

Corporate Policy and Procedure



POLICY	Working at Heights/Fall Protection Policy
CATEGORY	Corporate
AUTHORITY	All departments
RELATED POLICES	Job Hazard Analysis Confined Space Program Incident Investigation and Reporting Policy
APPROVED BY	Executive Team
EFFECTIVE DATE	2007/04/14
REVISION DATE	2019/08/01

Policy Statement

Guided by our corporate values, any worker at risk for falling from a height at their workplace shall take measures to first reasonably prevent exposure to a fall hazard, then to mitigate or prevent falls when exposure is unavoidable.

Scope

This policy applies to all City of Guelph employees, contractors and any other persons performing work at City of Guelph work locations.

Purpose

To outline the requirements and responsibilities for working at heights including roof work, ladders, elevated work platforms and scaffolding to ensure the safety of all employees involved. Although not technically working at heights this policy shall also apply to situations where employees can fall from one level to another, such as uncovered openings in floors, open sides of raised floors or other such situations where a guardrail system is required.

Definitions

Affected Worker - A worker in the vicinity of a work area where work at heights is being performed.

Anchor Point - A structure or structural member intended to withstand forces exerted by fall protection equipment.

Authorized Worker - A competent person who is trained, qualified, and authorized to engage in tasks requiring work at heights

Buddy System - A situation in which at least one other person is physically present at all times, to closely monitor another employee's activity and safety during high risk work, such as working close to a roof edge, and be available to provide or summon immediate emergency assistance if required. For lower risk work, but where assistance may be needed to summon emergency responders in the event of an accident, a "periodic check-in" process may be used instead, in which contact will be maintained by radio or other personal communication devices.

Competent Person - An individual, who by way of training and/or experience: is knowledgeable of the work and applicable laws, standards and best practices; is capable of identifying workplace hazards relating to the specific operations; is designated by the employer and has the authority to take appropriate actions.

Elevated Work Platform - Any vehicle-mounted device used to elevate employees (may also be called an Aerial Work Platform)

Fall Arrest System - An assembly of components joined together so that when the assembly is connected to a fixed support, it is capable of arresting a worker's fall; consists of a full-body harness with back-mounted "D" ring, a shock absorbing lanyard, a lifeline, connecting hardware and anchor point(s)

Fall Hazard - Any potential of falling:

- a) More than 3 meters or
- b) More than 2.4 meters from the edge into an excavation or
- c) More than 1.2 meters, if the work area is used as a path for a wheelbarrow or similar equipment or
- d) Into operating machinery or
- e) Into water or another liquid or
- f) Into or onto a hazardous substance or
- g) Through an opening on a work surface

Fall Restricting System - a type of fall arrest system that has been designed to limit a worker's fall to a specified distance;

Full Body Harness - A device that can arrest an accidental vertical or near vertical fall of a worker and which can guide and distribute the impact forces of the fall by means of leg and shoulder strap supports and an upper dorsal suspension assembly which, after the arrest, will not by itself permit the release or further lowering of the worker

Guardrail System - An assembly of components joined together to provide a barrier to prevent a worker from falling from the edge of a surface

Lanyard - A flexible line or strap used to secure a worker or an energy absorber to a lifeline, anchorage or anchorage connector

Supervisor

A person who has charge of a workplace or authority over a worker.

Travel Restraint System - an assembly of components designed to keep a person away from the location of the fall hazard; consists of a full-body harness, a lifeline or retractable lanyard, and an anchorage point; also referred to as fall restraint

Worker

Means any of the following, but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program:

1. A person who performs work or supplies services for monetary compensation.
2. A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the school board that operates the school in which the student is enrolled.
3. A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university, private career college or other post-secondary institution.
4. Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation.

Workplace

Any land, premises, location or thing at, upon, in or near which a worker works.

Procedure**Roles and Responsibilities****Executive Management Team**

- Ensure this policy is implemented across departments of responsibility.

Manager/Supervisor

- Ensure that all potential fall hazards are evaluated, the necessary precautions taken, and that authorized workers assigned to work at heights are properly trained prior to any work being performed.
- Ensure workers are using the correct equipment for the work being performed.
- Develop and communicate a work plan to all authorized workers before work is performed.
- Develop and communicate a list of all work tasks that are required to be performed at heights, and indicate which activities are considered to be higher risk.
- Develop and communicate a rescue plan, if using **fall arrest equipment**, prior to any work being performed.

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- Ensure all affected workers are notified before work begins.
 - Ensure all equipment related to working at heights is properly inspected prior to every use.
 - Maintain records of annual inspections, by a competent person, for all equipment related to working at heights.
 - Report any fall incidents immediately to Department/Corporate Health & Safety and ensure proper reporting and investigation is completed.
 - Maintain all training records related to working at heights and ensure re-training is completed before current training expires (every 3 years).
 - At least once annually, audit an area of the workplace where potential fall hazards exist using **Appendix F – Fall Protection Focused Audit Tool**

Workers

- Comply with this working at heights policy.
- Complete all required training before commencing any work from heights in order to be deemed an authorized worker.
- Inspect equipment prior to each use and immediately remove any equipment that is unsatisfactory.
- Review the completed work plan and rescue plan for the task in question and follow all identified requirements.
- Always work in a safe manner and wear all required equipment.
- Immediately report any fall incidents to their supervisor/manager.
- Store equipment in a proper manner to prevent damage.

Department/Corporate Health & Safety

- Support the managers/supervisors in the development of work and rescue plans for any work at heights
- Be involved in the investigation of any fall incidents and ensure the investigation report is completed
- Periodically audit to ensure compliance with this procedure
- Maintain records of audits completed
- Review this procedure annually and revise as necessary

Department Managers

- Ensure this policy is communicated and implemented.
- Ensure any incidents related to working at heights are reported and investigated in a timely manner

Corporate Procedure

1. The Manager/Supervisor or a designated competent person shall survey the workplace or worksite to identify potential fall hazards. Falls often occur during:
 - Maintenance work
 - Working from elevated equipment
 - Use of ladders
 - Use of scaffolds
 - Climbing of structures

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2. Each potential fall hazard must be assessed to determine the degree of hazard and the workers who may be at risk. This assessment should be done in conjunction with a Job Hazard Analysis.
 3. Where fall hazards are identified, controls must be implemented to eliminate or reduce the risk. Depending on the fall hazard, a combination of control methods may be required to protect the worker.
 4. A work plan must be completed for all work that is to be performed at heights.
 5. When feasible, a protective covering or guardrail system must be installed to prevent the fall hazard
 - a. The protective covering must:
 - i. Completely cover the opening
 - ii. Be securely fastened
 - iii. Be adequately identified as a covering
 - b. The guardrail must:
 - i. Have a top rail and an intermediate rail
 - ii. Have a toe board if there is a danger of materials falling
 - iii. Have a top rail at least 0.9 meters but not more than 1.1 meters above the surface on which the system is installed
 - iv. Have the intermediate rail located midway between the top rail and the toe board
 - v. Have the toe board extend from the surface to which the guardrail system is attached to a height of at least 89 millimeters
 - vi. Be free of splinters and protruding nails
 6. Where a fall hazard cannot be eliminated, a Travel Restraint System (TRS) must be used
 7. TRS must be used if working within 3 meters of an edge of a fall hazard and must be arranged so the worker is not capable of falling over the edge
 8. Where a worker is exposed to the hazard of falling more than 3 meters, and the TRS is not feasible, a Fall Arrest System (FAS) must be used
 - i. The use of body belts is prohibited
 - ii. All FAS must be certified by an external standards board and be inspected and recertified annually.
 - iii. Refer to [Appendix A – Fall Arrest System Components](#) for description of FAS Components.
 - iv. Refer to [Appendix B - Calculating Total Fall Distance and Minimum Fall Clearance](#) when using an FAS.
 - v. Personal Fall Protection Equipment shall be used, maintained and stored in accordance with the manufacturer's instructions and recommendations
 9. FAS, including Fall Restricting Systems, or TRS must only be secured to an appropriate anchor point
 - i. The lifeline shall be adequately secured to an engineered anchor point
 - ii. Certification (Professional Engineer or equivalent) is required for all dedicated anchor points. For non-dedicated anchor points, 5000lb (22.2kN) rating is recommended. Dedicated anchor points may require more or less, depending on the FAS being used
 - iii. Dedicated anchor points should be clearly identified

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- iv. The highest available anchor point must be used
 - 10. The FAS shall be arranged so that a worker cannot hit the ground or an object or level below the work.
 - 11. A written rescue plan must be developed to describe procedures in the case of a fall. A quick rescue after a fall arrest will reduce the risk of injury to the suspended worker because prolonged "static suspension" may cause some circulatory problems leading to a possible loss of consciousness.
 - 12. Any equipment subjected to a fall must be destroyed and disposed of.
 - 13. All equipment must be inspected prior to each use by the user
 - i. If the inspection shows any component to be damaged or defective, it shall be taken out of service and tagged for repair or disposal immediately. Refer to [Appendix D – Fall Protection Inspection Checklist](#).
 - ii. Records of all inspections must be retained
 - 14. All equipment should be inspected by a trained and competent person annually. These records must be kept for at least two years.
 - 15. Any employee required to use a FAS must be trained to do so.
 - 16. Training for FAS use must include oral and written instructions from a competent person.
 - 17. Before working from a ladder, scaffolding or elevated work platform, an assessment of the area is required including:
 - Overhead wiring or bus ducts
 - Activity work below
 - Road/walkway surface (uneven, holes, loose ground, etc)
 - Ground slope
 - Any items that may fall off, or tangle into the platform
 - Warning signs
 - Other hazardous conditions that may exist
 - 18. A 1.5 meter radius must be cleared and identified below the work from height for pedestrian safety
 - 19. Anything used to gain platform height on top of a ladder, elevated work platform or scaffold is prohibited
 - 20. All roof work must be authorized, and the following precautions applied:
 1. A work plan must be completed before any roof work
 2. Roof work must not be completed during inclement weather
 3. Any work completed within 3 meters of the edge requires fall protection
 4. Buddy system must be initiated utilizing two or more workers **if the work to be done is within three metres of the roof edge** and there is a potential for falling, or if there is further working at heights required once on the roof. For lower risk work, outside three metres of the fall hazard, but where assistance may be needed to summon emergency responders in the event of an accident, a "periodic check-in" process may be used instead. In these situations the worker must maintain contact by radio or other personal communications device with other workers stationed away from the area.
 - 21. Tools must be transported to and from work areas in a safe manner, which does not include carrying them up a ladder.

Ladders

1. Only authorized workers, who have completed, at a minimum, ladder safety training, may use a ladder.
2. All ladders must be certified by an external standards board, and markings clearly identifying this and the allowed weight limit must be clearly visible.
3. All ladders must be stored in a safe and secure location to restrict unauthorized use.
4. An assessment must be performed by the authorized worker on the task in question to determine the most appropriate piece of equipment to perform the task, taking into consideration the task activities and task location.
5. Ladders must be inspected prior to use to ensure they are in a safe working condition. Things to look for include the following:
 - a. loose, damaged, missing or dirty:
 - i. Feet
 - ii. Side rails (smooth)
 - iii. Rungs/steps
 - iv. Hardware/accessories
 - v. Spreaders/hinges
 - vi. Rope
6. Ladders shall be inspected annually, or sooner, by a competent person and a record kept of the inspection.
7. Tags to indicate a damaged ladder must be kept in the ladder storage location.
8. When setting up a ladder, secure the base on firm and level ground. Do not use shims or blocking to level the legs.
9. Avoid placing the ladder on snow, ice, gravel on pavement or other slippery contaminants.
10. Straight ladders should be set at the proper angle of 1/4 and not more than 1/3 of the length of the ladder; ensuring any locks are engaged.
11. Before using a ladder, make sure it is secured to prevent movement (tied or being held). Do not work on unsecured ladders
12. When in position, a straight ladder shall extend one meter above the intended landing point.
13. **NEVER** work from the top three rungs of a straight ladder or the top two steps of a step-ladder.
14. **DO NOT** outreach while on the ladder. It is safer to climb down and to relocate the ladder a few feet to a new position.
15. Always face the ladder when using it. Grip it firmly and **use the three points of contact** method when moving up or down
16. Materials and tools should be lowered or raised by a rope or other mechanical means. A tool belt may also be used if necessary.
17. Ladders must be transported with care to ensure they are not damaged during transport.
18. Additional information related to safe use of ladders, can be found in [Appendix E – Precautions for Ladders.](#)

Elevated Work Platforms

1. Only authorized workers may use elevated work platforms.

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2. Authorized workers must have completed training in both working at heights and for the piece of equipment they are working on, and the training must be valid at the time of working.
 3. Prior to starting work, the authorized worker should review actual and potential hazards associated with the supervisor/lead hand to determine any issues that may arise, along with the associated work plan and rescue plan. In some circumstances this may necessitate the supervisor/lead hand travelling to the work site to review any potential hazards with the authorized worker.
 4. If an authorized worker arrives at a work site and finds additional hazards that he or she is unsure how to address, the supervisor/lead hand must be contacted to advise and re-assess.
 5. Prior to use, the authorized worker shall perform a pre-use inspection on the equipment in accordance with manufacturer's instructions. This inspection record must be kept on the equipment, along with a copy of the operator's manual. It is only necessary to perform the pre-use inspection once per day of use, unless the inspection record for that day is not completed. The equipment **shall not be used** until a pre-use inspection is completed.
 6. If any issues with the equipment are noted on the pre-use inspection, it shall immediately be reported back to the supervisor/lead hand, and shall not be operated until repaired.
 7. A Travel Restraint System (TRS) must be used at all times while on the platform
 - a. Use the dedicated anchor point on the equipment
 - b. The railing is not a suitable anchor point and must not be used
 8. Load stability warning as listed on the platform must never be exceeded
 9. Signage and barricading must be erected indicating overhead work and hazards
 10. If the platform is equipped with outriggers, they must be placed on an even and hard surface
 11. When travelling on or in the platform
 - a. Limit speed in relation to adjacent activities and conditions
 - b. Lower platform completely
 - c. Always look in the direction of travel
 12. Ensure the mechanism is clear of objects such as wires, ropes or other debris that can be caught before lowering
 13. Where the initial risk assessment of the work indicates that it is or may be considered higher risk, a buddy system must be utilised.

Training

All those workers who are or may be required to work at heights will be trained before being allowed to perform such work. This training must be provided by a training organization approved by the Ministry of Labour to deliver the Ministry's approved working at heights training program.

Workers who use **only** ladders and do not climb above 3 meters, need to complete Ladder Safety training, and may not be required to complete any additional

training. This determination must only be made by the Manager/Supervisor in consultation with Corporate Health & Safety.

Refresher training must occur every no more than every 2 years for basic Ladder Safety. The Ministry of Labour requires all approved Working at Heights training to be delivered no less than **every three years**.

Reference Documents

Occupational Health and Safety Act, R.S.O. 1990, c. O.1
R.R.O. 1990, Reg. 851: INDUSTRIAL ESTABLISHMENTS
O. Reg. 213/91: CONSTRUCTION PROJECTS
O. Reg. 297/13: OCCUPATIONAL HEALTH AND SAFETY AWARENESS AND TRAINING
CAN/CSA-Z259.1-05 Body Belts and Saddles for Work Positioning and Travel Restraint
Can/CSA-Z259.15-17 Anchorage Connectors
CAN/CSA-Z259.2.2-17: Self-Retracting Devices
CAN/CSA-Z259.2.3-16: Descent Devices
CAN/CSA-Z259.2.5-17: Fall Arresters and Vertical Lifelines
CAN/CSA-Z259.10-18: Full Body Harnesses.
CAN/CSA-Z259.11-17: Personal Energy Absorbers and Lanyards
CAN/CSA-Z259.12-16 Connecting Components for Personal Fall Arrest Systems
CAN/CSA-Z259.14-12: Fall Restrict Equipment for Wood Pole Climbing.

Appendices

[Appendix A – Fall Arrest System Components](#)

[Appendix B – Calculating Total Fall Distance and Minimum Fall Clearance](#)

[Appendix C – Inspection and Maintenance Guidelines](#)

[Appendix D – Fall Protection Inspection Checklist](#)

[Appendix E – Precautions for Ladders](#)

[Appendix F – Fall Protection Focused Audit Tool](#)

Revision History

Document Owner	Issue / Revised Date	Reason For Changes
Health & Safety	April 4, 2007	Initial draft (As Fall Prevention Program)

Document Owner	Issue / Revised Date	Reason For Changes
Health & Safety	January 1, 2018	Rewritten and renamed to Working at Heights Policy. Significant new provisions are included, particularly in regard to required training, which now must meet Ministry of Labour standard for work over 3m. Fall Protection is now required within 10 feet (3m) of a roof edge if no guardrail is present.
Health & Safety	August 1, 2019	Added O. Reg 297/13 to list of Reference Documents Added Appendix F – Focused Audit Tool along with an addition to Manager/Supervisor Responsibilities to complete at least one audit annually.