

# Walking and Working Surfaces



**29 CFR 1910.21-30**  
**Subpart D**

# NATIONAL STATS

- ✘ Slips, trips, and falls constitute the majority of general industry accidents.
- ✘ 15% of all accidental deaths are related to slips, trips, and falls. These are second only to motor vehicles as a cause of fatalities.

- ✘ Slips, Trips and Falls are the second leading cause of injury in Riverside County and cost on average \$15,000 each

# TOP 10 SLIP TRIP AND FALL HAZARDS

- ✘ Contaminants on the Floor
- ✘ Indoor Walking Surface Irregularities
- ✘ Outdoor Walking Surface Irregularities
- ✘ Weather Conditions: Ice and Snow
- ✘ Inadequate Lighting
- ✘ Stairs and Handrails
- ✘ Stepstools and Ladders
- ✘ Tripping Hazards: Clutter, Loose Cords, etc.
- ✘ Improper Use of Floor Mats and Runners
- ✘ Poor Drainage: Pipes and Drains

# 1910.22 GENERAL REQUIREMENTS

- ✘ The OSHA standards apply to all places of employment. Employers must ensure:
- ✘ Passageways, storerooms, service rooms, and walking-working surfaces are kept clean, orderly, and in sanitary condition.

# OSHA Walking and Working Surfaces Standard: Subpart D 1910.22: Housekeeping

Good housekeeping includes picking up, wiping up, and cleaning up.



**Requires that all places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.**

# CONTAMINANTS ON THE FLOOR



# INDOOR WALKING SURFACE IRREGULARITIES





TRIP HAZARD?



A photograph of an office floor covered in a textured, reddish-brown carpet. In the upper right corner, a person's feet wearing brown work boots and blue jeans are visible, standing on a circular, olive-green mat with a pattern of small yellow dots. The mat is partially under a grey office chair. The carpet appears slightly worn and uneven. A white rectangular box is centered on the carpet, containing the text "TRIP HAZARD?".

**TRIP HAZARD?**



TRIP HAZARD?





**MORE TRIPPING  
HAZARDS:  
CLUTTER, LOOSE WIRES,  
ETC.**





**TRIP HAZARD?**

A photograph of a loading dock area. A concrete curb runs across the top of the frame, with several black bumper blocks attached to its side. The floor is dark asphalt with yellow parking lines. There is a significant amount of debris, including wood shavings, plastic, and other trash, scattered along the curb and on the floor. A yellow pallet jack is visible on the left side. In the center, a white rectangular box contains the text "TRIP HAZARD?".

TRIP HAZARD?

# SIDEWALKS AND WALKWAYS 1910.22

- ✘ General Requirements
  - + Sufficient safe clearance maintained where mechanical handling equipment is used
  - + Aisles and passageways kept clear and in good repairs
  - + No obstruction across or in aisles that could create a hazard





**SLIP HAZARD**



TRIP HAZARD?





TRIP HAZARD?



TRIP HAZARD?

## **1910.30(b)(2)**

**Aisles shall be provided of sufficient width to permit the free movement of employees bringing and removing material. This aisle space is to be independent of working and storage space.**



# COVERS AND GUARDRAILS 1910.22 (C)

- ✘ General Requirements
  - + Shall be provided to protect workers from the hazards of open pits, tanks, vats, ditches, etc.



# OPEN-SIDED FLOORS 1910.23 (C)(1)

- ✘ General Requirements
  - + Every open-sided floor or platform 4 feet or more guarded on all open sides except where there is entrance to a ramp, stairway, or fixed ladder.



A photograph showing a raised floor access panel with a yellow border. The panel is open, revealing a large, disorganized bundle of white cables protruding from the space below. The cables are piled together and some are draped over the edge of the panel. The surrounding floor is a light-colored, textured material. A white text box with black text is overlaid on the center of the image.

**TRIP HAZARD?**

# STAIRWAYS 1910.23 (D)(1)

## ✘ General Requirements

- + **Every flight of stairs having four or more risers (4 feet or higher) shall be equipped with standard stair railings or standard handrails.**

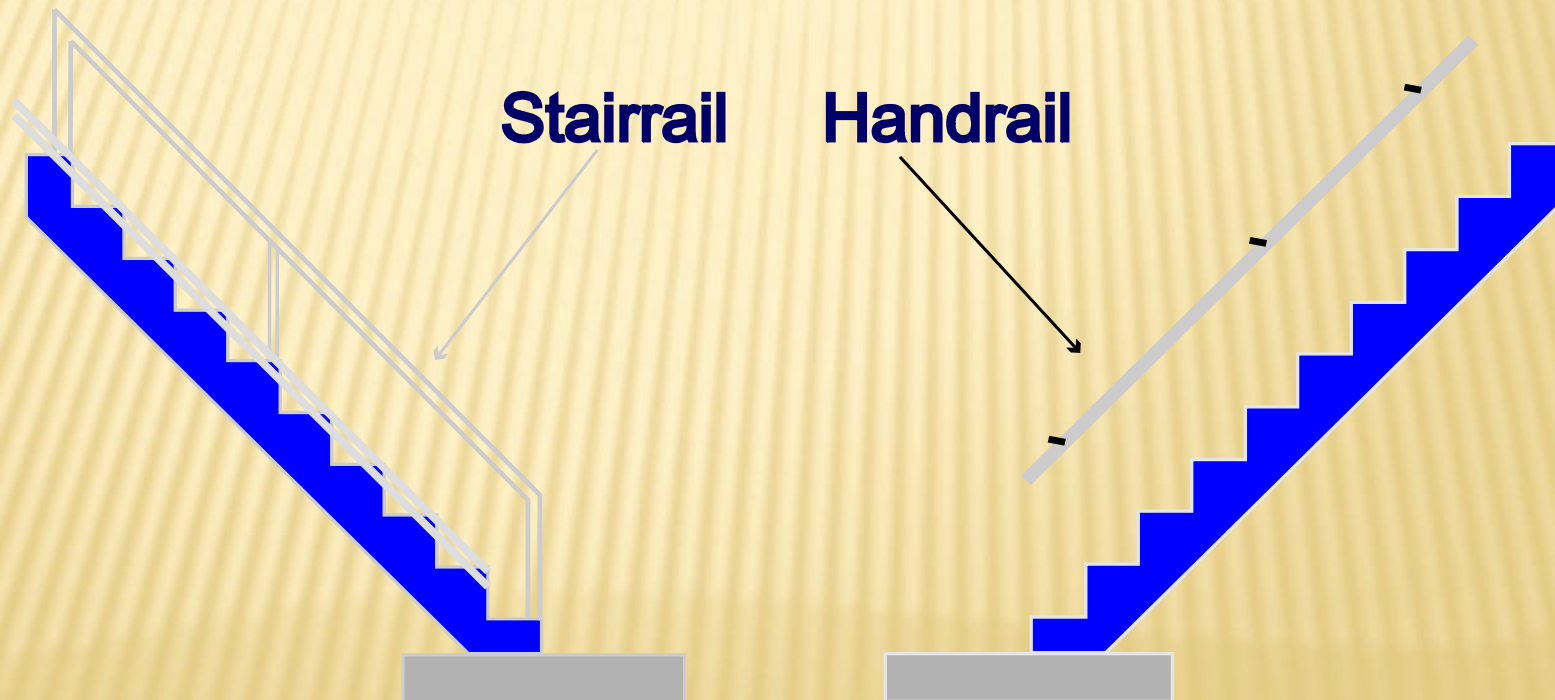




# RAILINGS 1910.23 (E)(2)

## ✘ General Requirements

- + A stair railing shall be not more than 34 inches nor less than 30 inches from upper surface of top rail to surface of tread in line with face of riser at forward edge of tread.



# FIXED STAIRS 1910.24 (B)

- ✘ General Requirements
  - + Provided for regular travel between levels
  - + Where equipment requires attention routinely
  - + Fixed stairs provided where access to elevations is daily
  - + For work around acids, caustics, gases, or other harmful substances



# USING HAND RAILS PREVENTS FALLS...

FALL HAZARD?

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# FIXED STAIRS 1910.24 (F)

## ✘ General Requirements

- + "Stair treads." All treads shall be reasonably slip-resistant and the nosings shall be of nonslip finish.
- + Rise height and tread width shall be uniform throughout any flight of stairs including any foundation structure used as one or more treads of the stairs.





FALL HAZARD?

A photograph of a utility room with a metal ladder leading to a yellow door. The door has a sign that says "ROOF ACCESS". The room contains various pipes and conduits. The text "FALL HAZARD?" is overlaid on the image.

FALL HAZARD?

# PORTABLE LADDERS 1910.25 AND 1910.26

## ▶ Types of Stepladders

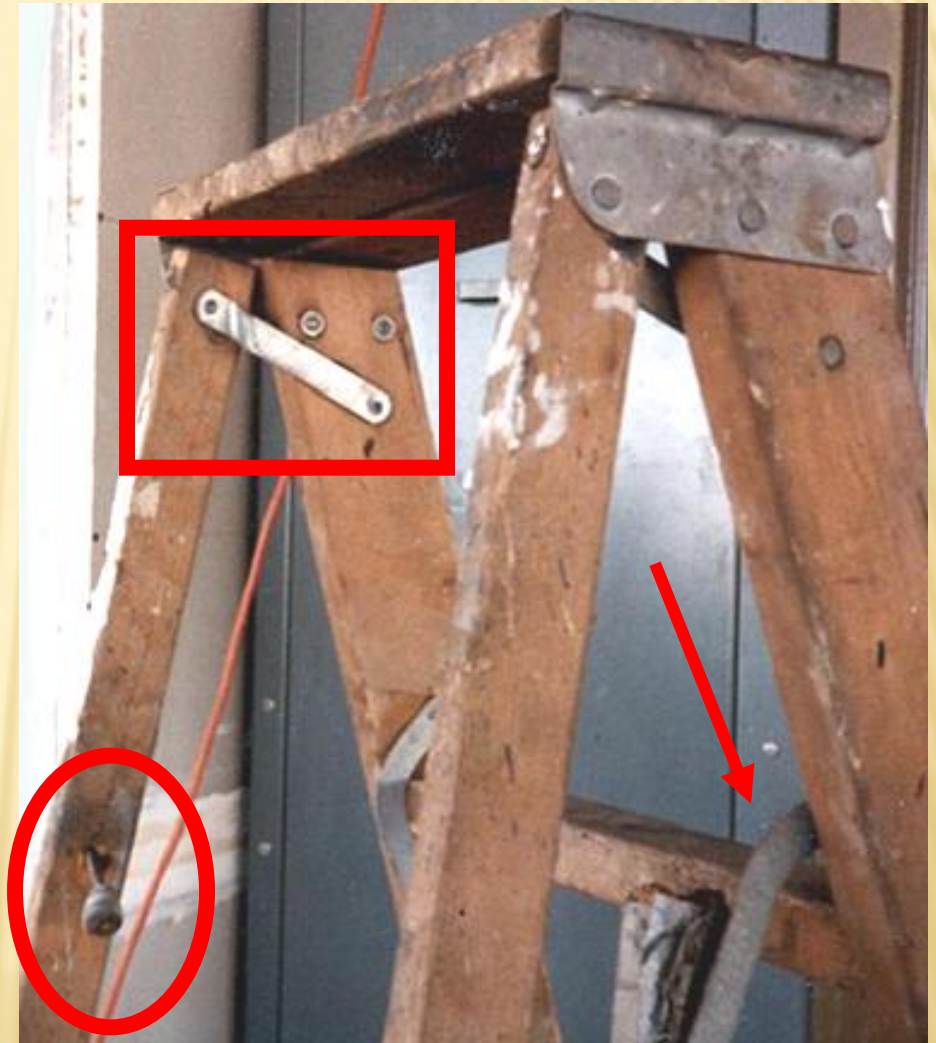
- Type I – Industrial stepladder
  - 3 to 20 feet for heavy duty use, such as utilities, contractors, and industrial use
- Type II – Commercial stepladder
  - 3 to 12 feet for medium duty use, such as painters, offices, and light industrial use
- Type III – Household stepladder
  - 3 to 6 feet for light duty, such as light household use



# PORTABLE LADDERS - INSPECTION

## 1910.25

- ✘ General Requirements
  - + Ladders inspected frequently
  - + Those with defects withdrawn from service for repair or destruction and tagged or marked as **"Dangerous, Do Not Use."**





# PORTABLE LADDERS – INSPECTION 1910.25



- ▶ General Requirements
  - Ladders with broken or missing steps, rungs, or cleats, broken side rails, or other faulty equipment shall not be used;
  - Improvised repairs shall not be made

# PORTABLE LADDERS 1910.25

- ✘ General Requirements
  - + Ladders must not be placed in front of doors opening toward the ladder unless the door is blocked upon, locked, or guarded.



# PORTABLE LADDERS 1910.25

- ✘ General Requirements
  - + Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height;



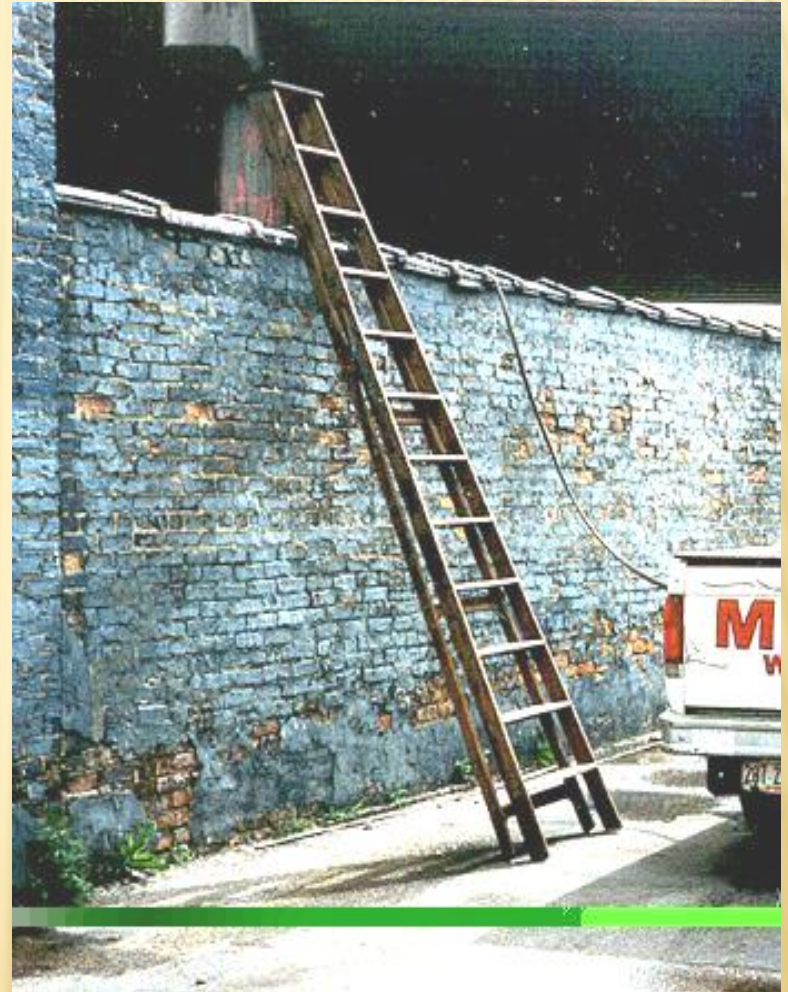
# PORTABLE LADDERS 1910.25

- ✘ General Requirements
  - + Extension ladders used to access roof must clear roof line by minimum of three feet
  - + Extension ladders used to access roofs and overhead working heights must be secured.



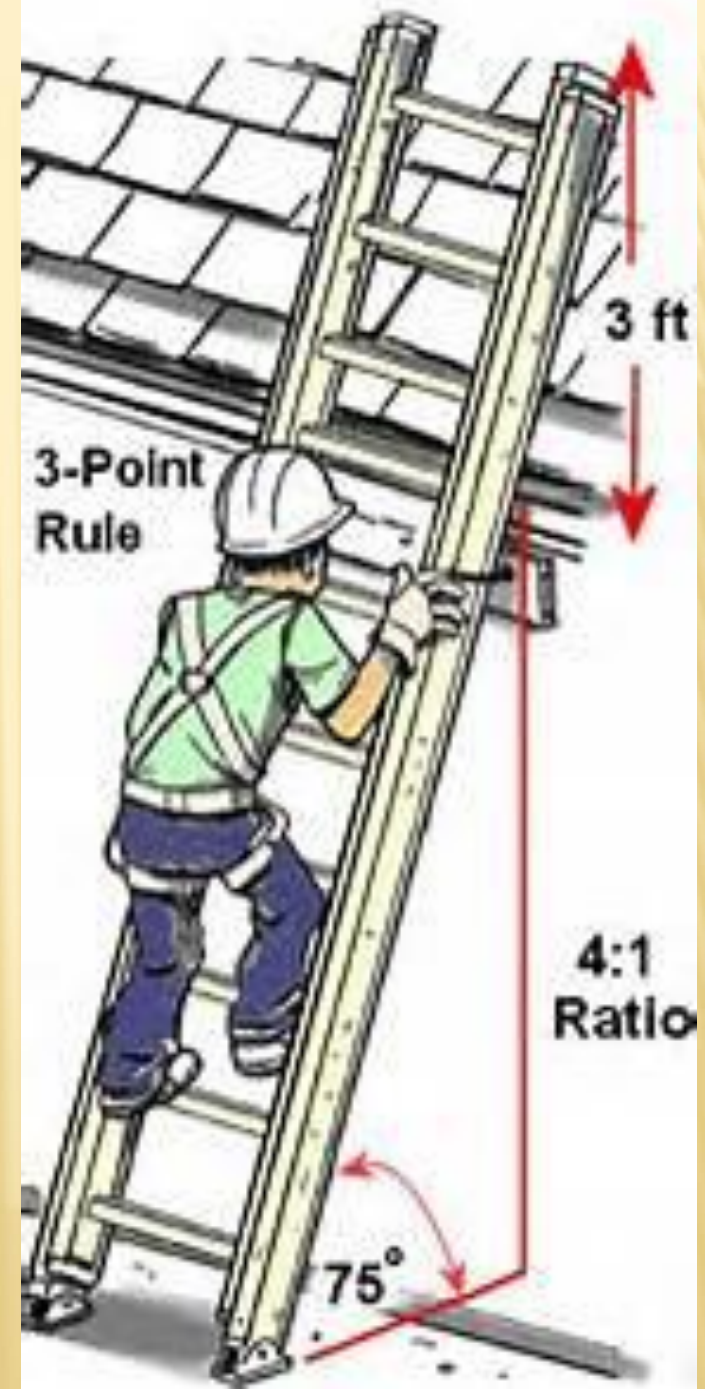
# Use of Ladders 1910.26

- ▶ General Requirements
- Portable ladders are designed as a one-man working ladder based on a 200-pound load minimum.
- The ladder base section must be placed with a secure footing.
- The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment.



# Use of Ladders 1910.26

- ▶ General Requirements
- 4:1 Ratio
- When ascending or descending the climber must face the ladder.
- Maintain three points of contact when climbing up and down



# Use of Ladders 1910.26

- ▶ General Requirements
- Use the right ladder for the job
- Never use a step ladder as an extension ladder



# Use of Ladders 1910.26

- ▶ Never stand on the top of a step ladder





# Summary

- ▶ Slips, trips and falls can be prevented
- ▶ Watch where you are walking
- ▶ Always use stair hand rails
- ▶ Practice good housekeeping
- ▶ Identify slip, trip and fall hazards inside and outside during inspections
- ▶ Sign, mark off, barricade hazards
- ▶ Report hazards in writing
- ▶ Inspect the hazard until eliminated or mitigated

