# Systems™ Scaffold
## Product Selection Guide

SYS

SAFWAY®

Since 1936, Safway® brand scaffold has been the industry standard. From Systems™ to Sectional, Tube & Clamp to SafMax®, Motorized access to QuikDeck™, Safway has a full line of products designed to work for any project.

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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 Safway.

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 Safway without charge.



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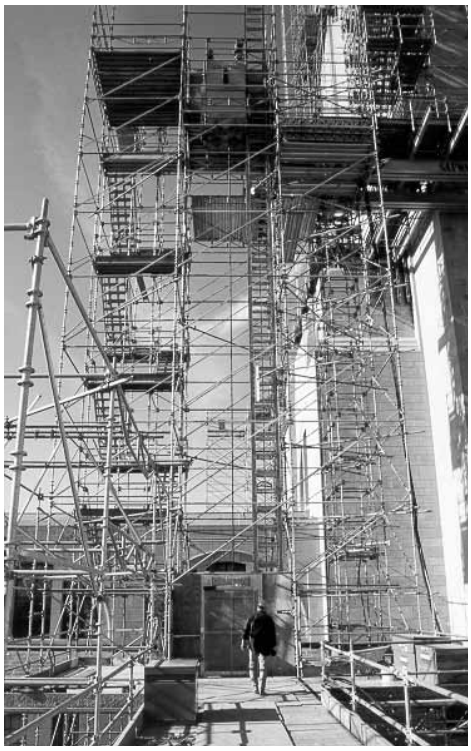
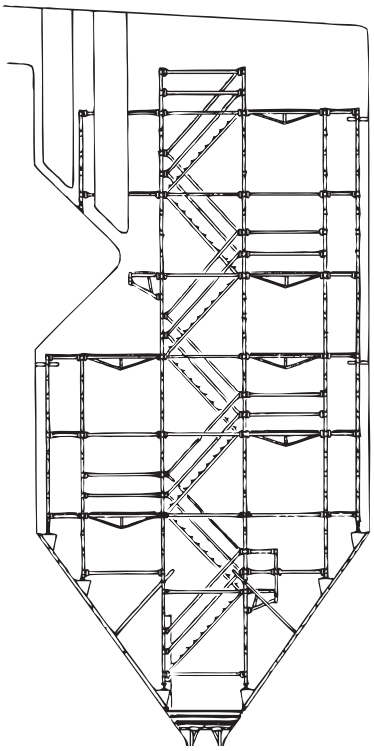
# **Strength through Versatility**
## Adapting to the Needs of Your Project





**Basics to Success**
From left to right: Nebraska State Capitol framed for maintenance (2002). Photo courtesy of Associated Construction Publications; Example of scaffolding erected inside a boiler; Shipbuilding and maintenance application

Systems™ Scaffold is one of the simplest, most versatile scaffold products ever developed. Its design allows for adaptation to virtually any shape structure inside or outside.

The versatility of Systems™ Scaffold can be adapted to fit projects with unusual dimensions and configurations. The more traditional applications include large area platform uses such as in auditoriums, churches, and arenas as well as for ship building and repair operations. Systems™ Scaffold can also be set up inside rectangular, circular and odd vessel shapes easily because it adapts to the structure like a liner.

- 360° placement on the vertical post ring sets
- Attach up to eight horizontal members on each ring set
- Horizontals may be attached at any angle
- Ring sets are spaced every 21 in. on vertical posts for flexible platform placement at 7 ft. maximum intervals and proper guardrail attachment
- Horizontal and diagonal members can be individually removed and placed after Systems™ Scaffold has been erected.

**Power Plants**
Systems™ adapts easily and erects quickly to get the crews on the job. Special component jacks, support frames and braces allow the scaffold to conform to the sloping surfaces of the boiler cavity. All components can be passed through small openings. Maintenance crews can operate at any level and move quickly across and around the boiler. When the project is complete, Systems™ Scaffold disassembles just as fast so power generation can resume.

**Ships**
The shape of a ship's bow is unique to marine architecture, and Systems™ Scaffold fits it like a glove. For new marine construction, ship repair, and retrofit projects, Systems™ Scaffold's adaptability stands out.

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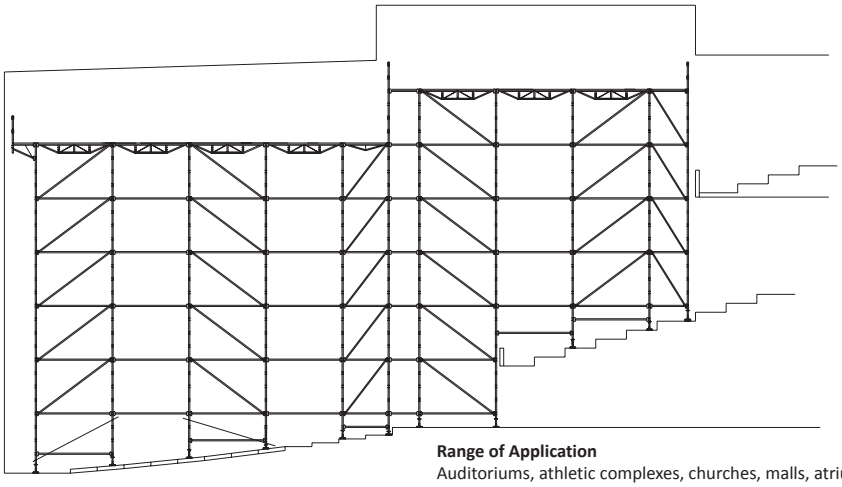

**Range of Application**
Auditoriums, athletic complexes, churches, malls, atriums

**Circular Vessels**
Systems™ Scaffold erects quickly around circular chemical and petrochemical vessels, tanks and storage systems, allowing work to progress at any level. Knee out brackets allow the diameter of a scaffold assembly to be increased or decreased as needed.

**Large Platform Scaffolds**
In auditoriums, arenas, athletic complexes, churches, malls, convention halls, atriums – wherever large platform area scaffold is needed – Systems™ Scaffold can be easily adapted to sloping floors, irregular ceilings and balconies. The speed of erection and dismantling makes it easy for the scaffold crews to match the progress of the project.

**Modular Access Structures**
Systems™ Scaffold includes components which are designed for use in constructing temporary stair towers and scaffold platform access structures adjacent to or located within the scaffolding. The 11¼ in. wide stair units allow you to build stairways as wide as needed.

**Save Time**
Systems™ Scaffold is engineered to provide not only fast and extremely easy erection, but optimum use of labor as well by allowing work at or above eye and arm level for efficiency.

- Level the base easily with starter collars and screw jacks.
- Vertical posts assemble quickly with built-in locking pins.
- Horizontal members and diagonals can be connected at any point around the vertical post ring sets and locked individually.

**Quick Connections**
The 3½ in. spacing on the rings combined with the rugged strength of the end connectors provide an exceptionally strong connection that gives extra rigidity to the scaffold assembly.

- To assemble, just hook the horizontal or diagonal member on the vertical post and hammer home the wedge (Photo 01). The wedge retainer will drop, locking it in place (Photo 02).
- To disassemble, lift the retainer with the Safway pry-bar hammer and loosen the wedges with a quick flick of the hammer, then unhook the horizontal or diagonal (Photos 03 and 04).
- Wedges are positioned under horizontal bars so workers can easily engage and disassemble these components from below. Each operation only takes seconds to complete, so you are back online fast.

Systems™ Scaffold comes down fast, even in tight quarters. Each horizontal member disassembles from the level below, without disturbing adjacent members. This allows a crew to work its way down efficiently and get to the next job faster.

**Seismic-tested: Proven Safe for Plants**
Systems™ Scaffold has passed all seismic qualification tests of Class 1E equipment, meaning the scaffold is in full compliance with the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers (IEEE) standard 344-1987.

Performed in May 2010, seismic qualification tests evaluated the scaffold and showed that Systems™ has the ability to safely withstand earthquake-like conditions. None of the equipment was broken, damaged, or became dislodged during any of the tests, including diagonals, toeboards, and plank.

Safway's seismic qualification test input was greater than any other known seismic qualification test of scaffold in its class, further proving its safety and versatility.

01

02

03

04


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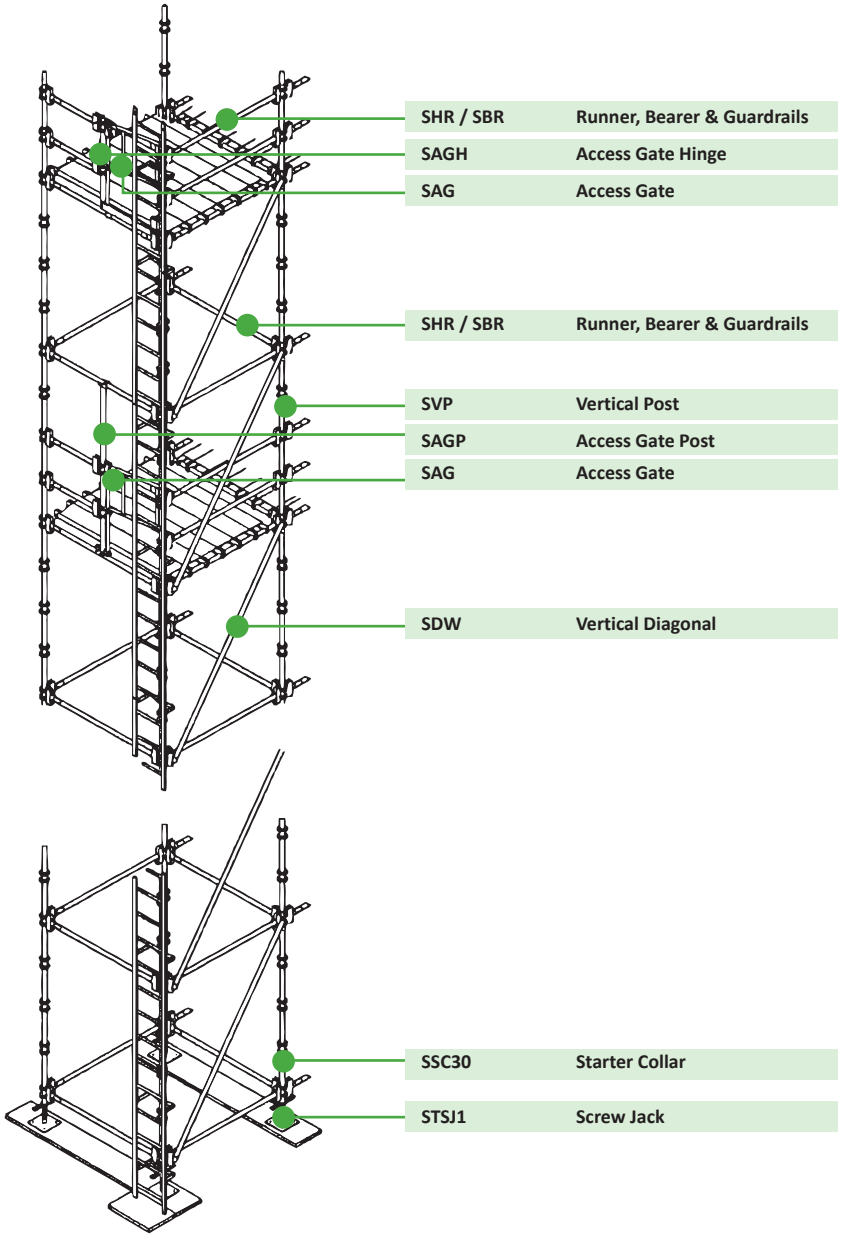
# Engineered from the Ground Up





| | |
|---|---|
| SHR / SBR | Runner, Bearer & Guardrails |
| SAGH | Access Gate Hinge |
| SAG | Access Gate |
| SHR / SBR | Runner, Bearer & Guardrails |
| SVP | Vertical Post |
| SAGP | Access Gate Post |
| SAG | Access Gate |
| SDW | Vertical Diagonal |
| SSC30 | Starter Collar |
| STSJ1 | Screw Jack |

### Easy Leveling

- Systems™ screw jacks and starter collars provide easy leveling of the scaffold base.
- Vertical posts, with ring sets every 21 in. install over starter collars and provide the connection points for all horizontal and diagonal members.

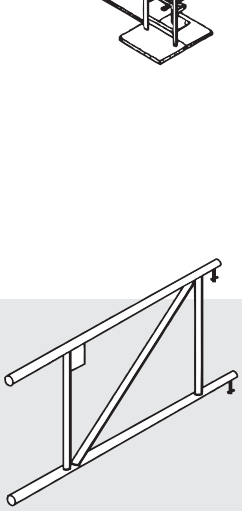
### Stability

- Horizontal diagonals square the scaffold assembly and provide base rigidity.
- Vertical diagonals provide scaffold stability.

### Adaptability

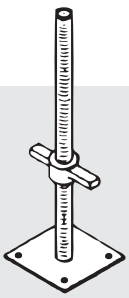
- Horizontal runners or bearers may be installed at any angle around the ring set to adapt to any required configuration.
- Horizontal runners also serve as mid-rails and top rails.
- Up to eight members install on any ring set.
- Vertical clamp-on ladders, with brackets and gates, provide access to platforms.

No matter what your project need, Systems™ Scaffold is the answer. Systems™ Scaffold is designed so that it can be erected into assemblies that will comply with all local, provincial, state, and federal safety regulations.

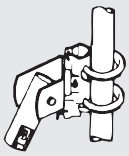


SAG_

SSC30



STSJ1



SDW

SHR / SBR

SAGH

SAGP

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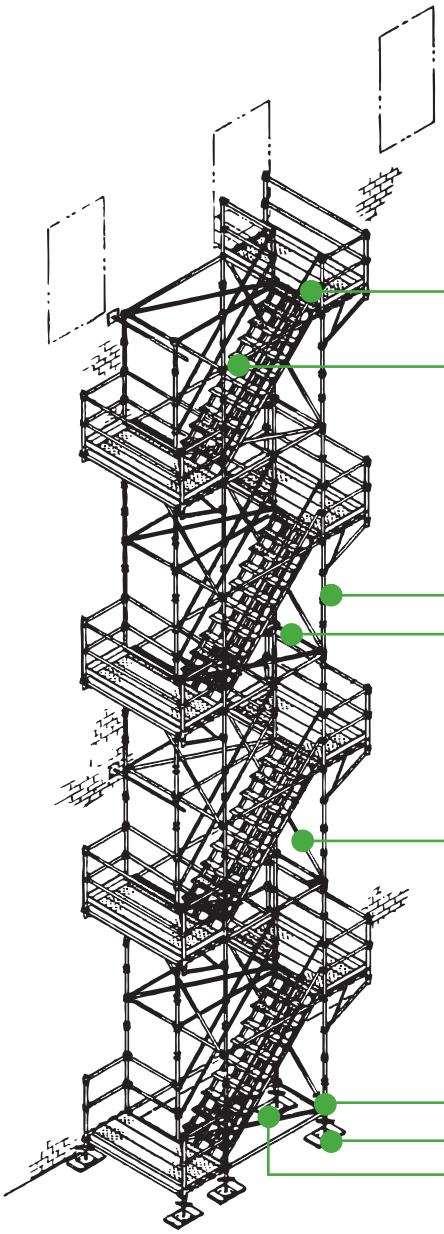
# Fast Erecting Stair Towers



| | |
|---|---|
| SSF | Stair Filler |
| STR7 / STR7A | Stair Unit (Two, Three or Four Units Wide) |
| SVP | Vertical Post |
| SHR / SBR | Runner, Bearer & Guardrails |
| SDW | Vertical Diagonal & Stair Handrail |
| SSC30 | Starter Collar |
| STSJ1 | Screw Jack |
| SHD | Horizontal Diagonal |

Get crew and supplies up or down to the work level on Systems™ Scaffold temporary stair towers and access structures. You simply combine standard components with stair units to erect towers in a wide variety of landing options and stairway widths.

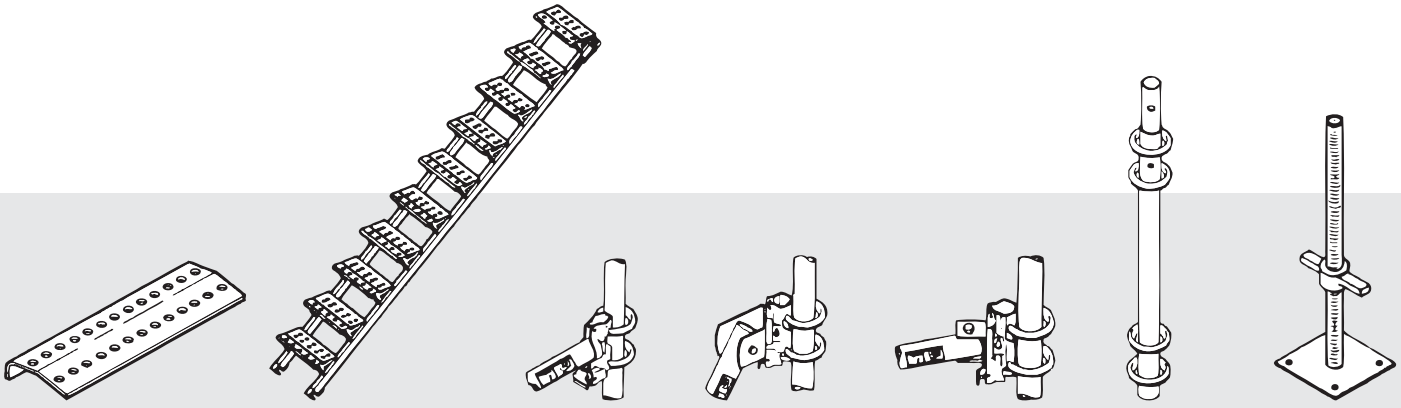
### Start With The Basics

- Level the base with screw jacks and starter collars.
- Erect the scaffold using vertical posts, horizontal members and diagonals, forming the basic shape.

### Stair Units And Handrails

A choice of either steel or lightweight aluminum 11¼ in.-wide stair unit modules fit side-by-side (minimum two units) to build the stair widths you require.

- Stringer clips assure side alignment, and stair fillers complete each level for ready access.
- Galvanized steel and aluminum stairs have non-skid surfaces for sure footing.
- Wood or steel planks are used to deck the landings in varying widths to suit your requirements.
- Standard 7 ft. vertical diagonal members are used as handrails.



SSF | STR7 / STR7A | SHR / SBR | SDW | SHD | SSC30 | STSJ1

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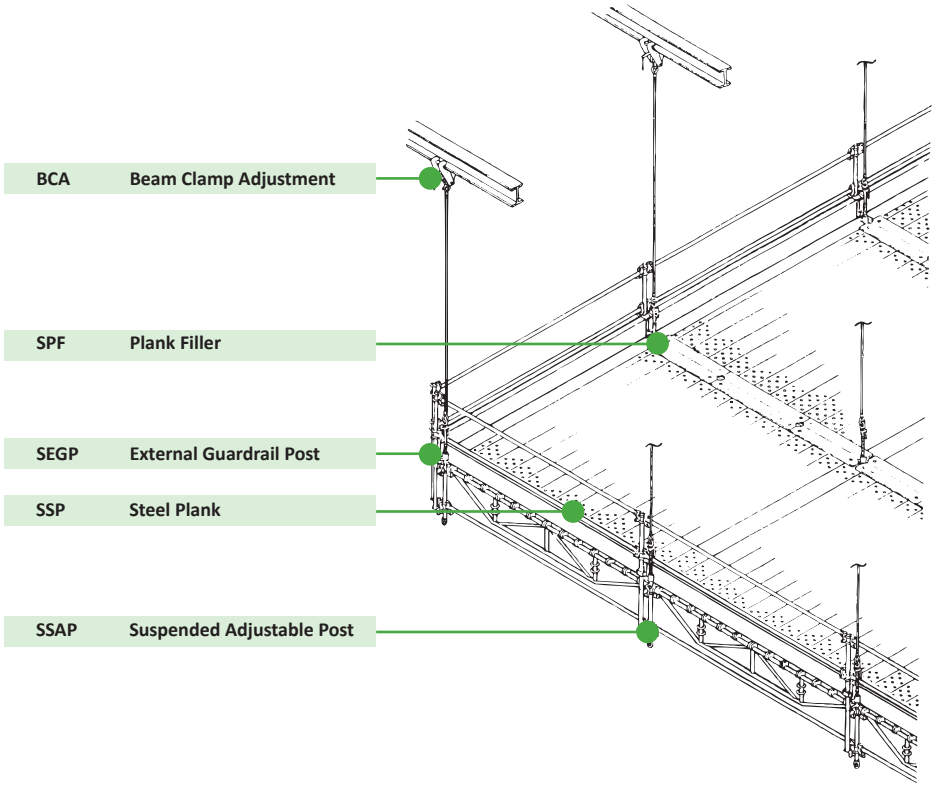
# Specialized Product Applications

## Suspended Systems™ Scaffold

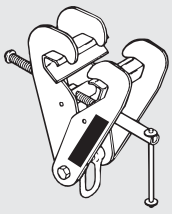



Application flexibility of Systems™ Scaffold allows suspended, area work platforms to be erected quickly and easily.

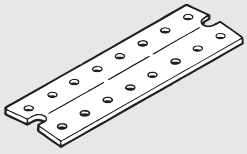
Floor space is kept clear of scaffold, allowing normal day-to-day operations to continue while work is carried on overhead.

The key to Suspended Systems™ is the functional and adjustable suspension post which incorporates captive suspension shackles and leveling mechanisms.

Suspended Systems™ is ideally suited for projects in shopping malls, hospitals, airport concourses, pulp, petrochemical and refinery installations, when debris protection is installed.

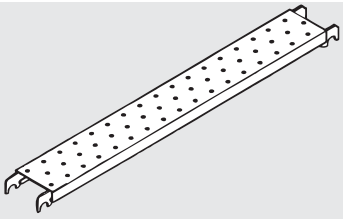


BCA



SPF

SEGP



SSP

SSAP

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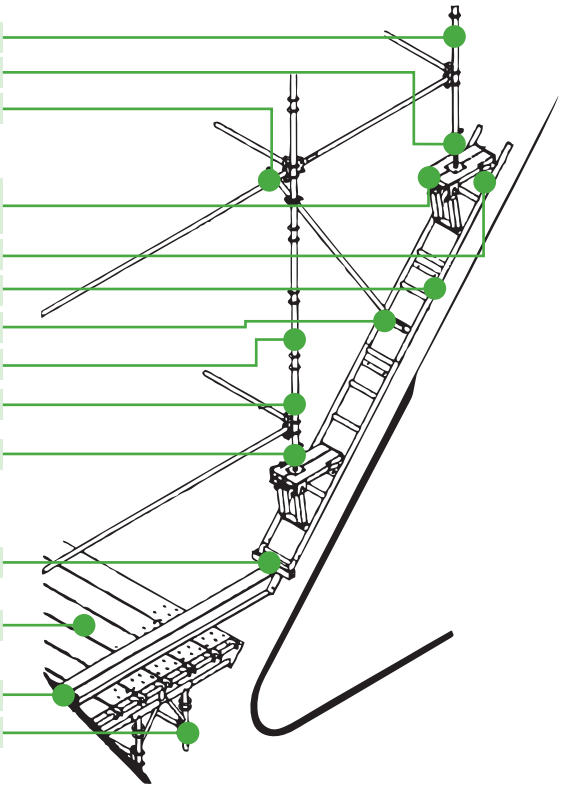
# Specialized Product Applications

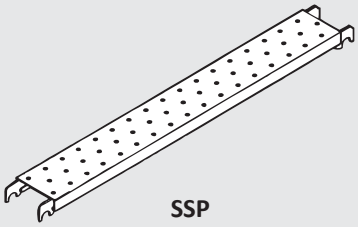
## Sloping Surface Support System

| | |
|---|---|
| SVP | Vertical Post |
| STSJ1 | Screw Jack |
| CSA19 | Swivel Clamp |
| SASB2 | Adjustable Support Bracket Assembly |
| | Drop Latch |
| SBF | Support Frames |
| SSB10 | Saddle Brace |
| SVP | Vertical Post |
| SSC30 | Starter Collar |
| STSJ1 | Screw Jack |
| SFS | Frame Starter |
| SSP | Steel Plank |
| SBB6 | Base Beam |
| STH4 | Throat Header |

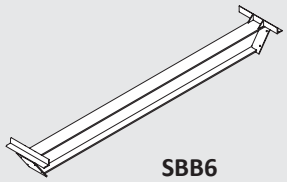


Systems™ Scaffold provides a unique support system for interior sloping boiler surfaces. This assembly allows for fast, stable, scaffold erection on sloping surfaces, and quick disassembly in tight quarters.

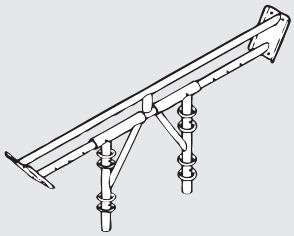
Adjustable jack assemblies and support frames allow the scaffold assembly to proceed with standard components, as illustrated in the drawing.



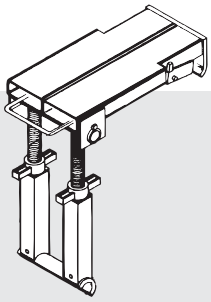
SSP



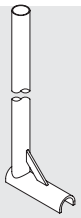
SBB6



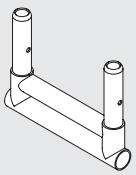
STH4



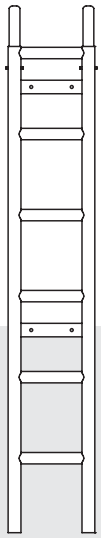
SASB2



SSB10



SFS



SBF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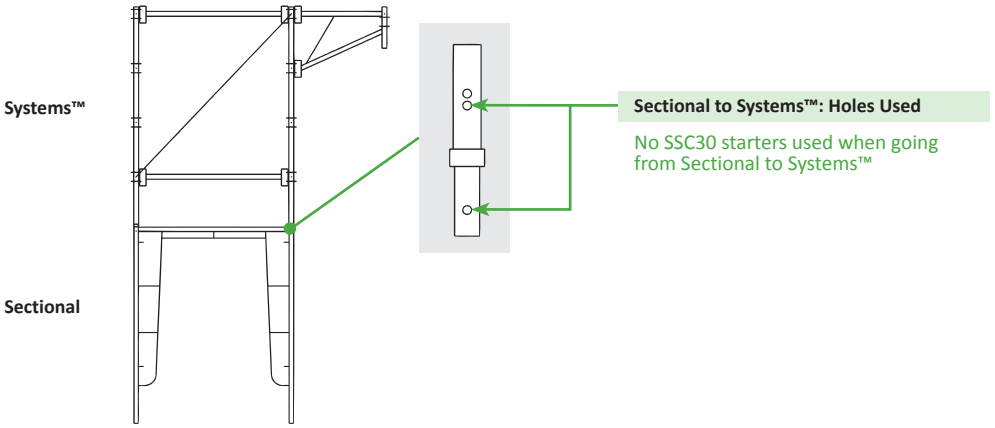
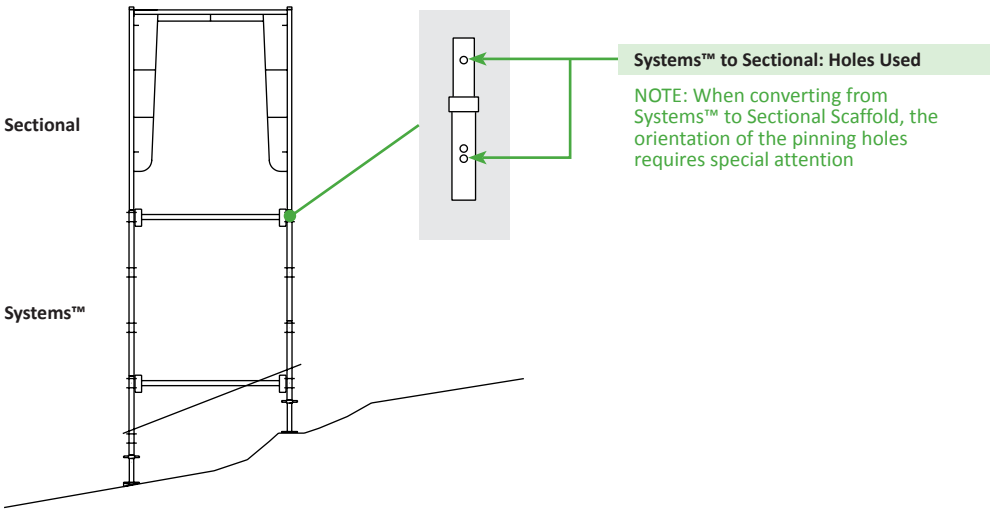
# Unique Components



## Combining Systems™ and Sectional Scaffold




**Compatibility**

For greater job site flexibility, Systems™ Scaffold is compatible with other Safway scaffold products.

- Systems™ is directly compatible with Tube & Clamp Scaffold.
- Add Sectional to your Systems™ Scaffold using the Safway transition coupling pin.

The transition coupling pin allows leg for leg transition between Systems™ and Sectional Scaffold. Utilizing both scaffold products is ideal for projects on uneven grade, church steeples, and dance floors. The transition coupling pin is just one more way to expand the versatility of Systems™ Scaffold.

The unique pinning holes allow the transition coupling pin to be pinned to both the Sectional and Systems™ Scaffold as required by OSHA Regulations where uplift may occur. Federal, state, provincial and local regulations may also apply.

## SL Tie Assemblies

The unique tie tube and eye bolt design (shown left) ties the scaffold securely to the building while minimizing the amount of refinishing needed. When the tie tube and eye bolt are removed, it leaves a small, ⅝" hole rather than the large voids caused by other tying systems.

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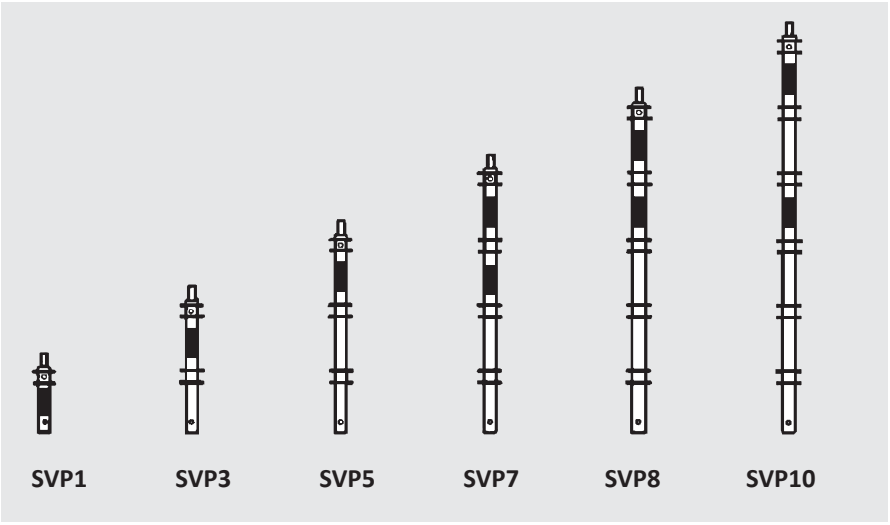
# Systems™ Scaffold Component Parts

## Vertical Posts

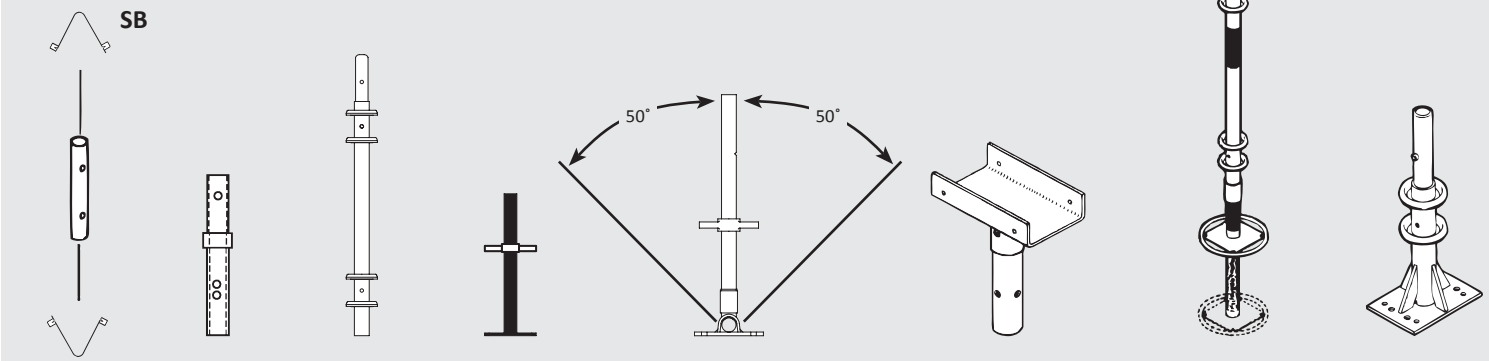
| Part No. | Effective Height | Weight |
|---|---|---|
| SVP10 | 10' 6" | 35.1 lbs. |
| SVP8 | 8' 9" | 29.7 lbs. |
| SVP7 | 7' | 24.1 lbs. |
| SVP5 | 5' 3" | 18.6 lbs. |
| SVP3 | 3' 6" | 13.0 lbs. |
| SVP1 | 1' 9" | 7.6 lbs. |

Note: For shipping length, add 6" for coupling pin




| Part No. | Description | Length (L) / Height (H) / Width (W) | Weight |
|---|---|---|---|
| SCP | Removable Coupling Pin | 11" (L) | 2.1 lbs. |
| SCPS* | Transition Coupling Pin | 11" (L) | 2.3 lbs. |
| SSC30 | Starter Collar | 30" (effective length) | 10.7 lbs. |
| STSJ1 | Tubular Screw Jack | 21" (H) | 8.3 lbs. |
| SSJ | Swivel Screw Jack | 24.5" (H) | 14.9 lbs. |
| SSH8 | U-Head | 8" (L); 4" (W) | 5.6 lbs. |
| SACA | Adjustable Caster Adapter | 45" (maximum effective height) | 27.2 lbs. |
| SCA | Caster Adapter | 16" (effective height) | 9.6 lbs. |
| SB | Snap Button | —— | 0.1 lbs. |

* See assemblies on page 9




See assemblies on pages 5–6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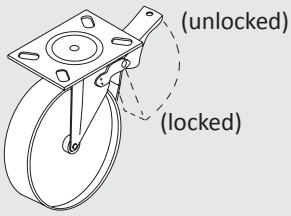
# Systems™ Scaffold Component Parts

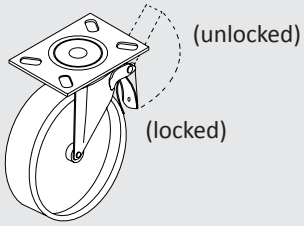


## Casters

| Part No. | Description | Wheel Style | Height | Weight |
|---|---|---|---|---|
| SCU8 | 8" Caster | Urethane | 9½" | 10.8 lbs. |
| SCS8 | 8" Caster | Steel | 9½" | 15.4 lbs. |
| SCU12 | 12" Caster | Urethane | 14½" | 25.2 lbs. |
| SCS12 | 12" Caster | Steel | 14½" | 36.7 lbs. |




SCU8 / SCS8




SCU12 / SCS12

## Systems™ Truss Bearer

| Part No. | Length | Depth | Weight |
|---|---|---|---|
| STB6 | 64⅜" | 10" | 23.4 lbs. |
| STB7 | 76⅜" | 10" | 26.9 lbs. |
| STB8 | 88⅜" | 12" | 40.6 lbs. |
| STB9 | 100⅜" | 14" | 45.7 lbs. |
| STB10 | 112⅜" | 14" | 56.5 lbs. |
| STB12 | 136⅜" | 16" | 68.4 lbs. |
| STB14 | 160⅜" | 16" | 76.5 lbs. |
| STB16 | 184⅜" | 18" | 93.1 lbs. |
| STB18 | 208⅜" | 18" | 101.2 lbs. |

## Systems™ Bearer / Runner

| Part No. | Width | Weight |
|---|---|---|
| SBR2 | 16⅜" | 6.7 lbs. |
| SBR33 | 25⅜" | 8.2 lbs. |
| SBR3 | 28⅜" | 8.7 lbs. |
| SBR42 | 34⅜" | 11.1 lbs. |
| SBR45 | 37⅜" | 10.1 lbs. |
| SBR4 | 40⅜" | 12.2 lbs. |
| SBR54 | 46⅜" | 13.5 lbs. |
| SBR5 | 52⅜" | 14.7 lbs. |

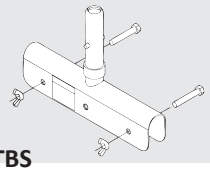
## Systems™ Horizontal Runner

| Part No. | Length | Weight |
|---|---|---|
| SHR6 | 64⅜" | 14.6 lbs. |
| SHR7 | 76⅜" | 16.5 lbs. |
| SHR8 | 88⅜" | 18.4 lbs. |
| SHR9 | 100⅜" | 20.4 lbs. |
| SHR10 | 112⅜" | 22.3 lbs. |

Note: For shipping lengths of bearers, runners and trusses, add 5⅜"

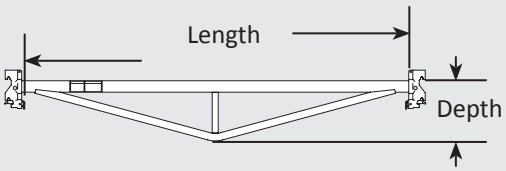
## Systems™ Truss Bearer Components

| Part No. | Description | Weight |
|---|---|---|
| STBC | Truss Bearer Coupling Pin | 2.6 lbs. |
| STBS | Truss Bearer Saddle | 6.3 lbs. |

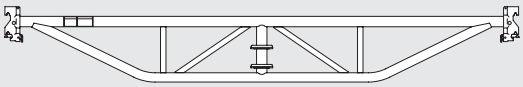


STBS

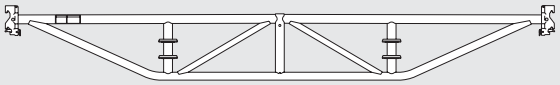
STBC



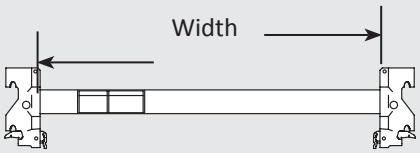

STB6 / STB7



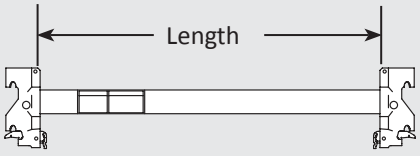
STB8 / STB9



STB10–STB18




SBR




SHR

See assemblies on pages 5–6

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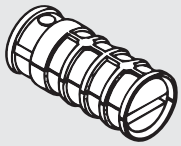
# Systems™ Scaffold Component Parts

## Systems™ Brackets

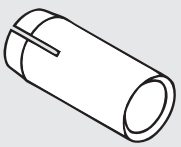
| Part No. | Description | Width | Weight |
|---|---|---|---|
| SBK06 | Plank Bracket | 4½" | 2.6 lbs. |
| SBK1 | Plank Bracket | 13½" | 4.2 lbs. |
| SBK2 | Side Bracket | 24' 15/16" | 18.9 lbs. |
| SBK33 | Side Bracket | 33' 15/16" | 21.4 lbs. |
| SBK3 | Side Bracket | 36' 15/16" | 22.3 lbs. |
| SKO3 | Knee Out Bracket | 36' 15/16" | 42.1 lbs. |
| SKO45 | Knee Out Bracket | 45' 15/16" | 45.3 lbs. |

## Tie-off Components

| Part No. | Description | Dimension | Weight |
|---|---|---|---|
| SLTLS1 | Tie Shield Anchor - LAG | 1¾" (L) | 0.06 lbs. |
| SLTLS2 | Tie Shield Anchor - Machine Thread | 1 1/16" (L) | 0.06 lbs. |
| SLTTB1 | Welded Tie Eye Bolt - LAG | 4⅜" (L) | 0.13 lbs. |
| SLTTB2 | Welded Tie Eye Bolt - Machine Thread | 2½" (L) | 0.12 lbs. |
| SLTT | SL Frame Tie Tube | 19½" (Dim "A") | 4.6 lbs. |
| SLTT1 | SL Frame Tie Tube | 43¼" (Dim "A") | 9.7 lbs. |
| SLTC | SL Frame 1.90 Tie Clamp | | 3.1 lbs. |
| CRA19 | Right Angle Clamp | | 3.0 lbs. |
| CSA19 | Swivel Clamp | | 3.5 lbs. |
| CRA2B | Beam Clamp | | 3.9 lbs. |
| TT2 | Tie Tube | 24" | 4.9 lbs. |
| TT3 | Tie Tube | 36" | 6.8 lbs. |
| TTN | Tie Tube Nut | | 0.31 lbs. |
| SLTWB | Wall Bracket | | 1.6 lbs. |



SLTLS1



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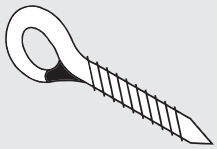
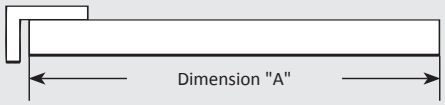
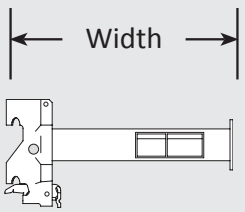


SLTTB1

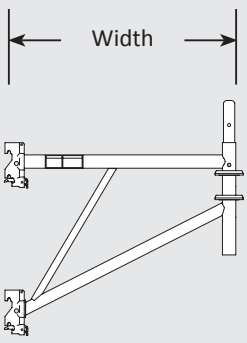
SLTTB2



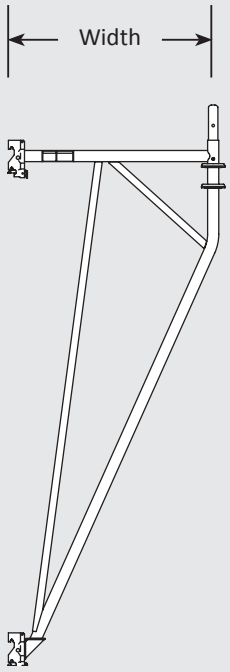

SLTT / SLTT1



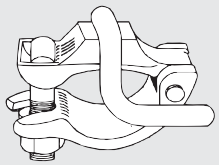

SBK06 / SBK1



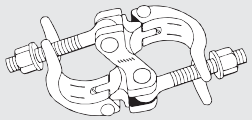

SBK2 / SBK33 / SBK3



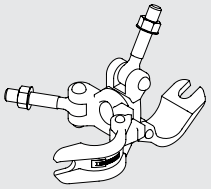

SKO3 / SKO45



SLTC

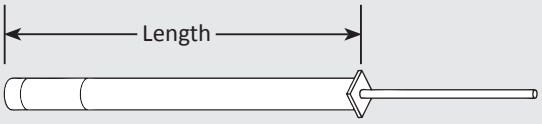


CRA19

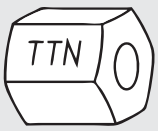


CSA19

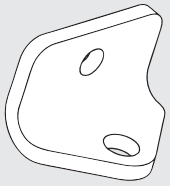
For use with STxxSG/STC Tubes



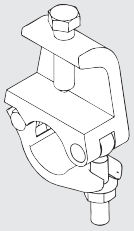

TT2/TT3




TTN



SLTWB



CRA2B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# Systems™ Scaffold Component Parts

## Systems™ Vertical Diagonals

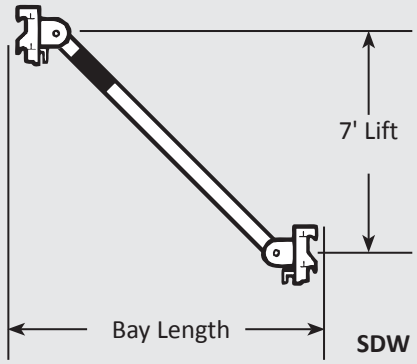
| Post Spacing | Part No. | Total Length | Weight |
|---|---|---|---|
| 3' | SDC3 | 7' 11⅜" | 16.8 lbs. |
| 3' 6" | SDC42 | 8' 1 15/16" | 17.2 lbs. |
| 4' | SDC4 | 8' 4¾" | 17.5 lbs. |
| 4' 6" | SDC54 | 8' 7⅞" | 18.0 lbs. |
| 5' | SDC5 | 8' 11 ¼" | 18.5 lbs. |
| 6' | SDC6 | 9' 6 ⅝" | 19.4 lbs. |
| 7' | SDC7 | 10' 2 13/16" | 20.6 lbs. |
| 8' | SDC8 | 10' 11 9/16" | 21.7 lbs. |
| 9' | SDC9 | 11' 8 13/16" | 23.0 lbs. |
| 10' | SDC10 | 12' 6½" | 24.3 lbs. |

| Part No. | Total Length | Weight |
|---|---|---|
| SDW3 | 8' 5/16" | 18.2 lbs. |
| SDW42 | 8' 2 11/32" | 18.5 lbs. |
| SDW45 | 8' 3 15/32" | 18.6 lbs. |
| SDW4 | 8' 4 11/16" | 18.8 lbs. |
| SDW54 | 8' 7⅜" | 19.2 lbs. |
| SDW5 | 8' 10 11/32" | 19.6 lbs. |
| SDW6 | 9' 5 1/16" | 20.5 lbs. |
| SDW7 | 10' 21/32" | 21.5 lbs. |
| SDW8 | 10' 8 31/32" | 26.1 lbs. |
| SDW9 | 11' 5⅞" | 27.5 lbs. |
| SDW10 | 12' 3 7/32" | 29.1 lbs. |

## Systems™ Horizontal Diagonals (SHD)

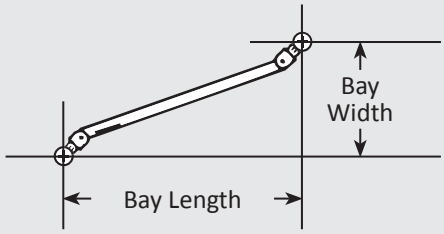
| Part No. | Bay Width | Bay Length | Total Length | Weight |
|---|---|---|---|---|
| SHD33 | 3' | 3' | 48 25/32" | 11.3 lbs. |
| SHD37 | 3' | 7' | 90⅛" | 16.9 lbs. |
| SHD38 | 3' | 8' | 101 15/32" | 18.5 lbs. |
| SHD39 | 3' | 9' | 112 15/16" | 20.0 lbs. |
| SHD310 | 3' | 10' | 124 17/32" | 21.6 lbs. |
| SHD425 | 3' 6" | 5' | 71 5/16" | 14.4 lbs. |
| SHD427 | 3' 6" | 7' | 92 13/32" | 17.2 lbs. |
| SHD428 | 3' 6" | 8' | 103 15/32" | 18.7 lbs. |
| SHD457 | 3' 9" | 7' | 93 11/16" | 17.4 lbs. |
| SHD459 | 3' 9" | 9' | 115¾" | 20.4 lbs. |
| SHD4510 | 3' 9" | 10' | 127 1/16" | 21.9 lbs. |
| SHD45 | 4' | 5' | 74 25/32" | 14.9 lbs. |
| SHD47 | 4' | 7' | 95 1/32" | 17.6 lbs. |
| SHD547 | 4' 6" | 7' | 98" | 18.0 lbs. |
| SHD55 | 5' | 5' | 82 23/32" | 15.9 lbs. |
| SHD57 | 5' | 7' | 101¼" | 18.4 lbs. |
| SHD58 | 5' | 8' | 111⅜" | 19.8 lbs. |
| SHD59 | 5' | 9' | 121⅞" | 21.2 lbs. |
| SHD510 | 5' | 10' | 132⅝" | 22.7 lbs. |
| SHD77 | 7' | 7' | 116 21/32" | 20.5 lbs. |
| SHD79 | 7' | 9' | 134 25/32" | 23.0 lbs. |
| SHD710 | 7' | 10' | 144 17/32" | 24.3 lbs. |
| SHD99 | 9' | 9' | 150⅝" | 25.1 lbs. |
| SHD910 | 9' | 10' | 159 11/32" | 26.3 lbs. |
| SHD1010 | 10' | 10' | 167 9/16" | 27.4 lbs. |

SDC




SDW

SHD

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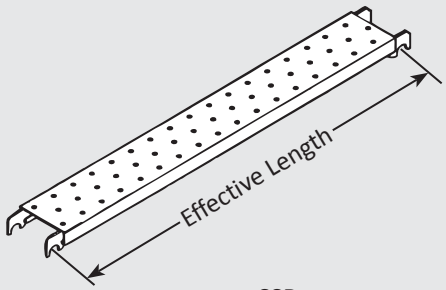
# Systems™ Scaffold Component Parts

## Systems™ Steel Plank and Duraplank™

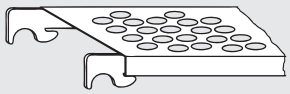
| For All Lengths | Part No. | Description | Width | |
|---|---|---|---|---|
| | SSP | Steel Plank | 9" | (6" wide planks available upon request) |
| | SSPB | Sand Blast plank | 9" | |

| Eff. Length | Part No. | Weight | Part No. | Weight |
|---|---|---|---|---|
| 2' | SSP2 | 11.4 lbs. | SSPB2 | 11.6 lbs. |
| 2' - 9' | SSP33 | 14.8 lbs. | SSPB33 | 14.8 lbs. |
| 3' | SSP3 | 16.0 lbs. | SSPB3 | 15.6 lbs. |
| 3' 6" | SSP42 | 18.2 lbs. | SSPB42 | 18.1 lbs. |
| 3' 9" | SSP45 | 19.3 lbs. | SSPB45 | 19.1 lbs. |
| 4' | SSP4 | 20.5 lbs. | SSPB4 | 20.2 lbs. |
| 4' 6" | SSP54 | 22.7 lbs. | SSPB54 | 22.4 lbs. |
| 5' | SSP5 | 24.9 lbs. | SSPB5 | 21.4 lbs. |
| 6' | SSP6 | 29.5 lbs. | SSPB6 | 28.8 lbs. |
| 7' | SSP7 | 33.9 lbs. | SSPB7 | 32.9 lbs. |
| 8' | SSP8 | 38.4 lbs. | SSPB8 | 37.4 lbs. |
| 9' | SSP9 | 42.9 lbs. | SSPB9 | 41.7 lbs. |
| 10' | SSP10 | 47.4 lbs. | SSPB10 | 46.2 lbs. |

Note: For overall length add: 3"




**SSP**



**SSPB**

| Part No. | Description | Width | Height | Weight |
|---|---|---|---|---|
| SSPC | Toeboard Clip | 6⅝" | 8⅞" | 0.2 lbs. |

**SSPC**

Toeboard clip (SSPC) is needed when steel plank (SSP or SSPH) is used as toeboard.

See assemblies on pages 7–8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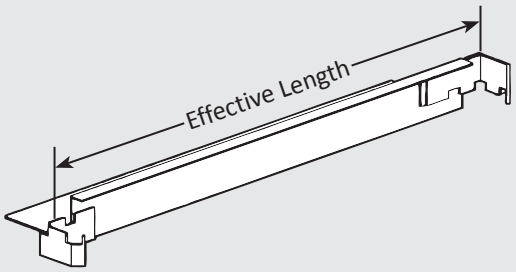
# Systems™ Scaffold Component Parts

## Systems™ Metal Toeboards (SMT)

| Part No. | Eff. Length | Weight |
|---|---|---|
| SMT2 | 2' | 7.1 lbs. |
| SMT33 | 2' 9" | 8.9 lbs. |
| SMT3 | 3' | 9.5 lbs. |
| SMT42 | 3' 6" | 10.9 lbs. |
| SMT45 | 3' 9" | 11.6 lbs. |
| SMT4 | 4' | 12.6 lbs. |
| SMT54 | 4' 6" | 14.0 lbs. |
| SMT5 | 5' | 14.9 lbs. |
| SMT6 | 6' | 18.1 lbs. |
| SMT7 | 7' | 20.2 lbs. |
| SMT8 | 8' | 23.6 lbs. |
| SMT9 | 9' | 25.5 lbs. |
| SMT10 | 10' | 28.2 lbs. |

Note: Overall length add 2 9/16"

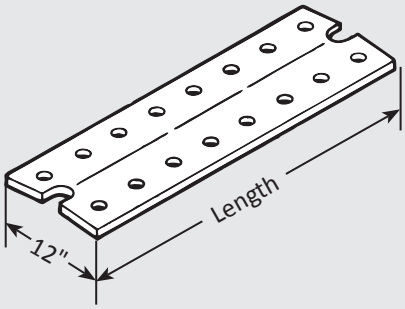



SMT

## Systems™ Plank Filler (SPF)

| Part No. | Length | Weight |
|---|---|---|
| SPF18* | 17¾" | 7.0 lbs. |
| SPF2 | 23¾" | 9.2 lbs. |
| SPF3 | 35¾" | 13.7 lbs. |
| SPF45 | 44¾" | 17.0 lbs. |

*SPF18 is notched at one end only




SPF

## Stair Units (STR)

| Part No. | Width | Depth | Length | Weight | Material |
|---|---|---|---|---|---|
| STR7 | 11¼" | 9½" | 10' 1 11/16" | 74.2 lbs. | Steel |
| STR7A | 11¼" | 9½" | 10' 1 11/16" | 52.4 lbs. | Aluminum |

## Modular Stair

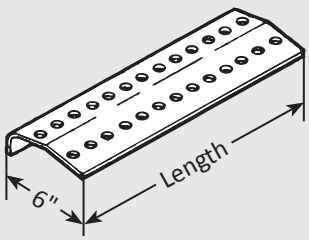
| Part No. | Description | Weight |
|---|---|---|
| STR7M42 | Modular Stair | 239.0 lbs. |

## Stair Filler (SSF)

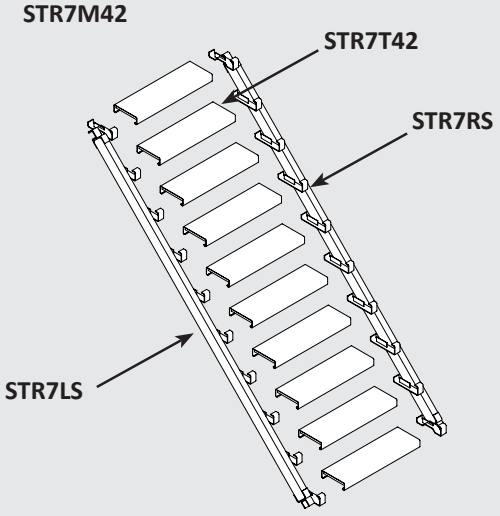
| Part No. | Length | Weight |
|---|---|---|
| SSF3 | 2' 9⅛" | 10.3 lbs. |
| SSF42 | 3' 2¾" | 9.8 lbs. |
| SSF54 | 4' 2¾" | 13.0 lbs. |

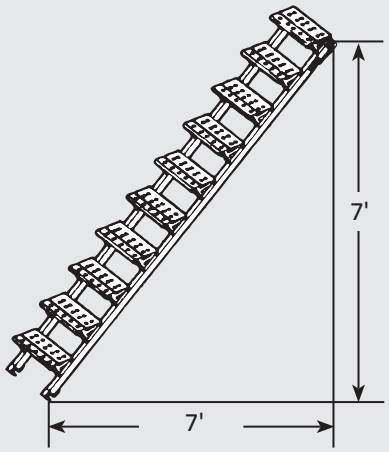
See assemblies on pages 5–6

SSF_




STR7M42




STR7 / STR7A

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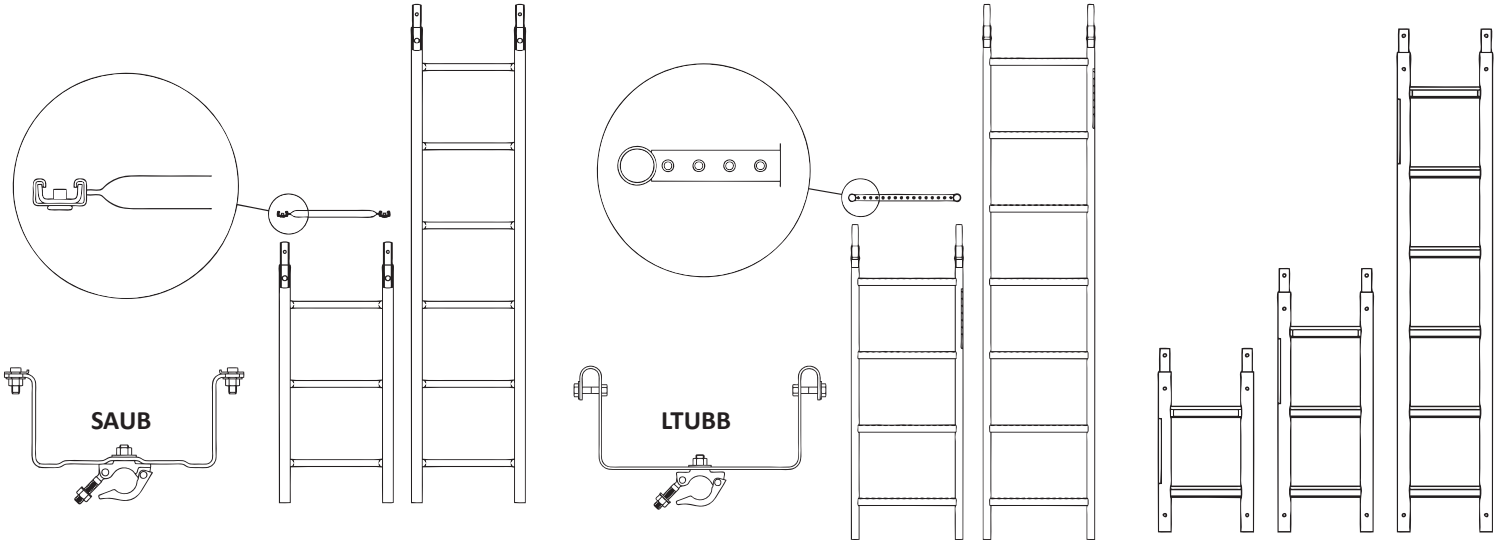
# Systems™ Scaffold Component Parts

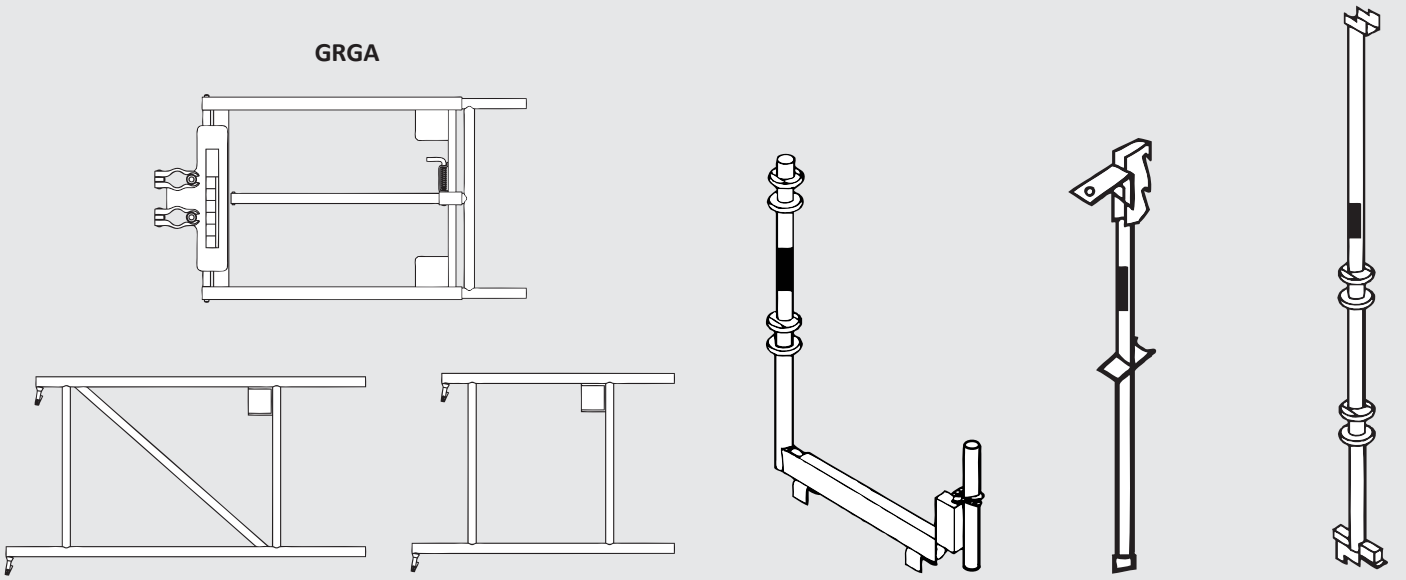
## Access Ladders and Gates

| Part No. | Description | Weight |
|---|---|---|
| SAU3 | Access Ladder Unit, 3' | 9.6 lbs. |
| SAU6 | Access Ladder Unit, 6' | 18.3 lbs. |
| SAUB | Access Ladder Bracket | 5.8 lbs. |
| LTUB4 | Access Ladder Unit 4' | 14.2 lbs. |
| LTUB7 | Access Ladder Unit 7' | 24.1 lbs. |
| LTUBB | Access Ladder Bracket | 6.8 lbs. |
| SAG3 | Access Gate, 3' | 8.8 lbs. (painted) |
| SAG4 | Access Gate, 4' | 12.8 lbs. (painted) |
| GRGA | Adjustable Gate | 27.9 lbs. |

| Part No. | Description | Weight |
|---|---|---|
| SAGH | Access Gate Hinge | 8.0 lbs. |
| SAGP | Access Gate Post | 20.6 lbs. |
| SAGSU | Access Gate Unit | 32.4 lbs. |
| SALCS218 | Confined Space Ladder | 7.6 lbs. |
| SALCS318 | Confined Space Ladder | 10.3 lbs. |
| SALCS618 | Confined Space Ladder | 18.6 lbs. |
| SALCS212 | Confined Space Ladder | 7.0 lbs. |
| SALCS312 | Confined Space Ladder | 9.4 lbs. |
| SALCS612 | Confined Space Ladder | 16.8 lbs. |




SAU3 SAU6 LTUB4 LTUB7 SALCS_ _ _



GRGA

SAG4 SAG3 SAGSU SAGH SAGP

See assemblies on pages 5–6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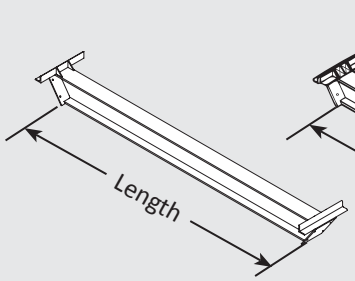
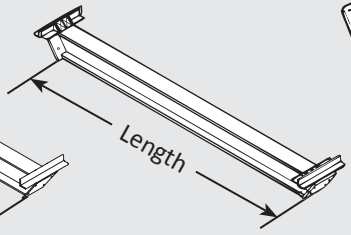
# Systems™ Scaffold Component Parts

## Support Components

| Part No. | Description | Weight | Length | Height |
|---|---|---|---|---|
| SBB6 | Base Beam Steel | 128.2 lbs. | 6' 0" | |
| SBBA8 | Base Beam Aluminum | 107.3 lbs. | 8' 0" | |
| STH4 | Throat header | 41.5 lbs. | 4' 9" | |
| STH6 | Throat header | 48.8 lbs. | 6' 5" | |
| SASB2 | Adjustable Support Bracket | 52.3 lbs. | 1' 7" | |
| SASB3 | Fixed Boiler Bracket | 27.1 lbs. | 1' 1" | |
| SSB10 | Saddle Brace | 22.2 lbs. | 9' 6 11/16" | |
| SFS | Support Frame Starter | 7.8 lbs. | 13 3/16" | 10¼" |
| SPBH | Safway® Pry-Bar Hammer | 2.3 lbs. | 1' ¾" | |
| SHST | Horizontal Square Tool | 10.6 lbs. | 2' 5⅜" | |
| CW78 | Wrench | 2.2 lbs. | | |




SBB6

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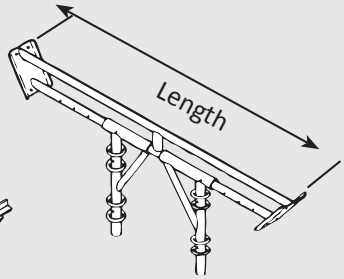


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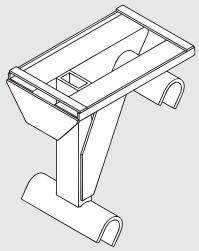

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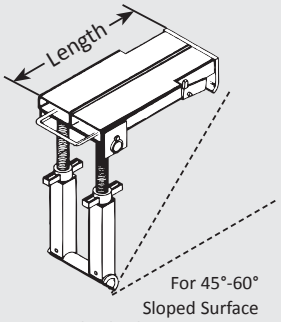


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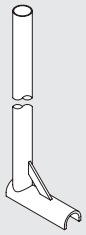

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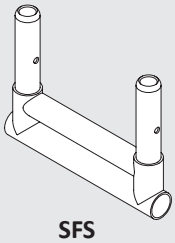

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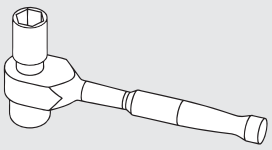

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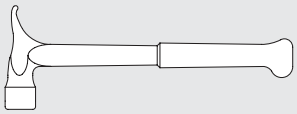


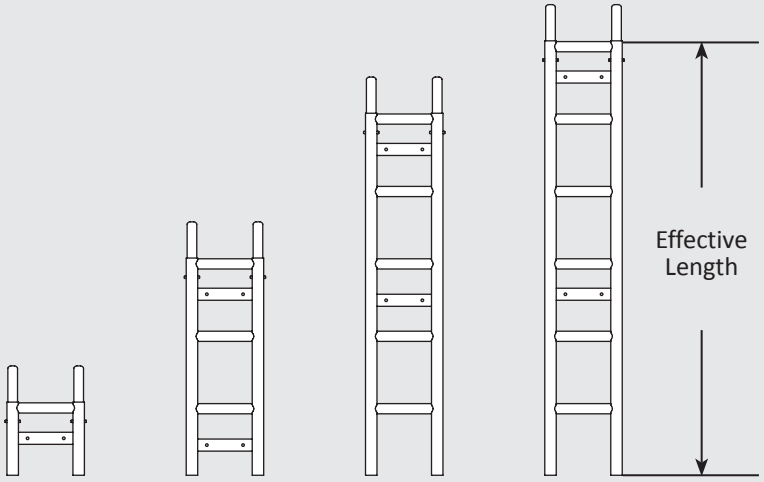
SPBH

SHST

## Support Frames (SBF)

| Part No. | Effective Length | Weight |
|---|---|---|
| SBF1 | 1' ⅛" | 12.7 lbs. |
| SBF3 | 3' | 27.4 lbs. |
| SBF5 | 5' | 39.9 lbs. |
| SBF6 | 6' | 46.2 lbs. |

Note: For shipping length add 6" for coupling pin




SBF1 SBF3 SBF5 SBF6

See assemblies on pages 6–7

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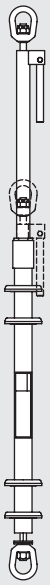
# Systems™ Scaffold Component Parts

## Miscellaneous

| Part No. | Description | Height | Weight | Other |
|---|---|---|---|---|
| SSAP | Suspended Adjustable Post | 62 3/16" | 31.1 lbs. | 19" (Adjustment Range) |
| SEGP | External Guardrail Post | 33 3/8" | 12.6 lbs. | |
| BCA | Adjustable Beam Clamp | | 13.8 lbs. | 12 1/4" (Maximum Flange) |
| | | | | 5 1/4" (Minimum Flange) |
| SSECA | Replacement End Connector Assembly | | 0.5 lbs. | |
| SRO | Storage Rack | | 128.0 lbs. | 3' 10 3/4" (Length / square) |
| SRB | Storage Rack Bin | | 134.7 lbs. | |
| SHA | Hoist Arm | | 13.5 lbs. | |
| SRLB | Retractable Lifeline Bracket | | 14.8 lbs. | |



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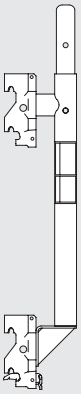

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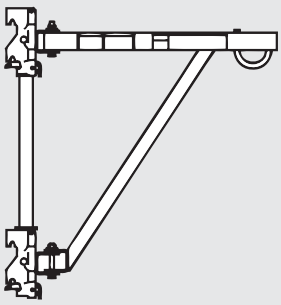

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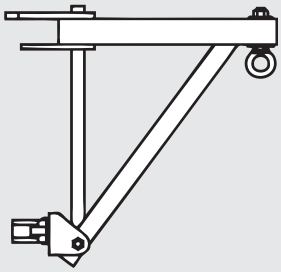

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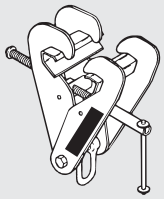
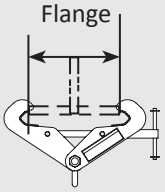
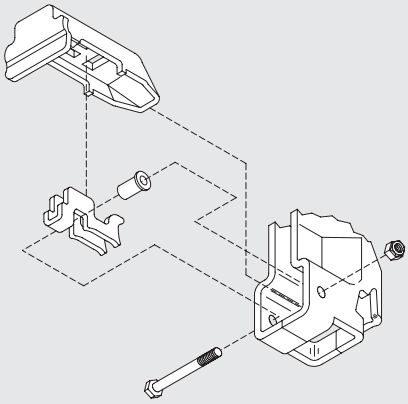





BCA



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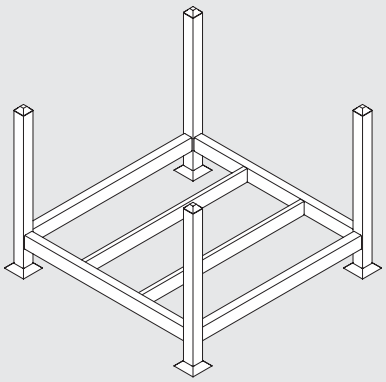
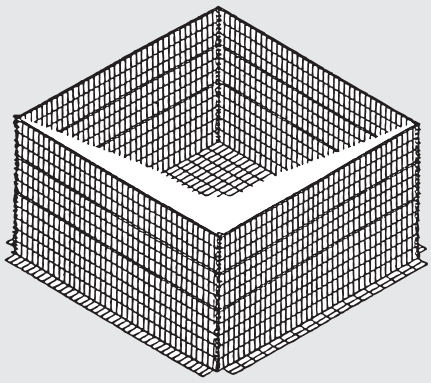


SRO



SRB

See assemblies on pages 7–8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SYS

# Systems™ Safety Guidelines

Safety is everyone's responsibility. Everyone's safety depends upon the design of scaffolds by a **Qualified Person**, erection and dismantling of scaffolds by **Trained Erectors** under the direct supervision of a **Competent Person** and use scaffolds by properly trained workers. Inspect your scaffold before each use to see that the assembly has not been altered and is safe for your use.

**⚠ WARNING**
**SERIOUS INJURY OR DEATH CAN RESULT FROM YOUR FAILURE TO FAMILIARIZE YOURSELF, AND COMPLY WITH ALL APPLICABLE SAFETY REQUIREMENTS OF FEDERAL, STATE, PROVINCIAL AND LOCAL REGULATIONS AND THESE SAFETY GUIDELINES BEFORE ERECTING, USING OR DISMANTLING THIS SCAFFOLD.**

**⚠ WARNING**
**BE SURE TO FULLY SEAT WEDGES IMMEDIATELY AFTER PLACING COMPONENT. WEDGES THAT ARE NOT FULLY SEATED WILL NOT SUPPORT DESIGN LOADS. FAILURE TO SEAT WEDGES COULD CAUSE SERIOUS INJURY OR DEATH.**

## Safety must come first!

Safway® equipment is designed and manufactured with the user in mind. The safety that goes into each piece of equipment, however, cannot offset carelessness on the part of the erector or the user. **Follow these safety guidelines in order to prevent injury** to the users of Safway® equipment. Scaffold design must include analysis of load carrying members by properly qualified personnel. Safway® component load capacity and weight information is available from your Safway branch. Scaffold must be erected, used, moved, and disassembled only under the supervision of Competent Persons.

## I. Erection of Safway Systems™ Scaffold

### A. Prior To Erection - All Scaffold Assemblies

1. Job site must be inspected to determine ground conditions, strength of supporting structure, proximity of electric power lines, overhead obstructions, wind conditions, and the need for overhead or weather protection. These conditions must be evaluated and adequately addressed.
2. Jobsite must be evaluated by a **Competent Person** for possible anchor locations for attaching a Personal Fall Arrest System. A new evaluation will need to be performed as site conditions change.
3. Post spacing and sill size can only be determined after the total loads to be imposed on the scaffold and the weight of the scaffold have been calculated.
4. Stationary scaffolds over 125 ft. in height must be designed by a professional engineer.
5. All equipment must be inspected to see that it is in good condition and is serviceable. Damaged or deteriorated equipment must not be used.

**⚠ WARNING**
**NOT ALL SPECIES AND GRADES OF LUMBER CAN BE USED AS SCAFFOLD PLANK. WOOD PLANKS USED FOR SCAFFOLD PLATFORMS MUST BE GRADED AS SCAFFOLD PLANK BY AN APPROVED GRADING AGENCY, OR SPECIFICALLY MANUFACTURED FOR SCAFFOLD USE.**

6. Scaffold plank must be inspected to see that it is graded as scaffold plank, is sound and in good condition, and inspected for saw cuts, cracks, notches, splits, delaminations and holes.
7. A Competent Person can deviate from these guidelines only if it can be shown that the resulting scaffold design complies with applicable codes and generally accepted scaffold engineering practices.
8. The scaffold assembly must be designed to comply with federal, state, provincial and local requirements.

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

### B. Erection Of Fixed Scaffold

Scaffold must be erected, moved or disassembled only under the supervision of Competent Persons. Safety equipment, including safety glasses and hard hats, must be worn by all persons erecting, moving, dismantling or using Systems™ Scaffold.

1. All scaffold legs require the use of a base plate **and** a mudsill or other adequate firm foundation. Base plates must be in firm contact with the sills/ foundation and scaffold legs and should be centered on the sills. Be especially careful when scaffolds are to be erected on soft or frozen ground. Any part of a building or structure used to support the scaffold must be capable of supporting the load to be applied.
2. Compensate for uneven ground by using screw jacks and base plates with sills. **Do not use** unstable objects or materials.
3. Use only tools recommended by Safway, such as the Systems™ Pry Bar Hammer, for erection and dismantling.
4. Plumb and level scaffold until connections can be made with ease. Be sure scaffold stays plumb and level as erection progresses.
5. Fasten vertical posts together to prevent uplift.
6. Position horizontal members on both rings of each ring set, and firmly seat wedges immediately. **Do not stand, lean, or put weight on horizontal members until the wedges are fully seated**. See Footnote 2.

**⚠ WARNING**
**FULLY SEAT WEDGES IMMEDIATELY AFTER PLACEMENT.**

7. Horizontal and/or vertical diagonal bracing is required to maintain a square and plumb scaffold structure.
8. Ties, guys, bracing and/or outriggers may be needed to assure a safe stable scaffold assembly. The height of the scaffold in relation to the minimum base dimension (length or width), wind loads, the use of brackets or cantilevered platforms and imposed scaffold loads determines the need for sway and stability bracing. The following general guidelines apply:
   a. A scaffold must always be secured when the height of the scaffold exceeds 4 times the minimum base dimension (length or width). See Footnote 1.

**⚠ WARNING**
**OUTRIGGERS, OR OTHER MEANS, MAY BE USED TO INCREASE THE MINIMUM BASE DIMENSION OF A SCAFFOLD TOWER. THE RESULTING BASE DIMENSION, HOWEVER, MAY NO LONGER BE THE MINIMUM (OR LIMITING) BASE DIMENSION.**

   b. Ties must be placed as near as possible to horizontal members. The bottom tie must be placed no higher than 4 times the minimum scaffold base dimension (length or width). Subsequent vertical tie placement will depend upon the scaffold width. Scaffolds 3 ft. and narrower must be tied at vertical intervals no more than 20 ft. apart. Scaffolds wider than 3 ft. must be tied at vertical intervals no more than 26 ft. apart. The uppermost tie should be placed as close to the top as possible and, in no case, more than 4 times the minimum base width from the top. See Footnote 1.
   c. Horizontal ties must be placed at the ends of the scaffold runs and at no more than 30 ft. horizontal intervals in between.
   d. Ties must be installed as the erection progresses, and not removed until scaffold is dismantled to that height.
   e. Side brackets, cantilevered platforms, pulleys, hoist arms, enclosed scaffolds, sloped surfaces and windy conditions introduce overturning and uplift forces which must be considered and compensated for. These situations require additional bracing, tying or guying.
   f. Circular scaffolds erected completely around or within a structure may be restrained from tipping by use of "stand off" bracing members.
   g. A freestanding tower must be guyed at the intervals outlined above or otherwise restrained to prevent tipping or overturning.
9. Outrigger bays or outrigger units can be used to increase the minimum base width of freestanding towers. If used on a free standing tower, they must be installed on both sides of the tower.
10. Work platforms must be fully decked with platform units in good, sound condition. Platform units may be individual scaffold grade wood planks, fabricated plank, fabricated scaffold decks or fabricated scaffold platforms.
    a. Scaffold platforms must be fully planked or decked between the front upright and guardrail post. Work platforms and walkways must be at least 18 in. wide.
    b. Each end of each plank must overlap its support by a minimum of 6 in. or be cleated.
    c. Each end of each platform 10 ft. long or less must overhang its supports by not more than 12 in. Each end of each platform longer than 10 ft. must overhang its supports by no more than 18 in. Larger overhangs must be guarded to prevent access to the overhang. Materials must not be stored on overhangs. Do not stand on platform overhangs.
    d. Each plank on a continuous run scaffold must extend over its supports by at least 6 in. and overlap each other by at least 12 in.

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e. Spans of 2 in. by 10 in. nominal scaffold grade plank must never exceed 10 ft. No more than one person must stand on an individual plank at one time. Loads on planks must be evenly distributed and not exceed the allowable loads for type of plank being used.

f. Secure platform units to scaffold to prevent uplift caused by high winds or other job site conditions. Use latches, if supplied by platform manufacturer, or other suitable means.

11. Guardrails must be used on all open sides and ends of scaffold platforms. Both top and midrails are required. Local codes specify minimum heights where guardrails are required. Use guardrail at lower platform heights if falls can cause injury
12. Toeboards must be installed whenever people are required to work or pass under a scaffold platform. When materials are to be stacked higher than the toeboard, screening is required from the toeboard or platform to the top guardrail.
13. Access must be provided to all work platforms. If access is not available from the structure, access ladder units or stairways must be provided. When access ladder units are provided, a rest platform must be installed at vertical intervals of 35 ft. or less. Attachable ladders should extend at least 3 ft. above platforms. Install access ladder units as scaffold erection progresses.
14. Use fabricated decks or cleated plank to minimize platform interference in access areas.
15. **Do not** store materials on side or end bracket platforms.
16. Cantilevered platforms must be specifically designed for that purpose, the posts pinned to prevent uplift, and adequate ties provided to prevent overturning.
17. Materials must never be placed on cantilevered platforms unless the assembly has been designed to support material loads by a qualified person. These types of platforms cause overturning and uplift forces which must be compensated for.
18. After erecting scaffold, be sure screw jacks are in firm contact with vertical posts.
19. **Do not** use truss bearers without considering the loads to be supported. Do not cantilever truss bearers or other horizontal members.
20. Truss bearers with ring sets must be laterally braced.
21. **Do not** install platforms between free standing towers.
22. Material hoists and derricks should not be mounted on a scaffold unless the scaffold is specifically designed for that purpose.
23. **A Competent Person must check the entire scaffold assembly before use**. Thoroughly inspect the completed assembly to see that it complies with all safety codes, all fasteners are in place and tightened, it is level and plumb, work platforms are fully decked, guardrails are in place and safe access is provided.

**C. Erection Of Rolling Scaffolds**

The following additional precautions apply to the erection of rolling towers:

1. Height of the rolling tower must not exceed 4 times its minimum base dimension (length or width), or 40 ft., whichever is lower. See Footnote 1.
2. All casters must be secured to adapters with nuts and bolts.

**⚠ WARNING**

**THE LOAD RATING OF THE CASTERS USED WILL LIMIT THE SIZE, CONFIGURATION, AND LOAD CAPACITY OF THE ROLLING TOWER.**

3. Screw jacks must not increase the height of the scaffold by more than 12 in. Tower must be kept level and plumb at all times.
4. Horizontal diagonal bracing must be used at the bottom and top of rolling towers where the top work platform is more than 9 ft. above the supporting surface. When rolling towers are to be erected higher than 9 ft., the first brace must be no more than 2 ft. above the casters, the others at not greater than 21 ft. intervals above. Fabricated planks with hooks may be used as diagonal braces.
5. Platform units with hooks, or cleated planks, must be used on rolling towers.

## II. Use Of Scaffolds

**A. All Scaffolds**

1. Each time before you use the scaffold, a Competent Person must: inspect the scaffold assembly to be sure it has not been altered, is assembled correctly, is level and plumb, all base plates are in firm contact with sills, all bracing is in place and securely fastened, all platforms are fully decked, all guardrails are in place, safe access is provided, it is properly tied and/or guyed, there are no overhead obstructions, there are no energized electric power lines within 10 ft. of the scaffold assembly, all wedges are firmly seated, all other member end connectors are firmly seated, all wedges are driven under ring sets, all retainers seated, all screw jacks are in contact with starter collars or posts. Correct any deficiencies prior to use.
2. All users must be trained prior to performing any work from the scaffold.
3. Use only proper access. Do not climb bracing, guardrails or vertical posts. Do not climb any scaffold component unless it is specifically designed for that purpose. If safe access is not provided, insist that it be provided.
4. Climb safely!
   a. Face the rungs as you climb up or down.
   b. Use both hands.
   c. Do not try to carry materials while you climb.
   d. Be sure of your footing and balance before you let go with your hands. Keep one hand firmly on frame or ladder at all times.
   e. Clean shoes and rungs to avoid slipping.
5. **Do not** work on slippery platforms.
6. **Do not** overload platforms with materials. Special care must be taken when truss bearers are used.
7. **Do not** extend working heights by standing on planked guard rails, boxes, ladders or other materials on scaffold platforms.
8. **Do not** loosen, detach or remove any component of a scaffold assembly except under the supervision of a Competent Person. Components that have been removed must be replaced.
8. **Do not** erect scaffold on wagons, trucks or other wheeled vehicles.
9. **Do not** stand on platform overhangs. Stand only within the platform area; do not try to extend work area by leaning out over guardrailing.

**B. Use Of Rolling Towers**

**All of the above precautions plus:**

1. A **Competent Person** must inspect the scaffold prior to dismantling to make sure it is safe. Missing or damaged components such as ties, braces or plank may need to be installed
2. **Do not ride manually propelled rolling scaffold. No one must be on a rolling tower while it is being moved.**
3. Lock all casters before getting on a rolling tower. Casters must be locked at all times the scaffold is not being moved.
4. **Do not** bridge between rolling towers.
5. Remove all materials from scaffold before moving a rolling tower.
6. Be sure floor surface is clear of debris, obstructions or holes before moving scaffold.
7. Be sure there are no overhead obstructions or energized electric power lines in the path when moving a rolling tower.
8. Rolling towers must only be used on level surfaces.
9. Move rolling towers from the base level only. **Do not pull or push** from the top.

## III. Dismantling Scaffolds

The following additional precautions apply when dismantling scaffolds:

**⚠ WARNING**

**IT MAY BE NECESSARY TO ADD PARTS TO A SCAFFOLD BEFORE IT CAN BE DISMANTLED SAFELY.**

1. **Prior to removal or loosening** of any component, consider the effect the removal of the component, or the loosening of a joint, will have on the strength of the remaining assembly.
2. Check to see if scaffold has been altered in any way which would make it unsafe. If so, reconstruct where necessary before beginning the dismantling process.
3. Use only proper access. Do not climb braces, guardrails, or vertical members. Do not climb scaffold components unless they are specifically designed for that purpose. Do not stand on platform overhangs.
4. **Do not** remove ties until scaffold above has been removed.
5. Visually inspect each plank to be sure it is supported on both ends and is safe to stand or work on.
6. **Do not** accumulate removed components or equipment on the scaffold.
7. Lower components in a safe manner as soon as dismantled. Do not throw components off scaffold.
8. Stockpile dismantled equipment in an orderly manner.
9. Remove component immediately after loosening wedges.

Understanding and following these safety guidelines will increase your personal safety and the safety of your fellow workers.

**Footnote 1:** California and some other states require a height-to-minimum base dimension (length or width) ratio of three-to-one (3:1). Refer to the governing codes for your job location.

**Footnote 2:** In California, horizontal members used as guardrails should be installed on the **top ring set only** to comply with the California 42 – 45 in. guardrail height requirement. **Fully seat wedges immediately after placement**.

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