

Lesson Plan
General Industry Training Program (10-hour)

Topic: Walking – Working Surfaces

Overview of the OSHA Standard

Slips, trips, and falls constitute the majority of general industry accidents. They cause 15% of all accidental deaths, and are second only to motor vehicles as a cause of fatalities. The OSHA standards for walking and working surfaces apply to all permanent places of employment, except where only domestic, mining, or agricultural work is performed.

Step 1: Planning the Lesson

• Instructional Materials.

1. PowerPoint presentation
2. Instructor notes.
3. Other materials.

• Instructional Objectives.

1. Complete the required topics for the OSHA 10-hour course.
2. Complete the following optional topics:
 - a.
 - b.
 - c.
3. Present *Walking/Working Surfaces* to [number] participants.
4. Incorporate active participation in each lesson.
5. Provide a quiz or short evaluation at the end of the course.
6. Ensure feedback from participants at various points in the training.

• Guest Speakers/Presenters and Topics/Responsibilities.

Step 2: Presenting the Lesson

• Lesson Introduction

Introductory remarks or transition from previous lesson.

- **Learning Objectives/Outcomes.**

Upon completion of the lesson, participants will be able to:

1. Define the terms: **floor hole, floor opening, wall opening, standard railing and standard toeboard.**

Possible responses.

- Floor hole. An opening in the floor, platform or pavement that measures less than 12 inches, but more than 1 inch; and through which materials – but not people - may fall.
 - Floor opening. An opening in the floor, platform or pavement that measures 12 inches or more, and through which persons may fall.
 - Wall opening. An opening in a wall or partition that is at least 30 inches high and 18 inches wide, and through which persons may fall.
 - Standard railing. Consists of a top rail, mid rail and posts. The height from the upper surface of the top rail to the floor level is 42 inches. Mid rail height is one-half as high as the top rail (21 inches).
 - Standard toeboard. Blocks an opening along the base/floor of stairs or other walking or working surfaces where materials or body parts might otherwise inadvertently fall through. It should be 4 inches high, with not more than ¼ inch clearance above the floor.
2. Discuss at least 5 requirements to consider in order to avoid walking/working surface hazards related to floors, walls, holes, stairways, platforms and ladders or scaffolding.

Possible responses.

- Keep floors and walking/working areas free of debris, spills, spent materials, and stored materials; always use good housekeeping practices.
- Mark permanent aisles and passageways and keep clear of obstructions.
- Don't exceed the maximum load rating of floors and walking/working surfaces.
- Ensure there are no uncovered or unguarded openings through which a person or materials may fall.
- Guard all open-sided floors or platforms 4 feet above the adjacent level.
- Regardless of height, guard all open-sided floors, walkways, platforms, or runways when above or adjacent to dangerous equipment.
- Install proper handrails for flights of stairs with four or more risers.

- **Learning Objectives/Outcomes (Continued)**

(Continuation of possible responses for Objective 2.)

- Follow recommended practices for using ladders, including:
 - Extend the ladder at least 3 feet above point of support
 - Inspect regularly; withdraw defective ladders from use, and tag or mark
 - Never use a ladder in horizontal position as scaffolds or work platforms
 - Never use metal ladders near electrical equipment
- Follow recommended practices for using scaffolds, including:
 - Do not alter or move the scaffold while in use
 - Protect workers from overhead hazards
 - If scaffold is higher than 10 feet, use guardrails, midrails and toeboards
 - Use wire mesh between guardrails and toeboards if people work or pass underneath
 - Equip the access with a ladder or the equivalent

References

OSHA Standard

- 29 CFR 1910 Subpart D (1910.211 to 1910.219)
 - http://www.osha-slc.gov/OshStd_toc/OSHA_Std_toc_1910_SUBPART_D.html

OSHA Publications

- <http://www.osha-slc.gov/OshDoc/Additional.html>
- 3124 Stairways and Ladders

OSHA References/Resources

- OSHA's Small Business Outreach Training Program - Walking/Working Surfaces
 - <http://www.osha-slc.gov/SLTC/smallbusiness/sec15.html>
- OSHA Technical Links - Walking/Working Surfaces
 - <http://www.osha-slc.gov/SLTC/walkingworkingsurfaces/index.html>
- Self-Inspection Checklists
 - <http://www.osha-slc.gov/SLTC/smallbusiness/chklist.html#Walking>