

## Construction Scaffold Hazards

About 65% of all construction workers use scaffolding in their daily work. Protecting these workers from scaffold-related accidents would prevent an estimated 4,500 injuries and 50 fatalities each year.

### These incidents include:

- Falls from height
- Slip and falls.
- Collapses
- Electrocutions
- Struck by falling objects

## Hazard Mitigation

These hazards can be controlled through compliance with OSHA Construction Regulations found in Subpart L and ANSI/ASSE A10.8-2011. Some of these requirements include:

### Falls from Height

- Scaffold must be equipped with a guardrail system including top rails, mid rails, and toe boards when over 10' high, unless other fall protection method is used. Cross braces may be an adequate substitute for either top rails or mid rails but not both.
- Scaffold platforms must be tightly planked with scaffold plank grade material or equivalent.
- Scaffold can be accessed by using ladders and stairwells but not by climbing the braces.

### Slip and Falls

- Employees shall be prohibited from working on scaffolds covered with snow, ice, or other slippery material except for removal of such material.
- Where scaffold platform is sloped greater than 1 in 8, cleats are required to provide footing.

- Scaffold stairways shall have slip-resistant treads and landings.

### Collapses

- Base plates must be used and must be placed on solid footing. Scaffold is to be leveled and plumbed.
- Scaffold must be sound, rigid and sufficient to carry its own weight plus four times the maximum intended load without settling or displacement.
- Scaffold must not be erected, moved, dismantled or altered except under the supervision of a competent person.
- Scaffold accessories such as braces, brackets, trusses, screw legs or ladders that are damaged or weakened from any cause must be immediately repaired or replaced.
- A competent person must inspect the scaffolding and, at designated intervals, re-inspect it.
- Scaffolds need to be tied to the adjacent structure at appropriate intervals.
- Synthetic and natural rope used in suspension scaffolding must be protected from heat-producing sources.
- Rigging on suspension scaffolds must be inspected by a competent person

before each shift and after any occurrence that could affect structural integrity to ensure that all connections are tight and that no damage to the rigging has occurred since its last use.

### Electrocutions

- Scaffolds generally must be at least 10 feet from electric power lines (higher voltages require greater distances).
- Special attention to overhead power lines must be paid when erecting or relocating scaffolds.

### Stuck by Falling Objects

- Areas below scaffold work should be barricaded unless a protective canopy is installed.
- Toeboards are to be used along the edges of platforms.
- Paneling or screening may be required to contain larger objects from falling.

### What is a "competent person"?

OSHA defines a competent person as "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 the authorization to take

prompt corrective measures to eliminate them".

### The competent person's responsibilities are:

- Selecting trained scaffold installers to perform the work.
- Inspection of scaffolding before each work shift and after any occurrence which could affect a scaffold's structural integrity.
- Supervising the erection, alteration and dismantlement of scaffolds.
- Assessing the need for fall protection during erection and dismantlement.

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*Greg has worked over 30 years in the construction industry, on a wide variety of projects, in many different roles. As a superintendent, quality control manager, and resident engineer he has been responsible for site safety, quality, and budget. As a member of the civil engineering group at Robson Forensic, Greg can help put you in touch with the most appropriate expert to assist on your case.*

