

SAFETY AT WORK

Falls on Stairways

29 CFR 1910.24

What could happen on a stairway?

Workers get hurt on stairs because:

1. They slipped or fell,
2. They tripped over objects on the steps,
3. The stair treads were loose,
4. They were not holding the handrail,
5. The handrails were missing,
6. They were holding objects with one or both hands,
7. The stairway was poorly maintained.

You can prevent falls on stairs by:

1. Maintaining stairway components (foot treads, handrail system, etc.),
2. Using stairs correctly, and
3. Maintaining good housekeeping.

Maintain stairway components

Every flight of stairs with four or more steps must be equipped with **standard handrails**.

- Stairways less than 44 inches wide must have at least one handrail (preferably on the right side descending).
- If a stairway has an **open side**, that side must be protected with standard railing.
- Stairways more than 44 inches must have two handrails.
- Stairways more than 88 inches wide need a handrail on both sides and midway between the sides.



- Where doors open directly onto a stairway, a platform must be provided, and the swing of the door must leave 20 inches of effective width on the platform.

Standard Handrail System

- Stair rails must be between 30 and 34 inches from the upper surface of the handrail to the surface of the stair tread at the front edge of the tread.
- A handrail must consist of a continuous piece of material mounted directly on a wall or partition by means of brackets attached to the lower side of the handrail so it will offer no obstruction to a smooth surface along the top and both sides of the handrail.
- There must be a three-inch space between the handrail and the wall or other projection.
- The brackets supporting the handrail must be spaced no more than 8 feet apart.
- The handrail must be capable of withstanding a load of at least 200 pounds applied in any direction at any point on the rail.

Stair treads

- Are they securely attached?
- Are they structurally sound?
- Are they slip-resistant?
- Is the rise-height evenly spaced?
- Is the stair width the same?
- Is the tread depth the same?
- Is the leading edge of the tread distinguishable from the rest of the step?

Stairway Landings

- Stairway landings must be protected by a standard railing system whenever there is an open side, four feet or more above the adjacent floor or ground. A standard railing includes:

- A top rail and intermediate rail;
- A standard toeboard must be provided whenever a person could pass beneath the landing, where there is moving machinery under the landing, or if falling materials could create a hazard to equipment under the landing;
 - A standard toeboard is 4 inches in height above the floor surface and cannot have a gap between the floor and the bottom of the toeboard of more than ¼-inch.



Use Stairs Correctly

- Hold the handrail as you are ascending and descending stairs.
- Don't carry objects with both hands.
- Stay to the right when others are or may be on the stairs.

- Look for hazards on the stairs (i.e. water or other slippery liquids, boxes, parts or equipment, small objects like nuts & bolts or pens you could slip on).
- Don't run on stairs. Take stairs one step at a time.
- People with new glasses should be extra careful on stairs.

Maintain Good Housekeeping

Proper housekeeping procedures can eliminate stairway slip, trip, and fall hazards.

- Repair or block off stairs that have compromised stair treads or handrails.
- Don't allow employees to use defective stairs.
- Don't allow anyone to leave anything on the stairs.
 - Boxes and other bulky items block access to stairs and can cause workers to trip.
 - Small items like pens and pencils, paper, trash, paperclips, or anything else on stairs can cause workers' feet to slip out from under them and result in a fall.

- Clean up liquids or other slippery substances on stairs as soon as possible.
- Pick up all objects that are left on stair treads or at the top or bottom of stairways.



- Make sure you have good lighting in stairwells ... you can't avoid what you can't see!
- Don't use stairwells or steps as storage areas.