



Safety Training Topics

March 2022

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SAFETY TRAINING TOPIC

Scaffold Users & Erectors/Dismantlers

OSHA categorizes workers involved with scaffolds into two groups, erectors/dismantlers and users. Anytime that you are responsible for building or taking down a scaffold you are considered an erector/dismantler. If you are responsible for conducting work on a scaffold platform, such as painting or plastering, you are considered a user. Each group has its own safety nuisances; however they share some common hazards.

Some dangers that you may encounter when working on or near scaffolds include unsafe access to work platforms, potential collapses, coming into contact with live wires or electrical hazards, falls, and falling objects or struck-by hazards. Erectors and dismantlers also need to be wary of structural instability when working.

Anyone that is involved with erecting or dismantling scaffolds must receive proper training from a competent person. As a refresher, a competent person is defined as one who is capable of identifying existing and predictable hazards, and has the authorization to take prompt corrective measures to eliminate them.

If you are responsible for designing a scaffold, OSHA requires you to be a qualified person. This means that you have a recognized degree, certificate, or professional standing or you have extensive knowledge, training, and experience.

OSHA also requires you to conduct adequate preplanning to ensure safe erection and use of scaffolding. This process includes determining the type of scaffold necessary for the job, the maximum load of the scaffold, avoidance of electrical hazards, and assuring a good foundation.

In the event that you are required to use a scaffold, you must be properly trained to do so prior to commencing work. Employers are responsible for training you and/or any colleagues required to perform tasks while on a scaffold.

This training should include hazard recognition and avoidance, proper use and procedures for the particular type of scaffold being used, and the appropriate Personal Protective Equipment (PPE)/fall protection necessary to conduct the job safely.

REVIEW AND DISCUSSION

- What are the two groups OSHA categorizes individuals that work with scaffolds?
- Identify some common hazards associated with scaffolds.
- Anyone that is involved with erecting or dismantling scaffolds must receive proper training from who?

SAFETY TRAINING TOPIC

Scaffold Construction Safety

When constructing a scaffold there are number of requirements that you should be familiar with. These requirements are intended to protect you and your colleagues from becoming involved with an accident, sustaining an injury, or worse.

First, it is important that any footing and anchorage points on scaffolds are sound, rigid, and capable of carrying the maximum intended load without becoming displaced. Scaffolds must be able to support at least four times the maximum intended load. You should never use any unstable objects like barrels, boxes, bricks, or concrete blocks to support any portion of a scaffold or its planks.

Make sure that scaffold planks extend over their end supports at least 6 inches, but never more than 18 inches. Anytime that you are using poles, legs, or uprights to support a scaffold, ensure that they are plumb, and securely and rigidly braced to prevent swaying and/or displacement. You should also secure the scaffold to any permanent structures, whenever possible, using anchor bolts, reveal bolts, or other similar means.

You must install guardrails and toe-boards on all open sides and ends of platforms that are more than 8 feet above the ground or floor unless the scaffolding is wholly within the interior of a building and covering the entire floor area of any room therein and not having any side exposed to a hoist-way, elevator shaft, stairwell, or other floor openings or you are using a needle-beam scaffold and float.

Your guardrails should be 2 x 4 inches or the equivalent, installed at least 36 inches but not more than 42 inches high. They must also be equipped with a mid-rail in certain situations. You must have toe-boards in place. They should be a minimum of four inches in height. Additionally, you will need to install a screen between the toe board and the guardrail, extending along the entire opening. This will help mitigate some struck by hazards caused by falling objects.

In the event that the scaffold you are using is suspended from wire or fiber rope, it must be able to support at least six times the intended load. All hooks on blocks used for raising scaffolding must be provided with a safety latch or be “moused at the throat” to prevent the hook from becoming dislodged. Never move or alter a scaffold when it is occupied.

Anytime that the scaffold is damaged or weakened, it must be immediately repaired and not used until repairs have been completed. Finally, make sure to keep scaffolds maintained and in safe operating condition.

REVIEW AND DISCUSSION

- What should you never use to support any portion of a scaffold or its planks?
- What do you need to install between the toe board and the guardrail, extending along the entire opening?

SAFETY TRAINING TOPIC

Scaffold Safety

Scaffold accidents cause thousands of injuries and are involved in many on the job fatalities each year. However, most, if not all of these incidents can be prevented by following some very basic safety practices and protocols. This talk will walk you through some dos and don'ts when working with scaffolds.

First, it is imperative that you have received proper training on the specific type of scaffold you are expected to work on for the given task at hand, prior to work commencing. Once you have accomplished this you should conduct a visual inspection to identify any visible hazards. This may include electrical wires in close proximity or improperly constructed scaffolding.

Prior to beginning work, make sure that you are using the scaffold as it is intended to be used and that you adhere to all load limits. It is also important that a competent person has inspected the scaffold before you use it.

You should always wear a hard hat or other approved head protection when you work on or near a scaffold. You should also wear proper footwear with nonslip soles and a personal fall arrest system whenever required.

While you are working on the platform, be sure to look out for colleagues on the scaffold and below. There should also be toe boards and other protective measures in place to prevent struck by hazards. Make sure to avoid any sudden movements and/or reaching too far beyond the edges of the platform. Don't take chances!

Never keep debris or unnecessary materials on the scaffold platform. If you do, there is a much greater risk of a slip, trip or fall and/or items being knocked off the scaffold and striking someone below. Do not leave materials or equipment on the platform at the end of the day. Never use an outdoor scaffold in stormy or windy weather, or if it's covered with ice or snow.

You should also avoid hitting a scaffold with anything such as a truck, a forklift, or load of lumber. In the event that this occurs, stop using the scaffold immediately until it is deemed safe for use again by a competent person. Anytime you are unsure if conditions are safe, consult with your supervisor.

Additionally, any changes in the types of scaffolds, fall protection, falling object protection, or other equipment require re-training. Similarly, in the event that there are indications that workers have not retained information initially taught, they should also be re-trained.

REVIEW AND DISCUSSION

- What should you wear on your head when working on or near a scaffold?
- When should you never use an outdoor scaffold?
- When should workers be re-trained on scaffold safety?

SAFETY TRAINING TOPIC

Case Study: Death by Scaffold

Recently a plaster laborer died after falling from a scaffold and striking his head on asphalt pavement. The victim and a co-worker had erected the welded tubular scaffolding on the outside wall of a single-story building, and planned to bring the railings and access ladder to the worksite the next day.

Near the end of the workday, the victim returned extra tools and equipment to the supply truck, removed his safety helmet, and returned to the scaffold area. The co-worker was positioned on the top of the unguarded scaffold, 12 feet from the ground, when the victim started to climb the scaffold bracing.

The co-worker was turned away from the victim, but heard a clanging sound on the bracing. He turned to see the victim lying on the ground, and called to an employee of a nearby business to summon an ambulance. The ambulance transported the victim to an emergency room, where he died 6 hours later of head and spinal injuries.

The employer was a plaster and steel frame contractor that had been in business for about 20 years and employed about 35 workers on a year-round basis. The superintendent directed a safety program that included a written general safety policy, periodic worksite visits, and weekly toolbox safety meetings. Task-specific safety procedures, including working on scaffolds, were unwritten but were communicated verbally to employees.

Records had been maintained of employee participation at the safety meetings for over two years, and there was no record that the victim had attended any safety talks related to fall prevention or scaffold safety during that time.

The victim had been employed by the company for 14 years, and had worked on scaffolds frequently. The company provided on-the-job training to employees, including training on appropriate use of personal protective equipment. This was the company's first fatality.

Investigators concluded that, to prevent similar occurrences, employers should:

- Ensure that safe access is provided to the work platforms of all scaffolds
- Ensure that adequate fall protection is used by workers on scaffolds
- Evaluate their current written safety program and incorporate specific training procedures that emphasize the importance of recognizing and avoiding hazards in the workplace. These procedures should include, but not be limited to, conducting hazard evaluations before initiating work at a job site, and implementing appropriate controls
- Encourage workers to actively participate in workplace safety

REVIEW AND DISCUSSION

- What type of Personal Protective Equipment could have prevented this fatality?