

Improper Scaffolding Foremost Violation Cited by OSHA

Poorly constructed scaffolding is the most frequently cited violation of construction and remodeling standards by the [Occupational Safety & Health Administration](#) (OSHA), according to David Coble, a former OSHA inspector and now safety consultant with North Carolina-based [CTJ Safety Associates](#).

He said common scaffolding violations cited at job sites included:

- Not having the scaffold deck fully floored
- Not having the scaffold level or capable of supporting its designated load with the proper use of screw jacks, footings, etc.
- Not providing safe access for each scaffold
- Not providing proper fall, or falling object, protection — guardrails, midrails, toe boards, screens and debris netting
- Not having scaffold components approved by a competent person on the job site
- Not having the scaffold inspected daily

Coble also said access should be provided by fixed ladders.

The other 25 most often cited OSHA standards for construction and remodeling for 2002-2003, according to Coble, included:

#2 Fall Protection

While fall protection is required so that employees will not fall more than six feet, Coble suggested that fall protection be provided for a minimum of four feet.

#3 Ladders

Fall protection for fixed ladders is provided so that employees will not fall more than 24 feet and that portable ladders must extend at least three feet above the point of support.

Coble suggested that all ladder users be trained to maximize safety at the job site.

#4 Electrical Wiring Methods

Common violations cited, according to Coble, included:

- Not protecting all light bulbs from damage by using a cage, protection screen, etc.
- Not protecting flexible cords from damage
- Not covering all knockout holes
- Not covering all circuit breaker holes
- Running cords through walls, ceilings and floors

#5 Stairways

Coble indicated that temporary stairways that were not built to specification were often cited. These specs include:

- Stairs must be installed between 30- and 50-degrees.
- The rise and tread width must be uniform.
- Stairs with four or more risers or rising above 30 inches must have stair rails.

#6 General Safety and Health Provisions

To meet this standard, Coble said employees must be trained to work safely, use proper tools, store tools safely and have tools guards on power tools.

#7 Fall Protection Systems

Coble said comprehensive fall protection systems, where applicable, should be in place to avoid citations. He said proper systems, such as roof anchorages, only added about \$200 to the cost of a house but saved much more than that in workers compensation.

Fall protection systems include:

- Guard rails with midrails and toeboards
- Safety net systems no more than 30 feet below the working level
- Safety net systems inspected weekly
- Fall arrest anchorages that support 5,000 pounds per employee
- Controlled access zones at least six feet from the edge

#8 Electrical Wiring Design and Protection

Coble stressed the need for all handheld tools to be grounded or double-insulated. He said ground fault circuit interrupters (GFI) or an assured equipment grounding conductor program should be in use to avoid citations and injury.

He also said inspectors looked for overhead open conductors that were not installed at the proper height—10 feet above grade for job sites in general, 12 feet above grade for vehicular traffic, 15 feet above grade for truck traffic and 18 feet above public streets.

#9 Head Protection

Coble said hardhats are required where there is a danger of falling objects, impact or electrical shock and that hardhats should meet manufacturers' requirements or ANSI Z89 standards. He noted that decals placed improperly on hardhats have been known to transmit electricity and cause serious injury and even death.

#10 Hazard Communication

Coble said OSHA inspectors cited job sites where hazardous chemicals were present and a written hazard communication plan was not developed or the chemicals were not properly labeled or marked with a warning.

#11 Aerial Lifts

Among the more common violations for aerial lifts were:

- Lifts being used by unauthorized or not properly trained personnel
- A lack of body belts or lanyards to keep the employee on the basket floor so he would not be thrown
- Not using the lifts according to the manufacturers' recommendations

#12 General Electrical Requirements

Among the general requirements often cited were:

- Electrical equipment not meeting the proper NEMA rating
- Electrical equipment not protected from damage
- Unapproved gang boxes
- Spliced flexible cords or cords that are not of continuous length
- Circuit breakers that are not properly labeled

#13 Fall Protection Training

Coble said fall protection systems should be reinforced with fall protection training if citations are to be

avoided.

#14 Scaffolds

In addition to the proper placement and use of scaffolds, Coble said scaffold citations were given by OSHA inspectors if the scaffold was not built according to the manufacturers' specifications and OSHA and [Scaffold Industry Association](#) (SIA) standards.

#15 Housekeeping

In general, Coble said job sites littered with garbage, debris and scraps were subject to citations. He said debris should be removed on a regular basis and that forms and scrap lumber should be free of protruding nails.

#16 Construction Training and Education

Not only should employees be trained to recognize and avoid hazards, Coble said they should be trained to work in confined or enclosed spaces, to work with caustics and other harmful substances and to avoid harmful plants and animals.

#17 Concrete and Masonry Construction

To avoid citations:

- Reinforcing steel and rebar should have proper impalement protection.
- Only qualified employees should perform post tensioning.
- Riding in concrete buckets is forbidden.

#18 Scaffold Training

Citations are often given when people who work on scaffolds are not trained in how to use scaffolds or recognize hazards. Retraining is conducted when deficiencies are found in the original training program.

#19 Eye and Face Protection

To avoid citations, eye and face protection must meet — and be properly marked that it meets — ANSI Z87.1 standards.

#20 Fire Protection

Among the requirements for fire protection required at the job site are:

- Fire fighting equipment must be conspicuously located.
- Fire fighting equipment must be periodically inspected.
- A fire alarm should be provided.

#21 Woodworking Tools

Two safety requirements Coble stressed regarding woodworking tools are that:

- Saws and sanders are properly guarded.
- Each saw and sander must have an anti-start device to protect workers from accidents when power is interrupted.

#22 Excavations

Coble stressed that excavations and trenches should be properly supported and inspected weekly and that an approved ramp or ladder should be located at least 25 feet from each employee in the trench or excavation.

#23 Lead

Coble said potential lead-containing materials needed to be inspected before exposure and that if exposure exceeded the [OSHA permissible exposure limit](#) (PEL), controls would have to be implemented.

#24 Gas Welding and Cutting

Coble said oxygen and fuel gas cylinders should be separated in storage by 20 feet or by a five-foot high wall that meets OSHA specifications and standards. He also said the equipment should be used by properly trained personnel.

#25 Fall Protection in Steel Erection

Specific fall protection requirements must be met regarding steel erection. These include:

- Each employee engaged in steel erection must be protected from falling more than 15 feet.
- Connectors must be provided from falling more than 30 feet or two stories, whichever is less.
- A controlled decking zone must be established.