

# UNDERSTANDING OSHA'S FINAL RULE TO THE **WALKING-WORKING SURFACES AND FALL PROTECTION STANDARDS**



**F**alls from elevations and on same heights or working surfaces are among the leading causes of work-related injuries and deaths. OSHA has issued a final rule on Walking-Working Surfaces and Personal Fall Protection Systems to protect workers in general industry from these hazards. OSHA estimates the final rule will prevent **29 worker deaths and 5,842 lost-workday injuries each year**. This guide describes some of the notable changes of the final rule.

**Note: To comply with the final rule, all employees must be trained by a qualified person on fall and equipment hazards, including falling object hazards, by May 17, 2017.**



<https://safety.army.mil>



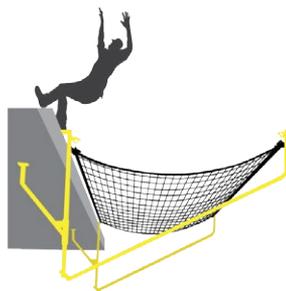
## Fall Protection Systems Options

OSHA defines fall protection as “any equipment, device, or system that prevents a worker from falling from an elevation or mitigates the effect of such a fall.” Under the final rule, employers must ensure that workers have fall and falling object protection in certain areas and during certain operations or activities. Employers have flexibility to select the system that works best for particular circumstances and activities. Employers may choose from the following fall protection options:

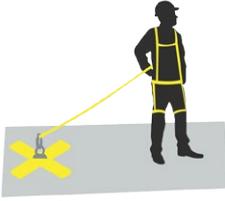


**Guardrails:** a barrier, such as a railing, erected along an unprotected or exposed side, edge or other area of a walking-working surface intended to prevent workers from falling.

**Safety net systems:** a netting system placed beneath the work area intended to stop falling workers before they make contact with a lower level or a lower level structure. Safety net systems are commonly used in the construction industry when working on bridges and large structures to protect workers from hazardous vertical drops. OSHA requires employers to follow the construction criteria and practice requirements under 1926 Subpart M, “Fall Protection.”



**Personal fall arrest systems:** a system that uses a combination of equipment to arrest/stop a worker from contact with a lower level. Consists of a body harness, anchorage and connector and may include a lanyard, deceleration device, lifeline or a suitable combination. OSHA strictly prohibits the use of body belts as part of a personal fall arrest system.



**Travel restraint systems:** a combination of equipment, such as an anchorage, anchorage connector, lanyard or other means of connection, used to prevent the possibility of a worker going over the unprotected edge or side of a walking-working surface.

**Ladder safety system:** a system attached to a fixed ladder intended to prevent workers from falling off the ladder. A ladder system is usually comprised of a carrier, safety sleeve, lanyard, connectors and body harness.



**Positioning systems:** a supportive system of equipment that when used with a body harness or body belt, allows a worker to be supported on an elevated vertical surface, such as a window, with both hands free.

**Handrail systems:** a system that uses rails to provide workers with a handhold for support. Additional handrail and stair rail system criteria can be found in 1910.29(f).

**Use of designated areas:** A designated area can only be used on a low-slope roof which OSHA defines as a roof with a slope less than or equal to a ratio of 4 in 12. This means a vertical rise of 4 units of measure (e.g., an inch, foot or meter) to every 12 units of that same measure of horizontal run. In industry, low-slope roofs are often referred to as “flat roofs.” There are limitations to the use of designated areas beyond this. Specifically, for any work that has to be done less than 6 feet from the roof edge, conventional fall protection has to be used. A designated area is NOT allowed in this circumstance. If the work that needs to be done is at least 6 feet from the edge, then a designated area may be used. If a designated area sounds like a better option than what you are currently doing to conduct work on roofs, then you need to review 1910.29(d), carefully.

**Note:** *In some cases, it is acceptable to use non-conventional fall protection. However, these must be accompanied by a written fall protection program highlighting the reasons why conventional fall protection is unsafe or infeasible in the specific application.*

## Notable Changes In The Final Rule

Preventing falls is almost the entire purpose of rules for walking-working surfaces. OSHA's final rule on 29 CFR 1910 Subpart D updates and revises the outdated, general industry Walking-Working Surfaces and Personal Protective Equipment Standards on slip, trip and fall hazards. The Subpart D definition of a walking-working surface means any horizontal or vertical surface on or through which an employee walks, works or gains access to a work area or workplace location. The following are some notable changes to the rule; visit [www.osha.gov](http://www.osha.gov) for a comprehensive regulatory list of changes made.

### **General requirements (1910.22)**

The final rule requires that employers inspect walking-working surfaces regularly and as needed correct, repair or guard against hazardous conditions. In this case, OSHA says that the term "regular inspection" means that an employer has some type of schedule, formal or informal, for inspecting that is adequate enough to identify hazards. The standard requires the employer to keep clean, orderly and sanitary conditions; maintains clean and, to the extent feasible, dry workroom floors and to keep walking-working surfaces free of hazards, such as sharp or protruding objects, loose boards, corrosion, leaks, spills, snow and ice.

**Note:** *Essentially, if a worker uses a surface to walk on, work on, or gain access to an area in their workplace, it must be inspected.*

**Ladders (1910.23)** The final rule requires workers, when ascending and descending a portable ladder, to maintain three points of contact by facing the ladder when climbing, grasping the ladder with at least one hand at all times and not carrying objects that could cause them to lose their balance and fall. Employers are required to ensure that every employee follows this climbing technique.

**Step bolts and manhole steps (1910.24)** Under Subpart D, OSHA has included the general requirements in the existing Telecommunications Standard for pole steps and manhole ladders. Pole steps and step bolts are covered jointly under the revisions. Also, since many workplaces already have step bolts or manhole steps installed, certain design changes are required on new installations.

**Stairways (1910.25)** This new section combines, clarifies and updates existing requirements and adds new provisions for stairways. OSHA replaced the term “fixed industrial stairs” used in the current standard with “stairways” (defined as risers and treads that connect one level with another). The new term does not limit stairways to stairs that have “three or more risers.” Rather, this section applies to all permanently installed stairs regardless of the number of steps. OSHA is permitting the installation of spiral, ship and alternating tread-type stairs for limited secondary use where it would not be practical to provide a standard stairway.

**Dockboards (1910.26)** A new provision requires that dockboards (i.e., bridge plates) be provided with a means, such as edging or curbing, to prevent equipment from running off the edge. Also, any transport vehicle which a dockboard has been placed must be prevented from moving via wheel chocks, sand shoes, etc. while workers are using them.

**Scaffolds and rope descent systems (1910.27)** The new rule replaces general industry scaffold standards with the requirement that employers comply with construction industry standards in 1926, Subpart L, “Scaffolds.” The final rule prohibits employers from using rope descent systems





(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.

**Duty to have fall protection and falling object protection (1910.28)** This section requires employers to provide protection for each employee exposed to fall and falling object hazards. The employer must ensure that each employee receives protection from falling on

a walking-working surface, with an unprotected side or edge that is 4 feet or more above a lower level. Employers have the flexibility to choose from several options in addition to guardrails such as safety net systems, travel restraint systems, personal fall arrest systems, positioning systems and designated areas. (This section does not apply to portable ladders.)

**Phase-in of ladder safety systems or personal fall arrest systems (PFAS) on fixed ladders [1910.28(b)(9)]** The final rule phases in an over 20 year requirement to equip fixed ladders (that extend over 24 feet) with ladder safety or personal fall arrest systems and prohibits the use of cages and wells as a means of fall protection after the phase-in deadline.



### **Phase-out of 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 and phases in the requirement to equip fixed ladders (over 24 feet) with ladder safety or personal fall arrest systems. Outdoor advertising employers must follow the fall protection phase-in timeline for fixed ladders.

### **Personal fall protection system performance and use requirements (1910.140)**

The final rule, which allows employers to use personal fall protection 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.

### **Fall protection systems**

**(1910.29)** Employers who are required to provide fall protection must choose a fall protection measure from the options provided under 1910.28 (unless otherwise specified in the standard). Employers must provide and install all fall protection systems and falling object protection this subpart requires and comply with other requirements in this subpart before any employee begins work that necessitates fall or falling object protection.

**Fall protection snap hooks, D-rings and carabiners** The final rule requires that all D-rings,



snap hooks and carabiners be proof tested to a minimum tensile load of 3,600 pounds without cracking, breaking or incurring permanent deformation. OSHA also added a new requirement specifying that the gate strength of snap hooks and carabiners also must be proof tested to 3,600 pounds in all directions. This direction aligns with ANSI/ASSE Z359.12 standard for connection components for personal fall arrest systems.

**Training (1910.30)** The final rule adds training requirements for employers. Training and retraining when necessary, is required. Training is required for all employees exposed to fall hazards, including falling object hazards. Training must be provided by a qualified person and presented to each employee in a manner that

the employee understands. At a minimum, a qualified person must train employees to recognize fall hazards, how to minimize those hazards, understand how to use the equipment provided for them for fall protection and how to maintain, inspect and store fall protection equipment and systems.

**Personal protective equipment (Subpart I, 1910.140)**

The final rule adds a new section to subpart I, personnel protective equipment, that provides criteria for personal fall protection equipment and systems. This section establishes requirements for the design, performance, use and inspections of each fall protection system and system components such as body harnesses, lifelines, lanyards and anchorages.



## Training

Training is required for all employees exposed to fall hazards, including falling object hazards. Training must be provided by a qualified person and presented to each employee in a manner that the employee understands. At a minimum, a qualified person must train employees to:

1. Recognize fall hazards.
2. How to minimize those hazards.
3. Understand how to use the equipment provided for them for fall protection.
4. How to properly maintain, inspect and store fall protection equipment and systems.

**To comply with the final rule, all employees must be trained by a qualified person on fall and equipment hazards, including falling object hazards, by May 17, 2017.**

# Retraining

Situations that require retraining of employees include but are not limited to:

1. When changes in the workplace render previous training obsolete or inadequate.
2. When changes in the types of fall protection systems or equipment to be used render previous training obsolete or inadequate.
3. When inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee no longer has the requisite understanding or skill necessary to use equipment to perform the job safely.

# Critical Compliance Dates

The majority of the new requirements are effective as of January 17, 2017. However, OSHA has extended the compliance dates for a few requirements listed in the chart below:

Subpart D Section	Compliance Date
Deadline by which employers must train employees on fall and equipment hazards.	May 17, 2017
Certification of anchorages.	November 20, 2017
Deadline by which employers must equip existing fixed ladders with a cage, well and ladder safety system or personal fall arrest system.	November 19, 2018
Deadline by which employers must begin equipping new fixed ladders with a ladder safety system or personal fall arrest system.	November 19, 2018
Deadline by which all fixed ladders must be equipped with a ladder safety system or personal fall arrest system.	November 18, 2036

*For more information regarding the final rule, visit [www.osha.gov](http://www.osha.gov).*





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