



29 CFR 1910 Subpart D

Walking-Working Surfaces

Slips, Trips, and Falls





Background

Annually, more than 200,000 workers are seriously injured on the job and almost 350 are killed.

Slips, Trips, and Falls continues to be one of the leading causes of serious workplace injuries.





Top 10 OSHA Citations of 2016

Fall Protection
Hazard Communication
Scaffolds
Respiratory Protection
Lockout/Tagout
Powered Industrial Trucks
Ladders
Machine Guarding
Electrical Wiring
Electrical, General Requirements





OSHA's Final Rule

On November 17, 2016, OSHA issued a final rule on Walking-Working Surfaces and Personal Fall Protection Systems to help protect workers from falls.

The new rule more closely aligns general industry requirements with those in the construction industry.





Today's Highlights

An overview of the major changes in the walking-working surfaces and fall protection standards.

29 CFR 1910 Subpart D:

Walking-Working Surfaces

29 CFR 1910 Subpart I:

Personal Protective Equipment





What's Covered by the Final Rule

Applies to all general industry workplaces and covers all walking-working surfaces, which include surfaces such as floors, stairs, roofs, ladders, ramps, scaffolds, and elevated walkways.

It also covers personal protective equipment used to keep employees safe from fall hazards.





Who's Covered by the Final Rule

All general industry, but now spotlights:

Building Management Services

Outdoor Advertising

Chimney Sweeping

Window Cleaning

Warehousing

Utilities

Retail

and More!



Benefits to Employers

The final rule is easier for employers to follow and provides employers with greater flexibility.





Important Dates

January 17, 2017

Most of the rule will become effective 60 days after publication in the Federal Register, but some provisions have delayed effective dates.

May 17, 2017

Exposed workers are trained on fall hazards and workers who use equipment covered by the final rule are trained.

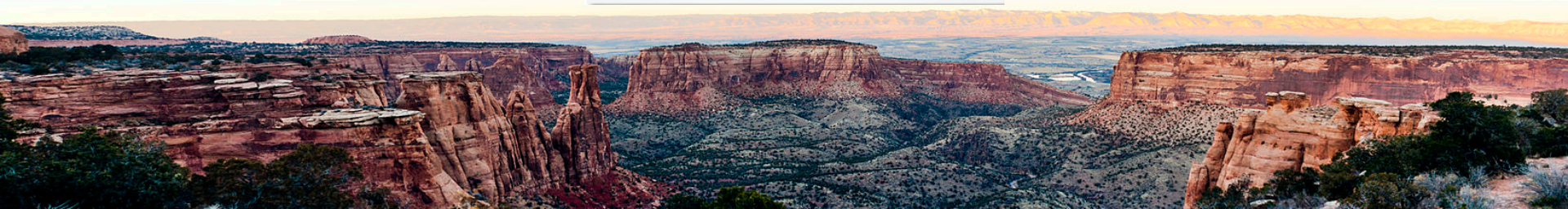




Important Dates

November 20, 2017

Inspection and certification of permanent anchorages for rope descent systems (RDS).





Important Dates

November 19, 2018

Installation of personal fall arrest or ladder safety systems on new fixed ladders over 24 feet and on replacement ladders or ladder sections, including fixed ladders on outdoor advertising structures.

Ensuring existing fixed ladders over 24 feet, including those on outdoor advertising structures, are equipped with a cage, well, personal fall arrest system, or ladder safety system.





Subpart D, Then & Now

Final Subpart D	Existing Subpart D
§1910.21 Scope and definitions.	§1910.21 Definitions.
§1910.22 General requirements.	§1910.22 General requirements.
§1910.23 Ladders.	§1910.23 Guarding floor and wall openings and holes.
§1910.24 Step bolts and manhole steps.	§1910.24 Fixed industrial stairs.
§1910.25 Stairways.	§1910.25 Portable wood ladders.
§1910.26 Dockboards.	§1910.26 Portable metal ladders.
§1910.27 Scaffolds and rope descent systems.	§1910.27 Fixed ladders.
§1910.28 Duty to have fall protection and falling object protection.	§1910.28 Safety requirements for scaffolding.
§1910.29 Fall protection systems and falling object protection—criteria and practices.	§1910.29 Manually propelled mobile ladder stands and scaffolds (towers).
§1910.30 Training requirements.	§1910.30 Other working surfaces.



Major Changes

Inspection of Walking-Working Surfaces

The final rule requires that employers inspect walking-working surfaces regularly and as needed and correct, repair, or guard against hazardous conditions.

29 CFR 1910.22(d)





More Specifically...

1910.22(d) Inspection, maintenance, and repair. The employer must ensure:

- (1) Walking-working surfaces are inspected, regularly and as necessary, and maintained in a safe condition.
- (2) Hazardous conditions on walking-working surfaces are corrected or repaired before an employee uses the walking-working surface again.
- (3) When any correction or repair involves the structural integrity of the walking-working surface, a qualified person performs or supervises the correction or repair.





Major Changes

Updated Scaffold Requirements

The final rule replaces the outdated general industry scaffold standards with the requirement that employers comply with OSHA's construction scaffold standards

(29 CFR part 1926, subpart L).

29 CFR 1910.27(a)





More Specifically...

29 CFR 1926, Subpart L

1926.450 Scope, Application and Definitions

1926.451 General Requirements

1926.452 Additional Requirements Applicable to Specific Types of
Scaffolds

1926.453 Aerial Lifts

1926.454 Training





Major Changes

Rope Descent Systems and Certification of Anchorage

The final rule codifies OSHA's memorandum for employers who use RDS to perform elevated work.

29 CFR 1910.27(b)





More Specifically...

1910.27(b) Rope Descent Systems:

(1) Anchorages.

(i) Before any rope descent system is used, the building owner must inform the employer, in writing that the building owner has **identified, tested, certified, and maintained** each anchorage so it is capable of supporting at least 5,000 pounds, in any direction, for each employee attached. The information must be based on an annual inspection by a qualified person and certification of each anchorage by a qualified person, as necessary, and at least every 10 years.





More Specifically...

1910.27(b) Rope Descent Systems:

(1) Anchorages.

(ii) The employer must ensure that no employee uses any anchorage before the employer has obtained written information from the building owner that each anchorage meets the requirements of paragraph (b)(1)(i) of this section. The employer must keep the information for the duration of the jobs.





More Specifically...

1910.27(b) Rope Descent Systems:

(1) Anchorages.

(iii) The requirements in paragraphs (b)(1)(i) and (ii) of this section must be implemented no later than November 20, 2017.

DON'T MISS
THE DEADLINE!





More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(i) No rope descent system is used for heights greater than 300 feet (91 m) above grade unless the employer demonstrates that it is not feasible to access such heights by any other means or that those means pose a greater hazard than using a rope descent system;

300 ft.





More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(ii) The rope descent system is used in accordance with instructions, warnings, and design limitations set by the manufacturer or under the direction of a qualified person;

(iii) Each employee who uses the rope descent system is trained in accordance with 1910.30;





More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(iv) The rope descent system is inspected at the start of each work shift that it is to be used. The employer must ensure damaged or defective equipment is removed from service immediately and replaced;



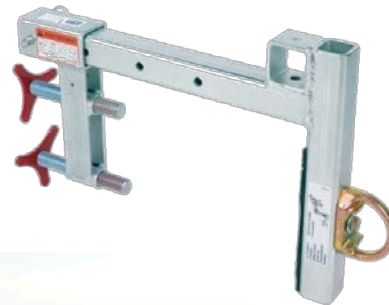


More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(v) The rope descent system has proper rigging, including anchorages and tiebacks, with particular emphasis on providing tiebacks when counterweights, cornice hooks, or similar nonpermanent anchorages are used;



More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(vi) Each employee uses a separate, independent personal fall arrest system that meets the requirements of subpart I of this part;



More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(vii) All components of each rope descent system, except seat boards, are capable of sustaining a minimum rated load of 5,000 pounds (22.2 kN). Seat boards must be capable of supporting a live load of 300 pounds (136 kg);





More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(viii) Prompt rescue of each employee is provided in the event of a fall;

(ix) The ropes of each rope descent system are effectively padded or otherwise protected, where they can contact edges of the building, anchorage, obstructions, or other surfaces, to prevent them from being cut or weakened;





More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(x) Stabilization is provided at the specific work location when descents are greater than 130 feet (39.6 m);

(xi) No employee uses a rope descent system when hazardous weather conditions, such as storms or gusty or excessive wind, are present;





More Specifically...

1910.27(b) Rope Descent Systems:

(2) Use of rope descent systems. The employer must ensure:

(xii) Equipment, such as tools, squeegees, or buckets, are secured by a tool lanyard or similar method to prevent it from falling; and

(xiii) The ropes of each rope descent system are protected from exposure to open flames, hot work, corrosive chemicals, and other destructive conditions.





Major Changes

Fall Protection Flexibility

The final rule provides flexibility to employers to protect workers from falls by choosing from a range of accepted fall protection systems, including personal fall protection systems.

29 CFR 1910.28(b)





More Specifically...

1910.28(b) Protection From Fall Hazards:

1) Unprotected sides and edges.

(i) Except as provided elsewhere in this section, the employer must ensure that each employee on a walking-working surface with an unprotected side or edge that is 4 feet (1.2 m) or more above a lower level is protected from falling by one or more of the following:

- (a) Guardrail systems;
- (b) Safety net systems; or
- (c) Personal fall protection systems, such as personal fall arrest, travel restraint, or positioning systems.



Guardrail Systems

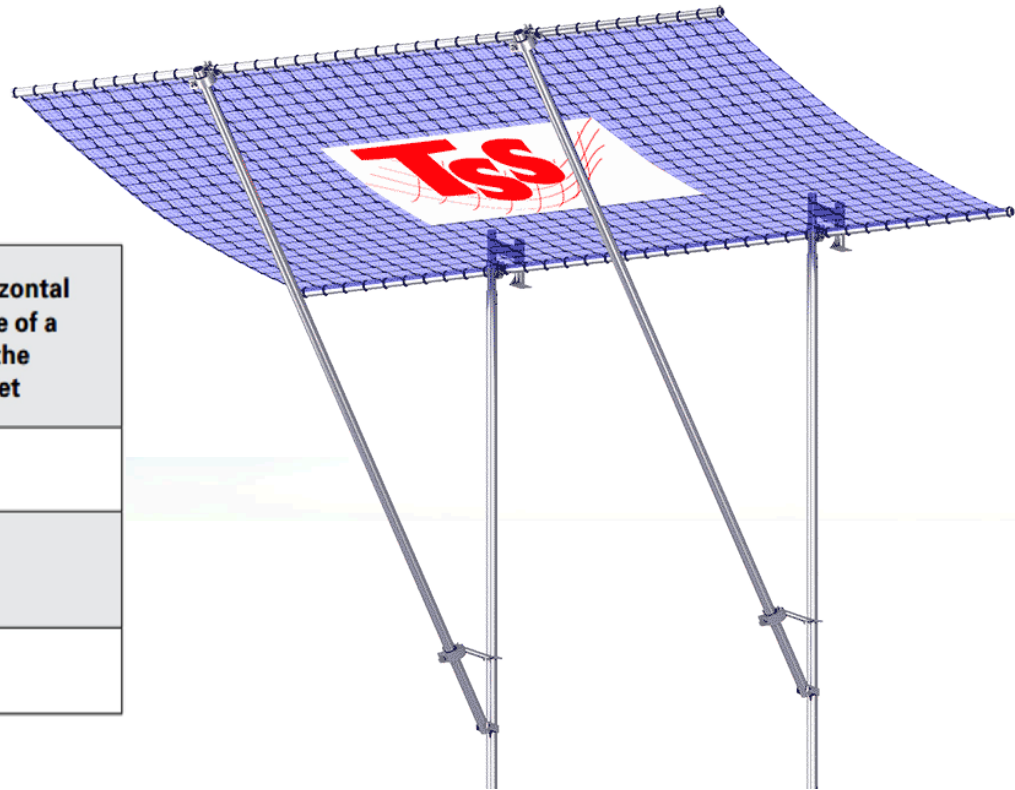
A barrier erected along an unprotected or exposed side, edge, or other area of walking-working surface to prevent workers from falling to a lower level.





Safety Net Systems

A horizontal or semi-horizontal, cantilever-style barrier that uses a netting system to stop falling workers before they strike a lower level or obstruction.

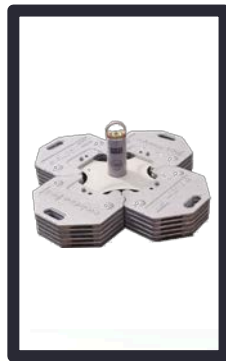


Vertical distance from a working level to the horizontal plane of the net	Minimum required horizontal distance from the edge of a working surface to the outer edge of the net
Up to 5 feet	8 feet
More than 5 feet up to 10 feet	10 feet
More than 10 feet	13 feet

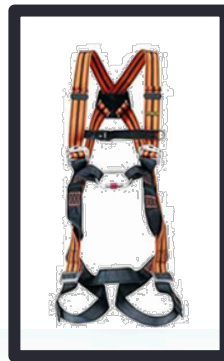
Personal Fall Arrest Systems

A system that arrests/stops a fall before the worker contacts a lower level.

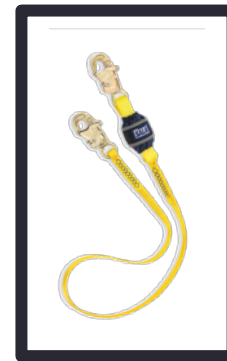
The ABC's of a good fall arrest system:



Anchor



Body Harness



Connector

Travel Restraint Systems

A combination of an anchorage, anchorage connector, lanyard (or other means of connection), and body support to eliminate the chance of a worker going over an unprotected edge.



Work Positioning Systems

A system of equipment and connectors that, when used with a body harness or belt, allows a worker to be supported on an elevated vertical surface, such as a wall or window sill, and work with both hands free.



Ladder Safety Systems

A system attached to a fixed ladder designed to eliminate or reduce the possibility of a worker falling off a ladder.





More Specifically...

1910.28(b) Protection From Fall Hazards:

1) Unprotected sides and edges.

(ii) When the employer can demonstrate that it is not feasible or creates a greater hazard to use guardrail, safety net, or personal fall protection systems on residential roofs, the employer must develop and implement a fall protection plan that meets the requirements of 29 CFR 1926.502(k) and training that meets the requirements of 29 CFR 1926.503(a) and (c).





Major Changes

Ladder Safety Systems or Personal Fall Arrest Systems for Fixed Ladders

The final rule phases in over 20 years a 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.

29 CFR 1910.28(b)(9)





More Specifically...

1910.28(b)(9)(1) Fixed Ladders (> 24' Above a Lower Level):

(ii) For fixed ladders that extend more than 24 feet (7.3 m) above a lower level, the employer must ensure:

(a) Existing Fixed Ladders: Each fixed ladder installed before November 19, 2018 is equipped with a personal fall arrest system, ladder safety system, cage, or well.

(b) New Fixed Ladders: Each fixed ladder installed on and after November 19, 2018, is equipped with a personal fall arrest system or a ladder safety system.





Major Changes

"Qualified Climber" Exception in Outdoor Advertising

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.

29 CFR 1910.28(b)(10)





More Specifically...

1910.28(b)(10) Outdoor Advertising (Billboards)

- (i) The requirements in paragraph (b)(9) of this section, and other requirements in subparts D and I of this part, apply to fixed ladders used in outdoor advertising activities.
- (ii) When an employee engaged in outdoor advertising climbs a fixed ladder before November 19, 2018, that is not equipped with a cage, well, personal fall arrest system, or a ladder safety system the employer must ensure the employee:





More Specifically...

- (A) Receives training and demonstrates the physical capability to perform the necessary climbs in accordance with 1910.29(h);
- (B) Wears a body harness equipped with an 18-inch (46 cm) arrest lanyard;
- (C) Keeps both hands free of tools or material when climbing on the ladder; and
- (D) Is protected by a fall protection system upon reaching the work position.

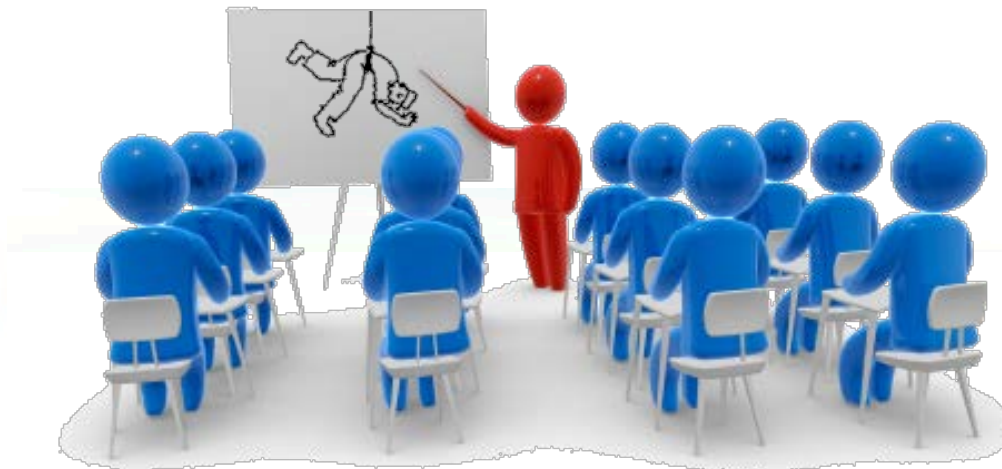


Major Changes

Training

Employers must ensure workers using personal fall protection and work in other specified high hazard situations are trained and retrained, as needed, about fall and equipment hazards.

29 CFR 1910.30



More Specifically...

1910.30(a) Fall Hazards

(1) Before any employee is exposed to a fall hazard, the employer must provide training for each employee who uses personal fall protection systems or who is required to be trained as specified elsewhere in this subpart (Subpart D).

(2) Employers must ensure employees are trained in the requirements of this paragraph on or before **May 17, 2017**.





More Specifically...

1910.30(b) Equipment Hazards

(1) The employer must train each employee on or before **May 17, 2017** in the proper care, inspection, storage, and use of equipment covered by this subpart before an employee uses the equipment.

1910.30(c) Retraining

(1) The employer must retrain an employee when the employer has reason to believe the employee does not have the understanding and skill required by paragraphs (a) and (b) of this section.





Situations Requiring Retraining

- (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; or
- (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 or perform the job safely.





Training

1910.30(d)

(1) Training must be understandable. The employer must provide information and training to each employee in a manner that the employee understands.





Major Changes

Personal Fall Protection System

The final rule adds requirements on employers to ensure the fall protection equipment provided to their employees has been tested and deemed safe for their use. All parts of fall arrest, work positioning, and travel restraint systems must be inspected before and after every use to be sure the safety of the equipment has not been compromised.





More Specifically...

1910.40(c)(7)

D-rings, snaphooks, and carabiners must be capable of sustaining a minimum tensile load of 5,000 pounds.

1910. 40(c)(8)

D-rings, snaphooks, and carabiners must be proof tested to a minimum tensile load of 3,600 pounds (16 kN) without cracking, breaking, or incurring permanent deformation. The gate strength of snaphooks and carabiners, must be proof tested to 3,600 lbs. in all directions.





Hang in there, you can do this!





Summary

With more than 200,000 serious injuries, almost 350 workers killed, and 30% of OSHA citations in 2016, it is apparent that *Slip, Trip, and Fall* hazards have not been a true priority in most workplaces.

I challenge you to be the difference. Your leadership and example may be difference that saves someone's life.





Sources

OSHA.gov:

29 CFR1910 Subparts D and I

The Federal Register

Walking-Working Surfaces and Fall Protection Factsheet

Frequently Asked Questions

