

Scaffold and the 3:1 rule

Supported scaffolds are one or more working platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or other similar rigid support. A supported scaffold can topple if its center-of-gravity is too high. That's why Cal/OSHA has stipulated that supported scaffolds more than three times as high as the width of the base (3:1) must be prevented from tipping by guying, tying, bracing, or other equivalent means. This 3:1 ratio includes outrigger supports, if used. The Federal OSHA ratio is 4:1 and may be used where Fed OSHA has jurisdiction.

What else do you need to know to ensure your scaffold is safe?

- Supported scaffolds must sit on base plates, mudsills, or other steady foundations. Base plates must be fastened to mudsills.
- Never use objects such as blocks of wood or buckets to support scaffolds.
- Supported scaffold poles, legs, posts, frames, and uprights must be plumb and braced to prevent swaying and movement.
- Safe access must be used. Never climb x-braces or end frames.
- Scaffold planks must not be spaced more than 1 inch, must be marked "OSHA Approved" and should be discarded when damaged.

Other common hazards associated with all scaffolds

- Falls from elevation, due to lack of fall protection.
- Collapse of the scaffold, caused by instability or overloading.
- Being struck by falling tools, work materials, or debris.
- Electrocutation, principally due to proximity of the scaffold to overhead power lines.

Why is scaffold safety important?

An estimated 2.3 million construction workers, or 65 percent of the construction industry, work on scaffolds frequently. Protecting these workers from scaffold-related accidents would prevent 4,500 injuries and 50 deaths every year, at a savings for American employers of \$90 million in workdays not lost.

Studies show that 25 percent of workers injured in scaffold accidents had received no scaffold safety training, and 77 percent of scaffolds were not equipped with guardrails.

Do not add to the above statistics. Ensure your jobsite scaffolds are safe.