Preventing Slips, Trips, & Falls

OSHA’s Walking & Working Surfaces, & Fall Protection Standards
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Introduction and Purpose

The *Walking/Working Surfaces (WWS) and Fall Protection Standards* basically address:

- General workplace conditions
- Equipment

The regulations that apply to walking working surfaces include:

- OSHA’s General Industry Standards (29 CFR 1910)
- Building and Fire codes from the state and local governments
Injury Prevention

- You take hundreds of steps every day, but how many of those steps do you take seriously?
- The following slides provide an overview of some of these types of hazards, and:
  - How OSHA expects employers to protect employees from slip, trip, and fall hazards, and
  - Other tips on how to manage these potential hazards.
Walking/Working Surfaces – Primary Hazards are...Slips, Trips and Falls

About 20% of all workplace injuries are the result of a slip, trip, or fall.
SLIPS!! : to slide along smoothly resulting in a sudden mishap.

- Weather conditions cause the floors to be wet or the ground to be icy.
- Wet, greasy, or soiled floors.
TRIPS!!: to catch the foot on something so that you stumble.

Tripping over:
- Cords
- Equipment
- Furniture
- Uneven floor mats
- Unseen or unexpected objects
FALLS!!: to descend freely by the force of gravity.

Falling:
- From heights > 4'
- From ladders
- From lifts
- Into or through holes
- From elevated walkways and ramps
- From elevated platforms and walking/working surfaces
- Into dangerous equipment.
- From the unexpected.
Types of Walking/Working Surfaces

- Examples of walking/working surfaces include:
  - Sidewalks
  - Floors, isles/passageways, ramps
  - Mezzanines and other elevated walkways and storage areas
  - Roofs and skylights
  - Holes and pits
  - Fixed industrial stairs
  - Fixed ladders
  - Portable ladders
  - Lifts
Housekeeping

- Floors, isles, and passageways must be as clean and orderly as possible.
- Drains in wet areas are often required to keep things dry, especially if you have wet processes (e.g., in a kitchen).
- Equipment, materials, or construction must not obstruct foot traffic.
Housekeeping

Sanitation (condition of floors) is the #1 OSHA violation/citation under the Walking/Working Surfaces and Fall Protection Standards. Why? Because it causes a large number of injuries, it is easy to identify, and almost as easy to correct!
Housekeeping—Inside the Building

Open file drawers pose trip and fall hazards.
✓ Remember to close drawers after you are done.

Cords that are unseen can pose trip hazards.
✓ Use cord-keepers.
✓ Keep cords out of isles and walkways.
Housekeeping-Outside of a Building

Snow and ice present serious slip and fall hazards. Make sure walks and parking lots are routinely:

☑ Clear and treated with ice melt.

☑ Use door wet mats used to keep the snow and moisture “outside.”

Winter weather accidents result in some of our most severe injuries.

How can you protect yourself?
Equipment and Isle Set-up

Improper aisle widths coupled with poor housekeeping and vehicle traffic can cause injury to employees, damage the equipment and material, and can limit your egress in emergencies.

✓ Where mechanical handling equipment is used, aisles must be sufficiently wide, and marked with visible and permanent markings.
Load Ratings

It is unlawful to place, or cause, or permit to be placed, on any floor or roof of a building or other structure, a load greater than that for which such floor or roof is approved.

- Load rating limits must be marked on plates and conspicuously posted.
- This rule applies to mezzanines, elevated storage, and even storage racks.
- This rule also applies to ladders, lifts, and other elevated equipment used to walk on or work from.
Floor/Wall Openings and Holes

Floor/wall openings and holes, open-sided platforms and ramps and runways, and roofs, might create hazards.

People might fall through the openings or over the sides to the level below.

Objects, such as tools or parts, could fall through the holes and strike people or damage machinery on lower levels.
General – Marking and Covers

- Where there are minor breaks in elevation, mark the area to highlight it
- Provide adequate covers to protect pipes or cords resting on floors
  - Bright, contrasting colors work best
**Stairs**

Damaged steps or misplaced items are major factors in trips.

- Make sure that steps you use often are in good shape
- Remove items that do not belong on the steps, and get them out of the way.
- Use handrails when ascending or descending stairs.
Ladders

Various types of ladders include:

**Stepladder**- A self-supporting portable ladder, non-adjustable in length, having flat steps and hinged back.

**Single Ladder**- A non self-supporting portable ladder, nonadjustable in length, consisting of but one section. Its size is designed by overall length of the side rail.

**Extension Ladder**- A non self-supporting portable ladder adjustable in length.

**Fixed Ladder**- A is a ladder permanently attached to a structure, building or equipment.

There are specific design and dimension requirements for ladders, and the regulations must be reviewed carefully and in detail before installing them.
Question-Ladders

What is the #1 killer when working with ladders?

Contacting electrified power sources.
Ladder Safety

- Ladders present unique opportunities for unsafe acts and unsafe conditions.
- Ladder users must be trained on how to:
  - Select
  - Inspect
  - Set-up
  - Use
  - Store....

.......and work safely with ladders.
#1 Ladder Selection

Consider:

➤ Height—is it tall enough?

➤ Type—wood, metal, or fiberglass? If you are working with or near electrical hazards, NEVER use a metal ladder.

➤ Is the ladder used for just climbing, or do you have to work from it? Straight ladders are for climbing; step ladders are platforms you may work from.

➤ How much weight can you place on a ladder? All ladders are load rated, and you must make sure you do not exceed load limits.
#2 Ladder Inspection

Make sure you inspect a ladder before you use it. Look for:

- Split rails and rungs
- Loose connections and rivets
- Nails, splinters, or other materials that protrude from it
- Bends in metal ladders
- “Wobbles”

 ✓ If a ladder does not pass inspection or you think it is unsafe to use, you must label it with the words “Danger. Do not use.”
#3 Ladder Set-Up

Steps ladders:
- Spread must be locked
- Don’t “lean” it against a wall to work from

Straight ladders:
- Follow the 4:1 set-up rule
- Allow 3’-4’ of overlap at the top (if not, block, brace or tie-off the ladder)

All ladders:
- Set on firm and level ground
- Keep materials away from base

Don’t use your back to pick up a ladder; use legs to lift it.

Get a second person to help you carry a heavy ladder.
#4 Ladder Use

- Maintain 3 points of contact when climbing.
- Do not carry tools/materials in your hands when climbing.
- Face the ladder when climbing or working from it.
- Use every rung when climbing.
- Do not sit on a ladder.
- In general, one person per ladder.
- Use all locks, levels, and safety devices.

- Chairs and stools must never be used as a “ladder.”
- Always work within the rungs of a ladder—do not lean out.
- Do not leave a ladder unattended.
#5 Ladder Storage

- Secure the ladder
  - Protects the ladder, and prevents theft or misuse
  - Secure in racks
- Prevent sagging and warping
- Protect from sun, moisture and chemicals
- Don’t hang materials from ladders in storage
Falling Object Protection

If you are working with objects that may strike those below, you must:

- Attempt to restrain objects from falling (and that includes preventing yourself from falling!).
- Keep objects away from edges where they could fall off.
- Barricade off the area below to keep people out of the immediate work area (e.g., orange cones around ladder work).
- Let people know what you are doing...give them fair warning.

If you are working below someone, and objects may fall and hit you, make sure you wear a hard hat.

- Stay out of the work area if you can.
Footwear

Use good judgment with regard to footwear while on duty. Be certain footwear is in good condition and appropriate to your job function and work conditions.
One thing to remember about most slip, trip, and fall hazards.........

They are quite preventable.  
Consider this an appeal to common sense.
Summary

OSHA has additional standards related to preventing slips, trips, and falls.
✓ You may also need to thoroughly review the regulations whether you are working in an office environment or on a construction site.

➤ You can find more information about these regulations on OSHA’s website at: