

TRAINING GUIDE

SCAFFOLDS



2001

Before you begin the meeting...

- Does this topic relate to the work the crew is doing? If not, choose another topic.*
- Did you read this Training Guide and fill in the blanks where the  appears? (To find the information you need, look over the Safety Walkaround Checklist for this topic.)*
- Did you locate a place to hold this meeting with a scaffold nearby?*

Begin: Most scaffold injuries happen because the scaffold itself is unsafe. Scaffolds are often set up by another contractor, so we don't have as much control over them as we would like. But no matter who sets up the scaffold, don't work on it if you think there's a problem.

If you're not sure a scaffold is safe, talk to a supervisor, foreman, or other site safety staff.

Scaffolds are strictly regulated, and today we'll look at some of the rules for building a safe scaffold and working on it safely. Keep in mind that you should never use unstable objects like stilts, bricks, blocks, or loose tile as a substitute for a scaffold. And some kinds of scaffolds are outlawed—like shore scaffolds, lean-to scaffolds, and jack scaffolds. Don't take a chance on a scaffold that won't do the job.

You or a crew member may want to add a personal story about scaffolds.

Next, discuss with the crew where scaffolds will be used at this particular job site:



ASK THE CREW THESE QUESTIONS:

After each question, give the crew time to suggest possible answers. Use the information following each question to add points that no one mentions.

1. When and where do you need to use a scaffold?

- When there is no solid construction (at least 20 inches wide) to stand on.
- When the work can't be done safely while standing on a ladder.

2. When a scaffold is built or dismantled, Cal/OSHA says that a “qualified person” must supervise. What does that person do?

- Advises on safety requirements.
- Inspects materials and construction methods used.



Name of qualified person: _____

3. According to Cal/OSHA, certain types of scaffolds must be designed by a registered civil engineer. Do you know which types?

- Wooden pole scaffolds (over 60 feet).
- Tube and coupler scaffolds (over 125 feet).
- Tubular welded scaffolds (over 125 feet).

4. Cal/OSHA says that scaffolds must be built to meet certain standards. Do you know any of the “specs” for scaffolds?

Using a nearby scaffold, demonstrate the requirements below.

- A Cal/OSHA permit is required to erect a scaffold more than 36 feet high (3 stories).
- If a scaffold is 7½ feet or higher, it must have standard guardrails on its open sides and ends. (*Guardrails are covered in more detail in a separate Training Guide.*)
- If people work or pass below, the scaffold must have toeboards at least 4 inches high to keep tools and debris from falling on them.
- The scaffold must be tied off, using a double wrap of No. 12 wire. Begin tying off as the scaffold is built. Improper tying off is one of the main reasons for scaffold accidents.

5. Do you know any of the requirements for platforms on a scaffold?

Using a nearby scaffold, demonstrate the requirements below.

- They must be planked solid, without openings or gaps. (Standard planking is 2"x10".)
- They must be able to support the intended load.
- They must not slope or be slippery.
- If work is done above the platform, the platform must be protected from falling objects.

6. Any special rules for rolling scaffolds?

- Always lock or block the wheels before anyone gets on.
- After you move a rolling scaffold, adjust it to make sure it's still plumb. Never extend adjusting screws all the way.
- Always get off before the scaffold is moved, even if only a few feet.
- Use horizontal cross bracing to prevent skew.

7. Is it OK for heavy and light trades to work from the same scaffold?

- Light trades **may** work from heavy trade scaffolds.
- Heavy trades **may not** work from light trade scaffolds.

8. What is the right way to get on and off a scaffold?

- Use a ladder to go up to the working platform and to get down.
- Make sure the ladder is secured to the scaffold.
- Never jump from a scaffold.

CAL/OSHA REGULATIONS

Explain: Most of the safety measures we've talked about are required by Cal/OSHA. We have to take these precautions—it's the law. I have a Checklist of the Cal/OSHA regulations on scaffolds. If you'd like to know more, see me after the meeting.

COMPANY RULES

(Only if applicable.) Besides the Cal/OSHA regulations, we have some additional company rules about scaffolds.

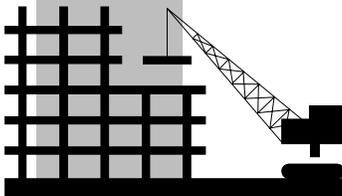
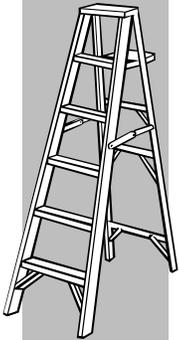
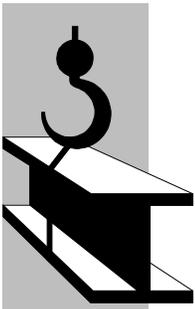
Discuss company rules: _____



COMMENTS FROM THE CREW

Ask: Do you have any other concerns about scaffolds? Do you see any problems on our job?
(Let the steward answer first, if there is one.)

What about other jobs you've worked on? Have you had any experience with scaffolds that might help us work safer on this job?



One Killed, Three Injured in Scaffold Accident

A 29-year-old hod carrier died and three co-workers were injured when they fell from the fourth story of a pump house building that was under construction at a reservoir.

The hod carrier and others had been spraying fireproof insulation onto the structural steel frame of the building. They used a rolling tower scaffold to gain access to the structural steel overhead.

Putlogs (types of trusses) had been added to the sides of the rolling tower scaffold, and an extension platform had been built there. This platform was used to reach the outer side of the structural steel.

On this day, a supervisor said a guardrail was needed on the scaffold. The hod carrier joined three co-workers on the extension platform to help install the guardrail. Their combined weight caused the scaffold to tip. They were all thrown to the concrete deck 44 feet below.

The scaffold had not been engineered for the extension platform. No counterweights, anchorage, or bracing were used. Neither the hod carrier nor his co-workers were wearing personal fall protection. The scaffold and platform had been constructed using parts from different manufacturers.

December 8, 1998

What should have been done to prevent this accident?

Preventive Measures

Cal/OSHA investigated this accident and made the following recommendations.

Employers should:

- Ensure that scaffolds are assembled according to the manufacturer's recommendations. If locally built, they must be properly designed and engineered.
- Ensure that no extensions or auxiliary parts are added to scaffolds unless designed and approved by an engineer.
- Ensure that workers follow safe work practices when constructing scaffolds.
- Ensure that scaffold load limits given by the manufacturer or engineer are not exceeded.

This Case Study is based on an actual California incident. For details, refer to California Dept. of Health Services, Occupational Health Branch, Fatality Assessment and Control Evaluation (FACE) Report #98CA017.