

Protecting Against Fall Hazards in Construction

What's at Stake?

Workplace falls cause a significant number of lost workdays, injury, suffering and even death. In Canada, an average of 100 workers suffer fall injuries each day, leading to 60 deaths and over 40,000 work days lost each year. In the US, falls are consistently at or near the top of causes of worker deaths in the construction industry.

What's the Danger?

A "vertical fall" is typically something that occurs between two different levels (i.e. falling from a roof to the ground) compared to a "horizontal fall" which occurs on the level upon which a person is standing or moving (i.e. running and tripping). Vertical falls cause most of the significant injuries and fatalities. Falling only a relatively short distance can lead to significant, long-term illness, disability or death. The way a person lands, or the surface they land on, can be the difference between walking away uninjured or permanent paralysis.

On construction sites, hazards include:

- Sloping, slippery roof.
- Overreaching to carry out work.
- Uncovered floor or wall openings.
- Falling from, or onto machinery.
- Falling into deep water - physical injury hitting the water, drowning.
- Being inadequately trained to use specialist fall prevention equipment.

How to Protect Yourself

7 easy ways to protect against falls from heights:

1. Know the safety regulations about when fall protection is required, based on:
 - How high up you will be working - typically 3 meters/6 feet (or higher);
 - The surface or platform you are working on (e.g., vehicles, scaffolds, sloped roofs);

- What you are at risk of falling through, on or into (e.g., machinery, hard surfaces, water).
2. Check if a site-specific fall protection plan is required and in place.
 - If there is a plan, know it and follow it.
 3. Notice physical barriers:
 - Guardrails - strict guidelines are in place including the minimum heights, gap between rails and materials used.
 - Protective coverings over openings.
 - Safety nets.
 4. Take notice of warning signs.
 5. Use appropriate active fall protection systems correctly.
 - Fall restraint system.
 - Preferred system as they prevent falling.
 - Fall arrest systems:
 - Limit the distance of the fall.
 - Risk of injury from system when worker comes to an abrupt stop.
 - Risk of suspension trauma after the fall.
 - Emergency rescue plan for suspended workers must be in place.
 6. Use PPE to reduce the injury risk if a fall happens.
 - Hard hats.
 - Knee/elbow pads.
 - Lifejackets if working over deep water.
 7. Complete any required courses to keep you safe when working at heights and attend regular training.

Final Word

Vertical falls on construction sites are a common cause of injury and worker deaths. Procedures, processes and equipment must be in place on all construction sites to prevent falls. And, workers must wear and use fall protection equipment consistently and correctly to protect themselves if they do fall.

TEST YOUR KNOWLEDGE

1. The only factor in determining if fall protection equipment is needed is how high you will be working.
☐ True ☐ False
2. Life jackets are required when working over deep water.
☐ True ☐ False
3. Falls are the leading cause of workplace death in Canada and the US.
☐ True ☐ False
4. Hardhats and knee pads help prevent falls.
☐ True ☐ False

What Would You Do?

You are working on a 5-story building with a sloping roof. Scaffolding is all around the building. After a sudden storm it is noticed that a piece of roofing metal has not been fully secured. The rain and wind have stopped but the roof is still wet from the rain. It needs a minor fix that will take 2 minutes to do. What would you do?

Meeting materials to go:

Safety meeting materials such as presentation tips, PowerPoint presentations, quiz answers and more are downloadable at www.SafeSupervisor.com

PREPARATION TIPS

- 1 Pass around the Attendance Sheet.
- 2 Review the fall protection program and policies with workers and have examples of fall protection plans to show the workers.
- 3 Show photos and ask the workers:
 - “What fall prevention measures are missing from this picture?”
https://commons.wikimedia.org/wiki/File:Construction_workers_not_wearing_fall_protection_equipment.jpg
 - “What fall prevention measures can be seen in this picture?” “Are there any missing?” https://cdn.pixabay.com/photo/2016/05/21/21/39/house-construction-1407499_960_720.jpg
- 4 Ask workers “Have you had, or seen, any vertical falls, or near misses?”
- 5 If practical, take a walk around the site and get workers to identify examples of fall prevention measures and potential risks.

[illegible]

CHECKLIST

- Provided extra training to workers who did poorly on quiz
Date: _____
- Observed workers
Date: _____
- Refresher training
Date: _____
- Other (describe)

[illegible]

Date: _____

Date: _____

Location: _____

Meeting conducted by: _____

MEETING WAS ATTENDED BY: Each participant is to sign below, for record kept on file.

[illegible]

Answers to T201805-03 Quiz: 1. False, 2. True, 3. True, 4. False