

# Fall protection systems and weather

## OHS information for employers, supervisors and workers

### KEY INFORMATION

- Slips, trips and falls are a primary concern for all workplaces since they comprise a majority of injuries.
- Ensure all fall protection equipment and systems are inspected and maintained before use.

Working at heights occurs both indoors and outdoors. When outdoors, you and the fall protection system that protects you may have to deal with changing conditions that can also change the hazards you face. This resource will explain how (extreme) weather conditions can influence the use and function of various fall protection systems and some tips on how to handle those situations.

### How can weather affect fall protection systems?

When working at heights, ensure you are prepared, have received instruction, and that you're adequately trained in the use of the fall protection system as per legislative requirements. An explanation by the responsible party regarding the tasks, hazards and processes to those carrying out the work is essential when working at heights.

Every type of weather has its own effect on equipment, and can have negative effects to functionality and use of fall protection systems. This may be the case for permanent anchorage systems, temporary anchors and even scaffolding. Always tag out and remove any defective equipment.

### Rain

Rain, as well as creating wet and slippery surfaces, can cause erosion to fall protection systems. A fall protection system may be designed for outdoor use, but to extend the life span of equipment and reduce potential wear and tear, it will need to be maintained. To help ensure the health and safety of the workers who use fall protection equipment, check it after a storm or rain has passed. Before using a fall protection system, a hazard assessment must be completed and a pre-use inspection conducted. If the conditions change, such as the weather, stop and re-assess.

This may include performing simple yet essential housekeeping, such as:

- remove loose branches and debris that can block access, cause tripping hazards, or become entangled in equipment.
- keep equipment clean and dry.

### Ice and snow

Freezing temperatures can create metal contact hazards, anchor points and tools may not work properly, and energy absorbers could ice up. If this happens, never use any form of electronic or gas powered heaters to defrost or dry a fall protection system. You can further damage the fall protection equipment and make it unsafe to use again.

Manually remove as much ice as possible, and avoid skin contact exposure if possible. Dry anchor points or previously frozen parts with a towel or cloth so the risk of erosion is taken away, and ensure to remove or mark slip and trip hazards – which can lead to falls.

### Heat and sun

Temperature impacts the form and strength of all types of metals and the wear on materials. Most permanent fall protection systems are engineered to be used in outdoor and indoor settings. Despite this, regular inspection and replacement of worn materials are essential to ensure equipment is functioning as intended.

When exposed to high temperatures for a long period of time, metal parts can expand and the chance of deformation and degradation increases. Although this most likely only happens in extreme conditions, you should always check equipment before use, and properly store unused equipment and materials away from the elements.

It is important to be careful when working while using a fall protection system in heat and direct sun for heat-related illnesses, as the extra layering and weight of fall protection equipment can intensify the effects of those hazards.

## About the OHS Prevention Initiative

The [OHS Prevention Initiative](#) is a partnership between the Alberta government, employers, workers, health and safety associations, labour organizations, service providers (consultants, trainers and auditors) and WCB-Alberta. Its aim is preventing workplace injury and illness.

## Contributors to this resource

Alberta Construction Safety Association  
 Alberta Forest Products Association  
 Alberta Hotel and Lodging Association  
 Alberta Motor Transport Association  
 Alberta Municipal Health and Safety Association  
 AgSafe Alberta  
 Continuing Care Safety Association  
 Energy Safety Canada  
 Ledcor Group of Companies

## For more information

Occupational health and safety fall protection plan  
[ohs-pubstore.labour.alberta.ca/gso10](https://ohs-pubstore.labour.alberta.ca/gso10)

Slips, Trips, and Falls  
[ohs-pubstore.labour.alberta.ca/ph015](https://ohs-pubstore.labour.alberta.ca/ph015)

Prevention Initiative slips, trips, and falls  
[ohs-pubstore.labour.alberta.ca/slips-trips-and-falls](https://ohs-pubstore.labour.alberta.ca/slips-trips-and-falls)

## Other resources

WCB-Alberta – Worker handbook  
[wcb.ab.ca/ssets/pdfs/workers/worker\\_handbook.pdf](https://wcb.ab.ca/ssets/pdfs/workers/worker_handbook.pdf)

WCB-Alberta – Forms and guides  
[wcb.ab.ca/resources/for-employers/forms-and-guides/](https://wcb.ab.ca/resources/for-employers/forms-and-guides/)

Government of Alberta OHS resource portal  
[ohs-pubstore.labour.alberta.ca/](https://ohs-pubstore.labour.alberta.ca/)

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