Fall Protection – Fall Protection Plan (General)

Why is fall protection planning important?

Falls are common causes of serious work related injuries and deaths. Fall protection planning can help to eliminate the hazards or control the risks associated with working near openings or at heights.

This document will focus on working at heights.

What is working at heights?

Working at heights is any work where a person could fall a distance and be injured. This event might include, for example, falling from a step ladder, off of a roof, or through an unguarded hole in the ground or floor. Fall protection may also be required when working above an open top tank, bin, hopper, or vat.

Other situations that may require fall protection include the use of:

- forklift platforms,
- elevated work platforms,
- fixed suspended work platforms,
- swing staging,
- boatswain’s chairs,
- aerial devices,
- suspended equipment, or
- personnel carrying equipment (e.g., personnel lifting units raised by cranes or hoists)

Occupational health and safety laws generally require action when a worker has the potential to fall about 3 metres (10 feet). Check with your jurisdiction as exact requirements do vary. Note that most jurisdictions require the use of specific fall protection measures before, or in addition to, personal protective equipment (PPE). These measures generally include the use of some of the following:

- fixed barriers (e.g., handrails, guardrails)
- surface opening protection (e.g., covers, guardrails, etc.)
- warning barriers/control zones
- fall or travel restraint systems (i.e., a system to prevent a worker from falling from a work position, or from travelling to an unguarded edge from which

the worker could fall)
- fall containment system (e.g., safety nets)
- fall arrest systems (ie., a system that will stop a worker's fall before the worker hits the surface below)

There may also be specific legal requirements around use of equipment like ladders and scaffolding.

What are fall protection plans and why are they important?

Fall protection plans will outline the policy and procedures involved in assembling, maintaining, inspecting, using, and dismantling equipment such as ladders, scaffolds, or platforms used for working at heights as well as any fall protection equipment. Fall protection plans must be specific to each site where workers are at heights. There is "no one size fits all" program. Requirements and equipment used will change from workplace to workplace, site to site, and job to job.

How do I know if my workplace should have a fall protection plan?

Each workplace should seek the answers to the following questions:

- How is working at heights defined in my jurisdiction?
- Are workers working at heights?
- Is a hazard assessment required (by law, other authority, or good practice)?
- Are you required to have a fall protection plan?

What are some areas to examine during a hazard assessment for fall protection?

Look for all areas or situations where there is a risk of falling before any work begins.

- Are there any areas where people may fall during tasks they are expected to do? Examples include:

- from a height of 3 m (10 ft)
- into operating machinery
- into water or other liquid
- into or onto a hazardous substance or object
- through an opening in a work surface

- Are there controls in place to eliminate or reduce the likelihood of falls?
- Are workers trained to recognize new or previously unrecognized fall hazards and report them immediately?
- Do workers understand the protective measures taken to reduce falls (e.g., guardrails, safety nets, etc.)?
- Is all equipment used by workers stable and in good repair, including guardrails, ladders and scaffolding?
- Are floors in work areas in a clean and, so far as possible, a dry condition?
- Are workers educated and trained to understand how and when to use protective equipment safely?
- Is personal protective equipment prescribed, available, maintained in good condition, and used as instructed?

What are elements to consider when writing a fall protection plan?

Develop the fall protection plan by involving those individuals with direct experience and whose work will be most impacted, and get input from supervisors and

workers who’s work involves fall hazards. Involve the joint health and safety committee or representative during the development. Be sure to include procedures to follow during emergencies and fall rescues.

Fall arrest planning will include the steps necessary to prevent the worker from hitting the ground, material, equipment, or lower level of a structure. Workers may swing from side to side when they fall (called the pendulum effect) which also must be taken into consideration. A worker who has fallen, and who’s fall has been arrested, will most likely need to be rescued by others.

A site-specific fall protection plan will incorporate many items, including:

- site location (address, description, work area, tasks)
- site-specific fall hazards (e.g., maximum height(s), roof slope if applicable, proximity to power lines, ground cover, etc.)
- type of fall protection to be used, including anchor points, and clearance requirements
- equipment inspection
- any other requirements before beginning work (e.g., presence of first aid or rescue personnel, other safety equipment, barricades, etc.)
- rescue procedures
- worker sign off

Who has responsibilities for fall hazards?

An employer must:

- Develop written fall protection policy and procedures relevant for the workplace.
- Identify all areas where there is a potential of injury due to fall.
- Consider the use of passive fall arrest systems first, such as guardrails, or travel restraint or fall-restricting systems.
- Develop fall arrest rescue procedures which detail how to return workers safely to the ground after a fall has been arrested.
- Educate and train workers and supervisors to understand and properly fulfill their role in fall protection and prevention. Workers should have easy access to policies and procedures so they can be reviewed when needed.
- Make sure workers are instructed in all of the fall-protection methods or systems used and, in the post-fall rescue procedure before being allowed into an area where there is a risk of falling.
- Make sure the fall-arresting system consists of the required components, including full body harness, self-retracting lanyard, energy absorbing lanyard or lanyard and energy absorber, and appropriate anchor point or horizontal life line.
- Make sure all protective equipment, clothing or devices are provided, used, and maintained in good condition.
- Make sure PPE is used effectively according to the policies and procedures, legal requirements, and the manufacturer’s specifications.
- Review and amend the plan if necessary, on a regular schedule.
- Review and amend the plan after relevant workplace changes and after all falls or near falls to make sure the plan is effective and to see how it may be improved.

A supervisor must:

- Make sure workers follow all regulations for your jurisdiction, and the workplace policy and procedures regarding fall protection.

- Inform workers about fall hazards and how to work safely at heights.
- Make sure workers use and know how to wear the appropriate fall protection equipment.
- Act on information provided by workers (e.g., safety concerns about the situation, when equipment is broken, defective or missing, etc.).
- Participate in fall protection planning where relevant and when requested.

A worker must:

- Alert the supervisor about the unknown or unexpected fall hazards before beginning or continuting any work.
- Participate in fall protection planning where relevant and when requested.
- Follow the fall protection regulations for your jurisdiction, and the workplace policy and procedures.
- Actively participate in fall protection education and training.
- Wear and use all protective equipment, clothing or devices appropriately, as determined by the employer.
- Inspect your personal fall protection system before each use.
- Protect the protective equipment from damage where possible (e.g., make sure the lifeline or lanyard is protected during use from sharp edges, heat, flame or corrosive substances).
- Notify the supervisor or employer to any broken, defective or missing protective equipment.
- Be aware of your right to refuse unsafe work.

Does the fall protection plan include training for those working at heights?

Ontario and Prince Edward Island both have mandatory training and instruction requirements for those working at heights.

Even if training is not specifically required for those working at heights, it is still a very important part of fall protection. Selecting the proper personal protective equipment is complex and understanding how to wear and use it is not always intuitive. Workers and employers must understand how and when their equipment should be maintained, and how to identify damage or incorrectly assembled systems. Users must also have a clear understanding of how to work safely on equipment such as elevated platforms, lifts and scaffolds.

Does the fall protection plan include a rescue plan?

Often after a fall is arrested, the worker remains suspended in the air and will need to be rescued by others. In other situations, the worker could have injuries that require first-aid. A rescue plan will detail how to return fallen workers to a place of safety while keeping rescuers safe.

Like other forms of emergency planning, it is essential that everyone understands their role and what they must do after a fall. Before beginning the work, discuss the situation with local emergency services to see if they are able to assist when there is a need to rescue a fallen worker. Leaving a worker suspended for a long period of time can be dangerous to their health and safety.

Designated rescuers must be adequately trained and have easy access to all the equipment they need to effectively rescue others safely and as quickly as possible.

A rescue plan should:

- Designate, educate, and train those who will conduct the rescue.
- Be written and posted before work begins.
- Identify on-site first aid personnel and include all contact information.
- Outline the necessary first aid equipment that will be needed on site.
- Provide contact information for local emergency medical and fire services, if needed.
- Identify all emergency exits and access routes within the worksite.
- Identify all available systems of communications. Make sure there is a backup system for your primary mode of communication.
- Develop procedures for rescue, including rope rescue, retrieval lines, location of anchor points, etc.
- Develop procedures for using any powered mobile equipment, mechanical hoisting systems or elevating devices that may be required during the rescue.
- Detail procedures necessary to clear and secure work areas while they remain unsafe or if any ongoing work would obstruct a rescue.
- Provide for education and training workers involved so they understand what they must do after a fall and during a recovery operation.
- Review and amend the rescue plan on a regular schedule, after relevant changes to the worksite, and after all rescues or related incidents