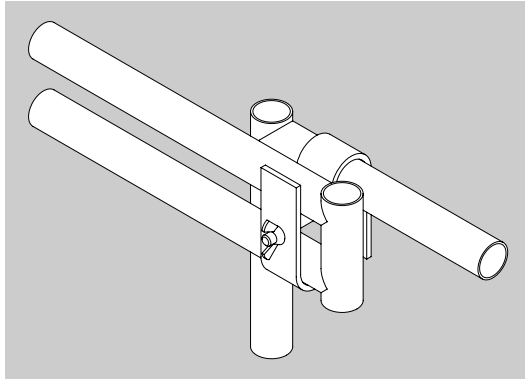


Putlogs Assembly Guide



SEC

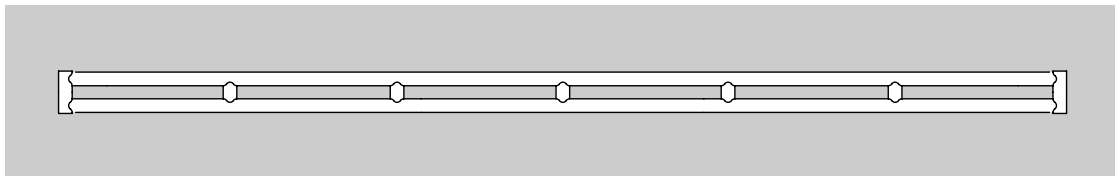
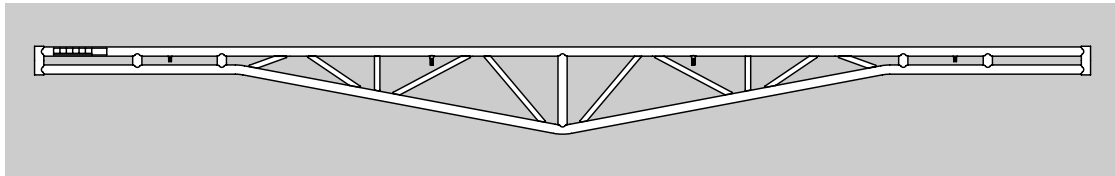


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⚠ WARNING
THIS DOCUMENT IS INTENDED TO SERVE AS A BASIS FOR PROPER APPLICATION OF BRANDSAFWAY PUTLOGS. USE BY UNQUALIFIED PERSONS MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE.

ALL SCAFFOLDS SHALL BE ERECTED, DISMANTLED, MODIFIED, REPAIRED, INSPECTED AND MAINTAINED UNDER THE SUPERVISION OF A COMPETENT PERSON. A COMPETENT PERSON SHALL TRAIN ALL PERSONS ENGAGED IN ERECTING OR DISMANTLING SCAFFOLDS.

⚠ WARNING
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.

This document is subject to periodic revision and updating. Before designing a scaffold, contact BrandSafway to be sure you are using the most current revision.

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

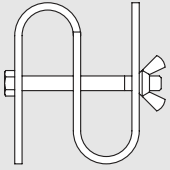
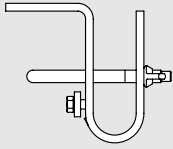
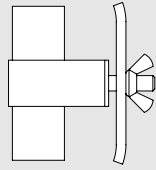

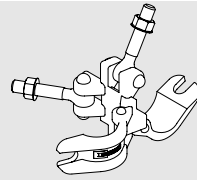
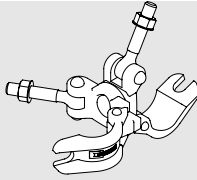
THIS DOCUMENT IS NOT TO BE REPRODUCED IN PART OR IN WHOLE.


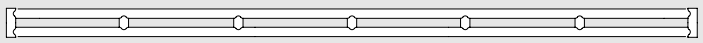
All drawings in this guide are for illustrative purposes only. This guide is intended for general information purposes only. Because of the many variables which affect the performance of the product line, some of the information in this brochure may not apply. For specific applications, contact BrandSafway.

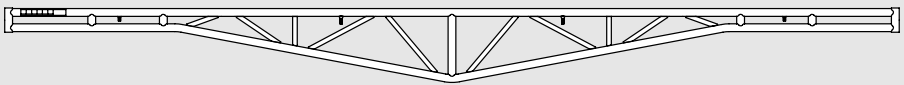
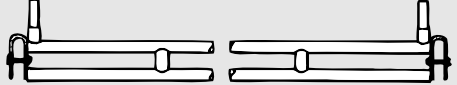
Note: All scaffolds shall be erected, modified and dismantled only under the supervision of a Competent Person. Erection, use, maintenance and disassembly must conform to current manufacturer's instructions as well as all federal, state, provincial and local regulations. Copies of complete Safety Guidelines for these and other products are available from your local BrandSafway branch without charge.

Putlog Components

Part No.	Description	Weight
PH1	Putlog Hanger	3.7 lbs.
PH2	Hanger	5.6 lbs.
PH3	Guardrail Post Socket	2.3 lbs.
PH4	Guardrail Post Socket	5.6 lbs.
PH5	Putlog Diagonal Knee Brace, with clamps	15.4 lbs.
CRA19	Rigid Clamps	2.75 lbs.
CSA19	Swivel Clamps	3.5 lbs.
P8	Putlog, 8'	30.9 lbs.
P12	Putlog, 12'	45.7 lbs.
P16	Deep Truss, 16'	70.8 lbs.
P22	Deep Truss, 22'	96.3 lbs.
PS42	Putlog Spreader, 42"	21.7 lbs.
PS5	Putlog Spreader, 5'	24 lbs.

					
PH1	PH2	PH3	PH4	CRA19	CSA19
Parallel to frame horizontal	Any angle to frame horizontal	Short flange	Long flange	Used to join tubes at right angles	Used to join tubes for bracing only – NOT to be used to support putlogs (Hanger Assembly , pg. 5).

	
PH5	P8 / P12

	
P16 / P22	PS42 / PS5

Used when scaffolds are placed on putlogs over clear spans

4 Allowable Loading

Allowable Loading: 8' Putlog (P8)

Putlog Spacing			5' 0"	6' 0"	7' 0"	8' 0"	10' 0"
Span	Maximum Allowable Load		Maximum Allowable Total Load**				
	Uniform	Concentrated*					
4'	3325 lbs.	1662 lbs.	166.2 lbs./ft ² .	138.5 lbs./ft ² .	118.8 lbs./ft ² .	103.9 lbs./ft ² .	83.1 lbs./ft ² .
5'	2660 lbs.	1330 lbs.	106.4 lbs./ft ² .	88.6 lbs./ft ² .	76 lbs./ft ² .	66.5 lbs./ft ² .	53.2 lbs./ft ² .
6'	2217 lbs.	1108 lbs.	73.9 lbs./ft ² .	61.6 lbs./ft ² .	52.8 lbs./ft ² .	46.2 lbs./ft ² .	37 lbs./ft ² .
7'	1900 lbs.	950 lbs.	54.2 lbs./ft ² .	45.2 lbs./ft ² .	38.7 lbs./ft ² .	33.9 lbs./ft ² .	27.1 lbs./ft ² .

Allowable Loading: 12' Putlog (P12)

Putlog Spacing			5' 0"	6' 0"	7' 0"	8' 0"	10' 0"
Span	Maximum Allowable Load		Maximum Allowable Total Load**				
	Uniform	Concentrated*					
7'	2143 lbs.	1072 lbs.	61.2 lbs./ft ² .	51 lbs./ft ² .	43.7 lbs./ft ² .	38.3 lbs./ft ² .	30.6 lbs./ft ² .
8'	1875 lbs.	938 lbs.	46.9 lbs./ft ² .	39.1 lbs./ft ² .	33.5 lbs./ft ² .	29.3 lbs./ft ² .	23.4 lbs./ft ² .
9'	1667 lbs.	834 lbs.	37 lbs./ft ² .	30.9 lbs./ft ² .	26.5 lbs./ft ² .	23.2 lbs./ft ² .	18.5 lbs./ft ² .
10'	1500 lbs.	750 lbs.	30 lbs./ft ² .	25 lbs./ft ² .	21.4 lbs./ft ² .	18.8 lbs./ft ² .	15 lbs./ft ² .
11'	1364 lbs.	682 lbs.	24.8 lbs./ft ² .	20.7 lbs./ft ² .	17.7 lbs./ft ² .	15.5 lbs./ft ² .	12.4 lbs./ft ² .

Allowable Loading: 16' Deep Truss (P16)

Putlog Spacing			5' 0"	6' 0"	7' 0"	8' 0"	10' 0"
Span	Maximum Allowable Load		Maximum Allowable Total Load**				
	Uniform	Concentrated*					
10'	3725 lbs.	1862 lbs.	74.5 lbs./ft ² .	62.1 lbs./ft ² .	53.2 lbs./ft ² .	46.6 lbs./ft ² .	37.2 lbs./ft ² .
11'	3350 lbs.	1675 lbs.	60.9 lbs./ft ² .	50.7 lbs./ft ² .	43.5 lbs./ft ² .	38.1 lbs./ft ² .	30.5 lbs./ft ² .
12'	3040 lbs.	1520 lbs.	50.7 lbs./ft ² .	42.2 lbs./ft ² .	36.2 lbs./ft ² .	31.7 lbs./ft ² .	25.3 lbs./ft ² .
13'	2775 lbs.	1388 lbs.	42.7 lbs./ft ² .	35.6 lbs./ft ² .	30.5 lbs./ft ² .	26.7 lbs./ft ² .	21.3 lbs./ft ² .
14'	2500 lbs.	1250 lbs.	35.7 lbs./ft ² .	29.7 lbs./ft ² .	25.5 lbs./ft ² .	22.3 lbs./ft ² .	17.8 lbs./ft ² .
15'	2250 lbs.	1125 lbs.	30 lbs./ft ² .	25 lbs./ft ² .	21.5 lbs./ft ² .	18.8 lbs./ft ² .	15 lbs./ft ² .

Allowable Loading: 22' Deep Truss (P22)

Putlog Spacing			5' 0"	6' 0"	7' 0"	8' 0"	10' 0"
Span	Maximum Allowable Load		Maximum Allowable Total Load**				
	Uniform	Concentrated*					
16'	2438 lbs.	1219 lbs.	30.5 lbs./ft ² .	25.4 lbs./ft ² .	21.8 lbs./ft ² .	19 lbs./ft ² .	15.2 lbs./ft ² .
17'	2206 lbs.	1103 lbs.	26 lbs./ft ² .	21.6 lbs./ft ² .	18.5 lbs./ft ² .	16.2 lbs./ft ² .	13 lbs./ft ² .
18'	2000 lbs.	1000 lbs.	22.2 lbs./ft ² .	18.5 lbs./ft ² .	15.9 lbs./ft ² .	13.9 lbs./ft ² .	11.1 lbs./ft ² .
19'	1816 lbs.	908 lbs.	19.1 lbs./ft ² .	15.9 lbs./ft ² .	13.7 lbs./ft ² .	11.9 lbs./ft ² .	9.6 lbs./ft ² .
20'	1650 lbs.	825 lbs.	16.5 lbs./ft ² .	13.8 lbs./ft ² .	11.8 lbs./ft ² .	10.3 lbs./ft ² .	8.3 lbs./ft ² .
21'	1500 lbs.	750 lbs.	14.3 lbs./ft ² .	11.9 lbs./ft ² .	10.2 lbs./ft ² .	8.9 lbs./ft ² .	7.1 lbs./ft ² .

Loads listed on this page are only valid when putlogs are installed with horizontal and lateral bracing as detailed in the following pages. Contact the BrandSafway Engineering Department for loading conditions not covered in the table.

*At center of span

**Note: Total load includes live load and all dead loads (decking, etc.).

Hangar Assembly Details

⚠ WARNING
DO NOT INSTALL PUTLOGS ON HANGERS WITHOUT THE U-BOLT AND WING NUTS INSTALLED AND TIGHTENED. FAILURE TO DO SO MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE.

The PH1 hanger can only be used when the putlog is oriented parallel to the frame horizontal.

The PH2 can be used at angles from 0°–90° to the frame horizontal.

Putlogs shall extend a minimum of 6" beyond the frame leg.

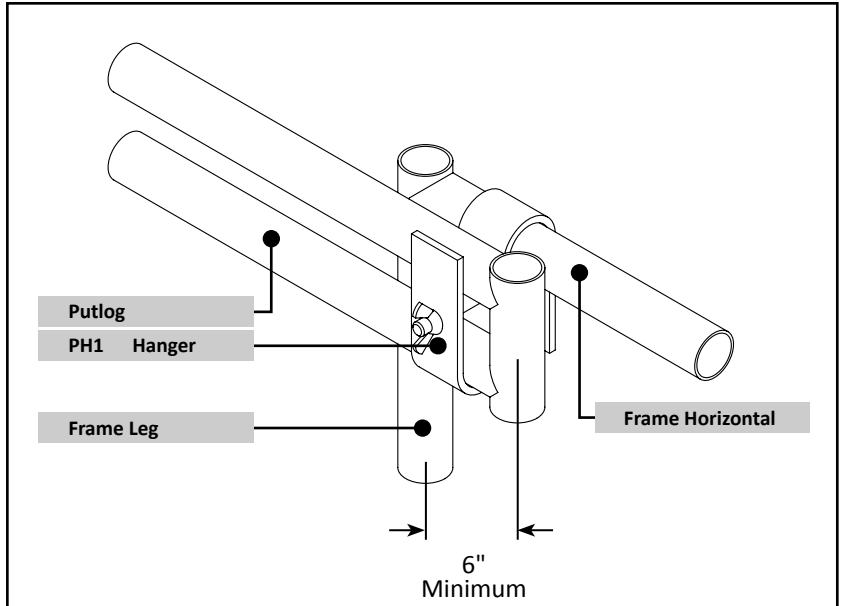


Figure 1 – PH1 Hanger Assembly

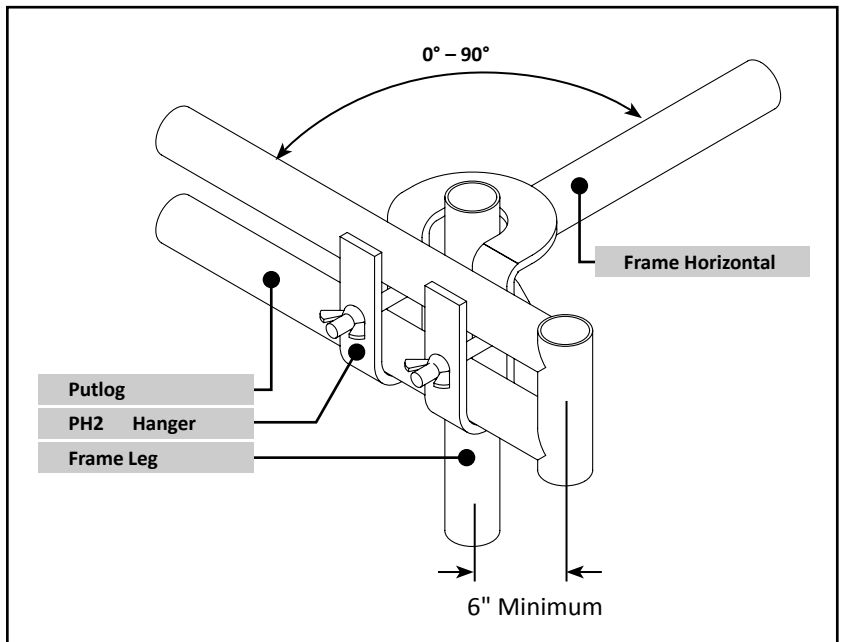


Figure 2 – PH2 Hanger Assembly

Bracing Methods

Note: The following putlog bracing techniques shall be followed when putlogs are used to support a work deck.

Lateral Bracing

Install putlogs on same side of frame legs to assure cross braces will fit (Fig. 3).

Install BrandSafway cross braces horizontally between putlogs, using the studs provided on the putlogs. Secure the cross braces with nuts/wing nuts. Cross braces shall be placed in end bays and every third bay between (Fig. 3).

Install continuous BrandSafway ST__SG tubing. Clamp to bottom of vertical member of all putlogs, at center of span, with BrandSafway CRA19 clamps as shown (Fig. 3).

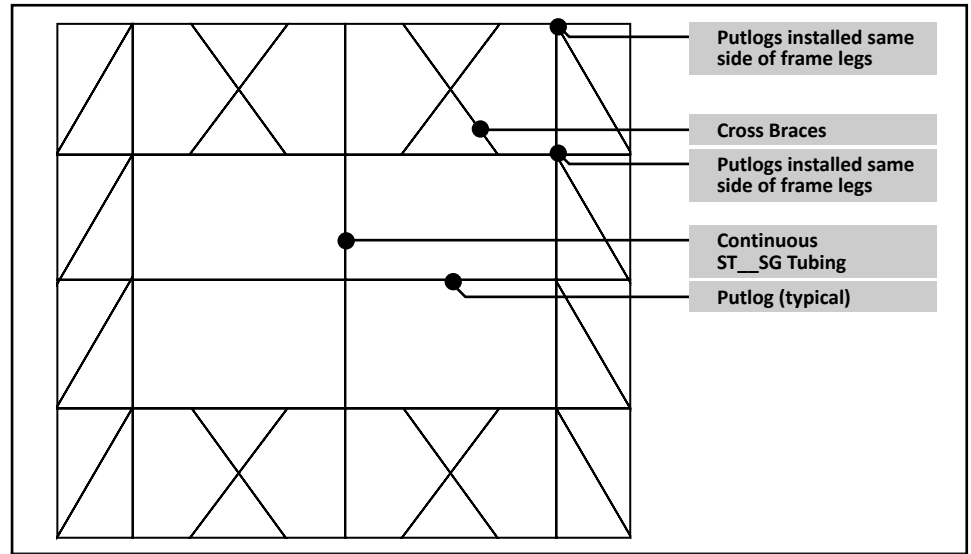


Figure 3 – Lateral Bracing of P16 & P22 Putlogs (Plan View)

Alternate Lateral Bracing

Install BrandSafway ST__SG tubing with CSA19 clamps on the first and last putlog in a putlog run and every third bay in between as shown. Clamp near the center of the putlog span and run the bracing diagonally to the next interior frame line. Clamp to the frame within 6 inches of a horizontal frame member (Fig. 4).

Install continuous BrandSafway ST__SG tubing. Clamp to bottom of vertical member of all putlogs, at center of span, with BrandSafway CRA19 clamps as shown (Fig. 4).

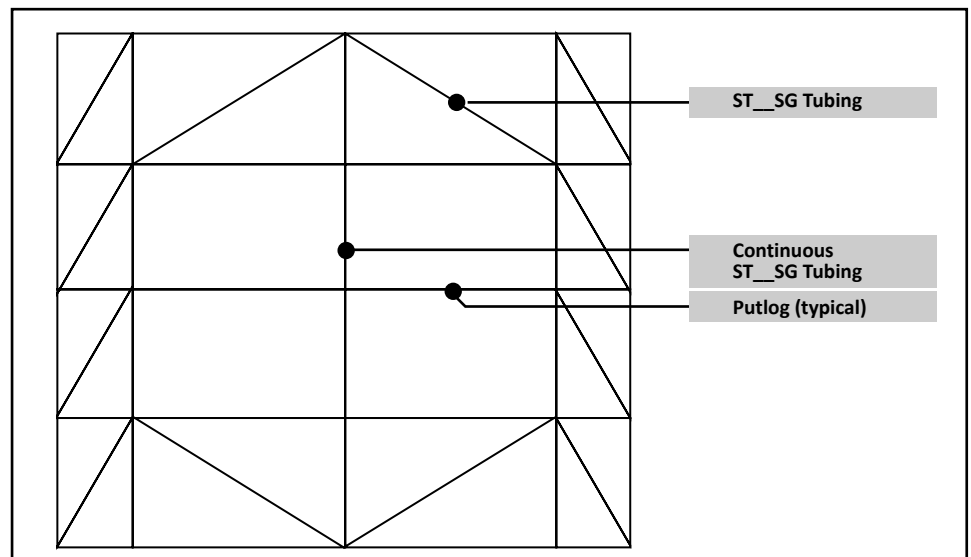


Figure 4 – Alternate Lateral Bracing of P16 & P22 Putlogs (Plan View)

Knee Bracing

Install PH5 putlog knee brace as close as possible to a 45° angle (Fig. 5).

Locate the knee brace within 6 inches of a horizontal member of the supporting scaffold frame. Knee braces are required when spans are 10 feet or greater (Fig. 5).

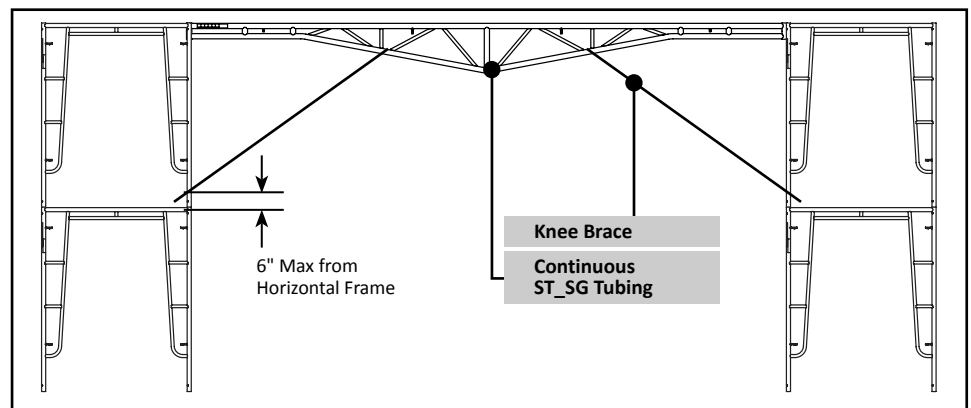


Figure 5 – Knee Bracing (Front Elevation)

Supporting Work Platforms Spanning from Frame Row to Frame Row at the Top of Scaffold Towers

⚠ WARNING
 NEVER USE CSA19 SWIVEL CLAMPS TO ATTACH PUTLOGS THAT SUPPORT WORK PLATFORMS.

Attach putlogs at each frame line using either the PH1 or PH2 putlog hanger.

- Do **not** use CSA19 swivel clamps for putlog vertical support. CSA19 swivel clamps may only be used for knee bracing.
- Extend each putlog a minimum of 6 inches beyond the attachment hanger.
- Do **not** use a CP (frame coupling pin) to attach putlogs.
- Install lateral bracing and knee bracing (**Bracing Methods**, pg. 6).
- Install knee braces for intermediate putlogs at each end at every third frame line.
- Use PH3 guardrail post sockets with parallel-type putlogs and PH4 guardrail post sockets with deep truss putlogs. This requires the use of the GGRP male guardrail post.
- Vertical distance between horizontal braces should not exceed 4 times the frame width.

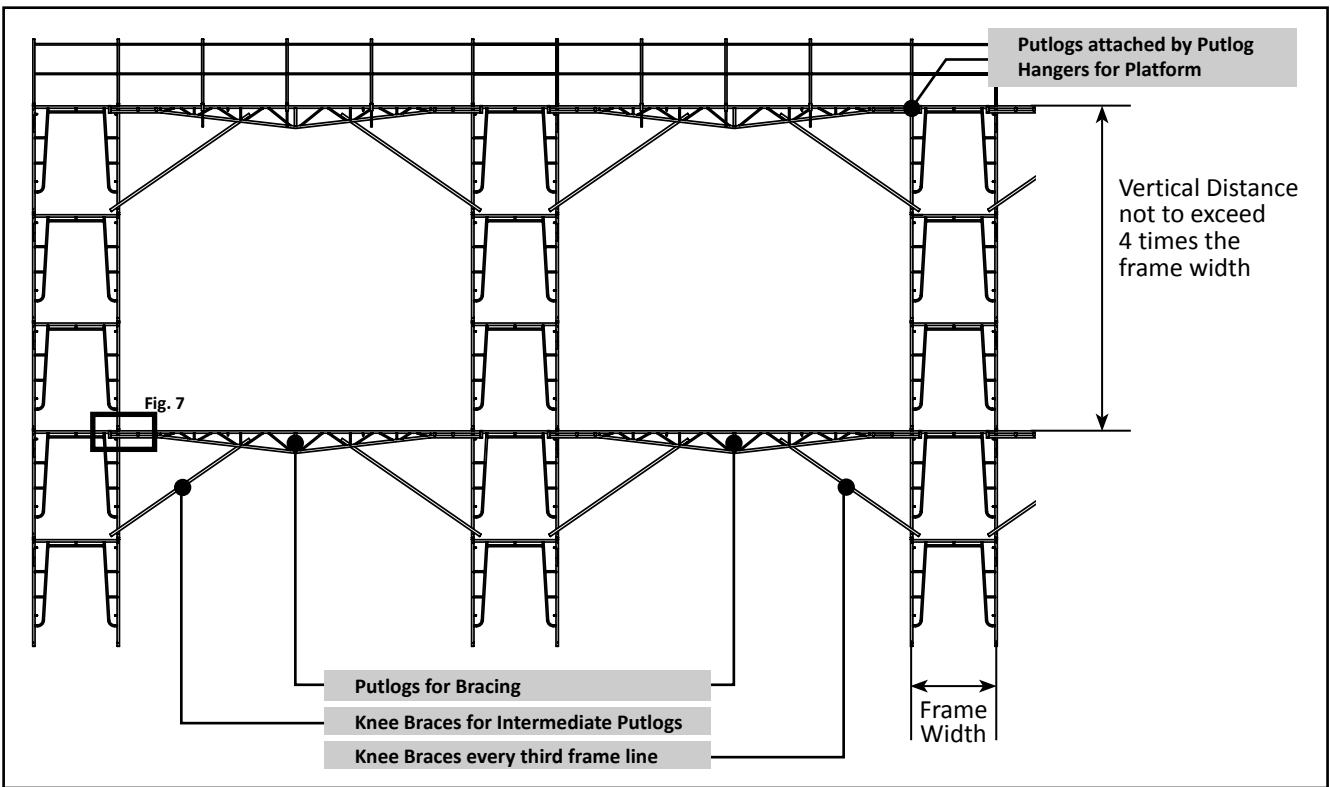


Figure 6 – Supporting Work Platforms that Span from Frame Row to Frame Row at the Top of Scaffold Towers

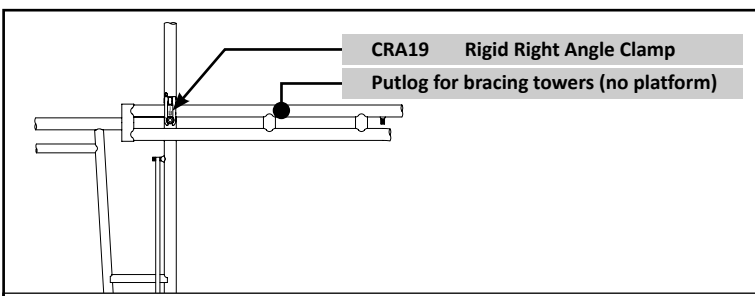


Figure 7 – Putlog Application (closeup)

8 Putlog Applications

Intermediate Tower Bracing

Putlogs may be used for intermediate tower bracing on large stationary scaffolds. CRA19 rigid right angle clamps are recommended in lieu of PH1 or PH2 hangers to attach the putlog to the frame for intermediate tower bracing where the putlogs will not be supporting loads from a work platform. The clamp must be installed immediately above and rest on a frame horizontal member.

Putlogs must be knee braced for lateral stability (Fig. 6).

Cantilevered Putlogs Supporting Work Platforms

The minimum support and bracing requirements to cantilever putlogs supporting work platforms located anywhere in a scaffold tower are as follows:

1. Putlog must extend a minimum of 6" beyond the outer frame leg (Fig. 8).
2. Attach putlog to outer frame leg with CRA19 clamp and to inner leg with putlog hanger (PH1 or PH2). **Do not substitute** (Fig. 8).
3. Frames must be secured to coupling pins (CP) with rivet & hairpins (RHP), pigtail pins (PTP) or bolts (Fig. 8).
4. Install a stand-off (butt tube) against the structure at each putlog (Fig. 8).
5. Install a tension/compression (push/pull) tie to the structure at each frame one lift below the putlog. Tie shall be located near a horizontal frame member (Fig. 8).
6. Install a horizontal tube (ST__SG) to the cantilevered end of the putlog with CRA19 clamp (Figs. 8, 10).
7. Install a horizontal tube (ST__SG) just above the top of the frame below with CRA19 clamp (Figs. 8, 9).
8. Install knee brace tube to the horizontal tubes with CRA19 clamps (Figs. 8–10).
9. Do not exceed 500 lbs. live load (workers and material) on the cantilevered putlog. Contact a qualified engineer if a higher load rating is needed.

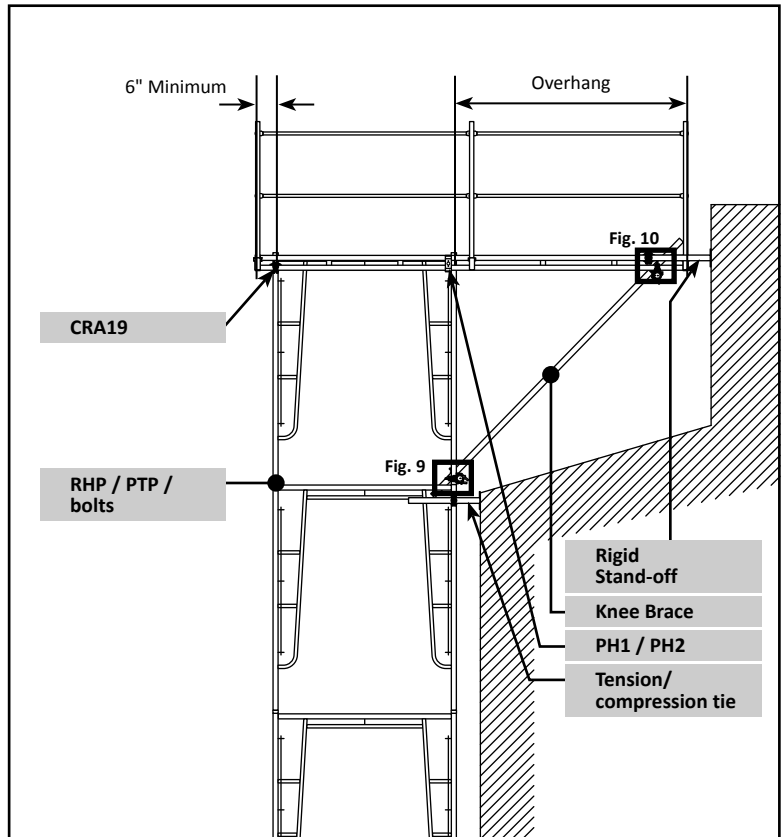


Figure 8 – Cantilevered Putlogs

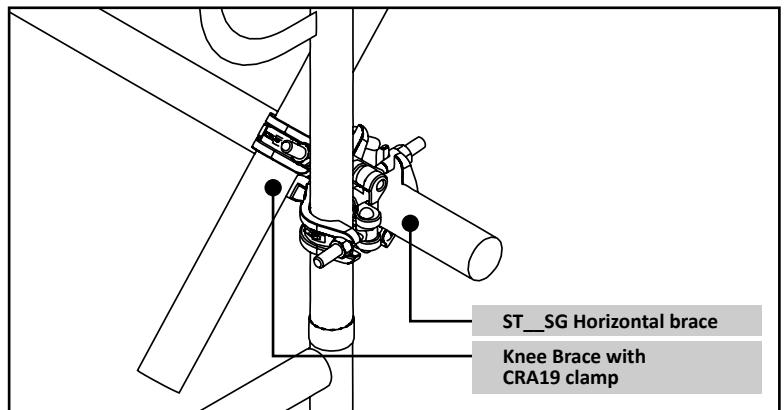


Figure 9 – Attaching to Frame Leg

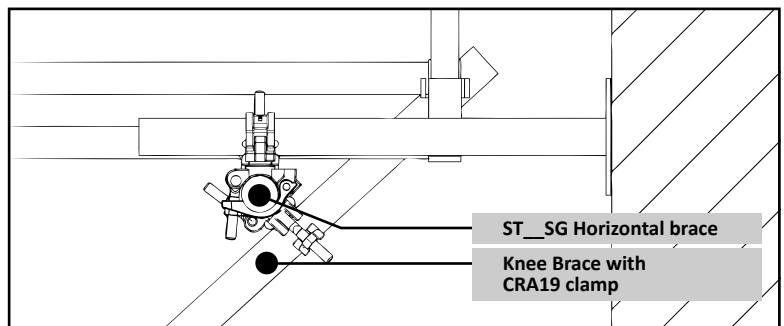


Figure 10 – Attaching to Putlog

Supporting Working Platforms Spanning Frame Row to Frame Row at Intermediate Levels

It is recommended that appropriate PH1 or PH2 hangers be used to support putlogs used for work platforms at intermediate levels.

CRA19 rigid right angle clamps may also be used; however, make sure that the putlog end reactions do not exceed the clamp capacity (750 lbs. on painted surfaces; 1000 lbs. on galvanized surfaces). The CRA19 clamps must be installed immediately above a frame horizontal member to prevent slippage. 40 ft. lbs. clamp torque required.

P16 and P22 putlogs must be knee braced and laterally braced (**Bracing Methods**, pg. 6).

WARNING
NEVER USE CSA19 SWIVEL CLAMPS TO ATTACH PUTLOGS THAT SUPPORT WORK PLATFORMS.

WARNING
PUTLOG SUPPORTED WORK PLATFORMS MAY REQUIRE THAT GUARDRAIL SYSTEMS BE INSTALLED. FOLLOW BRANDSAFWAY SECTIONAL SCAFFOLD SAFETY GUIDELINES AS WELL AS FEDERAL, STATE, PROVINCIAL, AND LOCAL REQUIREMENTS FOR INSTALLATION AND USE OF GUARDRAILS AND TOEBOARDS.

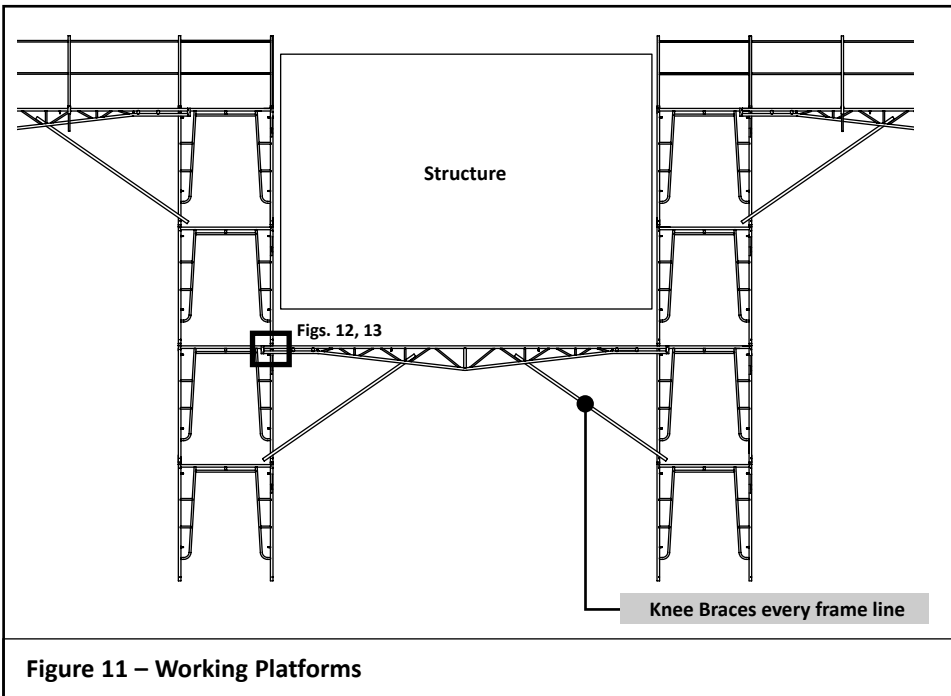


Figure 11 – Working Platforms

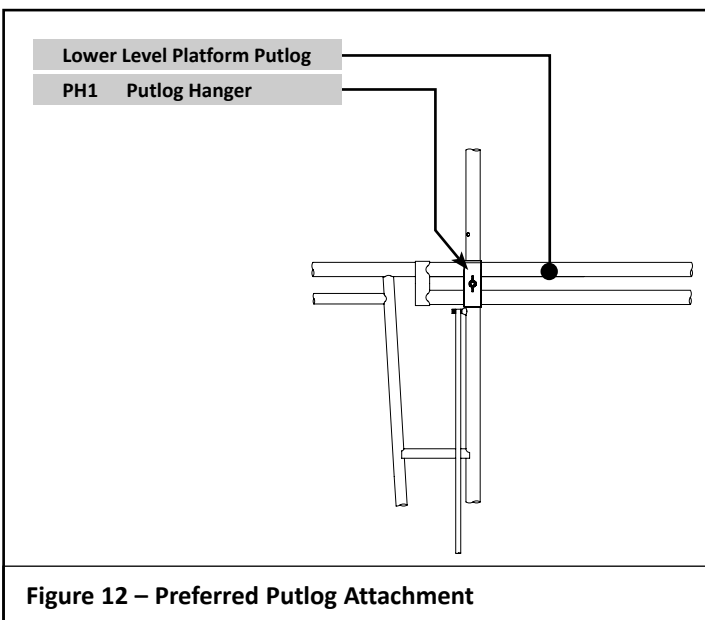


Figure 12 – Preferred Putlog Attachment

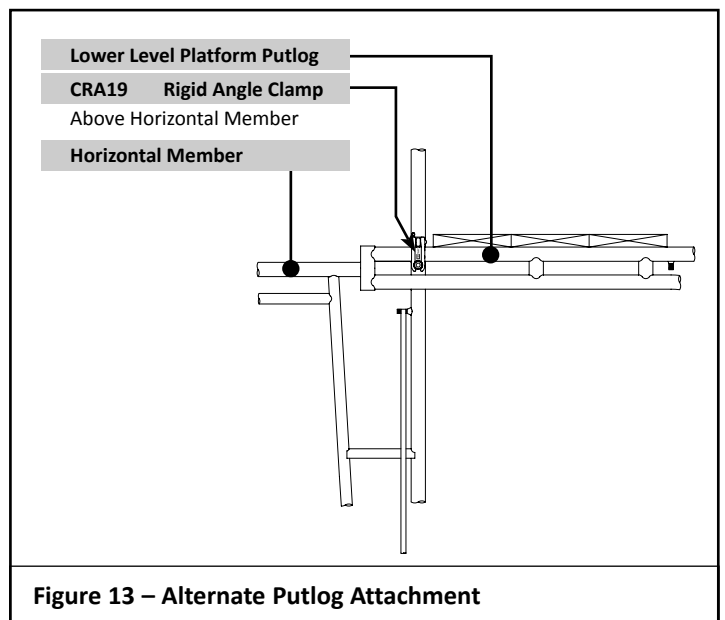


Figure 13 – Alternate Putlog Attachment

Spanning to a Structure

Do not attach putlogs directly on scaffold base plates or screw jacks. Putlogs must be attached to scaffold frames using putlog hangers, BrandSafway clamps, or as specified by BrandSafway Engineering, and must be laterally braced (**Bracing Methods**, pg. 6).

If putlogs are used as a tie to stabilize a scaffold tower, the putlog support frame on the structure must be secured from movement (Fig. 14).

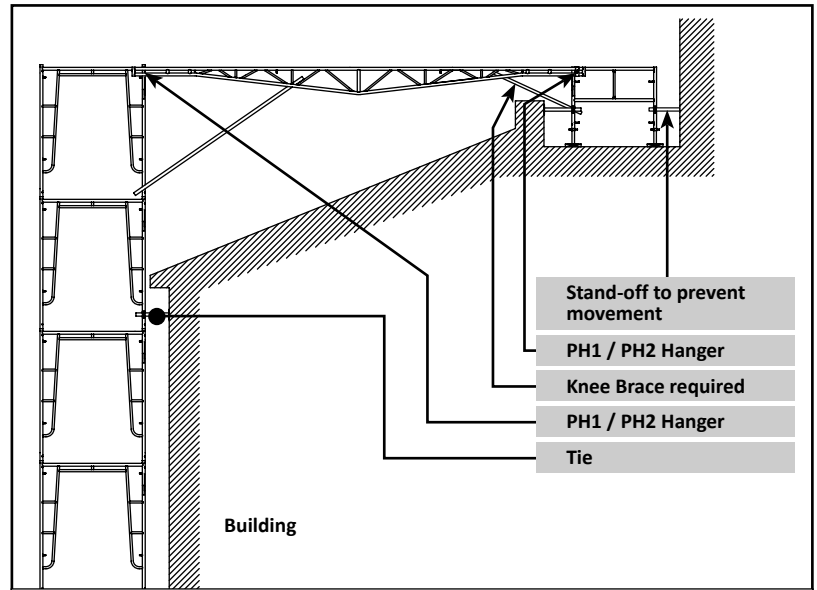


Figure 14 – Spanning a Structure

Supporting Frames Over an Opening

In those instances where putlogs are used to support frames spanning an opening, a PS5 putlog spreader is used to support the scaffold frames above the putlog and align them with other frames in the scaffold run. The PS5 contains a “saddle” at each end which rests on putlogs for support and has coupling pins to place the next frame above.

Install putlogs on the outside of the scaffold frames so that coupling pins in PS5 line up with the scaffold frames. When PS5s are used, additional lateral bracing is not required (**Bracing Methods**, pg. 6). However, knee braces are still required.

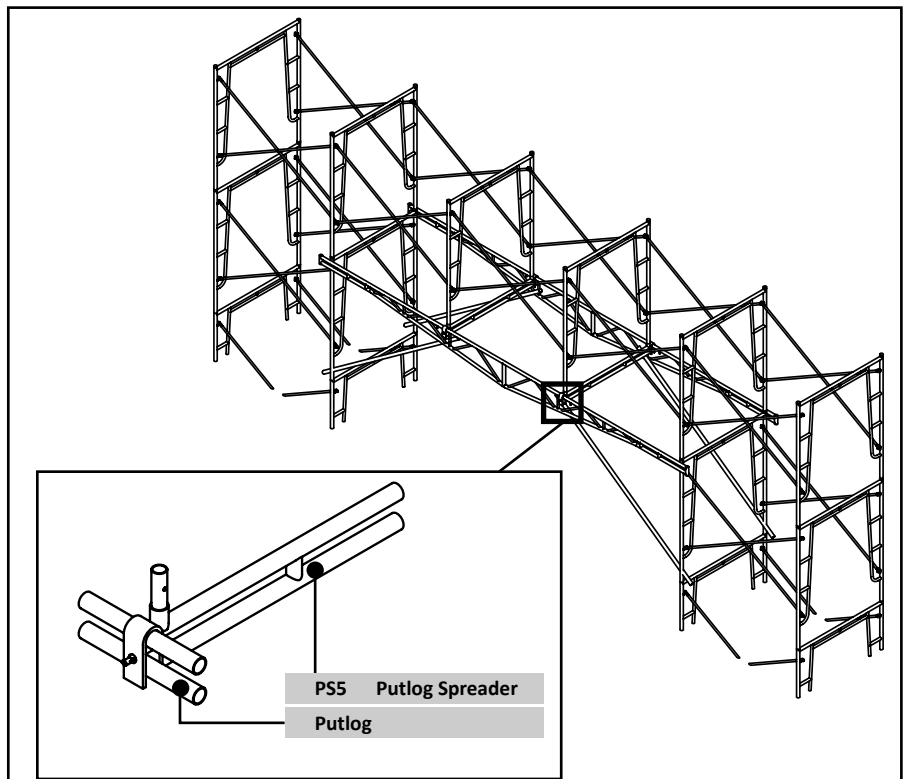


Figure 15 – Supporting Frames Over an Opening

Components

Part No.	Description	Weight
PH6	Single Putlog Suspension Hanger	5.8 lbs.
PH7	Double Putlog Suspension Hanger	8.0 lbs.
BCA	Adjustable Beam Clamp	14.2 lbs.



Bracing for Suspended

Install BrandSafway ST__SG tubing with CSA19 clamps for horizontal diagonals or BrandSafway cross braces horizontally between each pair of putlogs (Fig. 16).

Install continuous BrandSafway ST__SG tubing. Clamp to bottom of vertical member of all putlogs, at center of span, with BrandSafway CRA19 clamps (Fig. 16).

Perimeter of scaffold and all openings require guardrails and toeboards. Use standard BrandSafway guardrail components (Fig. 17).

Note: Putlogs may require an additional support at mid-span for specific applications. Contact the BrandSafway Engineering Department for recommended procedures in these cases.

WARNING
DO NOT INSTALL PUTLOGS ON HANGERS WITHOUT THE BOLT AND LOCK NUT INSTALLED AND TIGHTENED. FAILURE TO DO SO MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE.

WARNING
EACH PERSON ERECTING OR DISMANTLING THIS SCAFFOLD MUST WEAR A PROPERLY ATTACHED FALL ARREST DEVICE. INSPECT ALL EQUIPMENT PRIOR TO INSTALLATION. DO NOT EXCEED ALLOWABLE LOADING ON PUTLOGS (ALLOWABLE LOADING, PG. 4).

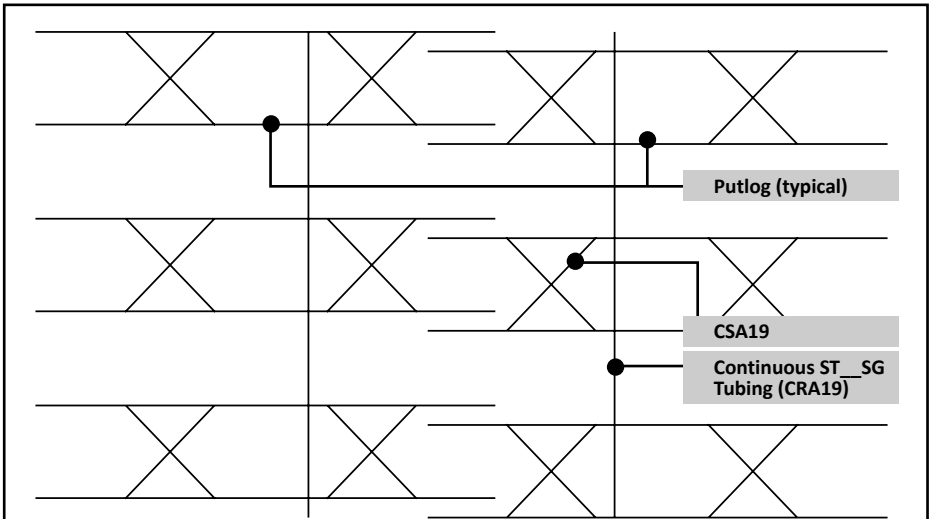


Figure 16 – Bracing (Plan View)

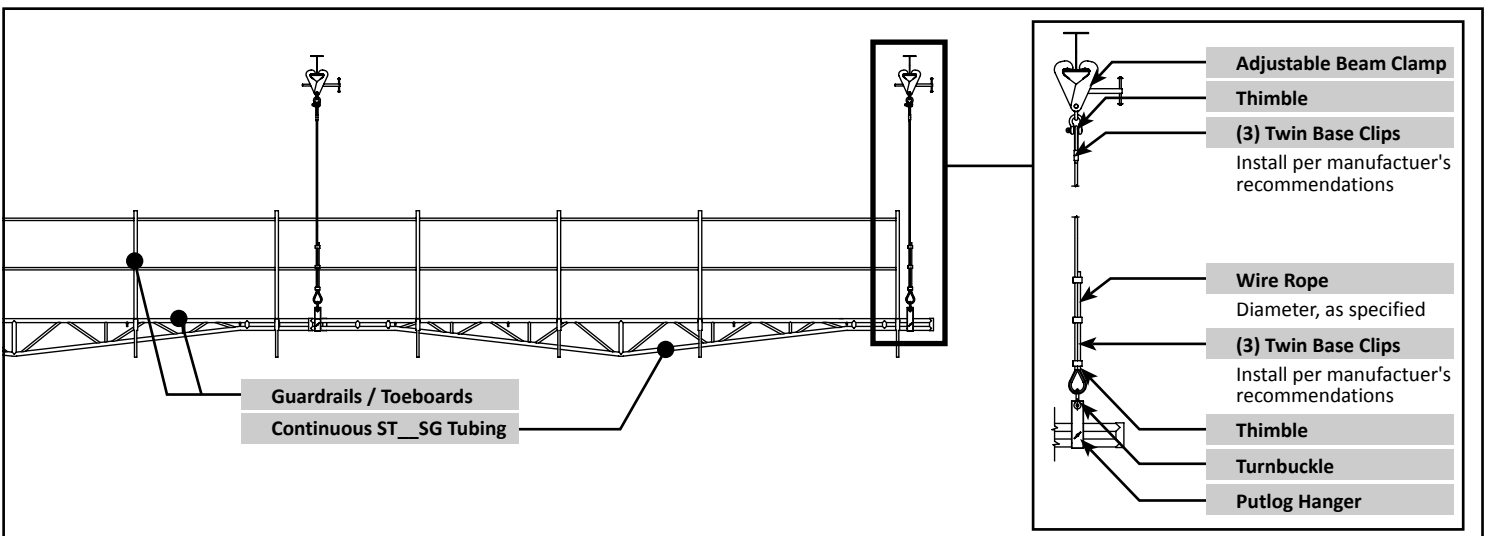


Figure 17 – Bracing (Front Elevation)

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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