

FUNDAMENTAL 55: Scaffold Safety



Key Takeaways:

- Learning about common types of supported and suspended scaffolds.
- Understanding who is qualified to design, construct, and inspect scaffolds.
- Comprehending the key design and construction requirements for scaffolds, including the maximum intended load.
- Observing the hazards posed by working on scaffolds, including instability or collapse, falls, being struck by falling objects, overloading, and electrocution.
- Understanding the requirements and controls that protect against falls, falling objects, and electrical hazards.
- Recognizing conditions that prohibit scaffold use.
- Learning about inspection criteria for scaffolds.

Course Description

OSHA reports that scaffolding accidents lead to an estimated 9,000 injuries and 79 fatalities every year.

Throughout the industrial world of construction and maintenance, scaffolds are widely used to typically give employees access to heights ranging from a few feet to over several hundred feet.

OSHA describes scaffolds as “any temporary elevated platform and its supporting structure used for supporting employees or materials.”

Regardless of how safe or sturdy a scaffold may look, it can only support a specific weight capacity specified by the manufacturer. It is the worker’s responsibility to recognize terms associated with capacity limits when working with scaffolds. Each scaffold and scaffolding component is required by OSHA to be capable of supporting, without failure, its own weight and at least four times the maximum intended load.

Here’s some basics on scaffold safety.

Scaffold hazards: – Falls – Falling objects – Electrocution – Overloaded scaffolds
Working on scaffolds is prohibited: – When there are storms or high winds unless a competent person determines it is safe, and a personal fall arrest system or wind screen is provided; – Anywhere snow, ice, or other slippery materials exist; – Everywhere scaffold foundation is not firm (i.e. in sand or mud). Employees working on scaffolds must wear a hardhat to protect against falling objects, such as tools, debris, and other small objects. As well, they must be provided with additional protection through the installation of toeboards, screens, or guardrail systems, or through the erection of debris nets, catch platforms, or canopy structures that

contain or deflect the falling objects. Anytime that the falling objects are too large, heavy or massive to be contained or deflected by any of those measures, the objects need to be moved away from the edge of the surface they could fall from, in addition to being secured as necessary to prevent falling. In the case that these measures cannot be taken, the area below the scaffold must be barricaded, and employees must not be permitted to enter the hazard area. Here are the required housekeeping practices to prevent falls and injuries: – Clear work levels of trash and debris. – Organize work areas and keep them free of tripping hazards. – Never stand on “makeshift devices”, such as boxes and barrels to increase working level height. Any employee on a scaffold over 10 feet above a lower level needs to be protected from falling to that lower level. Also, employers must provide fall protection for employees erecting or dismantling supported scaffolds where the installation and use of such protection is feasible, and does not create a greater hazard. Varying with the type of scaffold or powered platform used, personal fall arrest systems used on scaffolds need to be attached by lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member. Again, dependent on the scaffold type, these fall arrest systems are either anchored to substantial members of the building or structure or are anchored to the scaffold or platform itself. Usually, the system will consist of a body belt/harness attached by a lanyard to a vertical or horizontal lifeline, or to a structural member of the scaffold. All workers need to wear personal fall arrest protective systems when provided by employers, as a last line defense against the potential hazards of working at heights. Guardrail systems are a vertical barrier designed to prevent employees from falling off a scaffold platform or walkway to lower levels. Generally, these are the most common type of fall protection used on elevated work surfaces. Due to the extreme danger of falls facing employees, OSHA standards require guardrail systems to be installed along all open sides and ends of platforms, and must be installed before the scaffold is released for use by employees other than erection/dismantling crews. It is a great idea to encourage workers to visually inspect scaffolding for safety concerns before trusting the structure; if it looks unsafe, it probably is. In addition, when a worker encounters a situation that presents a fall hazard on scaffolding, it is important that the worker note the situation and report it immediately. This is also true when a worker notices structural degradation, meaning the scaffolding looks unsafe for some reason, perhaps because its missing a critical linkage or supporting board. Always be aware of your environment, and never take your scaffold safety for granted.