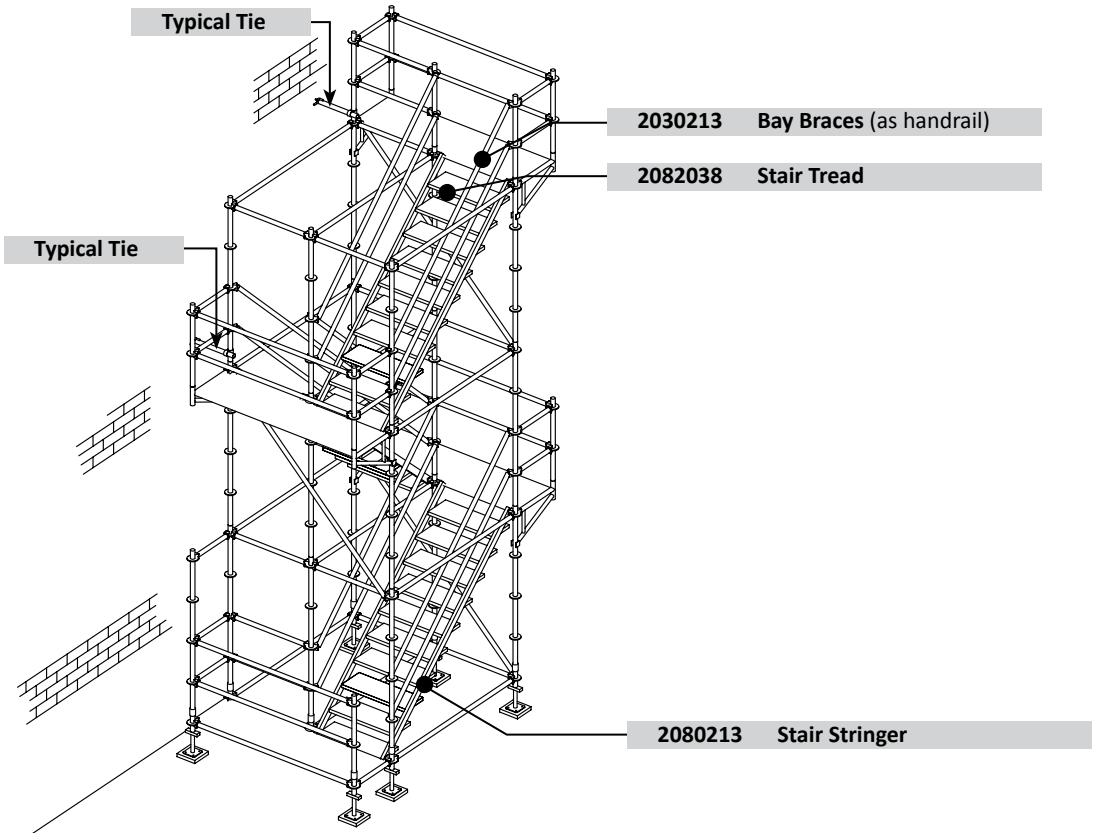
Assembly Details

Typical Stair Towers

Landings Supported by Standards – 10-leg Stair Tower

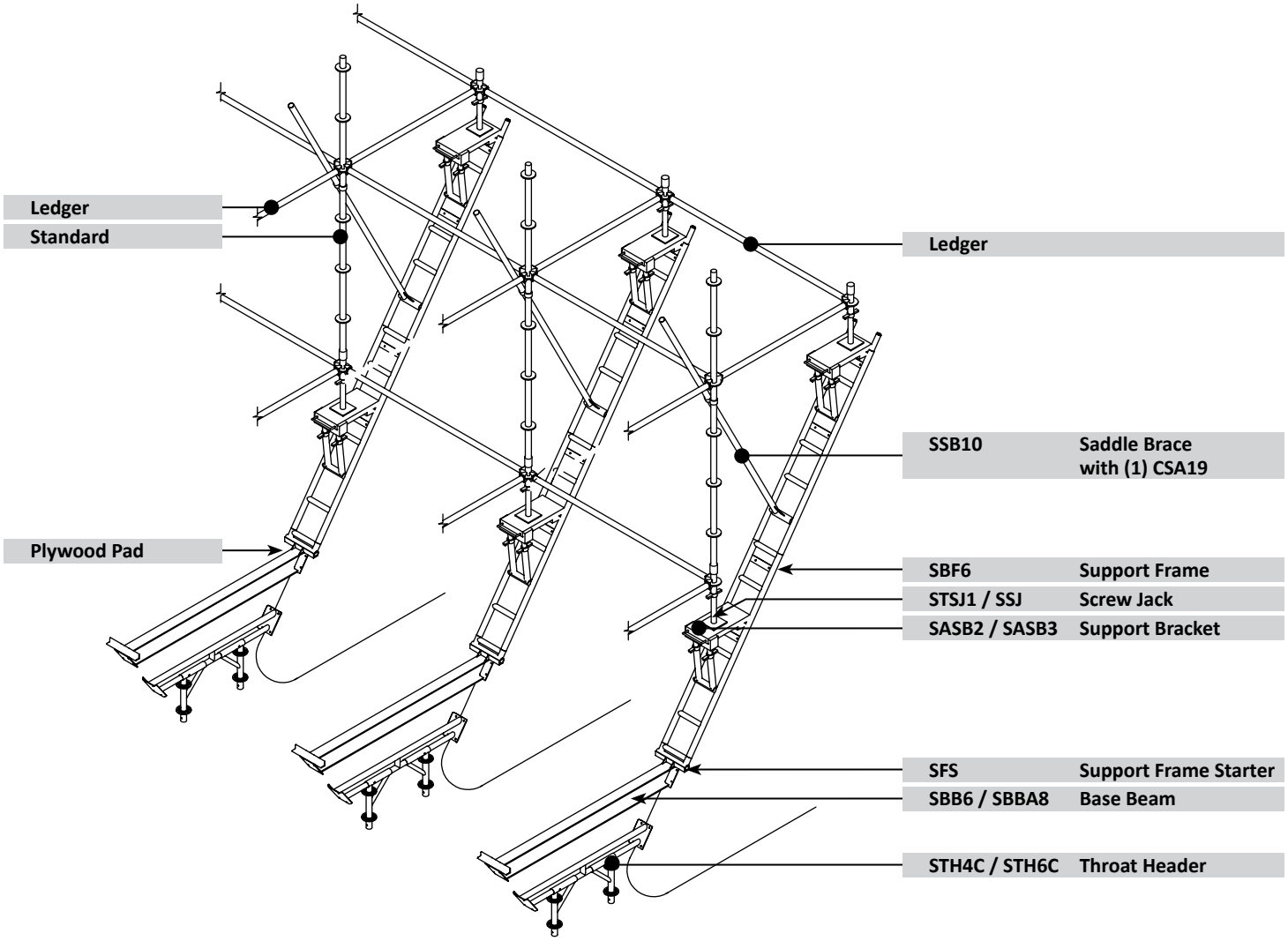


Landings Supported by Side Brackets – 6-leg Stair Tower



Assembly Details

Boiler Founding System



Note: Size of ledger varies and depends on size of boiler and load requirements.

Assembly Details

Planking Chart for 241 mm (9½") Planks

Double Truss Ledgers

Part No.	Effective Width m	Effective Width in	Qty. of Planks	Gap* mm	Gap* in
2060852	8.52	28' 0"	34	165.6	6.5"
2060639	6.39	21' 0"	25	207.3	8.2"
2060518	5.18	17' 0"	20	203.8	8.0"
2060426	4.26	14' 0"	17	7.7	0.3"

Truss Ledgers

Part No.	Effective Width m	Effective Width in	Qty. of Planks	Gap* mm	Gap* in
2060305	3.05	10' 0"	12	5.2	0.2"
2060213	2.13	7' 0"	8	49.4	1.9"

Ledgers

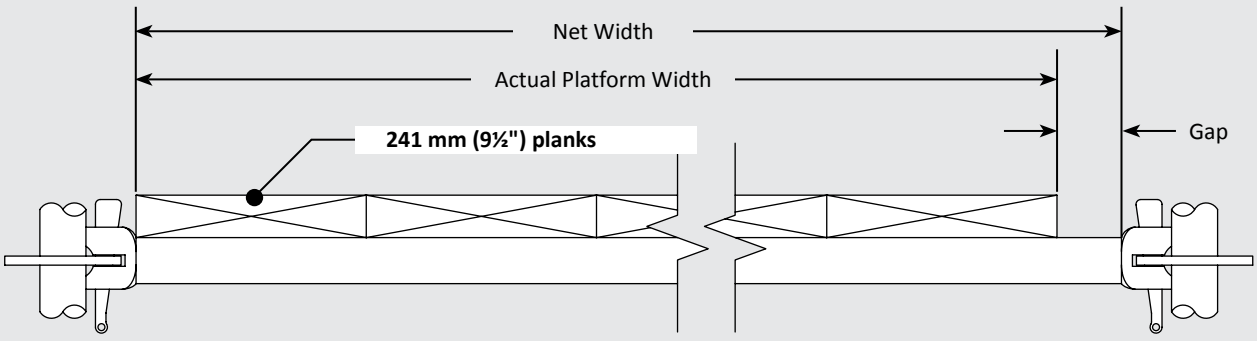
Part No.	Effective Width m	Effective Width in	Qty. of Planks	Gap* mm	Gap* in
2020157	1.57	5' 2"	5	215.3	8.5"
2020115	1.15	3' 10"	4	34.6	1.4"
2020065	0.65	2' 2"	2	17.2	0.7"

Side Brackets

Part No.	Effective Width m	Effective Width in	Qty. of Planks	Gap* mm	Gap* in
2050115	1.15	3' 10"	4	85.6	3.4"
2050088	0.88	2' 11"	3	56.9	2.2"
2050065	0.65	2' 2"	2	68.2	2.7"

*Gap indicates the difference between net width and actual platform width.

All scaffold platforms must be a minimum of two planks in width.



Planking

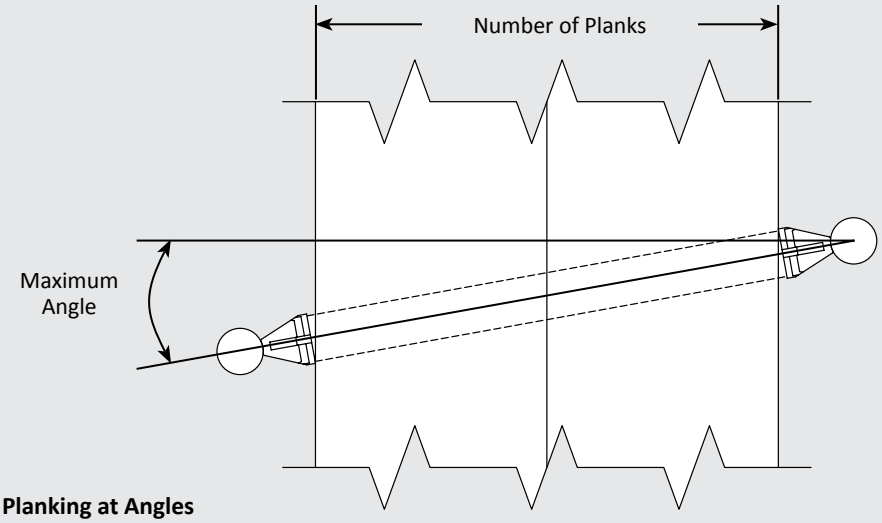
Assembly Details

Laminated Veneer Lumber (LVL) Installed at Angles to Load Bearing Member

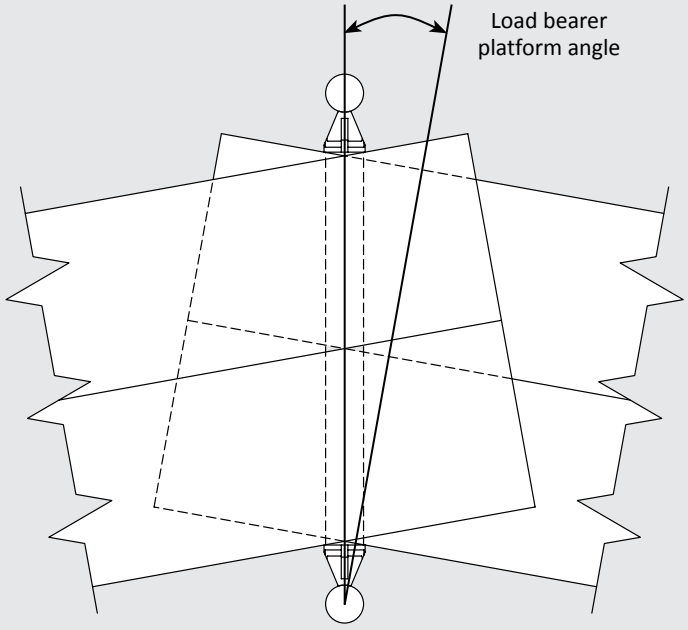
Part No.	Description	Number of Planks	Maximum Angle
2020157	Ledger	4	45°
2050115	Side Bracket	4	22°
2020115	Ledger	4	12°
2050088	Side Bracket	3	20°
2050065	Side Bracket	2	26°
2020065	Ledger	2	10°

Note: Angles shown are determined for 241 mm (9½") wide LVL planks.

Planking Chart for 241 mm (9½") Planks (page 68) illustrated the plank/ledger recommended gap when a load bearing member is perpendicular to a platform run. This gap diminishes when the load bearer member intersects the platform at an angle. Refer to the chart above to determine the maximum load bearer/platform angle for 2, 3 and 4 plank wide platforms. Also, see example below.



Planking at Angles

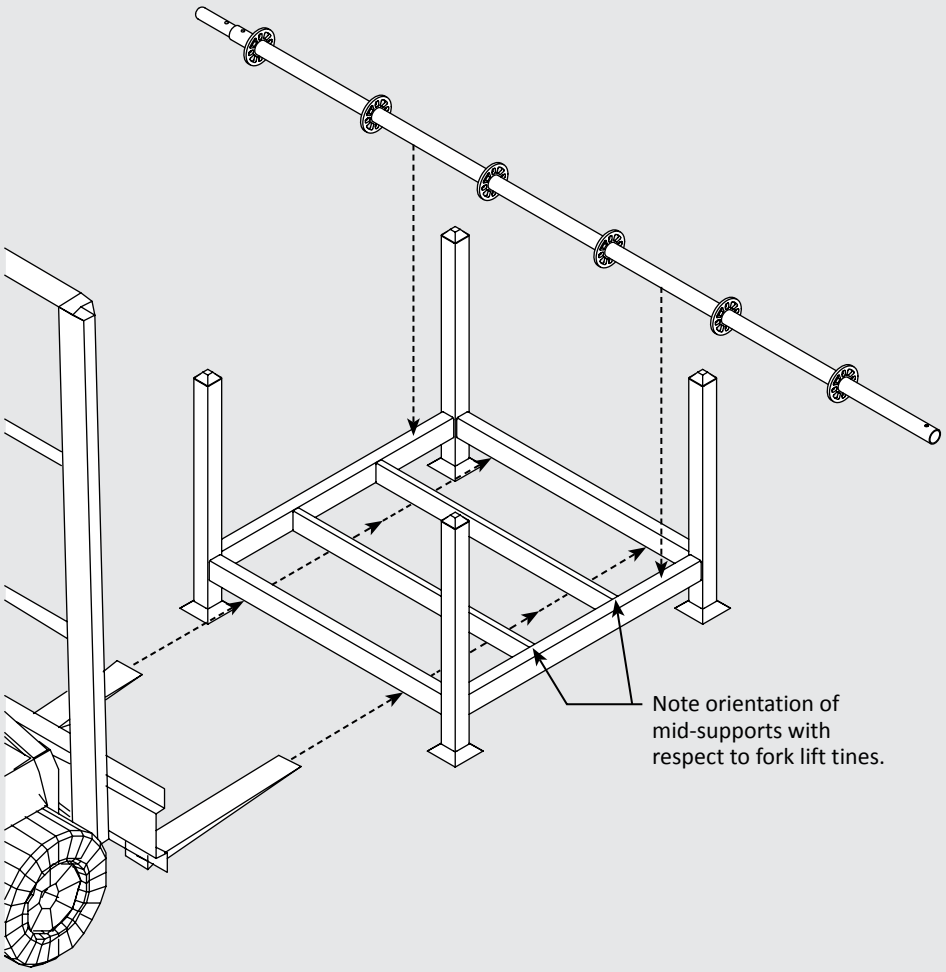


Planking at Angles – Circular Scaffold

Assembly Details

SRO Rack Component Capacity

Component Description	SRO Capacities
Standards	75
Ledgers	150
Bay Braces	100
Truss Ledgers	60



BRAND SAFWAY™

With a commitment to safety as its foremost value, BrandSafway was created when Brand Energy and Infrastructure Services and Safway Group combined in 2017. BrandSafway is a portfolio company of Clayton, Dubilier & Rice.

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