Workplace Safety

OSHA Alert: New Ladder Safety Rules Are Almost Here

Gillian Scott | Oct 11, 2018

What You Need to Know

Falls from ladders account for 20 percent of fatal and lost workday injuries in general industry.
OSHA recently updated its safety standards for fixed and portable ladders.
Design innovations are helping to make ladders easier and safer to use.

Climbing a ladder may seem like a simple task. But improper and unsafe use of ladders in manufacturing facilities leads to injuries and fatalities. OSHA recently updated its walking and working surfaces standard in part to help address ladder safety.

The ***American Ladder Institute*** estimates that about 500,000 ladder accidents occur annually in this country, resulting in almost 300 fatalities and $11 billion in injury costs. The Occupational Safety and Health Administration says 20 percent of all fatal and lost workday injuries in general industry are due to falls from ladders.

"Every year there are 300 ladder-related deaths and thousands of disabling injuries related to ladders," said Ryan Moss, president of the American Ladder Institute and CEO of Little Giant Ladder Systems, ***in an article in EHS Today***. "Without better training and continuous innovation in safety, planning and product design, we will continue to see far too many fatalities."

OSHA Updates Ladder Safety Standard

The OSHA standard for ladders (***29 CFR 1926.1053***) describes the safety requirements for working with and maintaining different kinds of ***fixed and portable ladders***. It includes details like the weight loads, the allowable space between rungs and when cages are required.

"In general, ladders must be capable of supporting their maximum intended load, while mobile ladder stands and platforms must be capable of supporting four times their maximum intended load," writes OSHA. "Each ladder must be inspected before initial use in a work shift to identify defects that could cause injury."

Ladder safety is also covered under the general industry standard for Walking-Working Surfaces and ***Personal Fall Protection Systems***, with ladders covered under ***29 CFR 1910.23, Subpart D***. OSHA recently updated the standard, with many of the changes going into effect in January 2017. Updates related to ladders, however, will go into effect Nov. 19, 2018.

What Causes Most Ladder Accidents?

Ladder Systems, ***told EHS Today*** the main causes of ladder accidents are:

- **Large or heavy ladders.** Repeatedly lifting and moving heavy loads can result in injuries to the back, shoulders and knees.
- **Overreaching.** If someone on a ladder stretches to the side instead of descending the ladder, moving it over a few feet, and going back up, they may lose their balance and fall.
- **Using the wrong type or size of ladder.** Ladders should be suited to the job they are used for. Using a metal ladder near sources of electricity, for instance, could lead to electrocution. Ladders also need to be able to support the weight of the person climbing them, David Francis, national safety director for Little Giant Ladder Systems, ***told EHS Today***. And someone using a ladder that is too short is more likely to stand on the top cap, says Moss, which can lead to a fall.
- **Missing the bottom rung when descending a ladder.** Moss says missing the bottom rung can result in twisted, sprained and broken ankles and knees, head injuries and fatalities.

"Factors contributing to falls from ladders include haste, sudden movement, lack of attention, the condition of the ladder (worn or damaged), the user's age or physical condition, or both, and the user's footwear," says the ***ALI***.

The institute recommends that people using ladders maintain three points of contact. "At all times during ascent, descent, and working, the climber must face the ladder and have two hands and one foot, or two feet and one hand in contact with the ladder steps, rungs and/or side rails."

The ALI offers tips on choosing the right ladder and performing ladder maintenance, and it also provides free online ladder safety training at ***laddersafetytraining.org***.

"The new rule phases in a requirement for employers to have ladder safety or personal fall arrest systems for fixed ladders that extend more than 24 feet, and phases out the use of cages or wells for fall protection," says OSHA. The timeline for the ladder changes is:

- Within two years, all new fixed ladders and replacement ladder/ladder sections must have a ladder safety or personal fall protection system.
- Within two years, employers must install a cage, well, ladder safety system, or personal fall arrest system on existing fixed ladders that do not have any fall protection.
- Within 20 years, all ladders extending more than 24 feet must have a ladder safety or personal fall arrest system.

For portable ladders, OSHA says, "employers must ensure that: rungs and steps are slip resistant;

portable ladders used on slippery surfaces are secured and stabilized; portable ladders are not moved, shifted, or extended while a worker is on them; top steps and caps of stepladders are not used as steps; ladders are not fastened together to provide added length unless designed for such use; and ladders are not placed on boxes, barrels, or other unstable bases to obtain added height."

The updated rule also requires that employees be trained on safely using ladders.

"Required training is task- and equipment-specific for any employee who uses fall protection or equipment specified under Subpart D," notes ***J.J. Keller & Associates***. "For example, a worker who uses a fixed ladder must be trained on how to use the personal fall protection system required when climbing the ladder, as well as safe climbing techniques."

Confused about fall protection? Get some clarity in the article: "3 Tips for Preventing Falls from Height at Work."

Ladder Innovations Address Safety Issues

Though the basic structure of ladders hasn't changed for centuries, the details of how they're made have. Many of the recent changes have been made to increase the safety of ladders and prevent accidents. David Francis, the national safety director for Little Giant Ladder Systems, wrote for ***OH&S*** that innovations include:

- Ladders in lighter-weight materials to help prevent strains and sprains
- Ladders with built-in levelers, or levelers that can be added to existing ladders
- Ladders built without top caps, to prevent users from using the top cap (which Francis notes is often labeled as not for use)
- Outriggers added to the bottom of ladders that can prevent tipping if a user overreaches

"Some new innovations coming from ladder manufacturers combine the platform and handrail system of an enclosed scaffold system with an adjustable fiberglass ladder," Francis ***told EHS Today***. "These new adjustable safety cages or adjustable enclosed platforms allow workers to move freely with both hands in any direction, rather than forcing them to maintain three points of contact. Handrail systems on the adjustable safety cages removes the need to tie off from above, allowing workers to get the job done quickly and safely, even when there is no way to tie off."

Are you prepared for the new ladder safety regulations?

