

# **FALL PROTECTION REQUIREMENTS**

## **Section 116 Protection Against Falling**

116(1) in this section and sections 116.1 to 116.3:

- (a) “Anchor point” or “anchor plate” means a secure connecting point capable of safely withstanding the impact forces applied by a fall protection system;
  - (b) “Control zone” means the area within two metres of an unguarded edge of a level, elevated work surface of three metres or more in height;
  - (c) “fall protection system” means:
    - (i) a control zone as required pursuant to section 116.2;
    - (ii) a personal fall arrest system;
    - (iii) a safety net; or
    - (iv) a travel restraint system;
  - (d) “Permanent” means intended and designed to last indefinitely;
  - (e) “Similar barrier” means any barrier that the employer or contractor can demonstrate provides a level of protection that is at least equivalent to a guardrail;
  - (f) “Temporary” means:
    - (i) Designed to be removed by the last workers using it before commissioning or turnover to the contractor or owner; and
    - (ii) Intended and designed to last not more than one year;
  - (g) “Travel restraint system” means a system that prevents a worker from travelling to the edge of a structure or to a work position from which the worker could fall.
- (2) An employer or contractor shall ensure that workers use a fall protection system at a temporary or permanent work area where:
- (a) a worker may fall three metres or more; or
  - (b) There is a possibility of injury if a worker falls less than three metres.
- (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 three metres.
- (4) Notwithstanding subsection (3), where the use of a guardrail or similar barrier is not reasonably practicable, an employer or contractor shall ensure that a worker uses a travel restraint system.
- (5) Notwithstanding subsection (4), where the use of a travel restraint system is not reasonably practicable, an employer or contractor shall ensure that a safety net or control zone or other equally effective means that protects the worker from falling is used.
- (6) Subsection (2) does not apply to competent workers who are engaged in:
- (a) Connecting the structural members of a skeletal steel structure or a pre-cast structure;
  - (b) Connecting the support structure of a scaffold;
  - (c) Stabilizing or securing the load on a truck or trailer;
  - (d) Installing or attaching a fall protection system to the anchor point;
  - (e) Removing or disassembling the associated parts of a fall protection system when it is no longer required; or
  - (f) Activities within the normal course of business on a permanent loading dock that is not greater than 1.2 metres in height.

### **Section 116.1 Fall Protection Plan**

116. 1(1) An employer or contractor shall develop a written fall protection plan where:
- (a) a worker may fall three metres or more; and
  - (b) workers are not protected by a guardrail or similar barrier.
- (2) The fall protection plan required by subsection (1) must describe:
- (a) the fall hazards at the worksite;
  - (b) the fall protection system to be used at the worksite;
  - (c) the procedures used to assemble, maintain, inspect, use and disassemble the fall protection system; and
  - (d) the rescue procedures to be used if a worker falls, is suspended by a personal fall arrest system or safety net and needs to be rescued.
- (3) The employer or contractor shall ensure that a copy of the fall protection plan is readily available before work begins at a worksite where a risk of falling exists.
- (4) The employer or contractor shall ensure that a worker is trained in the fall protection plan and 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.

10 Aug 2007 SR 67/2007 s11.

### **Section 116.2 Control Zone**

116. 2(1) An employer or contractor shall ensure that a control zone:
- (a) is only used if a worker can fall from a level surface in a work area; and
  - (b) is not less than two metres wide when measured from the unguarded edge.
- (2) When crossing a control zone mentioned in subsection (1), a worker:
- (a) subject to subsection (4) is not required to use a fall protection system, other than the control zone, to enter or leave the work area; and
  - (b) shall follow the most direct route to get to or from the unguarded edge.
- (3) An employer or contractor shall ensure that a control zone is clearly marked with an effective raised warning line or other equally effective method if a worker is working more than two metres from an unguarded edge.
- (4) An employer or contractor shall ensure that a worker who has to work within a control zone uses:
- (a) a travel restraint system; or
  - (b) a means that is as equally effective as a travel restraint system and that prevents the worker from getting to the unguarded edge.

10 Aug 2007 SR 67/2007 s11.

### **Section 116.3 Anchor points and Anchor plates**

116. 3(1) Where a worker uses a personal fall arrest system or a travel restraint system, an employer, contractor or owner shall ensure that an anchor point or anchor plate that meets the requirements of this section is used as part of that system.

(2) An employer, contractor or owner shall ensure that a temporary anchor point used in a travel restraint system:

- (a) has an ultimate load capacity of at least 3.5 kilonewtons (800 pounds-force) per worker attached in any direction in which the load may be applied;
- (b) is installed and used according to the manufacturer's specifications;
- (c) is permanently marked as being for travel restraint only; and
- (d) is removed by the last worker from use on the earlier of:
  - (i) the date the work project for which it is intended is completed; and
  - (ii) the time specified by the manufacturer.

(3) An employer, contractor or owner shall ensure that a permanent anchor point used in a travel restraint system associated with any new construction project on or after the date this section comes into force:

- (a) has an ultimate load capacity of at least 8.75 kilonewtons (2 000 pounds-force) per worker attached in any direction in which the load may be applied;
- (b) is installed and used according to the manufacturer's specifications; and
- (c) is permanently marked as being for travel restraint only.

(4) In the case of a personal fall arrest system installed on or after one year after the date this section comes into force, an employer, contractor, owner or supplier shall ensure that anchor points to which the personal fall arrest system is attached have an ultimate load capacity of at least 22.2 kilonewtons (5000 pounds-force) per worker attached in any direction in which the load may be applied.

(5) An employer, contractor, owner or supplier shall ensure that the following types of equipment that are components of fall protection systems, and their installation, conform to the manufacturer's specifications or are certified by a professional engineer:

- (a) permanent anchor points;
- (b) anchors with multiple attachment points;
- (c) permanent horizontal lifeline systems;
- (d) support structures for safety nets.

10 Aug 2007 SR 67/2007 s11.

## **HANDRAILS AND GUARDRAILS**

### **Section 121 Handrails**

121(1) An employer, contractor or owner shall ensure that a stairway with five or more treads:

- (a) is equipped with a handrail that:
  - (i) extends the entire length of the stairway;
  - (ii) is adequately secured to the structure;
  - (iii) is installed on the stairway at a height of between 800 and 920 millimetres above the front edge of the treads; and

(iv) is strong enough to support a worker who falls on the stairway; and  
(b) on an open side, is equipped with both a handrail and an intermediate rail or equivalent safeguard.

(2) Where a handrail is required for a temporary stairway to which subsection (1) applies, an employer, contractor or owner shall ensure that the handrail is constructed of at least 38 by 89 millimetre construction grade lumber, or material of equivalent strength, and is supported by posts that are not more than three metres apart.

4 Oct 96 c0-1.1 Reg 1 s121.

## **Section 122 Guardrails**

122(1) Subject to subsections (2) to (4), where the installation of a guardrail is required by these regulations, an employer, contractor or owner shall ensure that the guardrail:

(a) has a horizontal top member that is not less than 920 millimetres and not more than 1070 millimetres above the working surface;

(b) has a horizontal intermediate member that is spaced midway between the horizontal top member and the working surface;

(c) is supported for the entire length of the guardrail by vertical members that are:

(i) not more than three metres apart, in the case of a guardrail installed before the coming into force of this section; and

(ii) where reasonably practicable, not more than 2.4 metres apart, in the case of a guardrail installed on or after the coming into force of this section;

(d) is capable of supporting a worker who may fall against the guardrail; and

(e) is constructed of 38 by 89 millimetre construction grade lumber or other materials that are of equal or greater strength.

(2) Clause (1)(a) does not apply to a guardrail that:

(a) was installed on or before October 30, 1988; and

(b) is not less than 900 millimetres nor more than one metre above the working surface.

(3) A horizontal intermediate member is not required in the case of a temporary guardrail that is manufactured with a substantial barrier completely filling the area enclosed by the horizontal top member, a horizontal bottom member and the vertical members.

(4) A wire rope guardrail may be used at the external perimeter of a building under construction.

(5) Where a wire rope guardrail is used pursuant to subsection (4), an employer, contractor or owner shall ensure that:

(a) the guardrail consists of a horizontal top member and a horizontal intermediate member made of wire rope that is not less than 9.5 millimetres in diameter, with vertical separators not less than 50 millimetres wide that are spaced at intervals not exceeding 2.4 metres;

(b) the horizontal top member and horizontal intermediate member are positioned above the working surface in accordance with clauses (1)(a)

- and (b);
  - (c) the guardrail is kept taut by means of a turnbuckle or other appropriate device; and
  - (d) the guardrail is arranged so that a worker coming into contact with the ropes cannot fall through the ropes.
- (6) An employer, contractor or owner shall ensure that no worker hangs equipment on a guardrail.

4 Oct 96 c0-1.1 Reg 1 s122.

## **Section 123 Toeboards**

123(1) An employer, contractor or owner shall provide toeboards at the edge of:

- (a) a permanent floor, platform, mezzanine, walkway, ramp, runway or other surface from which it is possible for materials to fall more than 1.2 metres;
- (b) a temporary scaffold or work platform from which it is possible for materials to fall more than three metres; and
- (c) a pit for a flywheel or pulley.

(2) Subsection (1) does not apply to a loading or unloading area if the employer, contractor or owner has taken other precautions to ensure that materials will not fall from the floor or other horizontal surface.

(3) Where a toeboard is required by these regulations, an employer, contractor or owner shall ensure that the toeboard extends from the floor or other horizontal surface to a height of not less than:

- (a) 125 millimetres from the floor or surface; or
- (b) 100 millimetres from the floor or surface, in the case of a toeboard that was installed before March 13, 1986.

4 Oct 96 c0-1.1 Reg 1 s123.

## **ENTRANCE, EXITS, LADDERS**

### **Section 248 General duty re-entrances, exits**

248 An employer, contractor or owner shall provide and maintain a safe means of entrance to and exit from a place of employment and all worksites and work-related areas in or on a place of employment.

4 Oct 96 c0-1.1 Reg 1 s248

### **Section 250 Travel ways**

250(1) An employer, contractor or owner shall ensure that every travelway:

- (a) is strong enough to withstand any traffic to which the travelway may be subjected;
- (b) has secure footing for workers and adequate traction for vehicles or equipment; and
- (c) is at least:
  - (i) 600 millimetres wide, in the case of travelways installed before

July 1, 1997; and  
(ii) 900 millimetres wide, in the case of travelways installed on and after July 1, 1997.

(2) An employer, contractor or owner shall ensure that every travelway that may give rise to a hazard described in subsection 116(2) is provided with a guardrail.

4 Oct 96 c0-1.1 Reg 1 s250.

### **Section 251 Stairs**

251 An employer, contractor or owner shall ensure that:

(a) the widths of treads, the depths of treads and the vertical distances between treads are uniform throughout the length of any stairway and that each tread is level; and

(b) any stairs installed on or after the day on which this section comes into force, including temporary stairs, are at least 600 millimetres wide.

4 Oct 96 c0-1.1 Reg 1 s251.

### **Section 252 Ladders**

252(1) An employer, contractor or supplier shall ensure that every ladder is designed, constructed, used and maintained to perform its function safely.

(2) An employer, contractor or supplier shall ensure that:

(a) no wooden ladder or stepladder is painted with any substance other than a transparent coating; and

(b) no ladder is made by fastening cleats across a single rail or post.

4 Oct 96 c0-1.1 Reg 1 s252.

### **Section 255 Fixed Ladders**

255(1) In this section, “fixed ladder” means a ladder that is fixed to a structure in a vertical position or at an angle that is between vertical and 25° to the vertical, but does not include a ladder used in underground mining operations to which The Mines Regulations apply.

(2) A ladder that is fixed to a structure at an angle of more than 25° to the vertical, or more than one horizontal to two vertical, is deemed to be a stairway and is subject to the requirements of sections 121 and 251.

(3) An employer, contractor or owner shall ensure that:

(a) the rungs on a fixed ladder are uniformly spaced with centres that are not less than 250 and not more than 300 millimetres apart;

(b) a clearance of at least 150 millimetres is maintained between the rungs on a fixed ladder and the structure to which the ladder is affixed;

(c) a fixed ladder is securely held in place at the top and bottom and at any intermediate points that are necessary to prevent sway;

(d) the side rails of a fixed ladder extend not less than one metre above any platform, roof or other landing on the structure to which the ladder is fixed;

(e) a ladder opening in a platform, roof or other landing does not exceed 750 millimetres by 750 millimetres;

(f) a fixed ladder that is more than six metres high:

(i) is equipped with:

(A) platforms at intervals of not more than six metres or ladder cages, in the case of ladders installed on or before March 11, 1986; or

(B) platforms at intervals of not more than six metres and ladder cages, in the case of ladders installed on or after March 12, 1986; or

(ii) is equipped with a personal fall arrest system that meets the requirements of Part VII; and

- (g) a fixed ladder in an excavated shaft is installed in a compartment that is separated from the hoist compartment by a substantial partition.
- (4) Where a ladder cage is required by these regulations, an employer, contractor or owner shall ensure that:
- (a) the ladder cage is constructed of hoops that are not more than 1.8 metres apart, joined by vertical members not more than 300 millimetres apart around the circumference of the hoop;
  - (b) no point on a hoop of the ladder cage is more than 750 millimetres from the ladder; and
  - (c) the ladder cage is of sufficient strength and is designed to contain any worker who may lean or fall against a hoop.
- (5) In the case of a ladder cage constructed before July 1, 1997, an employer, contractor or owner shall ensure that:
- (a) the lowest hoop of the ladder cage is not more than three metres from a platform, landing or the ground; and
  - (b) the uppermost hoop of the ladder cage is at the level of a platform, landing or roof.
- (6) In the case of a ladder cage constructed on or after July 1, 1997, an employer, contractor or owner shall ensure that:
- (a) the lowest hoop of the ladder cage is not more than 2.2 metres from a platform, landing or the ground; and
  - (b) the uppermost hoop of the ladder cage extends at least one metre above the level of a platform, landing or roof.

4 Oct 96 c0-1.1 Reg 1 s255; 10 Aug 2007 SR 67/  
2007 s23.

## **PERSONAL PROTECTIVE EQUIPMENT**

### **Section 86 Use of equipment required**

86(1) Where it is not reasonably practicable to protect the health and safety of workers by design of the plant and work processes, suitable work practices or administrative controls, an employer or contractor shall ensure that every worker wears or uses suitable and adequate personal protective equipment.

(2) Where personal protective equipment will not effectively protect a worker, an employer or contractor shall, where reasonably practicable, provide alternative work arrangements for that worker.

4 Oct 96 c0-1.1 Reg 1 s86

### **Section 87 General responsibilities**

87(1) Where an employer or contractor is required by these regulations or any other regulations made pursuant to the Act to provide personal protective

equipment, the employer or contractor shall:

- (a) supply approved personal protective equipment to the workers at no cost to the workers;
  - (b) ensure that the personal protective equipment is used by the workers;
  - (c) ensure that the personal protective equipment is at the worksite before work begins;
  - (d) ensure that the personal protective equipment is stored in a clean, secure location that is readily accessible to workers;
  - (e) ensure that each worker is aware of the location of the personal protective equipment and trained in its use;
  - (f) inform the workers of the reasons why the personal protective equipment is required to be used and of the limitations of its protection; and
  - (g) ensure that personal protective equipment provided to a worker:
    - (i) is suitable and adequate and a proper fit for that worker;
    - (ii) is maintained and kept in a sanitary condition; and
    - (iii) is removed from use or service when damaged.
- (2) Where an employer or contractor requires a worker to clean and maintain personal protective equipment, the employer shall ensure that the worker has adequate time during normal working hours without loss of pay or other benefits for this purpose.
- (3) Where reasonably practicable, an employer or contractor shall make appropriate adjustments to the work procedures and the rate of work to eliminate or reduce the danger or discomfort to the worker that may arise from the worker's use of personal protective equipment.
- (4) A worker who is provided with personal protective equipment by an employer or contractor shall:
- (a) use the personal protective equipment; and
  - (b) take reasonable steps to prevent damage to the personal protective equipment.
- (5) Where personal protective equipment provided to a worker becomes defective or otherwise fails to provide the protection it was intended for, the worker shall:
- (a) return the personal protective equipment to the employer or contractor; and
  - (b) inform the employer or contractor of the defect or other reason why the personal protective equipment does not provide the protection that it was intended to provide.
- (6) An employer or contractor shall immediately repair or replace any personal protective equipment returned to the employer or contractor pursuant to clause (5)(a).

4 Oct 96 c0-1.1 Reg 1 s87.

## **Section 101 Life lines**

101(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.
  - (1.1) 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.
- (2) 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) eight millimetres if the lifeline is made of wire rope.
- (3) An employer or contractor shall ensure that where 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) Unless otherwise specifically provided, an employer or contractor shall ensure that a horizontal lifeline is:
  - (a) either:
    - (i) designed and certified as safe by a professional engineer; or
    - (ii) manufactured to an approved standard; and
  - (b) installed and used in accordance with the design mentioned in clause (a) or the manufacturer's recommendations.

4 Oct 96 cO-1.1 Reg 1 s102; 10 Aug 2007 SR 67/  
2007 s7; 21 Sep 2007 SR 91/2007 s3.

## **Section 102 Personal Fall Protection Systems**

- 102(1) An employer or contractor shall ensure that a personal fall arrest system and connecting linkage required by these regulations are approved and maintained.
- (2) An employer or contractor shall ensure that a personal fall arrest system required by these regulations:
- (a) prevents a worker from falling more than 1.2 metres without a shock absorber;
  - (b) where a shock absorber is used, prevents a worker from falling more than two metres or the limit specified in the manufacturer's specifications, whichever is less;
  - (c) applies a peak fall-arrest force not greater than eight kilonewtons to a worker; and
  - (d) is fastened to a lifeline or to a secure anchor point that has a breaking strength of at least 22.2 kilonewtons.

10 Aug 2007 SR 67/2007 s8.

## **Section 103 Full Body Harness**

- 103 Where a full-body harness is used, an employer or contractor shall ensure that:
- (a) the full-body harness and connecting linkage are approved and maintained;

- (b) the full-body harness is properly fitted to the worker;
- (c) the worker is trained in the safe use of the full-body harness;
- (d) all metal parts of the full-body harness and connecting linkage are of drop-forged steel 22.2 kilonewtons proof tested;
- (e) a protective thimble is used to protect ropes or straps from chafing whenever a rope or strap is connected to an eye or a D-ring used in the fullbody harness or connecting linkage; and
- (f) the connecting linkage is attached to a personal fall arrest system, lifeline or secure anchor point to prevent the worker from falling more than 1.2 metres.

10 Aug 2007 SR 67/2007 s8.

### **Section 104 Snap hooks on personal fall arrest system**

104 Where a snap hook is used as an integral component of a personal fall arrest system, connecting linkage, full-body harness or lifeline, an employer or contractor shall ensure that the snap hook is self-locking and is approved and maintained.

10 Aug 2007 SR 67/2007 s8.

### **Section 105 Lanyards**

105 An employer or contractor shall ensure that a lanyard:

- (a) is as short as work conditions permit;
- (b) is constructed of:
  - (i) nylon, polyester or polypropylene rope or webbing; or
  - (ii) wire rope that is equipped with an approved shock absorbing device;
- (c) is equipped with suitable snap hooks; and
- (d) is approved and maintained.

4 Oct 96 c0-1.1 Reg 1 s105

### **Section 106 Workers' responsibilities re-lifelines etc**

106(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 274(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.

4 Oct 96 c0-1.1 Reg 1 s106; 10 Aug 2007 SR 67/

### **Section 107 Inspection of full body harness etc.**

107(1) Where the use of a connecting linkage, personal fall arrest system, full-body harness or lifeline is required by these regulations, an employer or contractor shall ensure that a competent person:

(a) inspects the connecting linkage, personal fall arrest system, full-body harness or lifeline:

(i) as recommended by the manufacturer; and

(ii) after the connecting linkage, personal fall arrest system, full-body harness or lifeline has sustained a fall-arresting incident; and

(b) determines whether the connecting linkage, personal fall arrest system, full-body harness or lifeline is safe for continued use.

(2) An employer or contractor shall ensure that a worker inspects the connecting linkage, personal fall arrest system, full-body harness or lifeline before each use and that where a defect or unsafe condition that may create a hazard to a worker is identified in a connecting linkage, personal fall arrest system, full-body harness or lifeline:

(a) steps are taken immediately to protect the health and safety of any worker who may be at risk until the defect is repaired or the unsafe condition is corrected; and

(b) as soon as is reasonably practicable, the defect is repaired or the unsafe condition is corrected.

10 Aug 2007 SR 67/2007 s10.

## **TRAINING**

### **Section 19 Training of workers**

19(1) An employer shall ensure that a worker is trained in all matters that are necessary to protect the health and safety of the worker when the worker:

(a) begins work at a place of employment; or

(b) is moved from one work activity or worksite to another that differs with respect to hazards, facilities or procedures.

(2) The training required by subsection (1) must include:

(a) procedures to be taken in the event of a fire or other emergency;

(b) the location of first aid facilities;

(c) identification of prohibited or restricted areas;

(d) precautions to be taken for the protection of the worker from physical, chemical or biological hazards;

(e) any procedures, plans, policies and programs that the employer is required to develop pursuant to the Act or any regulations made pursuant to the Act that apply to the worker's work at the place of employment; and

(f) any other matters that are necessary to ensure the health and safety of the worker while the worker is at work.

(3) An employer shall ensure that the time spent by a worker in the training required by subsection (1) is credited to the worker as time at work, and that the worker does not lose pay or other benefits with respect to that time.

(4) An employer shall ensure that no worker is permitted to perform work unless the worker:

(a) has been trained, and has sufficient experience, to perform the work

safely and in compliance with the Act and the regulations; or  
(b) is under close and competent supervision.

4 Oct 96 c0-1.1 Reg 1 s19.