

Walking and Working Surfaces

Introduction

Walking and working surfaces, such as floors, stairs and ladders, are associated with slip, trip and fall accidents. One in every six lost-time injuries in Ontario is caused by a fall. Same-level slips and falls account for 65% of all fall injuries (WSIB, 2003).

Accident Causes

The following are some walking and working surface conditions that contribute to slip, trip and fall accidents:

- Movement of underfoot surfaces (e.g., mats or ladders).
- Collapse or breakage of support structures (e.g., floorboards, duckboards, ladder rungs, scaffolding or climbing/cradle ropes).
- Floor surfaces – holes or depressions in floors, slopes, loose flooring, protruding objects, uncovered drains or pits, curbs, bent floor boards or plates, loose or poorly fitted grating, sagging floor supports, poor drainage.
- Slippery floor surfaces because of composition, age, finish, or lack of maintenance.
- Sudden change in traction brought about by walking from one floor surface (e.g., carpeted floor) to another (e.g., tiled floor).

- Stairs – steep, irregular treads, missing or worn treads, clutter, no handrails, poor or uneven lighting, glare from windows, distraction (e.g., signs or posters) in the area of the stairwell, doors that block the stairs when open.
- Extension cords, power cables, air hoses, pipes or conduits set near the floor.
- Projecting parts on machines or equipment.
- Ladders/scaffolds – improperly used, not properly maintained.
- Seasonal conditions – snow, ice, rain or mud on walking surfaces.

Applicable Legislation

Regulations for Industrial Establishments made under the Occupational Health and Safety Act:

- s.11: Floors, condition of
- s.15: Floor, openings in
- s.85: Falls from heights
- s.86: Falls into liquid
- s.13: Guardrails, where required
- s.14: Guardrails, specifications
- s.18: Ladders – fixed
- s.73: Ladders – portable
- s.17: Walkways

Controls

The following are some measures you can take to make walking and working surfaces safe and thus eliminate or reduce the occurrence of slips and falls in your workplace:

In-plant

- Install non-slip surfaces especially around machinery and equipment where spills may occur, on stairs and ramps, and in lunch rooms and aisles.
- Provide duckboards or other non-slip footing in frequently wet areas. Install drip pans.
- Provide proper lighting, particularly on stairs.
- Repair or replace worn or damaged stair treads.
- Clearly identify steps, ramps and other elevation changes.
- Provide proper storage facilities.
- Ensure that employees:
 - Wear clothing that is properly fitted and will not present a trip hazard (e.g., longer trouser cuffs).
 - Wear appropriate footwear.
 - Store heavy objects in accessible areas.
 - Do not carry loads that obstruct their view.
 - Refrain from horseplay.

Outside Areas

- Loading dock – mark the edges with yellow warning lines. Caution employees to watch for the edge. Employees must never jump down and should use the stairs.
- Keep stairs, ramps (including wheelchair ramps), and walkways clear and in good condition.
- Maintain parking lots. Caution employees to watch for holes, concrete divider bars, curbs, discarded cans, and other tripping hazards.
- Sand or salt ice patches on walking and working surfaces.

Offices

- Make sure that there are no turned up or worn patches in carpets.
- Place telephone cords, cables, etc., out of the way of traffic, or tape them down.
- Arrange furniture so that it does not create an obstacle.
- Apply non-slip coatings to uncarpeted floor areas (e.g., washrooms).
- Instruct employees to keep desk and file drawers closed when not in use. Caution them to be alert to hazardous floor conditions and changes in floor surfaces. Materials may become slippery with wear, and the wear may be uneven, creating further hazards.

Personal Factors

Everyone should take the following precautions:

- Walk at a safe speed, watch where you are going, change direction carefully. Do not run.
- Follow safe procedures, and use your protective equipment (e.g., appropriate footwear).
- Use a flashlight or extension light in dim or unlit areas.
- Be alert at all times.

Administration

- Establish and enforce procedures for immediate cleanup of spills, waste disposal, parts and equipment storage, ladder and scaffold safety, and for the reporting and correction of slip and trip hazards.
- Post warning signs in slippery areas.
- Review accident records periodically (where and how have slips and falls occurred, have conditions/contributing causes been addressed?).
- Provide permanent access to high places that must be reached regularly.

Checklist

This is a sample of an inspection checklist for walking and working surfaces. It may also be used as a pre-shift check. Modify the checklist to suit your needs.

Acceptable ✓ Unacceptable ×	Dates of Inspection											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ladders (secure, condition)												
Scaffolds (secure, condition)												
Ropes/cables (condition)												
Stairs (lighting, clear, condition)												
Floors (holes, spills, clutter)												
Projecting machine parts												
Washrooms (neat, clean)												
Lunch rooms (clean, tidy)												
Loading dock (surface conditions, work practices)												
Outside stairs, walkways (condition, clear)												
Parking lot (condition)												
Office (carpet, telephone cords, equipment, power lines)												
Appropriate footwear												
Reporting procedures posted/enforced												
Warning signs posted/barriers erected												
Written procedures/standards for safety of walking/working surfaces												
Initials of person making inspection												

Notes:

References:

WSIB, Prevention: Slips and Falls Fact Sheet, March 2003.

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Revised: May 2008

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