



SCAFFOLD SAFETY GUIDELINES

Instructions for Erecting and Using
Stationary or Rolling Scaffolding

DOING IT RIGHT COULD SAVE A LIFE!



SAFETY FIRST

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OSHA Rules for Scaffolding

A) Objectives:

1. Don't let the scaffold fall.
2. Don't fall off the scaffold.
3. Don't let the material fall off the scaffold.

Name of Competent Person:

Name of Qualified Person:

B) Key Definitions:

1. **Competent Person:** means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
2. **Qualified Person:** means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work or the project.

C) Significant Changes to Subpart L*

1. **Fall protection for Erectors and Dismantlers:** The standard now requires employees be protected from falls while erecting (including increasing the height of the scaffold as the work progresses). The employers must conduct a feasibility study to determine when fall protection, such as personal fall protection systems, are feasible and do not create a greater hazard. (Scaffolding is not designed as an anchor point for fall arrest.)
2. **Electrical Shock Protection:** The standard requires safe distance from power lines be maintained as outlined in the standard.
3. **Employee Training:** The standard now specifically requires all employees who work on, erect or dismantle, repair, operate, maintain or inspect scaffolding be trained in specific areas related to the safe use of the scaffold.
4. **Daily Inspections:** The new standard requires the scaffold be inspected before each use, daily or before each work shift by a competent person.
5. **Welding from a Suspended Scaffold:** The standard requires specific precaution be taken when welding from a suspended scaffold to prevent current travel and/or arcing in the scaffold components.
6. **Cross Braces as Railings:** The standard specifically addresses under what circumstances a cross brace can substitute as a top or mid rail (not both).
7. **Access:** The standard now defines how and under what circumstances a ladder or steps will be used.

Load Chart

Frame	Tier 1	Tier 2	Tier 3	Tier 4	Part	Load
	(all weights are in lbs. per leg)					(all weights are in lbs.)
5' x 3' SLB	4200	3465	3360	2993	All Purpose	1000 evenly distributed
5' x 4' SLB	4200	3465	3360	2993	Screw Jack	11000 at top of jack
5' x 5' SLB	4043	3360	3213	2835	20" Side Bracket	500 personnel only
5' x 6' 6" SLB	2441	2240	2048	1785	7' Plywood Deck	75 per sq. ft. with 1/2" decking
5' x 6' 6" WT	3434	3045	2646	2373	Folding Trestle	1000 on top cross member
5' x 6' 4" WT	3434	3045	2646	2373	8" Caster	500 per caster

For towers exceeding four (4) tiers high, subtract dead load weight/leg of frames, crossbraces, and brackets above the 4th tier to obtain an allowable load/leg for workman, materials, and planking.

All values are based upon 12" maximum screw extension at the base of the scaffold.

* Subpart L is the OSHA Scaffolding standard and can be obtained from your local OSHA office.

Scaffold Safety Tips

These tips and suggestions are designed to promote safety in the use of steel scaffolding. They are intended to deal only with some of the many practices and conditions encountered in the use of scaffolding. They do not purport to be all inclusive or to replace other additional safety and precautionary measures to cover usual, or unusual conditions. They are not intended to conflict with, or supersede any OSHA, federal, state, local statues or regulations.

Check Safety Codes

Check frequently with your local OSHA, state and local offices for the latest safety code updates. You can also check the A1 web site at www.a1scaffold.com for code updates and the latest in scaffold safety tips.

Don't Short Change Bracing

Use bracing at all points provided. Add extra braces if needed to insure stability.

Reject Damaged Parts

Bent or otherwise damaged frames or braces should not be used. Put them aside for replacement or repair. For repair, call A1 Plank & Scaffold.

Inclement Weather

Don't work on scaffolds in bad weather or high winds unless the Competent Person decides it is OK to do so. Platforms should be cleared of ice and or snow before being used.

Tie Scaffold to the Building

Scaffolding should be tied to the structure using #9 wire or tie-in devices. The first vertical tie should be at the maximum height of 4 times the narrowest base dimension. Additional ties are not to exceed 26' vertically. Maximum horizontal distance between ties is not to exceed 30'.

Intermixing of Components

Scaffold frames and their components manufactured by different companies shall not be intermixed, unless the component parts readily fit together without force and the Competent Person determines the resulting scaffold is structurally sound.

Personal Safety Equipment

Anyone working on a scaffold must wear a hard hat and steel toed work boots. Additionally, fall protection systems must be used when requested by the proper authorities. Scaffolding is not designed as an anchor point for fall arrest.

Don't Ride a Rolling Scaffold

The platform height of a rolling scaffold must not exceed four (4) times the smallest base dimension (Cal/OSHA and some Government agencies require a stricter ratio of 3 to 1)

Always keep casters locked while on scaffold.

Begin with Good Footings

Scaffolds must bear on base plates or screwjacks on a mud sill or other adequate firm foundation.

Work Practices

Safe work practice training by a Competent Person must be given to workers who erect, dismantle, move, operate, repair, maintain, inspect, and use scaffolding.

Scaffold Training

Re-training is necessary when workers are exposed to new hazards or conditions on the job or when workers show signs of unsafe work practices.



Check Safety Codes



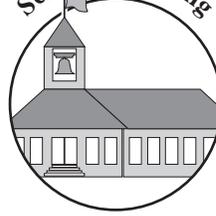
Cross Braces



Power Lines



Scaffold Training



Inspect and Check



Overload Scaffold



Tie Scaffold to Building



Inclement Weather



Guardrails

Top guard rails must be installed between 36" and 45" (if manufactured and placed into service after Jan. 1, 2000, between 38" and 45"). Mid rail is placed halfway in between.

Cross Braces

Cross Braces should not be used as a way to climb the scaffold. All braces must be checked for proper engagement onto locks. Cross bracing is acceptable for mid rail if cross point is between 20" and 30" above the work platform. Cross bracing is acceptable for top rail if cross point is between 38" and 45" above the work platform. Cross bracing cannot serve as both.

Toeboards

Debris and rubble should not be allowed to accumulate on the work platform and should be removed as quickly as possible. Additionally, tools and other materials should not be allowed to accumulate. Toeboards should be used to prevent tools and materials from being knocked off the work platform.

Work Platforms

Use metal catwalks or platforms where available. If wood plank is used, it must be scaffold grade or better. Inspect thoroughly before each and every job to make sure it is free from breaks, knots, cracks or warpage. Decking should be full width.

Plank Overlapping

Planks 10' long or less require a 6" minimum and a 12" maximum overlap. Planks greater than 10' long require a 6" minimum and a 18" maximum overlap.

Protect Working Levels

Use overhead canopies to protect workers on lower work levels when work is being done overhead. Rope off unsafe areas underneath scaffold or provide wire mesh around work area.

Proper Usage

Never use equipment for purposes other than those recommended by A1 Scaffold Mfg., Inc. Contact A1 for further information.

Don't Overload Scaffolding

Follow the safe load capacities as provided by the manufacturer... there's a limit even to what steel can support. A 4 to 1 safety factor must be calculated and maintained at all times on scaffolding.

Guyed Scaffolds

Remember - Slack guys are useless. Overtaut guys are dangerous.

Power Lines

DO NOT use scaffolding where the user can come into contact with live power lines.

Inspect & Check

Take no chances. Inspect the scaffold setup after erection and daily when in use. Don't remove or allow removal of any parts without the OK from the Competent Person. When wire rope is used, inspect it on each job.

CODE OF SAFE PRACTICES

FRAME SCAFFOLDS, SYSTEM SCAFFOLDS, TUBE AND CLAMP SCAFFOLDS & ROLLING SCAFFOLDS DEVELOPED FOR INDUSTRY BY THE SCAFFOLDING, SHORING & FORMING INSTITUTE (SSFI) AND THE SCAFFOLD & ACCESS INDUSTRY ASSOCIATION, INC. (SAIA)

It shall be the responsibility of all users to read and comply with the following common-sense guidelines which are designed to promote safety in the erecting, dismantling, alteration and use of Scaffolds. These guidelines do not purport to be all inclusive nor to supplant or replace other traditional safety and precautionary measures. If these guidelines in any way conflict with any state, local, provincial, federal or other government statute or regulation, said statute or regulation shall supersede these guidelines and it shall be the responsibility of each user to comply therewith.

1. GENERAL GUIDELINES

- A. POST THESE SCAFFOLDING SAFETY GUIDELINES** in a conspicuous place and be sure that all persons who erect, dismantle, or use scaffolds are aware of them. Use them in toolbox safety meetings.
- B. COMPLY WITH ALL STATE, LOCAL AND FEDERAL CODES, ORDINANCES AND REGULATIONS** pertaining to scaffolds.
- C. SURVEY THE JOB SITE.** A survey shall be made of the job site by a competent person for hazards, such as non-compacted earth fills, ditches, debris, electrical lines, unguarded openings, and other hazardous conditions created by other trades. These conditions should be corrected or avoided as noted in the following sections.
- D. INSPECT ALL EQUIPMENT BEFORE EACH USE.** Never use any scaffold component that is damaged or defective. Mark it or tag it as damaged or defective and remove it from service.
- E. ERECT SCAFFOLDS IN ACCORDANCE WITH DESIGN AND/OR MANUFACTURER'S RECOMMENDATIONS.**
- F. DO NOT ERECT, DISMANTLE OR ALTER A SCAFFOLD** except under the supervision of a competent person qualified in scaffold construction.
- G. DO NOT ABUSE OR MISUSE THE SCAFFOLD.**
- H. MAINTAIN THE SCAFFOLD IN A SAFE CONDITION.** Stop work and report any unsafe conditions to your supervisor.
- I. NEVER TAKE CHANCES!** If in doubt regarding the safety, or use of the scaffold, consult a qualified person.
- J. NEVER USE THE SCAFFOLD FOR PURPOSES OR IN WAYS FOR WHICH IT WAS NOT DESIGNED.**
- K. DO NOT WORK ON SCAFFOLDS** if you are physically unable to do so.
- L. DO NOT WORK UNDER THE INFLUENCE** of alcohol or drugs.
- M. FALL PROTECTION** - Never work on a scaffold that has open sided platforms; use a guardrail or personal fall protection system when required by applicable codes or site requirements.
- N. DO NOT ERECT, DISMANTLE, ALTER OR WORK ON SCAFFOLDS DURING STORMS OR HIGH WINDS, AS DETERMINED BY THE COMPETENT PERSON.**

2. GUIDELINES FOR ERECTION AND USE OF SCAFFOLDS

- A. STATIONARY SCAFFOLD LEGS SHALL BE SET ON BASE PLATES ON AN ADEQUATE FIRM FOUNDATION.** Install sills as necessary to distribute the leg loads to the foundations; secure base plates to the sills as required. Any part of a building or structure used to support the scaffold shall be capable of supporting the maximum intended load.
- B. USE ADJUSTING SCREWJACKS** or other approved methods to adjust to uneven grade conditions.
- C. BACING, LEVELING & PLUMBING OF SCAFFOLDS**
 - 1. Plumb & level all scaffolds as erection proceeds. Do not force scaffold components together.
 - 2. Each frame or panel shall be braced by horizontal bracing, cross bracing, diagonal bracing or a combination thereof for securing vertical members together laterally. All brace connections shall be properly secured, in accordance with the manufacturer's recommendations.
 - 3. Install bracing as erection proceeds, in accordance with the manufacturer's recommendations.
 - 4. Joints shall be secured as required to prevent separation.
- D. MAKE SURE SCAFFOLDS ARE STABLE.** Free standing scaffolds exceeding the allowable height to base ratio must be restrained from tipping.
- E. SECURE THE SCAFFOLD TO A SUBSTANTIAL STRUCTURE,** when the scaffold exceeds the maximum allowable height. Ties must prevent the scaffold from tipping either into or away from the structure. Install ties as close as practical where horizontal members connect to vertical legs.
- F. WHEN SCAFFOLDS ARE FULLY OR PARTIALLY ENCLOSED,** or when scaffolds are subjected to overturning forces, additional ties may be required; consult a qualified person.
- G. DO NOT ERECT OR USE SCAFFOLD NEAR LIVE POWERLINES** unless proper precautions are taken. Consult the power service company for advice.
- H. INSTALL SAFE ACCESS FOR ALL SCAFFOLD PLATFORMS.** This includes ladders, stairways, direct access, ramps and walkways. Do not climb scaffold components not intended for access, such as braces, rosettes, rings, cups and clamps.
- I. PROVIDE A GUARDRAIL OR PERSONAL FALL PROTECTION SYSTEM** when the platform height exceeds unprotected limits. (Check applicable regulations for permissible unprotected limits, but never more than 10 feet.)
 - IA. INSTALL FALLING OBJECT PROTECTION** when required by regulations.
- J. BRACKETS AND CANTILEVERED PLATFORMS**
 - 1. Cantilevered scaffolds platforms shall be installed and used as designed by a qualified person.
 - 2. All scaffold brackets shall be installed and used in accordance with manufacturer's recommendations. Brackets are to be used only as work platforms and shall not be used for storage of material or equipment unless designed for such use by a qualified engineer.
- K. SCAFFOLD COMPONENTS** shall be installed and used in accordance with the qualified persons design. Components shall not be altered. Scaffold components from more than one manufacture shall not be intermixed, unless the component parts have equivalent strength, readily fit together and the resulting scaffold's structural integrity is maintained.

L. PLATFORMS

1. Scaffold platforms shall be at least 18 inches wide. Only planking and decking meeting scaffold use requirements shall be used. Platforms shall be properly supported
2. Check each platform prior to use. Make sure platform units are not warped, damaged, or otherwise unsafe.
3. Planks shall have at least 12" overlap unless restrained.
4. Planks including Solid sawn lumber, Laminated lumber, modular, composite, or fabricated scaffold planks and platforms shall extend over their end supports not less than 6" unless restrained. Excess overhang is prohibited unless barricaded to prevent access.
5. Do not store materials or accumulate debris that could overload the scaffold.

M. FOR "PUTLOGS" AND "TRUSSES" THE FOLLOWING ADDITIONAL GUIDELINES APPLY:

1. Install and brace putlogs and trusses in accordance with the design.
2. Do not cantilever or extend putlogs/trusses except as designed by a qualified person.

N. FOR ROLLING SCAFFOLDS THE FOLLOWING ADDITIONAL GUIDELINES APPLY:

1. **RIDING A ROLLING SCAFFOLD IS VERY HAZARDOUS.** The SSFI and the SAIA, DO NOT recommend nor encourage this practice.
2. Rolling scaffolds should be used on hard level surfaces.
3. Caster with plain stems shall be secured to the frames or adjustment screws by pins or other suitable means.
4. A minimum 12 inches of screw jack shall extend into the scaffold leg or secured from sliding out.
5. Wheels or casters shall be locked to prevent caster rotation and scaffold movement when scaffold is in use.
6. Joints shall be restrained from separation.
7. Use horizontal diagonal bracing or equivalent means near the bottom and at 20 foot intervals measured from the rolling surface.
8. Do not use brackets or other platform extensions without compensating for the overturning effect.
9. Secure or remove all materials and equipment from platform before moving scaffold.
10. Do not attempt to move a rolling scaffold without sufficient help - watch out for holes in floor and overhead obstructions. Stabilize against tipping.

Q. SAFE USE OF SCAFFOLD

1. Prior to use, inspect scaffold to insure it has not been altered and is in a safe working condition regardless of what the tag might state.
2. Erected scaffolds and platforms should be inspected regularly by those using them prior to each work shift and after any occurrences that may alter the scaffold from a safe condition.
3. Exercise caution when entering or exiting a work platform.
4. Do not overload scaffold. Follow manufacturer's safe working load recommendations and the design.
5. Do not jump onto platforms.
6. **DO NOT USE** ladders or makeshift devices to increase the working height of a scaffold. Do not plank guardrails to increase the height of a scaffold.
7. Use proper access.

3. WHEN DISMANTLING SCAFFOLDING THE FOLLOWING GUIDELINES APPLY:

- A. Inspect the scaffold to make sure it is structurally stable. If unstable, do not start dismantling the scaffold prior to stabilizing it.
- B. Do not remove ties until the scaffold has been dismantled to that level.
- C. Visually inspect platform units prior to dismantling to be sure they are safe and secure.
- D. Do not remove a scaffold component without considering the effect of that removal.
- E. Do not accumulate excess components or equipment on the level being dismantled.
- F. Lower dismantled components in an orderly manner. Do not throw off the scaffold.
- G. Dismantled equipment should be stockpiled in an orderly manner.
- H. Defective components must be tagged and kept separate.

Since field conditions vary and are beyond the control of the SSFI and the SAIA, safe and proper use of scaffolding is the sole responsibility of the user