Vertical / Fall Protection — Know The Laws of Your Province



Fall protection regulations are vital for ensuring the safety of workers operating at heights or near fall hazards in the workplace. These regulations require employers to provide and maintain appropriate fall protection systems, such as guardrails, travel restraints, fall arrest systems, and safety nets, depending on the nature of the work and the level of risk. Equipment must meet recognized safety standards, be properly anchored, and be inspected regularly. Workers must be trained in the correct use of fall protection systems and understand the risks associated with working at heights. While the core safety principles are consistent across Canada, each province and territory has specific regulations to address local work environments and industry needs. Compliance with these regulations reduces the risk of falls, prevents serious injuries, and fosters a culture of safety on worksites.

FEDERAL

In federally regulated workplaces in Canada, employers are required to address fall protection under the <u>Canada Occupational Health and Safety Regulations</u>, Part XII, Section 12.09. If there's a risk of injury due to falling, employers must provide and ensure the use of personal fall-protection systems that comply with CSA standards, including full body

harnesses, lifelines, lanyards, and anchorage connectors. All components **must** be compatible and used as per the manufacturer's instructions. Equipment **must** be inspected before each shift, and special requirements apply for elevated work platforms.

PART XII - Protection Equipment and Other Preventive Measures

Fall Protection

- (1) If there is a risk of injury due to falling in a workplace and the fall-protection plan requires that a personal fall-protection system be used, the **employer must** provide such a system to every person other than a person who is installing or dismantling a fall-protection system who is granted access to the workplace.
- (2) A personal fall-protection system **must** meet the requirements set out in the following CSA Group standards:
- (a) Z259.16, Design of active fall-protection systems; and
- (b) Z259.17, Selection and use of active fall-protection equipment and systems.
- (3) The components of a personal fall-protection system **must** meet the requirements set out in the following CSA Group standards:
- (a) Z259.1, Body belts and saddles for work positioning and travel restraint;
- (b) Z259.2.2, Self-retracting devices;
- (c) Z259.2.3, Descent devices;
- (d) Z259.2.4, Fall arresters and vertical rigid rails;
- (e) Z259.2.5, Fall arresters and vertical lifelines;
- (f) Z259.10, Full body harnesses;

- (g) Z259.11, Personal energy absorbers and lanyards;
- (h) Z259.12, Connecting components for personal fall-arrest systems (PFAS);
- (i) Z259.13, Manufactured horizontal lifeline systems
- (j) Z259.14, Fall restrict equipment for wood pole climbing; and
- (k) Z259.15, Anchorage connectors.
- (4) The components of a personal fall-protection system **must** be compatible and **must** be used in accordance with the manufacturer's instructions.
- (5) If more than one personal fall-protection system is secured to an anchorage, a separate anchorage connector **must** be used for each personal fall-protection system.
- (6) The **employer must** ensure that a person who is using a personal fall-protection system wears and uses a full body harness.
- (7) The **employer must** ensure that, before each work shift, every employee inspects their personal fall-protection system in accordance with the fall-protection plan.
- (8) The **employer must** ensure that a person who works on an aerial device, boom-type elevating platform, scissor lift platform, forklift truck platform or any similar personnel lifting equipment in the circumstances described in subsection 12.07(1) uses a fall-restraint system that is connected to:
- (a) an anchorage that is specified in the instructions of the manufacturer of the lifting equipment; or
- (b) if no anchorage is specified by the manufacturer, an anchorage that is certified by a person who is authorized to exercise the profession of engineering in Canada and that

meets the requirements set out in CSA Group Standard Z259.16, Design of active fall-protection systems.

(9) If the use of a fall-restraint system would prevent the person referred to in subsection (8) from carrying out their work, the **employer must** ensure that a fall-arrest system is used. **Section 12.09 (1) to (9).**

Further details on the Canada Occupational Health and Safety Regulations can be found at justice.gc.ca.

ALBERTA

In Alberta, employers are required to address fall protection under the Occupational Health and Safety Code Part 9, Sections 139(1) to 143(1), 144, 147(1) to (3), 151(4), 154(1), and 160(1). Employers must ensure workers are protected from falls over 3 metres or where injury risks exist by implementing guardrails, travel restraints, or personal fall arrest systems. A fall protection plan must be in place, outlining hazards, equipment, procedures, and rescue steps, and must be reviewed with workers. Employers are also responsible for training workers, using approved safety equipment, and ensuring continuous protection on fixed ladders or structures. Fall risks must be minimized through proper planning, equipment, and instruction.

Part 9 - Fall Protection

General Protection

- (1) An employer and a supervisor must ensure that a worker is protected from falling if a worker may fall,
- (a) at a temporary or permanent work area, a vertical distance of 3 metres or more,
- (b) at a temporary or permanent work area, a vertical distance of less than 3 metres if there is an unusual possibility of

injury,

- (c) at a temporary or permanent work area, into or onto a hazardous substance or object, or through an opening in a work surface, or
- (d) at a permanent work area, a vertical distance of more than 1.2 metres and less than 3 metres.
- (2) For the purposes of this section, there is an unusual possibility of injury if the injury may be worse than an injury from landing on a solid, flat surface.
- (3) Subject to subsection (5), an **employer must** install a quardrail.
- (5) Subject to subsection (6), if the use of a guardrail is not reasonably practicable, an **employer** and a supervisor **must** ensure that a worker uses a travel restraint system that meets the requirements of this Part.
- (6) Subject to subsection (7), if the use of a travel restraint system is not reasonably practicable, an **employer** and a supervisor **must** ensure that a worker uses a personal fall arrest system that meets the requirements of this Part.
- (7) If the use of a personal fall arrest system is not reasonably practicable, an **employer** and a supervisor **must** ensure that a worker uses equally effective controls.
- (8) A worker must use a fall protection system as required by this section. Section 139 (1) to (8).

Fall Protection Plan

(1) An employer must develop procedures that comply with this Part in a fall protection plan for a work site if a worker at the work site may fall 3 metres or more and the worker is not protected by guardrails.

- (2) A fall protection plan must specify:
- (a) the fall hazards at the work site,
- (b) the fall protection system to be used at the work site,
- (c) the anchors to be used during the work,
- (d) that clearance distances below the work area, if applicable, have been confirmed as sufficient to prevent a worker from striking the ground or an object or level below the work area,
- (e) the procedures used to assemble, maintain, inspect, use and disassemble the fall protection system, where applicable, and
- (f) the rescue procedures to be used if a worker falls and is suspended by a personal fall arrest system or safety net and needs to be rescued.
- (3) The **employer must** ensure that the fall protection plan is available at the work site and is reviewed with workers before work with a risk of falling begins.
- (4) The **employer must** ensure that the plan is updated when conditions affecting fall protection change. **Section 140 (1)** to (4).

Instruction of Workers

- (1) An employer must ensure that a worker is trained in the safe use of the fall protection system before allowing the worker to work in an area where a fall protection system must be used.
- (2) The training referred to in subsection (1) must include the following:
- (a) a review of current Alberta legislation pertaining to fall protection;

- (b) an understanding of what a fall protection plan is;
- (c) fall protection methods a worker is required to use at a work site;
- (d) identification of fall hazards;
- (e) assessment and selection of specific anchors that the worker may use;
- (f) instructions for the correct use of connecting hardware;
- (g) information about the effect of a fall on the human body, including:
- (i) maximum arresting force,
- (ii) the purpose of shock and energy absorbers,
- (iii) swing fall, and
- (iv) free fall;
- (h) pre-use inspection;
- (i) emergency response procedures to be used at the work site, if necessary;
- (j) practice in:
- (i) inspecting, fitting, adjusting, and connecting fall protection systems and components, and
- (ii) emergency response procedures.
- (3) In addition to the training described in subsection (2), an **employer must** ensure that a worker is made aware of the fall hazards particular to that work site and the steps being taken to eliminate or control those hazards. **Section 141 (1)** to (3).

For more information:

- Full body harness. Sections 142(1).
- Body belt. Sections 142.1.
- Sections 142.2 (1) to (3).
- Shock absorber. Sections 142.3 (1) to (4).
- Connectors, carabiners and snap hooks. Sections 143.
- Fall arresters. **Sections 144.**
- Life safety rope. **Sections 147 (1)(2)(3).**
- Clearance, maximum arresting force and swing. Sections151 (4).
- Fixed ladders and climbable structures. Sections 154(1).
- Work positioning. Sections 160 (1).

Further details on the Occupational Health and Safety Code can be found at alberta.ca.

BRITISH COLUMBIA

In British Columbia, employers are required to address fall protection under the Occupational Health and Safety Regulation Part 11, Sections 11.2–11.5. Employers must ensure fall protection is used when there's a risk of falling 3 metres or more, or where a lower fall could cause serious injury. Guardrails or other restraint systems must be used where practicable; if not, fall arrest systems, rope access, or approved safe work procedures must be in place. Employers must also provide proper training, ensure workers use harnesses or belts, and that all equipment meets CSA or ANSI standards.

Part 11: Fall Protection

Obligation to Use Fall Protection

- (1) Unless elsewhere provided for in this Regulation, an **employer must** ensure that a fall protection system is used when work is being done at a place:
- (a) from which a fall of 3 m (10 ft) or more may occur, or

- (b) where a fall from a height of less than 3 m involves a risk of injury greater than the risk of injury from the impact on a flat surface.
- (2) The **employer must** ensure that guardrails meeting the requirements of Part 4 (General Conditions) or other similar means of fall restraint are used when practicable.
- (3) If subsection (2) is not practicable, the **employer must** ensure that another fall restraint system is used.
- (4) If subsection (3) is not practicable, the **employer must** ensure that one of the following is used:
- (a) a fall arrest system;
- (b) a rope access system that meets the requirements of Part 34.
- (5) If subsection (4) is not practicable, or will result in a hazard greater than if a fall arrest system or a rope access system was not used, the **employer must** ensure that work procedures are followed that are acceptable to the Board and minimize the risk of injury to a worker from a fall.
- (6) Before a worker is allowed into an area where a risk of falling exists, the **employer must** ensure that the worker is instructed in the fall protection system for the area and the procedures to be followed.
- (7) A worker **must** use the fall protection system provided by the **employer**. **Section 11.2 (1) to (7)**.

Fall Protection Plan

- (1) The **employer must** have a written fall protection plan for a workplace if:
- (a) work is being done at a location where workers are not protected by permanent quardrails, and from which a fall of

- 7.5 m (25 ft) or more may occur, or
- (b) section 11.2(5) applies.
- (c) Repealed. [B.C. Reg. 420/2004, effective January 1, 2005.]
- (2) The fall protection plan **must** be available at the workplace before work with a risk of falling begins. **Section** 11.3 (1)(2).

Selection of Harness or Belt

- (1) A worker **must** wear a full body harness or other harness acceptable to the Board when using a personal fall protection system for fall arrest.
- (2) A worker **must** wear a safety belt, a full body harness or other harness acceptable to the Board when using a personal fall protection system for fall restraint. **Section 11.4** (1)(2).

Equipment Standards

Equipment used for a fall protection system must:

- (a) consist of compatible and suitable components,
- (b) be sufficient to support the fall restraint or arrest forces, and
- (c) meet, and be used in accordance with, an applicable CSA or ANSI standard in effect when the equipment was manufactured, subject to any modification or upgrading considered necessary by the Board. Section 11.5 (a) to (c).

Further details on the Occupational Health and Safety Regulation can be found at worksafebc.com.

MANITOBA

In Manitoba, employers are required to address fall protection

under the Workplace Safety and Health Regulation Part 14, Sections 14.1, 14.7, 14.20, and 14.21. Employers must ensure fall protection is in place wherever there's a risk of falling 3 metres or more, or into hazards such as machinery, liquids, or dangerous substances. Fall protection systems must meet CSA or ANSI standards, be certified by a professional engineer, and be properly installed and maintained. Employers must also ensure lifelines are suitable, secure, and protected from damage, with vertical lifelines extending to a safe landing.

PART 14 - FALL PROTECTION

Application

- (1) This Part applies to every workplace where there is a risk of a worker falling:
- (a) a vertical distance of 3 m or more;
- (b) a vertical distance of less than 3 m where there is an increased risk of injury due to the surface or item on which the worker might land;
- (c) into operating machinery or moving parts of the machinery;
- (d) into water or another liquid;
- (e) into or onto a hazardous substance or object;
- (f) through an opening on a work surface; or
- (g) a vertical distance of more than 1.2 m from an area used as a path for a wheelbarrow or similar equipment. **Section 14.1** (1).

Requirements for Fall Protection Systems

- (1) An employer must ensure that a fall protection system:
- (a) is designed, installed, tested, used, and maintained in accordance with the applicable requirements of the following

standards:

- (i) CSA Z259.1-05 (R2015), Body Belts and Saddles for Work Positioning and Travel Restraint,
- (ii) CAN/CSA-Z259.2.1-98 (R2011), Fall Arresters, Vertical Lifelines, and Rails,
- (iii) CSA Z259.2.2-17, Self-retracting devices,
- (iv) CAN/CSA-Z259.2.3:16, Descent devices,
- (v) CSA Z259.10-18, Full Body Harnesses,
- (vi) CSA Z259.11-05 (R2015), Energy Absorbers and Lanyards,
- (vii) CSA Z259.12-16, Connecting Components for Personal Fall Arrest Systems (PFAS),
- (viii) CSA Z259.16-15, Design of Active Fall-Protection Systems,
- (ix) CSA Z259.13-16, Manufactured horizontal lifeline systems,
- (x) ANSI/ASSE A10.11-2010 (R2016), Safety Requirements for Personnel Nets American National Standard for Construction and Demolition Operations;
- (b) designed and certified as safe by a professional engineer and installed, tested, used and maintained in accordance with the specifications certified by the professional engineer.
- (2) Despite the reference to safety belts in CSA Standard Z259.1-05, Body Belts and Saddles for Work Positioning and Travel Restraint, an **employer must** ensure that a safety belt is not used as part of a fall protection system at the workplace. **Section 14.7 (1)(2).**

Lifeline Requirements

When a worker uses a lifeline, an employer must ensure that

the lifeline is:

- (a) suitable for the conditions in which the lifeline is to be used, having regard to factors including strength, abrasion resistance, extensibility and chemical stability;
- (b) free of imperfections, knots and splices, other than end terminations;
- (c) protected by padding where the lifeline passes over sharp edges;
- (d) protected from heat, flame, abrasive or corrosive materials during use;
- (e) fastened to a secure anchor point or anchor points as required under this Part; and
- (f) installed, used, and maintained in accordance with the manufacturer's specifications or specifications certified by a professional engineer. **Section 14.20**.

Vertical Lifelines

When a worker uses a vertical lifeline, an **employer must** ensure that:

- (a) the lower end of the vertical lifeline extends to the ground or to a safe landing; and
- (b) the vertical lifeline is protected at the lower end to ensure that the line cannot be fouled by equipment. **Section 14.21.**

Further details on the Workplace Safety and Health Act and Regulation can be found at gov.mb.ca.

NEW BRUNSWICK

In New Brunswick, employers are required to address fall

protection under the <u>General Regulation</u>, <u>Sections 49.1(2)</u>, <u>and 49.4</u>. <u>Employers must</u> ensure fall-protection systems meet CSA standards for harnesses, lanyards, connectors, lifelines, and other components, or use equivalent alternatives that offer equal or better protection. Vertical lifelines <u>must</u> extend to a safe level, be securely anchored, protected from damage, and used by only one worker at a time. All equipment <u>must</u> be properly maintained and used only as intended.

Fall-Protection System

Applicable Standards

- (2) For the purposes of paragraph (1)(c), the following CSA standards apply:
- (a) Z259.1-05, "Body Belts and Saddles for Work Positioning and Travel Restraint" or Z259.1-95, "Safety Belts and Lanyards";
- (b) Z259.2.4:15 (R2020), "Fall arresters and vertical rigid rails", or a standard offering equivalent or better protection;
- (b.1) Z259.2.5-17, "Fall arresters and vertical life- lines", or a standard offering equivalent or better protection;
- (c) Z259.2.2-17 (R2022), "Self-retracting devices", or a standard offering equivalent or better protection;
- (d) Z259.2.3-99, "Descent Control Devices", or a standard offering equivalent or better protection;
- (e) Z259.10-18, "Full body harnesses", or a standard offering equivalent or better protection;
- (f) Z259.11-17, "Personal energy absorbers and lanyards", or a standard offering equivalent or better protection;
- (g) Z259.12-16 (R2021), "Connecting components for personal

fall-arrest systems (PFAS)", or a standard offering equivalent or better protection;

- (h) Z259.14-01, "Fall Restricting Equipment for Wood Pole Climbing", or a standard offering equivalent or better protection;
- (i) Z259.13-04, "Flexible Horizontal Life Line Systems";
- (i.1) Z259.15-12 (R2016), Anchorage connector, or a standard offering equivalent or better protection; and
- (j) Z259.16-04, "Design of Active Fall-Protection Systems". **Section 49.1 (2).**

Vertical Life Lines

- (1) A vertical life line in a fall-arresting system shall:
- (a) extend to a safe level,
- (b) be adequately secured or weighted at the base of the life line to prevent tangling or disturbance of the life line,
- (c) be securely attached to an anchor point,
- (d) be free of imperfections,
- (e) be free of knots or splices, except for those that are necessary to connect the life line to an anchor point,
- (f) be provided with protective devices at all sharp edges or corners to protect against cuts to or chafing of the life line, and
- (g) be clearly identified as a life line by colour or other means.
- (2) A vertical life line in a fall-arresting system **shall** be used for its intended purpose only and **shall** be used by one employee at a time. **Section 49.4 (1)(2).**

Further details on the General Regulation can be found at gnb.ca.

NEWFOUNDLAND & LABRADOR

In Newfoundland and Labrador, employers are required to address fall protection under the Occupational Health and Safety Regulations Part X, Section 142(2) to (8). Employers must provide fall arrest systems that include CSA-compliant harnesses, lanyards, connectors, lifelines, and rope grabs. These systems must be securely anchored, limit free fall to safe distances, and be inspected by a qualified person before each shift. Lifelines must reach a safe surface, be properly secured, and used by only one worker at a time. If a fall occurs, the system must be removed from service and inspected before reuse.

PART X - FALL PROTECTION

Fall Arrest System

- (1) A fall arrest system that is provided in accordance with section 141 **shall:**
- (a) be adequately secured to:
- (i) an anchorage point, or
- (ii) a lifeline that is:
- (A) securely fastened to anchor points, or
- (B) attached to a static line that is securely fastened to anchorage points and that is capable of withstanding either the maximum load likely to be imposed on the anchorage point or a load of 22.2 kilonewtons, whichever is the greater;
- (b) include a lanyard:
- (i) that is attached to an anchorage point or lifeline, where

practicable, above the shoulder of the worker, and

- (ii) that complies with:
- (A) CSA Standard Z259.11 "Personal Energy Absorbers and Lanyards", or
- (B) CSA Standard Z259.2.2 "Self-Retracting Devices".
- (c) prevent a free fall greater than 1.22 metres where:
- (i) the fall arrest system is not equipped with a shock absorption system that complies with CSA Standard Z259.11 "Personal Energy Absorbers and Lanyards" and that reduces the shock level of a fall to less than 4 kilonewtons, or
- (ii) the combined free fall and shock absorbed deceleration distance exceeds the distance between the work area and a safe surface;
- (d) include a full body harness that:
- (i) is attached to a lanyard,
- (ii) is adjusted to fit the user of the harness, and
- (iii) complies with CSA Standard Z259.10 "Full Body Harnesses"; and:
- (e) include connecting components that comply with CSA Standard Z259.12 "Connecting Components for Personal Fall Arrest Systems".
- (2) Where a fall arrest system includes a lifeline, the lifeline **shall**:
- (a) comply with CSA Standard Z259.2.5 "Fall Arresters and Vertical Lifelines";
- (b) extend to a safe surface below the work area and be securely attached to an anchorage point;

- (c) be secured at the bottom of the lifeline to prevent tangling or disturbance of the line and be free of knots, lubricants and imperfections;
- (d) be free of splices, except where they are necessary to connect the lifeline to an anchorage point;
- (e) be provided with softeners at all sharp edges or corners to protect against cuts or chafing; and
- (f) be clearly identified as a lifeline by colour or by another means that provides an equivalent level of safety.
- (3) No worker shall:
- (a) use a lifeline in a fall arrest system while that fall arrest system is being used by another worker; or
- (b) provide a rope for use, or permit a rope to be used, as a lifeline in a fall arrest system where the rope has been used for another purpose.
- (4) Where a fall arrest system provided to a worker includes a rope grab, the rope grab used **shall** comply with:
- (a) CSA Standard Z259.2.4 "Fall Arresters and Vertical Rigid Rails"; and
- (b) CSA Standard Z259.2.5 "Fall Arresters and Vertical Lifelines".
- (5) An **employer** who provides a worker with a fall arrest system **shall** ensure the fall arrest system is inspected by a qualified person before each work shift undertaken by the worker.
- (6) A qualified person who carries out an inspection of a fall arrest system **shall** advise the **employer** where a component of the system is defective in condition or function and the **employer shall** ensure that the system is not used until the

defective component is replaced or repaired.

- (7) Where a fall arrest system has arrested the fall of a worker at a work area, the **employer shall** ensure that the fall arrest system:
- (a) is removed from service and inspected by a qualified person; and
- (b) is repaired, before it is reused, to the original manufacturer's specifications, where an inspection under paragraph (a) reveals that a component of the system is defective.
- (8) Where a fall arrest system includes a static line, the static line **shall:**
- (a) have a nominal diameter of at least 12.7 millimetres and be made of improved plow wire rope;
- (b) be equipped with vertical supports at least every 9 metres and have a maximum deflection, when taut, of no greater than 381 millimetres for a 9 metre span;
- (c) be equipped with turnbuckles or other comparable tightening devices that provide an equivalent level of protection, at the ends of the static line;
- (d) be equipped with softeners at all sharp edges or corners to protect against cuts or chafing;
- (e) be made only of components that are able to withstand either the maximum load likely to be imposed on the components or a load of 8 kilonewtons, whichever is the greater; and
- (f) comply with CSA Standard Z259.13 "Flexible Horizontal Lifeline Systems" and CSA Standard Z259.16 "Design of Active Fall Protection Systems". **Section 142 (1) to (8).**

Further details on the Occupational Health and Safety

Regulations can be found at assembly.nl.ca.

NOVA SCOTIA

In Nova Scotia, employers are required to address fall protection under the Workplace Health and Safety Regulations Part 21, Section 21.16. Employers must ensure that horizontal and vertical lifelines used in fall-protection systems comply with the latest CSA standards—Z259.16 for design, Z259.13 for horizontal systems, and Z259.2.1 for vertical systems. These lifelines must be properly designed, certified, and used to minimize fall risks and protect workers.

Part 21: Fall Protection

21.1 In this Part,

"fall distance" means the vertical distance a person may fall, measured from the surface where the weight of a person is supported to the surface the person could fall onto;

"lifeline" means a component of a fall-protection system consisting of a vertical lifeline or a horizontal lifeline;

"vertical lifeline" means a flexible lifeline with an end termination on the top end that is connected to an anchorage or anchorage connector and hangs vertically from where it is connected;

Horizontal and Vertical Lifelines

- **21.16 (1)** An **employer must** ensure that a horizontal lifeline used as a component of a fall-protection system meets all of the following:
- (a) it is designed and installed in compliance with the latest version of CSA standard CSA Z259.16, "Design of Active Fall-Protection Systems;
- (b) it is used, certified and made of material in compliance

with the latest version of CSA standard CSA Z259.13, "Flexible Horizontal Lifeline Systems".

(2) An employer must ensure that a vertical lifeline used as a component of a fall-protection system is used and certified in accordance with the latest version of CSA standard CSA Z259.2.1, "Fall Arresters, Vertical Lifelines and Rails".

Further details on the Workplace Health and Safety Regulations can be found at <u>novascotia.ca</u>.

NORTHWEST TERRITORIES

In the Northwest Territories and Nunavut, employers are required to address fall protection under the Occupational Health and Safety Regulations Part 7, Sections 103, 108(2), and 119(2). Employers must ensure lifelines are suitable for the work environment, securely anchored, and maintained according to manufacturer specifications. Vertical lifelines must extend to a safe landing and be protected from fouling; horizontal lifelines must be engineer-certified or meet approved standards. Where workers face fall risks between 1.2 m and 3 m, guardrails or similar barriers are required.

PART 7 — PERSONAL PROTECTIVE EQUIPMENT

Lifelines

- (1) Unless otherwise specifically provided, an **employer shall** ensure that a lifeline is:
- (a) suitable for the conditions in which the lifeline is to be used, having regard to the physical factors of the lifeline including strength, abrasion resistance, extensibility and chemical stability;
- (b) made of wire rope or synthetic material;
- (c) free of imperfections, knots and splices, other than end

terminations;

- (d) protected by padding where the lifeline passes over sharp edges;
- (e) protected from heat, flame or abrasive or corrosive materials during use;
- (f) fastened to a secure anchor point that:
- (i) has a breaking strength of not less than 22.2 kN, and
- (ii) is not used to suspend any platform or other load; and
- (g) maintained according to the manufacturer's specifications.
- (2) An **employer shall** ensure that a vertical lifeline **required** by these regulations has a minimum diameter of:
- (a) 12 mm if the lifeline is made of nylon;
- (b) 15 mm if the lifeline is made of polypropylene; or
- (c) 8 mm if the lifeline is made of wire rope.
- (3) An **employer shall** ensure that if a vertical lifeline is used,
- (a) the lower end extends to the ground or to a safe landing; and
- (b) the lifeline is protected at the lower end to ensure that the line cannot be fouled by any equipment.
- (4) An employer shall ensure that a horizontal lifeline is:
- (a) either:
- (i) designed and certified by a professional engineer, or
- (ii) manufactured to an approved standard; and
- (b) installed and used in accordance with the design or

standard referred to in paragraph (a) or the manufacturer's specifications. **Section 103 (1) to (4).**

Workers' Responsibilities

- (2) Before using a vertical lifeline, a worker **shall** ensure that:
- (a) the lower end extends to the ground or to a safe landing;
- (b) the lifeline is protected at the lower end to ensure that the line cannot be fouled by any equipment. **Section 108 (2).**

Protection Against Falling

(2) An **employer shall** ensure that workers at a permanent work site are protected from falling by a guardrail or similar barrier if a worker could fall a vertical distance of between 1.2 m and 3 m. **Section 119 (2).**

Further details on the Occupational Health and Safety Regulations can be found at canlii.org.

NUNAVUT

In the Nunavut, employers are required to address fall protection under the Occupational Health and Safety Regulations Part 7, Sections 103, 108(2), and 119(2). Employers must ensure lifelines are suitable for the work environment, securely anchored, and maintained according to manufacturer specifications. Vertical lifelines must extend to a safe landing and be protected from fouling; horizontal lifelines must be engineer-certified or meet approved standards. Where workers face fall risks between 1.2 m and 3 m, guardrails or similar barriers are required.

PART 7 - PERSONAL PROTECTIVE EQUIPMENT

Lifelines

- (1) Unless otherwise specifically provided, an **employer shall** ensure that a lifeline is:
- (a) suitable for the conditions in which the lifeline is to be used, having regard to the physical factors of the lifeline including strength, abrasion resistance, extensibility and chemical stability;
- (b) made of wire rope or synthetic material;
- (c) free of imperfections, knots and splices, other than end terminations;
- (d) protected by padding where the lifeline passes over sharp edges;
- (e) protected from heat, flame or abrasive or corrosive materials during use;
- (f) fastened to a secure anchor point that:
- (i) has a breaking strength of not less than 22.2 kN, and
- (ii) is not used to suspend any platform or other load; and
- (g) maintained according to the manufacturer's specifications.
- (2) An **employer shall** ensure that a vertical lifeline **required** by these regulations has a minimum diameter of:
- (a) 12 mm if the lifeline is made of nylon;
- (b) 15 mm if the lifeline is made of polypropylene; or
- (c) 8 mm if the lifeline is made of wire rope.
- (3) An **employer shall** ensure that if a vertical lifeline is used,
- (a) the lower end extends to the ground or to a safe landing;

- (b) the lifeline is protected at the lower end to ensure that the line cannot be fouled by any equipment.
- (4) An employer shall ensure that a horizontal lifeline is:
- (a) either:
- (i) designed and certified by a professional engineer, or
- (ii) manufactured to an approved standard; and
- (b) installed and used in accordance with the design or standard referred to in paragraph (a) or the manufacturer's specifications. Section 103 (1) to (4).

Workers' Responsibilities

- (2) Before using a vertical lifeline, a worker **shall** ensure that:
- (a) the lower end extends to the ground or to a safe landing; and
- (b) the lifeline is protected at the lower end to ensure that the line cannot be fouled by any equipment. **Section 108 (2).**

Protection Against Falling

(2) An **employer shall** ensure that workers at a permanent work site are protected from falling by a guardrail or similar barrier if a worker could fall a vertical distance of between 1.2 m and 3 m. **Section 119 (2)**.

Further details on the Occupational Health and Safety Regulations can be found at canlii.org.

ONTARIO

In Ontario, employers are required to address fall protection under the Reg. 213/91: CONSTRUCTION PROJECTS, Part II, Sections 26.1 and 26.9. Employers must ensure workers are

protected by a guardrail system or, where not practicable, the highest-ranked alternative: travel restraint, fall restricting, fall arrest systems, or safety nets. All systems **must** meet CSA standards and be designed by an engineer. Lifelines and lanyards **must** be protected from damage, used by one worker at a time, and meet specific installation and inspection requirements.

PART II - GENERAL CONSTRUCTION

- (1) A worker **shall** be adequately protected by a guardrail system that meets the requirements of subsections 26.3 (2) to (8).
- (2) Despite subsection (1), if it is not practicable to install a guardrail system as that subsection requires, a worker **shall** be adequately protected by the highest ranked method that is practicable from the following ranking of fall protection methods:
 - 1. A travel restraint system that meets the requirements of section 26.4.
 - 2. A fall restricting system that meets the requirements of section 26.5.
 - 3. A fall arrest system, other than a fall restricting system designed for use in wood pole climbing, that meets the requirements of section 26.6.
 - 4. A safety net that meets the requirements of section 26.8.
- (3) The components of any system listed in subsection (2) **shall** be designed by an engineer in accordance with good engineering practice, and **shall** meet the requirements of any of the following National Standards of Canada standards that are applicable:
 - 1. CAN/CSA-Z259.1-05: Body Belts and Saddles for Work Positioning and Travel Restraint.
 - 2. CAN/CSA-Z259.2.5-12: Fall Arresters and Vertical

Lifelines.

- 3. CAN/CSA-Z259.2.2-98 (R2004): Self-Retracting Devices for Personal Fall-Arrest Systems.
- 4. CAN/CSA-Z259.2.3-99 (R2004): Descent Control Devices.
- 5. CAN/CSA-Z259.10-06: Full Body Harnesses.
- 6. CAN/CSA-Z259.11-05: Energy Absorbers and Lanyards.
- 7. CAN/CSA-Z259.12-01 (R2006): Connecting Components for Personal Fall Arrest Systems (PFAS).
- 8. CAN/CSA-Z259.14-01 (R2007): Fall Restrict Equipment for Wood Pole Climbing.
- (4) Before any use of a fall arrest system or a safety net by a worker at a project, the worker's **employer shall** develop written procedures for rescuing the worker after his or her fall has been arrested. **Section 26.1 (1) to (4).**
- (1) This section applies to a lanyard or lifeline that is part of a travel restraint system or a fall arrest system.
- (2) The following requirements apply to a lanyard or a lifeline:
 - 1. It **shall** not be used in such a way that it is likely to be cut, chafed or abraded.
 - 2. It **shall** not be subjected to extreme temperature, flame, abrasive or corrosive materials or other hazards that may damage it.
 - 3. The free end of the lanyard or lifeline **shall** be kept clear of equipment and machinery.
- (3) Only one person at a time may use a lanyard.
- (4) The connecting ends of a lanyard **shall** be wrapped around a protective thimble and adequately fastened with a swaged fitting or eye splice supplied by the manufacturer of the lanyard.
- (5) A horizontal or vertical lifeline **shall** be kept free from splices or knots, except knots used to connect it to a fixed

support.

- (6) Only one person at a time may use a vertical lifeline.
- (7) A vertical lifeline **shall**,
- (a) extend to the ground; or
- (b) have a positive stop that prevents the rope grab or other similar device from running off the end of the lifeline.
- (8) The following requirements apply to a horizontal lifeline system:
 - 1. It **shall** be designed by an engineer in accordance with good engineering practice.
 - 2. The design may be a standard design or a custom design.
 - 3. The design **shall**,
 - 4. show the arrangement of the system including the anchorage or fixed support system,
 - indicate the components used,

iii. state the number of workers that can safely be attached to it,

- 1. set out instructions for installation or erection, and
- 2. show the design loads for the system.
- 3. The system **shall** be installed or erected, and maintained, in accordance with the engineer's design.
- 4. Before each use, the system shall be inspected by an engineer or a competent worker designated by a supervisor.
- 5. The constructor **shall** keep the design at the project while the system is in use. **Section 26.9(1) to (8).**

Further details on the Reg. 213/91: CONSTRUCTION PROJECTS can be found at ontario.ca.

PRINCE EDWARD ISLAND

In Prince Edward Island, employers are required to address fall protection under the OHS Act Fall Protection Regulations, Part 3, Section 3(2)((3)4)(9). Employers must ensure that lifelines used in fall arrest systems meet CSA standards, are properly anchored, extend to a safe surface, and are free of damage or prior use. Lifelines must be used by only one worker at a time and clearly identified. Rope grabs and static lines must also meet specific CSA requirements and design standards to ensure safety. All components must be properly secured and maintained.

PART 3 - FALL ARREST SYSTEMS

Lifelines - Requirements

- (2) Where a fall arrest system provided to a worker includes a lifeline, the lifeline **shall:**
- (a) comply with CSA Standard Z259.2.4-15, Fall Arresters and Vertical Rigid Rails or CSA Standard Z259.2.5-17, Fall Arresters and Vertical Lifelines, as applicable;
- (b) extend to a safe surface below the work area;
- (c) be secured at the bottom of the lifeline to prevent tangling or disturbance of the line;
- (d) be securely attached to an anchor point;
- (e) be free of knots, lubricants and imperfections;
- (f) be free of splices, except as are necessary to connect the lifeline to an anchor point;
- (g) be provided with softeners at all sharp edges or corners to protect against cuts or chafing; and
- (h) be clearly identified as a lifeline by colour or by another means that provides an equivalent level of safety.

Lifelines - Restrictions

- (3) No worker shall:
- (a) use a lifeline in a fall arrest system while that fall arrest system is being used by another worker; or
- (b) provide a rope for use, or permit a rope to be used, as a lifeline in a fall arrest system if the rope has been used for another purpose.

Rope Grabs

(4) Where a fall arrest system provided to a worker includes a rope grab, the rope grab used **shall** comply with CSA Standard Z259.2.5-17, Fall Arresters and Vertical Lifelines.

Static Lines

- (9) Where a fall arrest system provided to a worker includes a static line, the static line **shall:**
- (a) have a nominal diameter of at least 12.7 mm;
- (b) be equipped with vertical supports at least every 9 m;
- (c) have a maximum deflection, when taut, of no greater than 381 mm for a 9 m span;
- (d) be equipped with turnbuckles or other comparable tightening devices that provide an equivalent level of protection, at the ends of the static line;
- (e) be made of Improved Plow Wire Rope;
- (f) be equipped with softeners at all sharp edges or corners to protect against cuts or chafing;
- (g) be made only of components that are able to withstand either the maximum load likely to be imposed on the components or a load of 8 kN, whichever is greater; and

(h) comply with CSA Standard Z259.13-16, Manufactured Horizontal Lifeline Systems and CSA Standard Z259.16-15, Design of Active Fall Protection Systems. **Section 3 (2) to (4), 9.**

Further details on the Occupational Health and Safety Act Fall Protection Regulations can be found at princeedwardisland.ca.

QUÉBEC

In Quebec, employers are required to address fall protection under the Regulation Respecting Occupational Health and Safety, Sections 10, 12, 33.1, and 348. Workers must be protected against falls over 3 metres or in hazardous areas such as near liquids, machinery, or dangerous materials. Guardrails must meet specific height and strength requirements, and vertical openings must be secured with nets or protective screens. Fall arrest systems must include CSA-compliant components such as lanyards, shock absorbers, self-retracting devices, rope grabs, and lifelines, which must be used by only one worker and kept free of damage.

DIVISION III - ESTABLISHMENT CONDITIONS

Vertical openings: Any opening made through a wall that presents a falling hazard for an object that may cause injuries **shall** be protected with a net or a protective screen. **Section 10**.

Guardrails: Any guardrail incorporated in a building, with the exception of a guardrail that is part of any equipment, **shall** comply with the National Building Code as applied at the time of its installation.

Temporary guardrails **shall** be so designed, constructed and installed as to withstand the following minimum loads:

(1) a 900 N horizontal single point load applied at any location on the top rail;

(2) a 450 N load applied vertically at the top rail.

In addition, such guardrails shall be provided with:

- (1) a top rail located between 1 m and 1,2 m from the floor;
- (2) at least an intermediate rail fixed at midway between the top rail and the floor. The intermediate rail may be replaced by balusters or panels;
- (3) a toe board at floor level at least 90 mm high. Section 12(1) to (3).

DIVISION III.1 - PROTECTION AGAINST FALLS

Cases where workers must be protected: Workers shall be protected against falls in the following cases:

- (1) if they are at risk of falling more than 3 m unless they are only using a means of access or exit;
- (2) if they are at risk of falling:
- (a) into a liquid or dangerous substance;
- (b) on a moving component;
- (c) on equipment or material that constitute a danger;
- (d) from a height of 1,5 m or more in a well, a basin, a tank, a reservoir, a vat, a container for the storing or mixing of substances, or where the workers are handling a load. **Section 33.1** (1)(2).

DIVISION XXX — MEANS AND EQUIPMENT FOR INDIVIDUAL AND GROUP PROTECTION

Fall arrest connecting device: A fall arrest connecting device **shall** be composed of one or more of the following equipment, including at least the equipment provided for in paragraph 1 or 2:

- (1) a shock absorber and a lanyard complying with CAN/CSA Standard Z259.11 Shock Absorbers and Lanyards. The lifeline, including the shock absorber, **shall** have a maximum length of 2 m;
- (2) a self retracting lanyard complying with CAN/CSA Standard Z259.2.2 Self-Retracting Devices;
- (3) a rope grab complying with CSA Standard Z259.2.5 Fall Arresters and Vertical Lifelines or CSA Standard Z259.2.4 Fall Arresters and Vertical Rigid Rails;
- (4) a vertical lifeline complying with CSA Standard Z259.2.5 Fall Arresters and Vertical Lifelines or CSA Standard Z259.2.4 Fall Arresters and Vertical Rigid Rails, which **shall** never be directly in contact with a sharp edge and **shall**:
- (a) be used by one person only;
- (b) be less than 90 m in length;
- (c) be free of defects, knots and splices, except at the terminations of the lifeline;
- (5) a connecting component, such as a spring hook, D-ring or snap hook in compliance with CAN/CSA Standard Z259.12 Connecting Components for Personal Fall Arrest Systems. Section 348 (1) to (5).

Further details on the Regulation Respecting Occupational Health and Safety can be found at gouv.qc.ca.

SASKATCHEWAN

In Saskatchewan, employers are required to address fall protection under the <u>Occupational Health and Safety Regulations</u>, Sections 7-15, 7-20, 9-2(3). Employers must provide lifelines that are secure, properly anchored, and maintained according to standards, with vertical lifelines

extending to a safe landing and protected from damage. Lifeline dimensions depend on the material used, and each worker **must** have access to one. Workers are responsible for inspecting and properly using lifelines and harnesses. For falls between 1.2 m and 3 m, guardrails or similar barriers are **required** at permanent work areas.

PART 7 - Personal Protective Equipment

Lifelines

- (1) Unless otherwise specifically provided, an **employer**, contractor or owner **shall** ensure that a lifeline:
- (a) is suitable for the conditions in which the lifeline is to be used, having regard to factors including strength, abrasion resistance, extensibility and chemical stability;
- (b) is made of wire rope or synthetic material;
- (c) is free of imperfections, knots, and splices, other than end terminations;
- (d) is protected by padding where the lifeline passes over sharp edges;
- (e) is protected from heat, flame or abrasive or corrosive materials during use;
- (f) is fastened to a secure anchor point that:
- (i) has a breaking strength of at least 22.2 kilonewtons; and
- (ii) is not used to suspend any platform or other load; and
- (g) is maintained according to the manufacturer's recommendation.
- (2) Unless otherwise specifically provided, an **employer**, contractor or owner **shall** ensure that there is a lifeline that meets the requirements of this section for every worker.

- (3) Unless otherwise specifically provided, an **employer** or contractor **shall** ensure that a vertical lifeline **required** by these regulations has a minimum diameter of:
- (a) 12 millimetres if the lifeline is made of nylon;
- (b) 15 millimetres if the lifeline is made of polypropylene; or
- (c) 8 millimetres if the lifeline is made of wire rope.
- (4) An **employer** or contractor **shall** ensure that if a vertical lifeline is used:
- (a) the lower end extends to the ground or to a safe landing;
- (b) the lifeline is protected at the lower end to ensure that the line cannot be fouled by any equipment. **Section 7-15 (1)** to (4).

Workers' Responsibilities re: Lifelines, etc.

- (1) Before using a lifeline or lanyard, a worker **shall** ensure that the lifeline or lanyard:
- (a) is free of imperfections, knots and splices, other than end terminations;
- (b) is protected by padding where the lifeline or lanyard passes over sharp edges; and
- (c) is protected from heat, flame or abrasive or corrosive materials during use.
- (2) Before using a vertical lifeline, a worker **shall** ensure that:
- (a) the lower end extends to the ground or to a safe landing; and

- (b) the lifeline is protected at the lower end to ensure that the line cannot be fouled by any equipment.
- (3) Before using a full-body harness, a worker **shall** ensure that the full-body harness:
- (a) is properly adjusted to fit the worker securely; and
- (b) subject to subsection 18-9(5), is attached by means of a connecting linkage to a fixed anchor or a lifeline.
- (4) A worker who uses a full-body harness and connecting linkage **shall** ensure that the connecting linkage is attached to a personal fall arrest system, lifeline or a fixed anchor. **Section 7-20 (1) to (4).**

PART 9 - Safeguards, Storage, Warning Signs, and Signals

Protection Against Falling

(3) An employer or contractor shall ensure that a worker at a permanent work area is protected from falling by a guardrail or similar barrier if the worker may fall a vertical distance of more than 1.2 metres and less than 3 metres. Section 9-2 (3).

Further details on the Occupational Health and Safety Regulations can be found at saskatchewan.ca.

YUKON

In Yukon, employers are required to address fall protection under the Occupational Health and Safety Regulations Part 1, Sections 1.37 to 1.40. When guardrails or safety nets are not practical, workers must be provided with and use appropriate fall arrest systems in situations involving fall risks of 3 metres or more, or other hazardous conditions such as working on roofs, platforms, or near machinery or water. A written fall protection plan is required for work at heights of 7.5

metres or more. **Employers must** ensure the use of CSA-compliant full body harnesses, energy absorbers, and lifelines. Vertical lifelines **must** be properly anchored, protected, used by only one worker, and meet strength and material requirements.

Part 1 - General

PROTECTIVE EQUIPMENT AND CLOTHING — FALL ARREST

Provision and Use

Where it is not practical to protect a worker by guards, guardrails, safety nets or other devices, the worker **shall** be provided with and **required** to use the appropriate fall arrest protection:

Where Required

- (a) when working at a place from which a fall of:
 - 3 m (10 ft.) or more may occur, or
 ii. less than 3 m (10 ft.), if it involves an unusual risk of injury,
- (b) where there is a possibility of falling into a pit, shaft, machinery, water or bulk material that could shift,
- (c) when climbing or descending from utility poles, communication and transmission towers or single point suspension equipment,
- (d) when working on a swing stage or thrust out scaffold, elevating work platform or basket or suspended platform or cage,
- (e) when barring or scaling loose material from a wall in an open pit or an earth work, or
- (f) when working on a roof:

- having a slope of 2 vertical to 3 horizontal or steeper,
 or
 - ii. where the surface is slippery Section 1.37.

Fall Protection Program

Where work is performed at a location not protected by permanent guardrails and from which a fall of 7.5 m (25 ft.) or more may occur, a written fall protection plan **shall** be in place and communicated to workers with adequate consideration and description of:

- (a) falling hazards expected,
- (b) fall protection system or systems to be used,
- (c) the procedure to assemble, maintain, inspect, use and disassemble the fall protection system or systems, and
- (d) methods to rescue a fallen worker or one who is suspended by a personal fall protection system or safety net and is unable to effect self rescue. **Section 1.38.**

Components

A worker shall:

- (a) when using a personal protection system for fall arrest, wear a full body harness or other such acceptable harness or device which meets the requirements of CSA Standard Z259.10-M90, Full Body Harness or other similar standard acceptable to the board,
- (b) when using a personal protection system for fall arrest, wear an energy absorbing system which meets the requirements of CSA Standard Z259.11-05, Energy Absorbers and Lanyards or other similar standard acceptable to the board, and
- (c) when using a personal protection system for fall restraint, wear a safety belt, a full body harness or other

such acceptable harness or device and lanyard which meets CSA Standard Z259.1-95, Safety Belts and Lanyards, or other similar standard acceptable to the board. **Section 1.39**.

Vertical Lifelines

A vertical lifeline **shall** meet the requirements of CSA Standard Z259.2.1-98, Fall Arresters, Vertical Lifelines and Rails, or other similar standard acceptable to the board, and it **shall** be:

- (a) secured independently to an anchor with adequate strength,
- (b) padded or protected at points of attachment and everywhere else the lifelines may come in contact with sharp or abrasive edges,
- (c) used to protect only one worker per line,
- (d) first grade, three strand, hawser laid manila rope of not less than 0.019 m (3/4 in.), having a breaking strength of not less than 24 kN (5400 lbs.), or synthetic or wire rope of at least equal strength,
- (e) wire rope or wire-cored manila rope when there is a possibility of the line being cut, burned or other quick severing incidence,
- (f) non-conductive and used in duplicate (two lines per worker), where workers are using the lifelines in proximity of an energized electrical line,
- (g) less than 90 m (300 ft.) in length, and
- (h) extended to within 3 m (10 ft.) of the ground or other safe landing. **Section 1.40.**

Further details on the Occupational Health and Safety Regulations can be found at wcb.yk.ca.