Scaffold Safety

In December of 1996, She's new scaffold standards took effect. Still, many Construction Standard violations occur through the improper use of scaffolding. Common violations include inadequate bracing, no guardrails, unsafe access, and no pins in scaffolding to prevent uplifting.

General Safety Guidelines

No scaffold shall be erected, moved, dismantled or altered except under the supervision of competent persons. A competent person is defined as one who is capable of identifying existing and predictable hazards in the surroundings or working conditions, and who has the authorization to take prompt corrective action to eliminate them.

Safe Usage of Non-mobile Welded Frame Scaffolding

Scaffolding Frame

- The frame scaffold must be capable of supporting four times the maximum intended load.
- Using a horizontal frame separation distance of seven feet, the maximum plank extension over the end support shall be no more than 12 inches if guardrails are not used to block access to the area.
- On a 10-section wide frame scaffold, the overlap for each plank on top of each other must be 12 inches.
- A scaffold five feet wide, 35 feet in length and 30 feet high with frame spacing of seven feet must have horizontal securement every 20 feet and vertical tie-in every 20 feet.
- A frame scaffold, three sections high, using a cantilevered outrigger platform, shall use ties, guys, braces, outriggers or scaffold manufacturer's stabilizer legs or equivalent.

Scaffolding Rails

- Guardrails are required on welded frame scaffolds that are 10 feet high or more.
- Top rail height shall be at least 36 inches to a maximum of 45 inches.
- Top rail strength must be at least 200 pounds for welded frame scaffolds.
- Midrail strength on a welded frame scaffold must be at least 150 pounds.
- Scaffold legs must bear on base plates and these shall rest on either firm foundation or mudsills.

Scaffolding Planks

- The space between the scaffold planks must be no more than one inch.
- The maximum distance permitted between a plank and a frame upright is nine inches.

- An uncleated scaffold plank must extend over the end support a minimum of six inches.

Scaffolding Cross Bracing and Pins

- Cross bracing is acceptable in place of midrails when the "X" is between 20 and 30 inches above the work surface.
- Cross bracing is acceptable in place of a top rail when the "X" is between 30 and 48 inches above the work surface.
- The purpose of using pins to lock a scaffold vertically together is to prevent uplift. This can occur with a rough terrain forklift-grabbing scaffold. Wind, climbing a scaffold or the use of a hoist can also cause it to lift up.

Maximum Weight

The maximum intended load of a 10-inch wide, two-inch nominal thickness wood scaffold plank platform with the scaffold frames seven feet apart horizontally is approximately 175 pounds.

Other Specs

- Scaffold platforms above one section high must be provided with safe access.
- When hook-on-ladders are used, they must be provided with a rest platform every 35 feet.
- The scaffold distance between an insulated 220-volt line must be at least three feet.
- Work shall not be permitted during high winds. High winds are classified by the National Weather Service as 30 mph gusts or higher. Ultimately, the decision is to be made by the competent person.