

# WALKING / WORKING SURFACES

UNIT 3  
OCCUPATIONAL SAFETY  
HEALTH ADMINISTRATION



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## Introduction to Walking/Working Surfaces

- ▶ Falls cause the majority of general industry accidents and are responsible for many of the accidental deaths. More fatalities result from falls than any other cause, except for motor vehicle accidents.
- ▶ Standards for walking and working surfaces apply to all permanent places of employment, except workplaces where only domestic, mining, or agricultural work is performed.



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## OSHA General Requirements

OSHA's general requirements are designed to help keep your workplace safe and free of clutter. OSHA addresses four different areas:

- ▶ **Housekeeping**
  - Workplaces must be kept clean, orderly, and sanitary.
  - Workroom floors must be kept as clean and dry as possible.
- ▶ **Aisles and Passageways**
  - Aisles and passageways must be kept clear, and any obstructions that could cause a hazard must be removed.
  - Permanent aisles and passageways must be clearly marked.
  - Aisles must be sufficiently wide where mechanical handling equipment is used.



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## OSHA General Requirements (continued)

### › Covers and Guardrails

- Covers and/or guardrails must be provided to protect workers from the hazards of open pits, tanks, vats, ditches, etc.

### › Floor Loading

- Load ratings must be marked on plates and be clearly posted.
- The load rating limit must never be exceeded.



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## Guarding Against Hazards

- › There are several different kinds of hazards you might encounter on walking and working surfaces in the workplace. Various methods exist for guarding against each one and preventing accidents and falls. The most common methods of guarding walking/working surfaces are standard railings and standard toeboards.



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## Railings and Toeboards

- › A standard railing consists of a toprail, midrail, and toeboard.

- **Toprail:** A standard railing should measure **42** inches from the upper surface of the top rail to floor level.

- **Midrail:** A standard railing should include a midrail located **21** inches above floor level.

- **Toeboard:** A standard toeboard should be **4** inches high, with no more than  $\frac{1}{4}$  inch clearance above the floor.



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## Surface Hazards

### • Floor Openings

Floor openings are a common hazard. If they are not properly guarded, workers or equipment could fall through them, potentially causing serious injury or even death. There are three different kinds of floor openings:

#### • Typical Floor Opening

A typical floor opening is an opening measuring 12 inches or more in its least dimension, located in a floor, platform, pavement, or yard. Falling through a floor opening could cause serious injury. To be properly guarded, a floor opening should have both a standard railing and a standard toeboard.



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## Surface Hazards

### • Stairway Floor Opening:

Stairway floor openings occur when there is a stairway that descends below the floor level. Stairway floor openings must be guarded by a standard railing on all exposed sides, except at the entrance.



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## Surface Hazards

### • Ladderway Floor Opening:

Ladderway floor openings occur when a ladder descends below floor level. Ladderway floor openings must be guarded with a standard railing and toeboard on all exposed sides, except the entrance.



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## Surface Hazards (cont)

### ▶ Floor Holes

- Floor holes are another common walking and working surface hazard. A floor hole is an opening in the floor, platform, pavement, or yard measuring less than 12 inches but more than 1 inch in its least dimension, through which materials could fall.
- Every floor hole that is a potential hazard must be protected by either a standard railing with toeboard or a cover.



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## Surface Hazards (cont)

- ▶ Wall openings can also present a hazard in the workplace. Any wall opening at least 30 inches high and 18 inches wide from which there is a drop of more than 4 feet must be guarded with a standard railing and toeboard.
- ▶ Open-sided floors, platforms, walkways, and runways can pose a potential fall hazard as well. Open-sided floors or platforms 4 feet or more above the adjacent floor or ground level must be guarded by a standard railing on all open sides, except where there is an entrance to a ramp, stairway, or ladder.



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## Surface Hazards (cont)

- ▶ Regardless of height, a standard toeboard must also be used to guard open-sided floors, platforms, walkways, and runways when they are located above or adjacent to dangerous equipment, pickling or galvanizing tanks, degreasing units, or similar hazards.



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## Spills

- ▶ Spills occurring on the working surface can be just as dangerous as unmarked openings.
- ▶ Spills should be marked or blocked off as soon as they occur. They should remain marked until the spill has been properly cleaned up.
- ▶ Cleaning up a spill should commence immediately after the spill and after it has been marked.



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## Footwear

- ▶ The proper footwear must be worn in the work area to reduce the risk of slipping or tripping over hazards.
- ▶ Open-toed shoes, such as sandals, may be comfortable to wear, but they provide little to no protection in the workplace. To prevent injury, wear closed-toed shoes at all times.



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