



2017

Walking-Working Surface Standard

Identifying Solutions for the OSHA Updates in General Industry



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This year, OSHA has released new updates to its walking-working surface standard for general industry. After several decades of inadequate, or unclear standards, OSHA first made a major overhaul to the standard in 2016. The 2017 revision fine-tunes last year's final rule. This article is the first in a short series highlighting what you need to know for specific components of the new standard. Our goal is to help simplify the safety information so you know how to comply.

OSHA estimates the final rule will prevent 29 worker deaths and 5,842 lost workday injuries each year. Additionally, because the final rule harmonizes general industry requirements with OSHA's existing construction industry standard and many ANSI standards, the new rule will make compliance both easier and less costly. Before we discuss various fall protection solutions, it is important to identify some of the key changes in this final rule.

The new standard includes a number of revisions to the existing general industry standards which include:



Fall protection flexibility

(§1910.28(b)): The final rule allows employers to protect workers from falls by choosing from a range of accepted fall protection systems, including personal fall protection systems. It eliminates the existing mandate to use guardrails as the primary fall protection method and gives employers the flexibility to determine what method they believe will work best in their particular workplace – an approach that has been successful in the construction industry since 1994. The final rule allows employers to use non-conventional fall protection practices, such as designated areas on low-slope roofs, and for work that is temporary and infrequent. Employers can also create fall protection plans for residential roofs in situations where guardrail, safety net or personal fall protection systems are not feasible or might create a greater hazard (§1910.28(b)(1) and (b)(13)).



Updated scaffold requirements

(§1910.27(a)): The final rule requires that the outdated general industry scaffold standards be replaced with OSHA's construction scaffold standards.



Phase-in ladder safety systems or personal fall arrest systems on fixed ladders

(§1910.28(b)(9)): There is wide recognition that cages and wells do not provide workers who are using fixed ladders with adequate fall or injury prevention. The final rule prohibits the use of cages and wells after the deadline. It also creates a requirement to equip fixed ladders (that extend over 24 feet) with ladder safety or personal fall arrest systems within the next 20 years. While the final rule grandfathered in cages and wells on existing ladders, it requires employers to equip new/replacement ladders and ladder sections with ladder safety or personal fall arrest systems.



Phase-out the "qualified climber" exception in outdoor advertising

(§1910.28(b)(10)): The final rule phases out OSHA's directive allowing qualified climbers in outdoor advertising to climb fixed ladders on billboards without fall protection. It requires fixed ladders to be equipped with ladder safety or personal fall arrest systems, and that outdoor advertising employers follow the fall protection phase-in timeline for fixed ladders. If existing ladders do not have any fall protection, outdoor advertising employers have two years to comply with the existing standard (i.e. install a cage or well). Alternatively, they may opt to install ladder safety or personal fall arrest systems, both of which are less expensive than cages or wells.



Rope descent systems

(RDS) and certification of anchorages (§1910.27(b)): The final rule codifies OSHA's memorandum for employers who use RDS to perform elevated work. The final rule prohibits employers from using RDS at heights greater than 300 feet above grade unless they demonstrate it is not feasible or creates a greater hazard to use any other system above that height. In addition, the final rule requires building owners to provide, and employers to obtain, information that permanent anchorages used with RDS have been inspected, tested, certified and maintained as capable of supporting at least 5,000 pounds per employee attached.



Personal fall protection system performance and use requirements

(§1910.140): The final rule, which allows employers to use personal fall protection systems (i.e. personal fall arrest, travel restraint and positioning systems), adds requirements on the performance, inspection, use and maintenance of these systems. Like OSHA's construction standards, the final rule prohibits the use of body belts as part of a personal fall arrest system.



Inspection of walking-working surfaces

(§1910.22(d)): The final rule requires that employers inspect walking-working surfaces regularly and as needed to correct, repair or guard against hazardous conditions. While this new standard was primarily developed to mirror construction safety standards for fall protection from heights, OSHA is still focused on preventing slips, trips and falls on the same level. According to injury data from BLS and the National Academy of Social Insurance, same level slips and falls and overexertion are two of the leading causes of disabling, nonfatal workplace injuries, costing U.S. employers over \$1 billion per week. OSHA is requiring inspections on all relevant walking-working surfaces as needed to address slip, trip and fall concerns (from both heights and on the same level).



Training

(§1910.30): The final rule requires that workers who use personal fall protection and work in specified high hazard situations are trained and retrained as necessary about fall and equipment hazards, including fall protection systems. Employers must provide information and training to each worker in a manner the worker understands.



WHAT TO CONSIDER WHEN SOLVING FOR FALL PROTECTION

Companies with individuals working at heights sometimes must think outside of the box for solutions to best protect their employees. The new standard allows for some flexibility in an employer's choice of fall protection solutions. Since there are typically several options allowing employees to safely perform their work tasks at heights, companies usually look to other factors to help them make a decision for compliance.

These factors include:



Cost

While employers want to keep their employees safe on the job, the investment in custom fall protection systems and personal protective equipment (i.e. harnesses and lanyards) has to be considered when determining the best approach. For example, even though one option might cost more up front, it could easily pay for itself in the long run compared to other options.



Productivity

Guardrails can come with significant initial costs, but offer workers a greater range of motion and less restraint when compared to other fall protection options. In addition, they mitigate the extra time it takes workers to put on their harness and inspect the various PPE prior to use. A thorough evaluation of the job tasks can help identify productivity concerns with each of the fall protection options.



Safety

Outfitting employees with harnesses and lanyards might be an easy solution, but it doesn't guarantee that they won't get hurt in a fall. Employers must be sure to calculate fall clearance distances and "swing-fall" – what they might hit if they do fall – in addition to considering how a quick rescue could be made. How might we prevent worker injury even in instances where proper fall protection equipment is in use? Opportunities to "restrain" employees to effectively perform their tasks without getting too near the edge of the fall hazard may exist. In these instances, a guardrail might make sense. Alternatively, a proper assessment could identify that a personal fall arrest system is the only feasible option. In those cases, employers must consider ways to minimize fall distances limiting the potential for injury.



COMPLIANT FALL PROTECTION SOLUTIONS

Defined as “any equipment, device or system that prevents a worker from falling from an elevation or mitigates the effect of such a fall,” the protection solutions that OSHA details in its new standard include:



Guardrails

Guardrails are a barrier erected along an unprotected or exposed side, edge or other area of a walking-working surface that prevents employees from falling to a lower level. They can be permanent, portable and/or temporary. While commonly viewed as a more expensive fall protection option, guardrails are passive, allow full freedom of mobility and are considered the safest option for employees.



Personal Fall Arrest Systems

These systems are used to stop employees in falls from elevations. They consist of a full body harness, anchorage and connector. This means of fall protection may include a shock-absorbing lanyard, deceleration device (such as a self-retracting lifeline), lifeline or any suitable combination of these. While most devices reduce fall arresting forces to the body below 900 lbs., OSHA requires that the body not experience more than 1,800 lbs. of force during a fall.



Travel Restraint System

A travel restraint system includes a combination of an anchorage, anchorage connector, lanyard (or other means of connection), and body support. Employers use these systems to eliminate the possibility of a worker falling over the edge of a walking-working surface. Compared to a guardrail, this is considered to be the next most effective fall protection option.



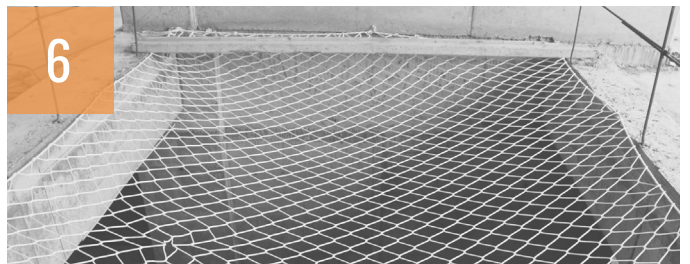
Work Positioning System

These systems are made up of equipment and connectors that are paired with a body harness or belt, allows an employee to be supported on an elevated vertical surface such as a walls or window sills. A major benefit of these fall protection systems is that they allow tasks to be completed with both hands free. One example of where work positioning systems are commonly used is in construction, with workers completing rebar installation on the side of a wall, prior to concrete being poured. Employees are either secured from their chest or a pair of side D-rings. Performance requirements for work positioning systems are covered under 1910.140(e) – positioning systems.



Ladder Safety Systems

Ladder safety systems are designed to eliminate or reduce the possibility of falling from a ladder. A system usually consists of a carrier, safety sleeve, lanyard, connectors and a body harness. While cages and wells are not considered compliant ladder safety systems, workers can still legally climb a fixed ladder when they're combined with a personal fall arrest system – possibly paired with a SRL at the top or a double-legged SRL from the back.



Safety Net Systems

Similar to a guardrail, a safety net system is considered a passive fall protection system that prevents a worker from falling to a lower level. When using this rare option, employers must install the safety net system as close as practicable below the working surface and extend the systems beyond the outermost projection. The standard details that employers should reference the existing construction standard for information about safety net systems, as the same requirements apply.

CUSTOM FALL PROTECTION SOLUTIONS

Sometimes personal fall arrest or travel restraints systems seem like a good option, but simple, “out-of-the-box” application of these solutions might not be feasible. Quite often, experts need to be brought in to design a custom anchorage or fall protective system. Their expertise can result in a system that both fits the design and needs of your work environment and allows employees to perform their tasks with minimal disruption to their productivity.

A PARTNER IN SAFETY

While injuries are largely avoidable, hazardous walking-working surfaces still pose a significant threat to industrial workers. These new OSHA standards offer guidelines to help employers keep their staff safe and productive. If you are unsure about your current compliance, or simply want to explore updated or alternative fall protection systems, Conney Safety can assist with solutions for your unique circumstance.

We closely partner with organizations that engineer and develop custom options for all workplace scenarios. To start, an assessment of all walking-working surfaces at your facility might surface necessary changes or additions. If you're not sure what steps to take next, call our Safety Support Team at (800)-462-1947 and we'll help you determine your best options.

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