FALL PROTECTION || Work at Heights

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Falls from heights cause serious work-related injuries and deaths every year, but these incidents are preventable! Job sites must be set up in a way that prevents workers from falling off of overhead platforms, elevated workstations, into floor holes, or out of holes in the wall.

OSHA requires that fall protection be provided at elevations of six feet on construction sites. In addition, OSHA requires that fall protection be provided when working over dangerous equipment and machinery, regardless of the fall distance.

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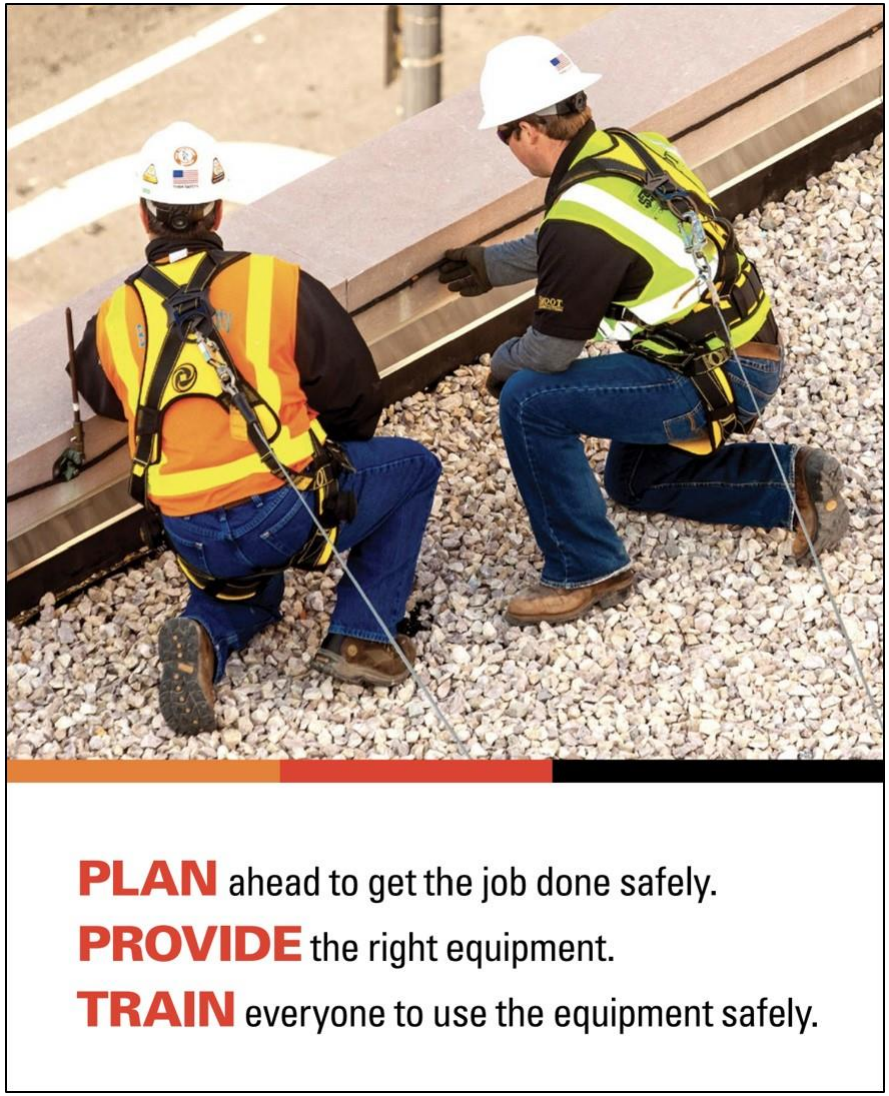
OSHA Standard 1926.501(b)(1) *Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.*

To prevent workers from being injured or killed from falls from heights:

- Guard or cover every floor hole that someone can accidentally walk into.
- Provide a guard rail and toe-board around every elevated open sided platform, floor, or runway.
- Regardless of height, if a worker can fall into or onto dangerous machines or equipment, like a vat of acid or a conveyor belt, adequate fall prevention measures must be in place.
- Other means of approved fall protection may be required on certain jobs like warning line systems, controlled access zones, or safety monitor systems.



OSHA Pub 3666: Fall Prevention Training Guide

Generally, when working at heights, fall protection can be provided through the use of guardrail systems, safety net systems, or personal fall arrest systems. OSHA refers to these systems as *conventional fall protection*.

- Adopting safe work practices, following standard operating procedures (SOPs), and ensuring there is full participation during adequate and appropriate training are additional measures that also increase fall prevention measures.

Whether conducting a hazard assessment or developing a comprehensive fall protection plan, thinking about fall hazards before the work begins will help to manage fall hazards and focus attention on prevention efforts.

- If personal fall protection systems are used, particular attention should be given to identifying attachment points and to ensuring that employees know how to properly use and inspect the equipment.

Working at Heights Fall Hazards

- Hoist areas
- Uncovered floor holes
- Roof and elevator openings
- Skylights that don't have adequate protection
- Form work and reinforcing steel
- Poor working surface integrity
- Faulty or misused equipment including ladders and scaffolds
- Working near unprotected edges like wall openings, leading edges, ramps, excavations, and pits

Staking and securing the side rails of a ladder to prevent falls. Image: Kiewit Power Constructors/eLCOSH.org

Protect Yourself! Prevent Falls from Heights

- If you are working at 6 feet or more, or there is something dangerous below, use fall protection.
- Before starting any job, ensure there is a fall prevention plan in place.
- Confirm that you have the correct equipment to complete the job safely.
- Make sure that you have been trained to use the equipment safely. If you have questions, ask!
- Inspect your equipment before use – including your fall protection and prevention equipment as well as any equipment you may be using, climbing, or working from.

The most effective way for workers to be protected from falls is to eliminate the fall hazard. If this is not feasible, then use at least one of the following:

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- In general, it is better to use fall prevention systems like guardrails, rather than fall protection systems like safety nets or fall arrest devices, because they actually prevent falls.
- Survey the work area for fall hazards before work begins or any time there may be new hazards.
- When workers are exposed to a fall of 6 feet or more above a lower level ensure there is a guardrail, a safety net, and/or a personal fall arrest system in use.

Image: J. Vinton Schafer & Sons, Inc. and CCBC Catonsville/eLCOSH.org

OSHA Standard 1926.502(c)(1) *Safety nets shall be installed as close as practicable under the walking/working surface on which employees are working, but in no case more than 30 feet below such level.*

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When fall hazards are a danger on the job site, remember these safety precautions:

- Cover or guard floor holes as soon as they are created. Floor hole covers should effectively support two times the weight of workers, equipment, and materials that may be on top of them.
- Skylights are considered “holes” and workers must be protected from stepping into, falling onto, or tripping into them.
- Construct all scaffolds according to the manufacturer’s instructions and install guardrail systems along all open sides, and on the ends of the platforms.
- Inspect ladders before use and follow ladder safety guidelines at all times. Position portable extension ladders at least 3 feet above the landing. Ensure that the weight placed on the ladder will not cause it to slip off of its support.
- In hoist areas, if a worker is required to lean through or out over the edge of the access opening to receive or guide equipment and materials, a personal fall arrest system must be used to protect the worker from falling through the unprotected opening.
- Working 6 feet or more above dangerous equipment requires fall protection by guardrails, a safety net, or a personal fall arrest system and when workers must be less than 6 feet above dangerous equipment there must be a guardrail system or equipment guards.

OSHA Standard 1926.501(b)(8)(ii) *Each employee less than 6 feet above dangerous equipment shall be protected from falling into or onto the dangerous equipment by guardrail systems or by equipment guards.*

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