

# GIVE TO ERECTOR / USER OR POST ON JOB SITE

Code of Safe Practices for: Frame Scaffolds, System Scaffolds, Tube and Clamp Scaffolds, and Rolling Towers

Developed for Industry by: Scaffold Industry Association, Inc.

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 and use of Scaffolds. These guidelines do not purport to be all inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If these guidelines in any way conflict with any state, local, federal or other government statute or regulations, 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 scaffolding are aware of them and also use them in tool box safety meetings.
- b) **Follow all state, local and federal codes, ordinances and regulations** pertaining to scaffolding.
- c) **Survey the job site.** A survey shall be made of the job site by a competent person for hazards, such as untamped earth fills, ditches, debris, high tension wires, 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 using.** Never use any equipment that is damaged or defective in any way. Mark it or tag it as defective. Remove it from the job site.
- e) **Scaffolds must be erected in accordance with design and/or manufacturer's recommendations.**
- f) **Do not erect, dismantle or alter a scaffold** unless under the supervision of a competent person.
- g) **Do not abuse or misuse the scaffold equipment.**
- h) **Erected scaffolds should be continually inspected** by users to be sure that they are maintained in a safe condition. Report any unsafe condition to your supervisor.
- i) **Never take chances! If in doubt regarding the safety or use of scaffold, consult your scaffold supplier.**
- j) **Never use equipment for purposes or in ways for which it was not intended.**
- k) **Do not work on scaffolds** if your physical condition is such that you feel dizzy or unsteady in any way.
- l) **Do not work under the influence** of alcohol or illegal drugs.

## 2. Guidelines for Erection and Use of Scaffolds:

- a) **Scaffolds base must be set on an base plates and an adequate sill or pad** to prevent slipping or sinking and fixed thereto where required. Any part of a building or structure used to support the scaffold shall be capable of supporting the maximum intended load to be applied.
- b) **Use adjusting screws** or other approved methods instead of blocking to adjust to uneven grade conditions.
- c) **Bracing, Leveling & Plumbing of Frame Scaffolds**
  1. Plumb and level all scaffolds as the erection proceeds. Do not force frames or braces to fit. Level the scaffold until proper fit can be easily made.
  2. Each frame or panel shall be braced by horizontal bracing, cross bracing, cross bracing diagonal bracing or any combination thereof for securing vertical members together laterally. All brace connections shall be made secure, in accordance with the manufacturer's recommendations.
- d) **Bracing, Leveling & Plumbing of Tube & Clamp and Systems Scaffolds**
  1. Posts shall be erected plumb in all directions, with the first level of runners and bearers positioned as close to the base as feasible. The distance between bearers and runners shall not exceed manufacturer's recommendations.
  2. Plumb and level all scaffolds as erection proceeds.
  3. Fasten all couplers and/or connections securely before assembly of next level.
  4. Vertical and/or horizontal diagonal bracing must be installed according to manufacturer's recommendations.
- e) **When Free Standing Scaffold Towers** exceed a height of four (4) times their minimum base dimension, they must be restrained from tipping (CAL/OSHA and some government agencies require stricter ratio of 3 to 1).
- f) **Tie continuous (running) scaffolds to the wall or structure** at each end and at least every 30' of length in between when scaffold height exceeds the maximum allowable free standing dimension. Install additional ties on taller scaffolds as follows:  
On scaffolds 3' or narrower in width, subsequent vertical ties shall be repeated at intervals no greater than every 20'. On scaffolds wider than 3', subsequent vertical ties shall be repeated at intervals not greater than 26'. The top tie shall be installed as close to the top of the platform as possible; however, no lower from the top than 4 times the scaffolds minimum base dimension. Ties must prevent the scaffold from tipping either into or away from the structure. Stabilize circular or irregular scaffolds in such a manner that the completed scaffold is secure from tipping. Place ties near horizontal members. When scaffolds are fully or partially enclosed, or when scaffolds are subjected to overturning loads, additional ties may be required. Consult a qualified person.
- g) **Do not erect scaffold near electrical power lines.** Consult a qualified person for advice.
- h) **Access shall be provided to all platform.** Do not climb cross braces or diagonal braces.

i) **Provide a guardrail system, fall protection and toeboards where required by the prevailing code.**

## j) Brackets and Cantilevered Platforms:

1. Brackets for **System Scaffold** shall be installed and used in accordance with manufacturer's recommendations.
  2. Brackets for **Frame Scaffolds** shall be seated correctly with side bracket parallel to the frames and end brackets at 90 degrees to the frames. Brackets shall not be bent or twisted from normal position. Brackets (except mobile brackets designed to carry materials) are to be used as work platforms only and shall not be used for storage of material or equipment.
  3. Cantilevered platforms shall be designed, installed and used in accordance with manufacturer's recommendations.
- k) **All scaffolding components** shall be installed and used in accordance with the manufacturer's recommended procedure. Components shall not be altered. Scaffold frames and their components manufactured by different companies shall not be intermixed, unless the component parts readily fit together and the resulting scaffold's structural integrity is maintained by the user.
- l) **Planking:**
1. Working platforms shall cover scaffold bearer as completely as possible. Only scaffold grade wood planking, or fabricated planking and decking meeting scaffold use requirements shall be used. Planks and platforms should rest on bearers only.
  2. Check each plank prior to use to be sure plank is not warped, damaged, or otherwise unsafe.
  3. Planking shall have at least 12" overlap and extend 6" beyond center of support, or be cleated or restrained at both ends to prevent sliding off supports.
  4. Solid sawn lumber, LVL (laminated veneer lumber) or fabricated scaffold planks and platforms (unless cleated or restrained) shall extend over their end supports not less than 6" nor more than 18". This overhang should be guardrailed to prevent access.

## m) For "Putlogs" and "Trusses" the following additional guidelines apply:

1. Do not cantilever or extend putlogs / trusses as side brackets without thorough consideration for loads to be applied.
2. Install and brace putlogs and trusses in accordance with manufacturers instructions.

## n) For Rolling Scaffolds the following additional guidelines apply:

1. **Riding a rolling tower is very hazardous.** A-1, the SIA, and the SSFI do not recommend nor encourage this practice.
2. Casters with plain stems shall be attached to the Frames or adjustment screw by pins or other suitable means.
3. No more than 12" of the screw jack shall extend between the bottom of the adjusting nut and the top of the caster.
4. Wheels or casters shall be locked when scaffold is in use.
5. Joints shall be restrained from separation.
6. Use horizontal diagonal bracing near the bottom and at 20' intervals measured from the rolling surface.
7. Do not use brackets or other platform extensions without compensating for the overturning effect.
8. The top platform height of a rolling scaffold must not exceed four (4) times the smallest base dimension (CAL / OSHA and some government agencies require a ratio of 3 to 1).
9. Clean or secure all plank.
10. Secure or remove all materials and equipment from platform before moving.
11. Do not attempt to move a rolling scaffold without sufficient help - watch out for holes in floor or overhead obstructions - stabilize against tipping.

## o) Safe Use of Scaffold

1. Prior to use, inspect scaffold to insure it has not been altered and is in safe working condition.
2. Erected scaffolds and platforms should be inspected continuously by those using them.
3. Exercise caution when entering or leaving a work platform.
4. Do not overload scaffold. Follow manufacturer's safe working load recommendations.
5. Do not jump onto planks or platforms.
6. Do not use ladders or makeshift devices to increase the working height of a scaffold. Do not place plank on guardrails to increase the height of a scaffold.
7. Climb in access areas only and use both hands. Do not climb braces or diagonals.

## 3. When Dismantling Scaffolding the following additional guidelines apply:

- a) Check to assure scaffolding has not been structurally altered in a way which would make it unsafe and, if it has, reconstruct and / or stabilize where necessary before commencing with dismantling procedures. This includes all scaffold ties.
- b) Visually inspect plank prior to dismantling to be sure they are safe.
- c) Do not remove a scaffold component without considering the effect of that removal.
- d) Do not accumulate excess components or equipment on the level being dismantled.
- e) Do not remove ties until scaffold above has been dismantled to that level.
- f) Lower dismantled components in an orderly manner. Do not throw off a scaffold.
- g) Dismantled equipment should be stockpiled in an orderly manner.

Since field conditions vary and are beyond the control of A-1, the SIA, and the SSFI, safe and proper use of scaffolding is the sole responsibility of the user.

These safety guidelines (Code of Safe Practice) set forth common sense procedures for safely erecting, dismantling and using scaffold equipment. However, equipment and scaffolding systems differ, and accordingly, reference must always be made to the instructions and procedures of the supplier and or manufacturer of the equipment. Since field conditions vary and are beyond the control of the Scaffold Industry Association, safe and proper use of scaffolding is the sole responsibility of the user.

# A1 Plank & Scaffold Mfg., Inc.

# New OSHA Rules for Scaffolding



## A) Reasons for new rules:

1. 9% of all construction fatalities occurred on Scaffolding.
2. There have been 510,500 injuries and 9,750 reported deaths.
3. 72% of injuries involved planking and supports.
4. 25% of people on jobs received no training on Scaffolding.
5. Only 33% of inspected Scaffolding have guardrails.

## B) 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.

## C) 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. Name of Competent Person:
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. Name of Qualified Person:

## D) Significant Changes to Subpart L\*

1. **Fall protection for Erectors and Dismantlers:** The new 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 new standard requires safe distance from power lines be maintained as outlined in the standard.
3. **Employee Training:** The new 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 new 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 new 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 (all weights are in lbs. per leg)	Tier 2	Tier 3	Tier 4	Part	Load (all weights are in lbs.)
5' x 3' SLB	4200	3465	3360	2993	Screw Jack	11000 at top of jack
5' x 4' SLB	4200	3465	3360	2993	Ext. Base Plate	1000 at top of extension
5' x 5' SLB	4043	3360	3213	2835	20" Side Bracket	500 personnel only
5' x 6'6" SLB	2441	2240	2048	1785	Plywood Decks	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		

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.