

Let's Talk Scaffold Safety



What is a scaffold?

A scaffold is any temporary elevated platform (supported or suspended) and its supporting structure (including anchorage points), used to hold workers, materials or both.

How does it work?

A **supported scaffold** (typically a frame scaffold) is the most commonly used. It has one or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or similar rigid support. Supported scaffolds include **system scaffolds** (fixed connection points at predetermined levels) and **mobile scaffolds**.

Types of Hazards

Worker falls are the number one scaffold hazard. Scaffolding general requirements are among the top 10 OSHA violations. Additionally, electrical hazards from overhead power lines and the use of power hand tools expose workers to electrocution risks. A person receiving an electrical shock can easily lose his/her balance and fall.

Injury examples:

- An employee fell through an open gate on the scaffold platform when leaning over to install a tarp over the top of a grain semi-trailer. He struck his head on the concrete floor dying 2 days later from a subdural hemorrhage and stroke.
- An employee moved a mobile scaffold while working on it. It became unstable and the worker to fall to the ground broke his neck and died.

Need to know

Fall protection, either personal fall-arrest systems or guardrail systems, must be provided on any scaffold 10 feet or more above a lower level to protect workers from falling to a lower level. Falling object protection is also required.

Scaffold Basics

- Set on a firm, stable, level base.
- Set-up level. Brace to prevent swaying & displacement.
- Assemble per the manufacturer's instructions using **ALL** parts provided.
- Chock or lock wheels on mobile platforms.
- Use guardrail systems on all open sides and ends.
 - ✓ Top rail, mid-rails, toe boards, entrance gates
- Do not overload the scaffold weight limit.
- Set a minimum 10 feet from overhead power lines.
- Fully plank work platforms; minimum 18" width.
- Keep platform/deck clear of debris, excess clutter and slip hazards.

Scaffold Use

- Do NOT attempt to move the scaffold when on it.
- Do not use in high winds.
- Climb only on the built in ladder.
- NEVER use cross braces for climbing.
- Do not rock the scaffold.
- Do not lean out of the scaffold.
- Do not climb on the guardrails.
- Do not increase scaffold height by standing on a barrel, ladder, box, etc. placed on the deck.
- Wear a hardhat.

Let's Talk about our Worksite

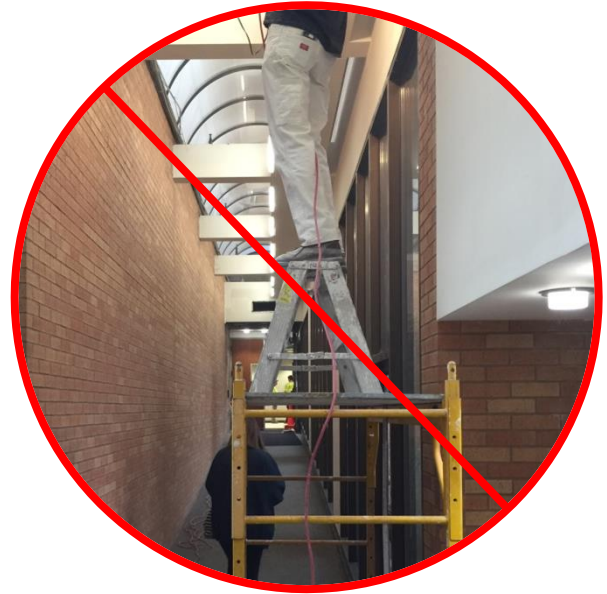
1. Are we inspecting scaffolds before each use to ensure they are stable and secure?
2. Are we receiving adequate training on scaffold hazards before use?
3. Do we know the weight limits for the scaffolds and not exceeding them?
4. Are we using appropriate hazard control methods to prevent incidents like those described?



Grain Handling Safety Coalition

Scaffold Safety

Why trust your life to this?



Use safe scaffolds!



Remember

- Inspect scaffold before use
- Set up level on firm base
- Lock or chock wheels
- Guard against falls
- Do not increase height
- Keep clear of debris



Scaffold Safety Supplement



Scaffold requirements for General Industry are found under the OSHA construction standard 1926 Subpart L (Scaffolds).

General Information

- Workers using personal fall arrest systems on scaffolds must be tied off to appropriate anchor points.
- Inspect guardrails, connectors, fastenings, footings, tie-ins, bracing and planking before using scaffolds.
- Remove damaged scaffolds from service immediately.
- Scaffolds must support the structure and 4 times the intended work load or not exceed the rated capacity.
- Pile necessary materials over ledger and bearer points.
- Scaffold planks must be cleated or secured, or extend over the end supports a minimum of 6 inches but no more than 12 inches.
- Do not use unstable objects as work platforms or to support scaffolds such as barrels, boxes, kegs, horses, ladders, loose tile blocks or piles of bricks, A-frames, etc.
- Always remove snow and ice before using. Use sand on wet planking to provide more secure footing.
- Use rolling scaffolds on level surfaces only. When not being moved, caster breaks must be locked. When moving the scaffold all loose materials must be secured and the route should be free of holes and overhead obstructions.

Additional Injury Examples

- A worker was killed and another suffered a broken wrist, laceration over his left eye and concussion when the two-tiered mobile platform approximately 12 feet tall with no outriggers or railing attached tipped over and the workers fell to the ground.
- Workers were erecting a 4 tier high frame near an energized, uninsulated power line (13.2 kV phase to phase). The minimum required clearance distance of 10 feet was not maintained. Only the last few pieces of guardrail needed to be installed, when an employee inadvertently contacted the power line with a 7-foot long piece of metal scaffolding. The employee was electrocuted and died.
- An employee was standing on the 4th step of a a closed 6 ft step ladder that was leaning against a beam. The step ladder had been set on the platform of a mobile scaffold set at a height 5 feet 7 inches above the concrete floor. The employee slipped and fell approximately 9 feet head first to the concrete floor and was killed by fatal impact to the head.
- An employee was working from a step stool that was on a mobile scaffold system. The employee lost his balance and fell approximately 7 feet to the ground when the stool shifted. The employee struck his head on the concrete floor and was killed.

Additional Resources

- OSHA scaffold e-tool - https://www.osha.gov/SLTC/etools/scaffolding/gen_req.html
- OSHA scaffold fact sheets – <https://www.osha.gov/pls/publications/publication.athruz?pType=Industry&pID=188>
- OSHA scaffold quick card - <https://stopconstructionfalls.com/wp-content/uploads/2012/03/OSHA-Quick-Card-Supported-Scaffold-Safety-Tips.pdf>
- A variety of scaffold resources can be found at elcosh.org and <https://www.cpwr.com/>