

SCAFFOLD POLICY

811

I PURPOSE

To ensure safe and uniform use, design and practices with scaffolds. It shall be noted that circumstances may present themselves where scaffolding may be rented or contracted from a third party therefore the following information shall be followed to ensure compliance with applicable scaffolding standard requirements.

29CFR 1910.1926.454- Construction Scaffolds

II POLICY

Scaffolding is a temporary, field erected structure used for working aloft. Because it is temporary and field erected, it is subject to wear and abuse, improper assembly, and unauthorized changes. Construction standards require that a "competent person" inspect scaffolds for defects before every work shift. Yet, in all industries, every employee who works on or around scaffolding should be aware of safety requirements.

The most common accident involving scaffolds is a fall to a lower level. That's quite obvious, since the purpose of erecting scaffolds is to provide a safe place to work when you must work at a height above ground level. This policy is designed to review some of the basics of scaffolds and how to properly use this equipment. This policy does not list all hazards or safety measures of scaffolds, it's simply an overview of some basics, to help make you more aware of safety around scaffolds.

Supervisor and Employee Responsibilities

All employees that are required to work from scaffolds will ensure the following procedures are taken:

1. Comply with the current and proposed OSHA / MIOSHA regulations for working with scaffolds.
2. Assure that design and construction of scaffolds conform with OSHA / MIOSHA requirements.
3. Inspect all scaffolds, scaffold components, and personal fall protection equipment before each use.
4. Provide personal fall protection equipment and make sure that it is used when applicable
5. Follow scaffold manufacturers' guidance regarding the assembly, rigging, and use.

Scaffold Requirements

Types of Scaffolds-The most common types of scaffolds are built up scaffolds, rolling scaffolds and suspended scaffolds. **Built up scaffolds** are made of wood or metal supports and are built up higher as the work progresses. In all built up scaffolds, the vertical members must be straight up and down and the horizontal members completely level. If the scaffold tilts noticeably it might collapse if it is unevenly loaded. Cross bracing or diagonal bracing or both will keep the scaffold erect, level and rigid. Again, make sure the footing and anchorage for built up scaffolds are sound, rigid and strong enough to support four times the maximum intended load.

Rolling scaffolds are similar to built up scaffolds except they are wheel mounted. They have the same safety requirements, plus a few additional ones. To prevent tipping, the maximum work height of a rolling scaffold must not be more than 4 times the smallest dimension of its base. When this requirement cannot be met, either use suitable outrigger frames to enlarge the base, or brace the scaffold. Rolling scaffold wheels must have a lock to prevent unexpected movement. Never move the scaffold with anyone on the scaffold.

Suspended scaffolds, such as those used in office building construction, carry a working platform on ropes secured to outrigger beams thrust out from the building. There are light duty, medium duty and heavy duty scaffolds, each designed for a specific requirement and use.

Supervisors and employees will insure that the following operating procedures are observed:

- Scaffolds must be substantially constructed to carry the loads imposed upon them and to provide a safe work platform.
- All scaffolds more than 4 ' high must have approved guardrails on all ends exposed ends and sides.
- Guardrails, mid-rails, and toe boards must be installed on all open sides of scaffolds 4' high or more in height.
- Only approved scaffolds will be used. Barrels, boxes, rebar. Or other make-shift substitutes for scaffolds will not be used.
- Scaffold planks must be cleated together, and must extend over the end supports at least 6 inches, but not more than 12 inches.
- All scaffold planks must be visually inspected before each use. Damaged scaffold planks must be destroyed immediately.
- All scaffold planks must be at least two planks wide: No employee may work from a single plank.
- Adequate mud sills or other rigid footing, capable of withstanding the maximum intended load, must be provided.
- Scaffolds must be tied to the building or structure at intervals which do not exceed 30 feet horizontally and 26 feet vertically.

- Do not overload scaffolds. Materials should be brought up as needed. Scaffolds must not be loaded in excess of one-fourth of their rated capability.
- Where persons are required to work or pass under scaffolds, a screen of 18 gauge, ½ inch wire mesh is required between the toe and guard rail.

Overhead protection is required if employees working on scaffolds are exposed to overhead hazards. Such protection must be a 2" thick plank or equivalent.

- Diagonal bracing must be used on all support components.
- Midrails 1" X 6" or equivalent must be present on all sides.
- Ladders will be used as a means of entry onto and exit off of the scaffold.

Inspection Checklists

Supervisors and Employees will inspect all scaffolds and scaffold components for visible defects before use on each work shift. Scaffolds will be erected, moved, dismantled, or altered only under the supervision of a competent person.

All components of personal fall protection equipment (including body harnesses, lanyards, droplines, trolley lines, and points of anchorage) should be inspected by Supervisors and Employees before use. Any visibly damaged or worn equipment should be removed from service immediately.

The following list includes things to watch for:

- Scaffolding must be erected on *firm footing* capable of carrying the maximum intended load. Boxes, barrels, loose concrete blocks or brick must not be used to support the structure.
- Consideration must be given to the weight the scaffold is to carry. It must be capable of supporting, *without failure*, four times the maximum intended load. The load includes not only the weight of the people on the scaffold but also any supplies and equipment being used.
- Scaffolding is naturally unstable because it is usually a tall structure with a narrow base. To counteract this, the scaffold must be braced or tied off to a stable structure such as building wall.
- The planking used must be "scaffold grade." The wood must be clear, free of loose knots, splits, or other defects. To create a proper work surface, generally 2 planks need to be laid side by side to create a 20" wide work platform. At the ends, the planking must overlap at least 6" but no more than 18" (limited to 12" for shipyards and construction) unless the planks are fastened to the supporting members.
- Toe boards at least 4" high (3 ½" for construction) should be installed along the outer scaffold edge, to prevent tools or materials from falling onto workers below.

- Guard rail requirements for supported scaffolds vary for different industries. The Company Standard is 4 feet or higher. Federal OSHA standard for construction and general industry requires guardrails when a platform is 10 feet or higher. In shipyards, they must be installed if the work platform is 5 feet or more above a solid surface, or at any distance above water.
- Guard rails are usually made of 2x4 lumber or steel pipe. The top rail should be about 42" above the scaffold walking surface, with a "mid-rail" at about 21 inches. Fiber or wire rope can be used if it is attached to rigid supports and kept taut. However, a variance may be needed to do so in some jurisdictions. It should be noted that the railings must be of adequate strength to restrain someone who has started to fall.
- Railings can be omitted if a structure prevents their use. However, in these circumstances, you must wear a safety harness and life line if you working more than 5 feet above a solid surface. If over water, you must wear an approved buoyant work vest.

Finally, never make any changes to scaffolding yourself. Only designated "Competent Persons" should make modifications.

Use of Fall Protection

GTC will provide appropriate fall protection systems and ensure their use by all workers when applicable. Generally, these workers will be protected by a full body harness.