§3.16. Handling and storage of materials

3.16.1. Generalities:

(1) All construction site materials shall be used, displaced or transported onto the site or unloaded from a vehicle or from a pile so as not to compromise the safety of workers and the public.

(2) The load imposed by storing materials on a permanent or temporary structure shall not exceed the permissible load.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.1.

3.16.2. Piling of materials:

(1) Piling of materials shall be done so that piles do not disturb:

(a) the spread of natural or artificial light;

(b) the good operation of machines and other installations;

(c) movement in passages, aisles, stairways, elevators, or near doors; and

(d) the efficient operation of fire prevention equipment.

(2) Materials shall not be piled against walls or partitions of buildings without ensuring that they can resist the lateral pressure.

(3) Materials shall not be piled to a height which might jeopardize the stability of the pile.

(4) The employer shall supply the necessary equipment to reach the height of piles to the person assigned to warehousing.

(5) The distance between the side of an opening in an opening in a floor or roof and the bottom of a pile of materials shall be more than the height of the pile except if a device prevents the falling of materials.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.2.

3.16.3. Building lumber: Reserves of building lumber shall be neatly piled. These piles shall be:

(a) supported at a certain height off the ground;

(b) disposed in horizontal layers, criss-crossed and slightly inclined; and

(c) stabilized by means of transversal supports or wedges, if the piles are more than 1.2 m high.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.6; O.C. 329-94, s. 66.

3.16.4. Masonry materials: Masonry units shall be stacked:

(a) on planks, a platform or other level base;

(b) in layers covering the entire area of the stacks;

(c) in such a way that the height of the vertical face of the stacks does not exceed 1.8 m;

(d) in tiers, when the height of the stockpiling exceeds 1.8 m;

(e) with wooden transversal supports between the layers to prevent the pile from crumbling, if the height of the pile exceeds 1.8 mm;

(f) bound together, if necessary, so as to ensure the stability thereof.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.7; O.C. 329-94, s. 66.

3.16.5. **Pipes:** Pipes shall be stacked:

(a) on racks or solid shelves;

(b) on wooden blocks provided with tappets at both ends; or

(c) on metal bars of which both ends are bent upwards.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.8; O.C. 329-94, s. 66.

3.16.6. **Bagged materials:** Bagged materials shall:

(a) be stacked by cross-piling the bags to form layers piled not higher than 10 bags unless:

i. the bags are stored in reservoirs or enclosures; and

ii. the sides of the piles are supported by the walls of the reservoirs or enclosures; and

(b) be removed from the piles in such a way that the top of the pile remains horizontal.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.9; O.C. 329-94, s. 66.

3.16.7. **Bound objects:**

(1) When drums or barrels are stacked:

(a) full, standing upright, the height of the piles shall be limited and 2 planks shall be laid side by side on each row before proceeding on to the next row;

(b) empty, lying on their sides, the piles shall be symmetrical and stable, and all units in the bottom row shall be carefully wedged.

(2) Subsection 1 also applies to large-diameter pipes, to rolls of paper or to any other object having a circular cross-section.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.10; O.C. 329-94, ss. 65 and 66.

3.16.8. **Hand lifting and carrying:**

(1) Mechanical apparatus shall be provided and used for carrying material, when the safety of the worker is jeopardized.

(2) *(Subsection revoked)*.

(3) Workers assigned to the handling of material shall be instructed as to the manner of lifting and carrying loads.

(4) Where an inclined plane is used for raising or lowering heavy objects, the following steps shall be followed:

(a) avoid standing on the lower end of the plane; and

(b) control the displacement of such object by means of cables, blocks, wedges or other devices.

(5) Where rollers are utilized for moving objects, tools designed for this type of work shall be used instead of hands or feet to change the position of the moving rollers.

(6) Suitable protective equipment in accordance with Subdivision 2.10 shall be used for the manual transportation of objects having sharp and dangerous edges, and for the handling of burning, caustic or corrosive substances.

(7) The handling of heavy objects by a crew shall be done with signals that are well understood and designed to ensure uniform manoeuvering.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.3; O.C. 329-94, ss. 63 and 66.

3.16.9. Conveyors:

(1) The resistance of a structural element of a conveyor shall be calculated so that it supports the loads and overloads to which it is exposed.

(2) A mobile element shall be protected in accordance with section 3.10.13 if it is located less than 2 m away from an accessible floor.

(3) A conveyor installed above a walkway or a work area shall be equipped with a protector to prevent objects from falling.

(4) An aerial conveyor in which workers are required to travel shall be equipped with a runway along its entire length and with an emergency stopping device installed at each work location.

(5) It is forbidden for a worker to climb on a conveyor or to stand on the structure supporting it.

(6) A vertical bucket conveyor shall be surrounded by a full protector:

(a) covering the entire length; and

(b) equipped with a door or with a detachable part for inspection, cleaning and repairs; the opening of this door or the removal of a detachable part shall produce automatic stopping of the conveyor.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.4; O.C. 329-94, ss. 64 and 66; O.C. 606-2014, s. 20.

3.16.10. Handling, storage and use of hazardous products

(1) The storage and handling of hazardous products within the meaning of the Hazardous Products Information Regulation (2015, chapter 13, section 14) must be carried

out in such a way as to prevent them from spilling or catching fire. The following measures must therefore be taken:

(a) any hazardous products which, in mixing with other substances, may cause fires or explosions or may give off flammable or toxic gases must be stored separately;

(b) receptacles, piping and apparatuses must be kept in good condition;

(c) floors or shelves onto which a product has been spilled must be cleaned immediately.

(2) Only the quantity of flammable liquid and combustibles contained in safety bottles and necessary for one work day may be stored in a building under construction, unless it can be stored in a ventilated room having a fire-resistance of at least 2 hours.

(3) Where a hazardous product is transferred from one container to another, the receptacle used must be safe for use with the product transferred.

(4) In addition to conforming to section 3.13.5, any cylinder of gas under pressure must not be

(a) lifted with slings or magnets; or

(b) exposed to shocks, in particular, shock caused by a fall.

(5) Oxygen must not be used for the following purposes:

(a) operating compressed-air tools;

(b) ventilation;

(c) obtaining pressure;

(d) cleaning;

(e) starting internal combustion engines.

(6) Corrosive materials must be handled with care and must be stored:

(a) away from areas in which the risk of fire is high;

(b) away from combustive substances;

(c) away from direct sunlight;

(d) in cool and well ventilated areas;

(e) in receptacles that are kept closed.

(7) Toxic or dangerously reactive substances must be stored:

(a) away from areas in which the risk of fire is high and away from heat sources;

(b) away from combustive substances;

(c) in cool and well ventilated areas.

For the purposes of this section, “corrosive materials”, “oxydizing material”, “toxic substances” and “dangerously reactive substances” mean a hazardous product that belongs to the corresponding hazard classes in the table provided for in section 70 of the Regulation respecting occupational health and safety.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.16.5; O.C. 995-91, s. 10; O.C. 329-94, s. 66; 2015, c. 13, s. 15; O.C. 805-2020, s. 4.

§3.17 (Revoked).

3.17.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.17.1; O.C. 1959-86, s. 24; O.C. 425-2010, s. 5.

3.17.2.-3.17.9. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 425-2010, s. 5.

§3.18. Demolition

3.18.1. Requirements prior to demolition:

(1) The principal contractor must send to the Commission a demolition notice giving the method used, at least 7 days before the beginning of wrecking work on a building or structure. In emergency cases the notice must be sent as soon as possible before the beginning of wrecking work; such emergency must be proven by the principal contractor.

Wrecking of any prestressed or poststressed concrete slab or structure shall be made according to a method approved by an engineer qualified in the field.

(2) Where mechanical wrecking is used, the notice must include the power of the machine, weight of the wrecking ball, space reserved for debris, successive wrecking steps, restrictions from and agreements with public utilities.

(3) The consumer supply mains for water, gas and electricity and the other services shall be cut off at the place and in the way specified by the authorities involved. These service mains shall be relocated to avoid any damage and shall not constitute a hazard for workers and the public.

(4) Any building or part of building in demolition shall be solidly braced or supported to avoid any collapse which could be dangerous for the workers.

(5) Provision shall be made for the necessary supports with respect to adjoining properties in order to ensure their stability and to avoid any collapse.

(6) Any glass shall be removed from outside openings prior to any demolition operations.

(7) Any sidewalk or street running alongside a demolition site shall be isolated from the latter by a covered sidewalk closed on the demolition side as stipulated in section 2.7.2. However, this covered sidewalk may be

replaced by a barrier if this sidewalk or street is located at a distance exceeding half the height of the building, but this building shall not measure more than 7.5 m in height.

(8) *(Subsection revoked)*.

(9) The public shall be prevented from entering a building which is marked for demolition.

(10) Construction signs shall be installed wherever the public may be exposed to any danger.

(11) All demolition works shall be done under the continuous supervision of a competent foreman.

(12) No employer shall employ for demolition work any worker younger than 18 years of age.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.18.1; O.C. 1959-86, s. 25; O.C. 995-91, s. 11; O.C. 329-94, s. 67.

3.18.2. Requirements during demolition:

(1) During demolition, the following precautions shall be taken:

(a) dust shall be kept down;

(b) debris shall not be burnt on the site without authorization;

(c) floors shall not be overloaded beyond their capacity;

(d) solid supports shall be provided in areas where there are gins, derricks and other similar hoisting apparatus;

(e) any scaffolding or platform shall be erected in compliance with Subdivisions 3.7 and 3.9 of this Code;

(f) materials with protruding nails shall be stacked or removed or nails shall be removed or hammered in;

(g) entrances and exits which are protected against hazards shall be provided;

(h) in buildings more than 7.5 m high, exterior openings shall be boarded up within 6 m of any shaft or chute for debris;

(i) floor openings below the demolition level which are not being used for the removal of debris shall be boarded up;

(j) stairways and ramps shall be kept as long as possible; and

(k) Subdivision 3.1 applies even when demolition works are suspended.

(2) Demolition works shall be done with the following provisions:

(a) demolition work shall proceed systematically from the roof down to the ground, unless another demolition procedure has been approved by an engineer;

(b) demolition and cleaning of a storey shall be finished before its supports give way or are removed;

(c) the steel frame may be left in place during demolition of the masonry. However, any material shall be removed from the framework as the removal of the masonry progresses;

(d) no beam, column or other structural part may be cut or separated from the others without having been previously separated from all supported loads;

(e) solid shores for the remaining structure shall be provided during the removal of masonry or concrete floors. Plankings or walkways shall be provided for workers and the area below such work closed to workers;

(f) masonry shall be demolished in reasonably level layers and not in large masses, so as to avoid affecting the solidity of the structure and its supports;

(g) cornices and other projections shall be supported until removed;

(h) no worker shall stand on any wall, pier or chimney unless scaffolding is provided on any side at a distance not exceeding 3 m below the level at which he is working;

(i) it is forbidden to leave without protection any wall, chimney or other structural part which might collapse under the effect of wind or vibrations;

(j) the demolition site shall be constantly inspected during the course of the works to prevent any eventual accident; and

(k) sand layers shall be used to break the fall of materials that pose a danger to the health and safety of workers.

(3) Removal, and transportation of debris shall be carried out in the manner described in section 3.2.2.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.18.2; O.C. 329-94, s. 68.

3.18.3. Mechanical method of demolition: Demolition by smashing walls or floors with a swinging weight, mechanical shovel, or other similar equipment shall be carried out according to the following provisions:

(a) the section which is to be mechanically demolished shall not be higher than 25 m from the ground;

(b) whenever the equipment is in operation, access to the section to be demolished is prohibited to all workers, except the operators of that equipment;

(c) if the public has access to the part to be demolished, a protective wall shall be placed around the building at a distance at least equal to 1.5 times the height of the part to be demolished or, if the public does not have access thereto, a demolition zone shall be marked off around the building by hazard signs placed at a distance equivalent to that prescribed for the protective wall;

(d) it shall be possible to manipulate the controls of the equipment used in such method of demolition at a safe distance from the points of impact; and

(e) where a swinging weight is used, the supporting cables shall be of such a length that it is not possible for the weight to swing against any structure other than the structure being demolished.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.18.3; O.C. 1959-86, s. 26; O.C. 329-94, s. 69; O.C. 1413-98, s. 25.

3.18.4. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.18.4; O.C. 1959-86, s. 27; O.C. 329-95, s. 70.

3.18.5. **Requirements following demolition:** The following measures shall be taken after demolition:

(a) cellars and excavations shall be rendered inaccessible to the public by protective walls, unless they have been completely backfilled to grade;

(b) streets, sidewalks or public roads shall be free from all temporary obstruction required by the work and shall be returned to their original state; and

(c) the demolition site shall be left in such condition that no accident, fire or health hazard has been created.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.18.5; O.C. 1413-98, s. 26.

3.18.6. Sections 3.18.1, 3.18.2 and 3.18.5 apply to all types of demolition.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.18.6.

§3.19. Work on stilts

3.19.1. Work carried out on stilts or other similar apparatus is forbidden at all times.

R.R.Q., 1981, c. S-2.1, r. 6, s. 3.19.1.

§3.20. Sandblasting

3.20.1. The wearing of an air-supplied hood, gloves and clothing designed to ensure protection from dust and abrasive or metal projections is compulsory for any worker using an abrasive air blaster unless the worker is isolated from the process.

O.C. 1959-86, s. 28; O.C. 885-2001, s. 368; O.C. 48-2022, s. 4.

3.20.2. *(Revoked)*.

O.C. 1959-86, s. 28; O.C. 885-2001, s. 369; O.C. 48-2022, s. 5.

3.20.3. **Air flow:** The air flow supplying the hood must be sufficient to prevent the admission of dust and suspended particles in the air breathed by the workman and must not be less than 165 litres per minute or greater than 430 litres per minute.

O.C. 1959-86, s. 28.

3.20.4. **Maintenance of equipment:** The employer must maintain the equipment as recommended by the manufacturer and keep it clean.

O.C. 1959-86, s. 28.

3.20.5. **Ventilation:** Where work with sandblasting is performed indoors, the area must be isolated and ventilated by extraction.

O.C. 1959-86, s. 28.

3.20.6. **Abrasive blasting - Changing room and shower:** For abrasive blasting, the employer must provide workers with a changing room that complies with section 3.2.11 and a shower that complies with section 3.2.15.

O.C. 885-2001, s. 370; O.C. 393-2011, s. 15.

§3.21. Work in confined space

3.21.1. Before work begins in a confined space, the principal contractor, together with the employer, specifies in writing:

(a) the tools required for the work;

(b) the equipment installed or to be installed in the confined space and the measures to be taken for its installation, use, maintenance and protection or to move it;

(c) the pipe and conduits entering the confined space;

(d) the hazards, and corresponding safety measures to be taken according to the work;

(e) contaminants which may be found in or around the confined space;

(f) the life saving devices and equipment needed and the corresponding emergency measures.

That information must be available on the job-site.

O.C. 1959-86, s. 28.

3.21.2. In confined spaces, the employer must take the contaminant concentration readings mentioned in subparagraph *e* of the first paragraph of section 3.21.1 and make sure that no worker, even when wearing a respirator, enters a confined space containing or which may contain:

(a) oxygen in a proportion lower than 19.5% or higher than 23%;

(b) flammable gas or vapour with a concentration higher than 25% of the lower explosion limit;

(c) contaminants in the air with a concentration higher than the threshold limit values mentioned in Schedule I to the Regulation respecting occupational health and safety (chapter S-2.1, r. 13);

(d) any other contaminant in a concentration which could be hazardous to a workman's health.

O.C. 1959-86, s. 28; O.C. 885-2001, s. 377; O.C. 48-2022, s. 6.

3.21.3. **Concentration readings:** The employer must ensure that the concentration readings prescribed in section 3.21.2 are:

(a) taken every 2 hours in the most hazardous spots, by a person trained for such purpose;

(b) taken so as to obtain a precision equal to that yielded by the methods described in section 44 of the Regulation respecting occupational health and safety (chapter S-2.1, r. 13);

(c) entered in the record on the job site, except if the recordings are made with continuous recorders equipped with automatic alarms setting off when the quality of air does not meet the requirements of section 3.21.2.

O.C. 1959-86, s. 28; O.C. 885-2001, s. 371.

3.21.4. The employer must install a ventilation system powerful enough to ensure compliance with the concentrations prescribed in paragraphs *a*, *b*, *c*, and d of section 3.21.2 in and around the confined space.

O.C. 1959-86, s. 28; O.C. 329-94, s. 71.

3.21.5. The employer must ensure that measures are taken to prevent workmen who are not assigned to work in a confined space from entering that space.

O.C. 1959-86, s. 28.

3.21.6. **Emergency:** Where the environment is unhealthy and the situation endangers the life or safety of a person, the employer:

(a) must ensure that the emergency measures prescribed in section 3.21.1 are taken; and

(b) may, despite section 3.21.2, allow a workman to enter the confined space if such workman has had special training for such circumstances and if he is informed of the hazards he will be exposed to.

O.C. 1959-86, s. 28.

§3.22. Work in isolated locations

3.22.1. Where a workman works alone in an isolated location where it is impossible for him to call for help, the employer must provide an efficient intermittent or continuous watch.

O.C. 1959-86, s. 28.

§3.23. Work liable to produce asbestos dust emissions

3.23.0.1. For the purposes of this subdivision, any material and product contains asbestos where the asbestos concentration is of at least 0.1%.

In that respect, the second paragraph of section 69.5 of the Regulation respecting occupational health and safety applies.

O.C. 476-2013, s. 5.

3.23.1. This subdivision applies to any construction site where work liable to produce asbestos dust emissions is carried out.

O.C. 54-90, s. 3.

3.23.1.1. For the purposes of this subdivision,

"protective clothing" means clothing that:

(a) resists the penetration of asbestos fibres;

(b) covers the worker's body, excluding his face, hands and feet;

(c) is closed at the neck, wrists and ankles;

"wetting agent" means a surfactant or liquid detergent added to water according to the manufacturer's instructions in order to increase its ability to penetrate materials containing asbestos;

"work carried out outside" means work entirely carried out elsewhere than in a building used, having been used or intended to be used to shelter or receive persons, animals or things.

O.C. 459-99, s. 1; O.C. 645-2022, s. 1.

3.23.2. For the purposes of this subdivision, the following categories of sites are established:

(1) sites where low-risk work is carried out:

(a) the installation, handling or removal of manufactured goods containing asbestos, provided they are and remain in a non-friable condition, such as:

i. vinyl tiles;

ii. acoustic tiles;

iii. gaskets;

iv. seals;

v. asbestos cement products;

(b) the sawing, cutting, shaping or drilling of a product mentioned in subparagraph *a* of this paragraph with a hand tool or a power tool fitted with a dust-collection device equipped with a high-efficiency filter that fully covers the work area;

(c) (paragraph revoked);

(2) sites where moderate-risk work is carried out:

(a) the total or partial removal of false ceilings for the purpose of gaining access to a work area where friable materials containing asbestos are found;

(b) the enclosure of friable material containing asbestos, subject to subparagraph *c* of paragraph 3;

(c) the removal of friable material containing asbestos where, in the removal process, the work area is sealed off from the worker's breathing area;

(d) any work that is liable to produce asbestos dust emissions and that is not classified as low or high-risk;

(e) the handling or removal, otherwise than in the case referred to in subparagraph *f*, of small quantities of friable material containing asbestos having a volume of debris not exceeding 0.03^{3} for each minor renovation or regular specific maintenance job;

f) the removal of drywall installed with asbestos joint-filling compounds;

(3) sites where high-risk work is carried out:

(a) subject to subparagraphs *c* and *e* of paragraph 2, the handling or the removal of friable material containing asbestos;

(b) the cleaning or removal of a ventilation system, including rigid ducts, in buildings where the insulation contains asbestos applied by spraying;

(c) the enclosure of friable material containing asbestos by the spray application of a sealant;

(d) the repair, alteration or demolition of kilns, boilers or similar devices made entirely or partly of refractory materials containing asbestos;

(e) the use of a power tool not fitted with a dust-collection device equipped with a high-efficiency filter that fully covers the work area to grind, cut, drill or abrade a product mentioned in subparagraph *a* of paragraph 1;

(f) subject to subparagraph *e* of paragraph 2, the handling or removal of friable material containing crocidolite or amosite;

(g) subject to subparagraph *e* of paragraph 2, the total or partial removal of false ceilings on which friable materials containing asbestos is found.

O.C. 54-90, s. 3; O.C. 459-99, s. 2; O.C. 645-2022, s. 2.

3.23.3. The employer shall determine the types of asbestos present in the materials before undertaking work liable to generate asbestos dust.

O.C. 54-90, s. 3; O.C. 459-99, s. 3.

3.23.3.1. The use of crocidolite or amosite or of a product containing either of those materials is prohibited, except where their replacement is not reasonable or feasible in practice.

O.C. 459-99, s. 3.

3.23.3.2. Before demolition work is undertaken, materials liable to generate asbestos dust shall be removed.

O.C. 459-99, s. 3.

3.23.4. The spray application of a mixture of friable materials containing asbestos and the installation of friable insulating materials containing asbestos are prohibited.

O.C. 54-90, s. 3; O.C. 459-99, s. 4.

3.23.5. The use of compressed air is prohibited in a work area covered by this subdivision, except compressed air necessary to operate a respirator.

O.C. 54-90, s. 3.

3.23.6. Smoking, eating, drinking or chewing any substance in a work area covered by this subdivision is prohibited.

O.C. 54-90, s. 3; O.C. 459-99, s. 5.

3.23.7. Before undertaking work liable to emit asbestos dust, the employer must train the worker and inform him of the risks, prevention methods and safe working methods. The training and information program must contain at least:

(1) the employer's general obligations;

(2) the effects of asbestos on health;

(3) the standards applicable and the sampling to be carried out;

(4) the worker's rights and obligations;

(5) individual and common protective devices and equipment;

(6) the tasks to be carried out and the equipment and tools to be used;

(7) safe working methods and procedures;

(8) prevention and verification methods.

The information and training provided for in the first paragraph must have previously been established in writing.

O.C. 54-90, s. 3; O.C. 459-99, s. 6.

3.23.8. Before undertaking in a building work covered by this subdivision:

(1) all furniture shall be removed from the work area or protected by airtight film;

(2) all friable materials that contain asbestos and that are spread in the work area shall be removed in accordance with either of the following methods:

(a) after having wet those materials thoroughly using a wetting agent;

(b) with a vacuum cleaner equipped with a high-efficiency filter.

O.C. 54-90, s. 3; O.C. 459-99, s. 7; O.C. 645-2022, s. 3.

3.23.9. For the duration of work carried out inside a building, friable materials that contain asbestos and that are likely to be spread shall be kept thoroughly wetted using a wetting agent.

For the duration of work carried out outside, the employer shall prevent the dispersal of the dust of friable materials containing asbestos by spraying them. The employer shall ensure that those materials are kept wet or covered in order to prevent their dispersal.

Wetting is to be used, except where the procedure may create a danger to the health, safety and physical integrity of the worker and where the danger cannot be eliminated by another means.

O.C. 54-90, s. 3; O.C. 459-99, s. 7; O.C. 645-2022, s. 4.

3.23.9.1. Before moving kilns, boilers or similar devices made entirely or partly of refractory materials containing asbestos, the employer shall cover them entirely with an airtight film.

O.C. 459-99, s. 7.

3.23.10. During work inside a building, debris of materials containing asbestos shall be placed in airtight containers appropriate to the type of debris, regularly during the work shift and at the end of the work shift. Debris shall be removed by means of a vacuum cleaner equipped with a high-efficiency filter or by first wetting the debris using a wetting agent.

Where work is being carried out outside, the employer shall also prevent the dispersal of the debris of materials containing asbestos by using airtight film or any other equivalent means. The employer shall dispose of the debris using airtight containers, film, or any other means making it possible to ensure airtightness during transportation, depending on its intended use.

O.C. 54-90, s. 3; O.C. 459-99, s. 7; O.C. 645-2022, s. 5.

3.23.11. Upon completion of work where airtight drop sheets were used to protect the work area, drop sheets intended for re-use must be cleaned with a vacuum cleaner equipped with a high-efficiency filter. Drop sheets intended for disposal must first be wetted, then folded so that they hold all the dust that they have collected and, finally, placed in an airtight container.

O.C. 54-90, s. 3.

3.23.12. Upon completion of work covered by this subdivision, the work area and the area around it must be cleaned with a vacuum cleaner equipped with a high-efficiency filter or by damp wiping the surfaces and then cleaning them.

O.C. 54-90, s. 3.

3.23.12.1. The outside of containers for the debris of materials containing asbestos, the tools and the equipment shall be cleaned by wetting or by means of a vacuum cleaner equipped with a high-efficiency filter immediately before they are removed from the work area.

O.C. 645-2022, s. 6.

3.23.13. A label must be affixed to any receptacle containing asbestos materials, whether new or used, unless the receptacle has already been labelled by a supplier in accordance with the Hazardous Products Regulations (SOR/2015-17).

The label must be permanently affixed and legible and must bear the following indications:

Material containing asbestos

Toxic by inhalation

Keep container tightly closed

Do not breathe the dust

O.C. 54-90, s. 3; O.C. 459-99, s. 8; 2015, c. 13, s. 16.

3.23.14. Any worker working in a work area covered by this subdivision must wear protective footwear that meets the requirements of section 2.10.6 and that is fitted with soles that do not slip on wet surfaces.

O.C. 54-90, s. 3; O.C. 459-99, s. 9.

3.23.14.1. On a construction site where low-risk work is being carried out, except for the work referred to in subparagraph *a* of paragraph 1 of section 3.23.2, an employer shall ensure that any worker present in the work area wears a respirator.

O.C. 459-99, s. 10; O.C. 885-2001, s. 372; O.C. 48-2022, s. 7.

3.23.15. On a construction site where moderate-risk work is being carried out, an employer, in addition to the obligations provided for in sections 3.23.3 to 3.23.14, shall comply with the following:

(1) the employer shall ensure that any worker present in the work area is wearing a reusable protective respiratory apparatus equipped with a 100 series or HEPA high efficiency filter certified by the NIOSH;

(2) notwithstanding paragraph 1, a respirator that complies with the provisions of paragraph 1 or 2 of section 3.23.16 shall be worn in the following cases:

(a) for the handling or removal of friable material containing crocidolite or amosite;

(b) for any work covered by subparagraph *d* of paragraph 2 of section 3.23.2;

(3) protective clothing shall be worn by any person present in the work area and the clothing worn shall be used exclusively for carrying out such work;

(3.1) the employer must provide workers with a changing room that complies with section 3.2.11;

(4) the employer shall ensure that the protective clothing is clean and dry at the beginning of each day on which it is to be used;

(4.1) where a worker wearing disposable protective clothing leaves the work area, the employer shall ensure that the clothing is immediately placed in a hermetically sealed airtight container or in a receptacle filled with water or supplied by him until it is washed;

(5) the employer shall cause reusable protective clothing to be washed or shall cause it to be cleaned by means of a vacuum cleaner equipped with a high-efficiency filter before reuse;

(6) where a worker wears winter work clothes, the employer shall provide disposable protective clothing so that the worker can at all times wear 2 layers of disposable protective clothing over his winter work clothes;

(7) where a person wearing disposable protective clothing leaves the work area, the employer shall ensure that the clothing is immediately placed in a hermetically sealed airtight container supplied by him;

(8) the employer shall ensure that a worker does not wear or carry his work clothes and protective footwear outside the work area, unless they have been washed or cleaned by means of a vacuum cleaner fitted with a high-efficiency filter;

(9) during work to recover friable materials containing asbestos, the employer shall isolate the work area with an enclosure made of materials impervious to asbestos fibres that has an exhaust ventilation system equipped with a high-efficiency filter providing at least 4 changes of air per hour;

(9.1) during work to handle or remove friable materials containing asbestos having a volume of debris not exceeding 0.03 m^3, the employer shall isolate the work area with an enclosure made of materials impervious to asbestos fibres that has an exhaust ventilation system equipped with a high-efficiency filter providing at least 4 changes of air per hour;

(9.2) during work to remove friable materials containing asbestos in a work area sealed off from the worker's

breathing area, if the worker uses a glove bag, the employer shall ensure

(a) that it is used solely for the purposes and conditions for which it was designed, according to the manufacturer's instructions;

(b) that it is not reused after it has been filled;

(c) that it is not used if there is a risk that it will not remain hermetically sealed during the work, in particular due to the location of the tube, the deterioration of the insulation or the temperature of the tube, duct or structure; and

(d) that, before the glove bag is dismantled, any part of the tube where insulating materials that could release asbestos fibres is encapsulated, and that the glove bag is sealed above the debris of materials so that the debris is isolated from the upper compartment;

(10) during work to remove false ceilings for the purpose of gaining access to a work area where friable materials containing asbestos are found, the employer shall protect the building's ventilation system from any contamination and isolate the work area with an enclosure made of materials impervious to asbestos fibres that has an exhaust ventilation system equipped with a high-efficiency filter providing at least 4 changes of air per hour;

(11) the employer shall post a sign at the entrance to each work area. That sign shall be yellow, 500 mm high by 350 mm wide and shall indicate in black letters of the size specified below the following information in the following order:

Information	**Size of letters**
ASBESTOS	50 mm
DANGER	40 mm
Do not breathe dust	15 mm
Protective equipment must be worn	15 mm
No admittance	15 mm
Inhaling asbestos dust may be harmful to your health	10 mm;

(12) where there is no enclosure such as referred to in paragraphs 9, 9.1 and 10, the work area shall be marked off by hazard signs.

O.C. 54-90, s. 3; O.C. 459-99, s. 11; O.C. 885-2001, s. 373; O.C. 393-2011, s. 16; O.C. 48-2022, s. 8; O.C. 645-2022, s. 7.

3.23.15.1. On a construction site where moderate-risk work is being carried out, workers must, before removing their protective clothing and other individual protective equipment, decontaminate them using a wet cloth or a vacuum cleaner equipped with a high-efficiency filter.

O.C. 645-2022, s. 8.

3.23.16. On a construction site where high-risk work is being carried out, other than the work mentioned in section 3.23.16.1, an employer shall fulfil the obligations provided for in section 3.23.15, except those provided for in paragraphs 1, 2, 4.1 and 5 of that section, and the following obligations:

(1) the employer shall ensure that any worker present in the work area during the use of electric tools not fitted with a dust collector equipped with a high-efficiency filter or during the handling of thoroughly wetted friable materials containing asbestos is wearing a full-facepiece respirator; the respirator must comply with one of the following types:

(a) a powered air-purifying respirator with a HEPA particulate filter;

(b) a supplied-air respirator operated in continuous-flow positive-pressure mode or in a pressure-demand mode with positive pressure;

(2) notwithstanding paragraph 1, a supplied-air and continuous-flow positive-pressure adjusted, or pressure demand and positive pressure, full-facepiece respirator must be worn by any worker who is in one of the following situations:

(a) in the presence of friable materials containing asbestos that are not thoroughly wetted;

(b) in the presence of crocidolite or amosite, where the readings made under paragraph 4 give concentrations equal to or greater than 10 fibres/cm^3;

(3) before work begins, the employer and the principal contractor shall identify in writing the following information and make it available in the work area:

(a) the equipment and tools necessary to carry out the work and the measures to be taken in order to install, use, care for, protect and move them;

(b) the hazards and the health and safety measures to be taken depending on the work to be carried out;

(c) the types of asbestos and other contaminants that may be encountered during the work;

(d) the individual and group protective devices and equipment that must be used;

(e) the measures to be taken in case of emergency, which shall include, in particular, locating emergency exits in the work area and the exits through which the building can be evacuated;

(4) the employer shall take a sample of the concentration of airborne breathable asbestos fibres in the work area, in accordance with section 44 of the Regulation respecting occupational health and safety (chapter S-2.1, r. 13), at least once per shift during the work, send it immediately to a laboratory for analysis and take reasonable measures

to obtain the results of those analyses within 24 hours; the results shall be recorded in a register that is available on the work premises during all the work;

(5) the employer shall ensure that reusable protective clothing is washed before it is reused;

(6) the employer must provide workers working in the work area with a double changing room that complies with section 3.2.13;

(7) the employer shall ensure that any worker leaving the work area follows the decontamination procedure described below:

(a) workers shall remove their disposable protective clothing in the work clothes changing room and treat them as waste or shall remove their reusable protective clothing and put it immediately in a receptacle filled with water or, where clothes are washed in the work clothes changing room, in the tub of a washer filled with water;

(b) workers shall remove their work clothes and protective footwear in the work clothes changing room and those articles, before being put away, shall be washed or cleaned by means of a vacuum cleaner equipped with a high-efficiency filter;

(c) workers shall wash and remove their safety helmets and respirators under the shower; disposable cartridges shall be thrown into a garbage can and the other parts of the respirator shall be washed under the shower and then hung to dry in a clean area free of dust;

(d) workers shall shower immediately before entering the street clothes changing room;

(e) work clothes and protective footwear shall be washed before being transported outside the work premises referred to in this section; where the work clothes are winter clothes, they shall be cleaned by means of a vacuum cleaner equipped with a high-efficiency filter and placed in an airtight bag and the employer shall cause them to be dry cleaned and water-proofed;

(8) the work area and the work clothes changing room shall be sealed off from the rest of the building by an airtight enclosure that has an exhaust ventilation system. The ventilation system shall meet the following standards:

(a) it shall be equipped with a high-efficiency filter;

(b) it shall provide at least 4 changes of air per hour;

(c) it shall ensure negative pressure of between 1 and 4 Pa;

(9) notwithstanding paragraph 8, when work is done outdoors, an airtight enclosure is required only for the work clothes changing room; in such case, the travel area of workers that connects the work area and the work clothes changing room shall be marked off by hazard signs;

(10) at the beginning and end of each shift, the employer shall ensure that the airtight enclosure is in good condition. If the enclosure is punctured or becomes defective, the work shall cease until the enclosure is repaired;

(11) the air vents of the building's ventilation system shall be sealed off from the work area before the work begins and shall be kept sealed during the work;

(12) upon completion of the work, it shall be prohibited to dismantle the airtight enclosure or to remove the airtight drop sheets before the concentration of airborne respirable asbestos fibres in the work area drops to less than 0.01 fibres/cm^3. That reading shall be taken in accordance with section 44 of the Regulation respecting occupational health and safety.

O.C. 54-90, s. 3; O.C. 459-99, s. 11; O.C. 885-2001, s. 374; O.C. 393-2011, s. 17; O.C. 48-2022, s. 9; O.C. 645-2022, s. 9.

3.23.16.1. An employer handling or removing friable materials containing asbestos whose volume of debris exceeds 0.03 m^3 without exceeding 0.3 m^3, for each minor renovation or specific regular maintenance work, shall fulfil the obligations provided for in paragraphs 3, 3.1, 4, 6 to 9 and 10 to 12 of section 3.23.15, those provided for in paragraphs 1 and 2, in subparagraph *e* of paragraph 7 and paragraphs 10 and 11 of section 3.23.16, as well as the following obligations:

(1) the employer shall ensure that disposable protective clothing is used;

(2) the work area shall be sealed off from the rest of the building by an airtight enclosure that has an exhaust ventilation system equipped with a high-efficiency filter providing at least 4 changes of air per hour; notwithstanding the foregoing, where work is done outdoors, the airtight enclosure is not required;

(3) the following decontamination procedure shall be applied before any worker leaves the work area:

(a) the enclosure shall be cleaned by wetting or by means of a vacuum cleaner equipped with a high-efficiency filter;

(b) after removal of protective clothing, the respirator and the safety helmet shall be cleaned by wetting;

(c) the worker shall wash the parts of his body that have been exposed to dust containing asbestos.

O.C. 459-99, s. 11; O.C. 393-2011, s. 18; O.C. 645-2022, s. 10.

§3.24. Steel structure erection or dismantling work

3.24.1. **Scope:** This subdivision applies to work for the erection or dismantling of a steel structure including any sheet-metal apron, but excluding work to erect or dismantle an electrical transformer station, a telecommunications

tower or a power line tower used for electric power transportation or distribution.

O.C. 391-2011, s. 2.

3.24.2. Telecommunications system: A telecommunications system used by a worker who guides a maneuver under subsection 2 of section 3.10.5 must be bidirectional, hands-free and transmit on a radio frequency dedicated exclusively to the work in progress.

The work in progress must be interrupted in case of telecommunications system failure.

O.C. 391-2011, s. 2; O.C. 1078-2015, s. 6.

3.24.3. Means of access: The means of access provided for in Subdivisions 3.5. and 3.6 must be installed so that horizontal movements of workers on trusses, beams and joists do not exceed 30 m.

O.C. 391-2011, s. 2.

3.24.4. *(Revoked).*

O.C. 391-2011, s. 2; O.C. 63-2025, s. 15.

3.24.5. Presence of a first-aider: Despite section 7 of the First-aid Minimum Standards Regulation (chapter A-3.001, r. 10), during the work, the principal contractor must ensure that one first-aider within the meaning of that Regulation is present at all times on the work premises.

O.C. 391-2011, s. 2.

3.24.6. Protruding parts: Where studs or other protruding parts constitute a danger for workers on the steel structure, a temporary sidewalk must be installed to ensure the safe movement of workers.

O.C. 391-2011, s. 2.

3.24.7. Plans and procedures: The plans and procedures provided for in this subdivision must be kept on the work premises and be accessible.

O.C. 391-2011, s. 2.

— Erection of a steel structure

3.24.8. Preparation of the work area: Before the beginning of the steel structure erection work, the principal contractor must verify

(1) that the concrete foundations are backfilled and the work area, including the unloading area, is levelled, drained and of a sufficient dimension to store materials; and

(2) that the resistance of the soil under the work area allows support of hoisting apparatus, trucks and loads during the work.

O.C. 391-2011, s. 2.

3.24.9. **Erection plans:** Work must be carried out according to the steel structure manufacturer's plan. The plan must include

(1) the location of the various components of the structure and their erection marks;

(2) the main dimensions and their respective levels;

(3) the type of bolts used and their diameter;

(4) the welds to be done on site;

(5) the temporary structural components; and

(6) the number of rows of bridging and their position, if applicable.

O.C. 391-2011, s. 2.

3.24.10. **Erection procedure:** In addition to being carried out in accordance with the erection plan provided for in section 3.24.9, the work must be carried out according to a procedure established by the employer. The procedure must contain

(1) the installation method and the erection stages of the structure;

(2) the measures to be taken to ensure that the structure components are stable; and

(3) the measures to protect workers from falling.

In addition to the requirements provided for in the first paragraph, the erection procedure must include the hoisting procedure provided for in section 3.24.15.

O.C. 391-2011, s. 2.

3.24.11. **Anchor rods:** Column anchor rods must be installed according to an anchoring plan provided by the steel structure manufacturer. The plan must

(1) contain the following information:

(a) the dimensions of the anchor rods and their position;

(b) the details necessary for securing the anchor rods;

(2) provide an erection procedure where the columns are anchored with fewer than 4 anchor rods or where the position of the anchor rods does not ensure stability of the columns in all their axes.

In addition, column anchor rods must resist the application of a vertical construction load of at least 1.33 kN located 45 cm from the column face in each of its axes and at its maximum height.

O.C. 391-2011, s. 2.

3.24.12. **Prior certification:** Before the beginning of the work, the principal contractor must obtain from an engineer a certification according to which the anchor rods were installed in accordance with the anchoring plan provided for in section 3.24.11 and the concrete

foundations reached the strength required to support the erection of the steel structure.

O.C. 391-2011, s. 2.

3.24.13. **Anchor rod modification or repair:** During the work, the principal contractor must obtain from an engineer a new certification following any modification to or repair of column anchor rods that is subsequent to their installation.

O.C. 391-2011, s. 2.

3.24.14. **Stacks of shims:** Each column that stands on concrete foundations must rest on at least 2 stacks of shims of at least 9 in2 and located near the anchor rods, unless another levelling device offering equivalent safety is provided for in the erection plan.

O.C. 391-2011, s. 2.

3.24.15. **Hoisting procedure:** A hoisting procedure must be developed when a load is handled

(1) by more than one hoisting apparatus;

(2) by a hoisting apparatus other than a crane;

(3) on a pallet by a hoisting apparatus other than a fork lift truck.

Where a hoisting apparatus is anchored to an existing structure, the anchor point and its working load limit must be specified in the hoisting procedure.

O.C. 391-2011, s. 2.

3.24.16. **Component weight:** Information about the weight of each component of a steel structure to be erected must be accessible on the work premises.

In addition, the weight must be indicated on each component exceeding 500 kg.

O.C. 391-2011, s. 2.

3.24.17. **Hoist hooks:** Every hook used to hoist a load must present one of the following characteristics:

(1) be equipped with a safety latch;

(2) close under the application of the load and be equipped with a self-locking latch requiring a positive action to unlock the hoist hook.

Where a load is hoisted using a hook referred to in subparagraph 1 of the first paragraph, the load must be hung using a shackle or a wrought alloy steel ring.

Where a load remote unhooking device is used, it must have the following features:

(1) the minimum and maximum loading capacities are conspicuously indicated on the device;

(2) where the device is engaged, it locks under the application of the load; and

(3) it opens only when it no longer withstands the weight of the load and a command to open it is issued.

O.C. 391-2011, s. 2.

3.24.18. Beam-column connection of a multi-span steel structure: During beam-column connection work, a beam must not be supported by a spanner. The type of connection must be designed so as to take that prohibition into account.

The type of beam-column connection may be designed in one of the following manners:

(1) the beam is attached to the column while being supported by a bracket previously attached to the column;

(2) the upper right corner of the plate or angle seat is notched to clear the first supporting bolt of the beam placed previously in the manner specified in Schedule 6.

O.C. 391-2011, s. 2.

3.24.19. Erection of an open web steel joist: Erection work of an open web steel joint must be carried out in accordance with the following standards:

(1) before a hoisting apparatus lands the joist and in order to ensure the lateral stability of the joist during its placement, erection bridging must be installed, if applicable, in accordance with the joist manufacturer's plan. Bridging must be of the bolted diagonal type and the number of rows indicated in the plan must at least comply with the following specifications:

Joist length	**Minimum number of rows**
(a) less than 12 m	None
(b) 12 m to 18 m	1 row
(c) 18 m to 30 m	2 rows
(d) 30 m or more	4 rows

(2) as soon as a joist is placed, each joist end must be bolted using at least one bolt; and

(3) no load may be placed on the joist as long as all the rows of bridging have not been secured and each end of row has not been anchored, except if the joist manufacturer specifies on the joist connection plan the measures to be taken to do so and those measures have been complied with.

Joists may be hoisted and landed in bundles on the steel structure if they do not require erection bridging and are put in place one after the other to prevent them from falling off their supports.

O.C. 391-2011, s. 2.

3.24.20. **Space between girts:** If the provisions set out in section 3.10.7 may not be applied to the installation of girts because of the work environment or the height of the steel structure, the vertical space between girts must not exceed 1.6 m and a means of access to allow a worker to go from one girt to another must be provided in the plan or in the hoisting procedure.

O.C. 391-2011, s. 2.

— Dismantling of a steel structure

3.24.21. **Obligations of the principal contractor:** Before the beginning of the dismantling work of a steel structure, the principal contractor must

(1) locate, if applicable, the electric network of the work area, turn off the power and apply a locking procedure;

(2) locate any gas, steam or liquid line and apply, if applicable, a method for purging the line and a locking procedure.

O.C. 391-2011, s. 2.

3.24.22. **Dismantling plan:** Work must be carried out according to a plan drawn up by an engineer. The plan must contain

(1) the dismantling method and sequence, including the bolt, rivet and weld removal sequence;

(2) measures to ensure the stability of the hoisting apparatus and structure components. The measures must particularly take into account the following elements:

(a) the load must not exceed 70% of the hoisting apparatus capacity, including hoisting accessories, specified in the applicable load rating chart;

(b) anchor rods must be considered as having no resistance, unless pull-out tests are performed to establish their resistance;

(3) the weight and the centre of gravity of the structure components;

(4) measures to protect workers against falls; and

(5) any other relevant measure to ensure the safe dismantling of the structure.

O.C. 391-2011, s. 2.

§3.25. Work liable to produce crystalline silica dust emissions

3.25.1. **Scope:** This subdivision applies to any construction site where work involving materials presumed to contain or containing crystalline silica is carried out.

Only sections 3.25.7, 3.25.10 and 3.25.11 apply to the sandblasting work referred to in subdivision 3.20.

O.C. 820-2023, s. 4.

3.25.2. **Materials presumed to contain crystalline silica:** For the application of this subdivision, the following materials are presumed to contain crystalline silica:

(a) slate;

(b) asphalt;

(c) concrete;

(d) brick;

(e) ceramic;

(f) cement;

(g) fibrocement;

(h) granite;

(i) granulate;

(j) sandstone;

(k) mortar.

O.C. 820-2023, s. 4.

3.25.3. **Absence of crystalline silica:** This subdivision does not apply where the employer has a safety data sheet, a technical description or an analysis carried out according to a recognized method showing that crystalline silica is not present in the material.

A copy of the data sheet or technical description or the results of the analysis must be available at all times during the work on the construction site.

O.C. 820-2023, s. 4.

3.25.4. **Measures to control exposure to crystalline silica:** Where work involving a material presumed to contain or containing crystalline silica is liable to produce dust emissions, the employer must implement at least one of the following control measures:

(a) the use of a local exhaust ventilation system equipped with a high-efficiency filter;

(b) the use of a procedure to wet the dust emissions;

(c) the isolation of workers from the source of the dust emissions;

(d) the confinement of the source of the dust emissions so that workers are not exposed.

The equipment used to control dust must be used and cared for in accordance with the manufacturer's instructions or a standard offering equivalent safety.

O.C. 820-2023, s. 4.

3.25.5. **Closed operation cabin:** Where the worker is isolated from the source of the emission of dust from the materials presumed to contain or containing crystalline silica by the use of a closed operation cabin of a mobile machine, the cabin must have the following characteristics:

(a) the air intake in the cabin must be filtered by a high-efficiency filter;

(b) positive pressure must be maintained;

(c) a heating and air-conditioning system must be included;

(d) the door and window joints must be kept in good condition to ensure they are sealed.

O.C. 820-2023, s. 4.

3.25.6. **Respiratory protection:** When work involving a material presumed to contain or containing crystalline silica is carried out, in addition to one of the control measures listed in section 3.25.4, except in the case of those set out in subparagraph *c* or *d*, the wearing of a protective respiratory apparatus is mandatory for all workers present in the work area where one of the following types of work is carried out:

(a) sawing;

(b) grinding, sanding or bush hammering;

(c) jackhammering;

(d) boring in a confined location;

(e) drilling.

The protective respiratory apparatus supplied by the employer must provide at minimum an assigned protection factor of 10 and be equipped with a 100 series or HEPA high-efficiency filter.

The obligations set out in section 45.1 of the Regulation respecting occupational health and safety apply where one of the types of work provided for in this section is carried out. In addition, the protective respiratory apparatus must be selected, used and cared for in accordance with CAN/CSA Standard Z94.4-11 Selection, use, and care of respirators.

The wearing of a protective respiratory apparatus is not mandatory where the employer demonstrates that the level of exposure of workers to silica dust is less than the permissible exposure values indicated in Schedule I to the Regulation respecting occupational health and safety.

O.C. 820-2023, ss. 4 and 5.

3.25.7. **Training:** Before undertaking work referred to in this subdivision, the employer must train and inform workers of the risks, prevention methods and safe working methods. The training and information program must contain at least the following elements:

(a) the materials presumed to contain crystalline silica;

(b) the work that exposes workers to crystalline silica dust;

(c) the effects of exposure to crystalline silica dust on health;

(d) safe working methods and procedures;

(e) the use and care of control equipment and tools for crystalline silica dust;

(f) the wearing and care of individual and common protective equipment.

The information and training provided for in the first paragraph must have previously been established in writing.

O.C. 820-2023, s. 4.

3.25.8. Delimitation of the work area: When the work provided for in section 3.25.6 is carried out, the work area must be delimited by hazard signs. The delimitation must allow workers outside the work area to remain at a safe distance from the area where the work is carried out.

Only workers wearing a protective respiratory apparatus in compliance with section 3.25.6 may access that work area.

O.C. 820-2023, s. 4.

3.25.9. Cleaning of work clothes: Before leaving the work area referred to in section 3.25.8, the worker must remove the work clothes worn and place them in a closed bag supplied by the employer or clean them using either a wet cloth or a vacuum cleaner equipped with a highefficiency filter.

O.C. 820-2023, s. 4.

3.25.10. Cleaning: When the work area and equipment are being cleaned, it is prohibited to use work methods that may cause dust from materials presumed to contain or containing crystalline silica to become suspended in the air, such as dry sweeping or the use of compressed air.

Cleaning must be carried out by means of wetting or using a vacuum cleaner equipped with a high-efficiency filter.

O.C. 820-2023, s. 4.

3.25.11. Debris of materials: Where work is carried out in a building, the debris of materials presumed to contain or containing crystalline silica that is liable to become dispersed in the air must be wetted or placed in closed containers and clearly identified.

Where work is carried out outside, as defined in section 3.23.1.1 of this Code, the debris of materials presumed to contain or containing crystalline silica that is liable to become dispersed in the air must be wetted or an equivalent means that prevents the dispersion of crystalline silica dust in the air must be used.

O.C. 820-2023, s. 4.

DIVISION IV
HANDLING AND USE OF EXPLOSIVES

§4.1. General provisions

4.1.1. No explosive shall be used on a construction site if the following information is not clearly printed or indicated on the explosive box or container:

(a) the manufacturer's name;

(b) the name under which the explosive is known;

(c) the date of manufacture; and

(d) the instructions in French for the safe storage, handling, use and destruction of the explosive.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.1; O.C. 1959-86, s. 29; O.C. 57-2015, s. 2.

4.1.2. Explosives shall be:

(a) protected against impacts, frictions, fire, flames and sparks;

(b) sheltered from rain and snow; and

(c) kept in a ventilated place.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.2; O.C. 57-2015, s. 3.

4.1.3. Explosives bearing the oldest manufacture date shall be used first.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.3; O.C. 57-2015, s. 4.

4.1.4. Deteriorated explosives shall be handled with utmost care and shall be destroyed without delay according to the manufacturer's instructions.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.4; O.C. 57-2015, s. 5.

4.1.5. It is prohibited to use an explosive that has reached its freezing point, unless the manufacturer's instructions allow such use.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.5; O.C. 1959-86, s. 30; O.C. 57-2015, s. 6.

4.1.6. No explosive shall be left lying about.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.6; O.C. 57-2015, s. 7.

4.1.7. An employer must ensure that no one smokes, brings a flame, a substance or material likely to increase the risk of explosion or fire within 8 m from any place where explosives are present.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.7; O.C. 1959-86, s. 31; O.C. 57-2015, s. 8.

4.1.8. An employer must ensure that

(a) explosives are handled and used in accordance with the manufacturer's instructions;

(b) explosives that are brought on the site correspond to the quantities required to carry out the blasting for one workday;

(c) explosives not used to carry out blasting are stored in a depot designed for that purpose;

(d) explosives are not transported by hand at the same time as detonators or other blasting accessories.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.1.8; O.C. 1959-86, s. 32; O.C. 57-2015, s. 9.

4.1.9. When there is a risk of accidental blasting by electric induction, caused notably by a radio frequency transmitter or a power line, the employer must favour a non-electrical priming method.

If the employer nonetheless carries out blasting using an electrical priming method, the employer must take all the safety measures required, including the following:

(a) inform the Commission, before the work begins, of the safety measures agreed upon with public utilities where the blasting is near a power line of 125,000 V or more;

(b) place, 300 m around the loading area, signs requiring drivers to turn off the radio transmitter of their vehicle;

(c) isolate electrical circuits and make sure that the detonator leg wires are twisted together when the detonator is inserted in the firing point;

(d) make sure that all equipment emitting radio, electric or magnetic waves

i. are turned off within 15 m around the loading area before the electric detonator is assembled with the lead wires

ii. comply with the distances recommended in the Safety Guide for the Prevention of Radio Frequency Radiation Hazards in the Use of Commercial Electric Detonators, published by the Institute of Makers of Explosives (Safety Library).

O.C. 1959-86, s. 32; O.C. 57-2015, s. 10.

4.1.10. Fireworks, igniter cords, military devices and safety fuses may not be used on a construction site.

Despite section 295 of the Regulation respecting occupational health and safety, this section does not apply to an establishment as defined in section 1 of the Act respecting occupational health and safety.

O.C. 57-2015, s. 11.

4.1.11. Nothing in this Regulation exempts a person from the obligation to comply with the requirements of any applicable act or regulation, particularly with regard to the acquisition, possession, storage, transportation or delivery, handling, use and sale of explosives.

In the event of inconsistency between a provision of this Regulation and a provision of another act or regulation, the stricter standard is to apply.

O.C. 57-2015, s. 11.

§4.2. Shot-firer's certificate

4.2.1. **Shot-firer:** A person who carries out blasting must hold a shot-firer's certificate issued by the Commission or a body recognized by it.

The certificate is issued until the date of expiry of the general permit held under the Act respecting explosives (chapter E-22) by the shot-firer. The certificate is renewed upon request by its holder as long as renewal of the general permit is granted.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.1; O.C. 1959-86, s. 33; O.C. 1279-98, s. 1; O.C. 57-2015, s. 12.

4.2.1.1. A shot-firer must be in possession of the original of his or her certificate during blasting operations.

O.C. 57-2015, s. 12.

4.2.2. A shot-firer may not receive assistance from more than 2 workers who are not certificate holders.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.2; O.C. 1959-86, s. 33; O.C. 57-2015, s. 13.

4.2.3. In addition to holding a general permit, a candidate for a shot-firer's certificate must

(a) be 18 years of age and older;

(b) provide a document certifying that the candidate's character, knowledge and experience make the candidate competent to handle explosives; and

(c) pass the written examination prepared by the Commission with a mark of at least 80%.

Unless the Commission has suspended or revoked the certificate it issued to the shot-firer, a shot-firer holding a certificate issued by a competent authority in another province or a territory of Canada and recognized by the Commission as equivalent to the certificate issued under this Division is not required to undergo the examination provided for in subparagraph *c* of the first paragraph.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.3; O.C. 1959-86, s. 34; O.C. 1279-98, s. 2; O.C. 57-2015, s. 14.

4.2.4. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.4; O.C. 1959-86, s. 35; O.C. 57-2015, s. 15.

4.2.5. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.5; O.C. 1959-86, s. 36; O.C. 57-2015, s. 15.

4.2.6. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.6; O.C. 1959-86, s. 37; O.C. 57-2015, s. 15.

4.2.7.-4.2.8. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 1959-86, s. 38.

4.2.9. The Commission may suspend or revoke a certificate if the shot-firer

(a) has been the subject, in his or her work, of a remedial order under section 182 of the Act respecting occupational health and safety or of an order under section 186 of that Act, by reason of his or her refusal to comply with the Act or this Regulation;

(b) is found guilty of an offence under section 236 of the Act respecting occupational health and safety in relation to this Division;

(c) no longer holds a general permit issued under the Act respecting explosives (chapter E-22).

The Commission must notify the shot-firer in writing of the suspension or revocation of the certificate.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.2.9; O.C. 1959-86, s. 39;
O.C. 57-2015, s. 16.

4.2.10. The Commission must revoke a certificate if the shot-firer is found guilty of an offence under section 237 of the Act respecting occupational health and safety in relation to this Division.

The Commission must notify the shot-firer in writing of the revocation of the certificate.

O.C. 57-2015, s. 16.

4.2.11. An employer must ensure that a worker who acts as shot-firer holds a certificate.

O.C. 57-2015, s. 16.

§4.3. Transportation of explosives

4.3.1. An employer must make sure that a vehicle transporting explosives is in good working order and allows for the safe transportation of explosives, in particular in compliance with the following standards:

(a) the display of safety marks in accordance with the Transportation of Dangerous Goods Regulations (SOR/2001-286);

(b) the part of the vehicle containing explosives must be isolated, fireproof, in compliance with section 45 of the Regulation under the Act respecting explosives (chapter E-22, r. 1) and locked at all times except during the loading or unloading of explosives;

(c) the metal parts likely to come into contact with explosives or their wrapping during transportation must be covered with a material to prevent such contact;

(d) the installation of a tracking and communication system, for a vehicle carrying 2,000 kg or more of explosives, that makes it possible at all times to locate the vehicle and to communicate with its driver. The employer must make sure that a person is in charge of locating and communicating with the driver at all times during the transportation of explosives, as well as alerting police services in case of emergency.

The tracking and communication system provided for in subparagraph *d* must be installed not later than 26 February, 2018.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.1; O.C. 1959-86, s. 40; O.C. 57-2015, s. 17.

4.3.1.1. An employer must subject the vehicle referred to in section 4.3.1 to a mechanical inspection once a year and remedy without delay the failures observed during such inspection.

Inspection of a vehicle carried out by a holder of a certificate of competency issued under the Highway Safety Code, in the context provided for in the Code or its regulations or under another Act or regulation, stands in lieu of the annual inspection referred to in the first paragraph. Otherwise, the inspection must be carried out by a mechanic whose competency is equivalent to that of the holder of a certificate of competency issued under the Highway Safety Code.

The employer must keep proof that the vehicle has been inspected.

O.C. 57-2015, s. 17.

4.3.1.2. An employer must ensure that objects other than explosives are not transported with the explosives, unless they are stored, or separated from the explosives, in a way that reduces the risk of ignition to a minimum.

Despite the first paragraph, it is prohibited to transport diesel fuel, gasoline or other flammable products with explosives.

O.C. 57-2015, s. 17.

4.3.2. During loading and unloading, the employer must ensure that the driver is accompanied by a person who is responsible for watching over the explosives.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.2; O.C. 1959-86, s. 40; O.C. 57-2015, s. 18.

4.3.3. Where detonators are transported with explosives, the employer must make sure that they are stored separately in a compartment of the vehicle that is completely closed and does not communicate with the part of the vehicle that contains the explosives.

The compartment wall that separates the detonators from the explosives must be as high as the roof and be made of solid wood 150 mm thick or of a material that prevents the explosion of the detonators for at least 1 hour in case of fire.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.3; O.C. 1959-86, s. 41; O.C. 57-2015, s. 19.

4.3.4. *(Revoked.*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.4; O.C. 1959-86, s. 42; O.C. 57-2015, s. 20.

4.3.5. Every vehicle transporting explosives must be equipped with 2 portable fire extinguishers graded and classified: 4-A:40-B:C and complying with the standards in section 3.4.4.

The employer must ensure that the driver is capable of using the fire extinguishers.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.5; O.C. 1959-86, s. 42; O.C. 329-94, s. 72; O.C. 57-2015, s. 21

4.3.6. *(Revoked.*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.6; O.C. 1959-86, s. 42; O.C. 57-2015, s. 22.

4.3.7. **Loading and unloading:** During the loading or unloading of explosives in a vehicle, the employer must ensure that all the safety measures required to eliminate the risk of accidental blasting are taken. The employer must make sure, in particular, that

(a) the vehicle's engine is not running;

(b) the loading or unloading takes place without interruption and with care, except in the case of bulk explosives.

Once the explosives are unloaded, the employer must make sure that every explosive is stored in a depot, as soon as possible, unless the vehicle constitutes a depot covered by a magazine permit within the meaning of section 38 of the Regulation under the Act respecting explosives (chapter E-22, r. 1).

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.7; O.C. 1959-86, s. 43; O.C. 57-2015, s. 23.

4.3.8. The driver of a vehicle transporting explosives must no make unnecessary stops. When the vehicle must be parked, the driver must turn the ignition off, set the parking brake and ensure a continuous watch over the vehicle. A vehicle carrying explosives shall not be fueled except where the distance to cover is greater than the range allowed by the fuel tank capacity of the vehicle. In that case, fueling shall nevertheless be done before loading explosives.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.8; O.C. 1959-86, s. 44.

4.3.9. Only the driver and the persons engaged in the handling of explosives may ride in a vehicle transporting explosives.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.9.

4.3.10. Vehicle equipped with radio transmitter: When detonators are not in their original packing, the employer must make sure that the radio frequency transmitter is not in use unless the detonators are not electrical or are contained in a closed metal case lined with a material not likely to produce sparks.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.10; O.C. 57-2015, s. 24.

4.3.11. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.11; O.C. 57-2015, s. 25.

4.3.12. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.3.12; O.C. 1959-86, s. 45;
O.C. 57-2015, s. 25.

4.3.13. Where explosives are transported outside motor roads using a means other than a vehicle referred to in this subdivision, the employer must ensure that

(a) the quantity of explosives transported does not exceed the quantity required for the blasting;

(b) the explosives are contained in a chest that has no material inside that could produce sparks;

(c) detonators are transported separately from the explosives, either in another chest, or in the same chest if it is equipped with a safe partition;

(d) if applicable, the additional quantity of fuel necessary for the transportation is properly separated from the chests containing the detonators and explosives.

O.C. 57-2015, s. 26.

§4.4. Storage of explosives

4.4.1. On a construction site, the employer must make sure that an explosive depot meets the following safety standards:

(a) conform to the standards of the Regulation under the Act respecting explosives (chapter E-22, r. 1);

(b) be laid out so as to comply with the distances established in the standard *Explosives – Quantity Distances*, BNQ 2910-510, or in the table in Schedule 2.3;*

(c) be used exclusively for the storage of explosives or blasting accessories;

(d) be locked;

(e) be under the employer's supervision and responsibility;

(f) be kept clean inside, be coated or covered in such a way that no iron or steel is left uncovered and no particle of rough iron, steel or any similar substance may become loose or come into contact with the explosives contained in the depot;

(g) be of the colour white, aluminum or red with the word EXPLOSIVES written on all visible sides, in contrasting colours at least 150 mm high.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.1; O.C. 1959-86, s. 46;
O.C. 57-2015, s. 27.

* NOTE: *Until the standard Explosives – Quantity Distances, BNQ 2910-510, is made and published by the Bureau de normalisation du Québec, the distances for the disposition of depots, provided for by the standard in paragraph b of section 4.4.1 of the Safety Code for the construction industry, are those provided for in the Quantity Distance Principles User's Manual published in 1995 by the Explosives Regulatory Division of Natural Resources Canada.* (O.C. 57-2015, s. 63.)

4.4.1.1. A construction site chest used as an explosive depot may not contain more than 227 kg of explosives.

The chest may be kept without dike. However, it must be kept at least 15 m from any building, meeting place or road.

If there is more than one chest, each chest must be protected from the others by dikes and comply with the standards prescribed in column 3 of Schedule 2.3.

O.C. 57-2015, s. 27.

4.4.1.2. Where a truck is used to temporarily store the explosives required for a workday, the employer must ensure that the following standards are met:

(a) the quantity of explosives stored may not exceed 800 kg;

(b) the vehicle is covered by a magazine permit within the meaning of section 38 of the Regulation under the Act respecting explosives (chapter E-22, r. 1);

(c) the vehicle is equipped with an automatic fire suppression system, with dry chemicals, complying with AS 5062-2006 standard Fire Protection for Mobile and Transportable Equipment, published by Standards Australia;

(d) during blasting, the truck must be kept in a safe place, outside the blasting area, under the constant supervision of a person holding a general permit issued under the Act respecting explosives (chapter E-22).

O.C. 57-2015, s. 27.

4.4.1.3. During working hours, if it is impossible to conform to the distances provided for in paragraph *b* of section 4.4.1, the employer may store the explosives required for a workday in a construction site chest or an explosive transportation truck in compliance with the quantity and distance standards provided for in section 4.4.1.1 or 4.4.1.2, as the case may be.

O.C. 57-2015, s. 27.

4.4.2. In off-duty hours, the explosives, detonators and other accessories must be sent back to the supplier or stored in accordance with the Regulation under the Act respecting explosives (chapter E-22, r. 1).

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.2; O.C. 1959-86, s. 46.

4.4.3. **Dangerous substances:** Any flammable substance and any product likely to cause a fire or explosion must be handled and stored in compliance with the measures prescribed in section 3.16.10, away from any explosive depot.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.3; O.C. 57-2015, s. 28.

4.4.4. Every detonator must be stored in a depot separate from the explosive depot. No dike is required around that depot, which must be at least 8 m from any other explosive depot.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.4; O.C. 1959-86, s. 47;
O.C. 57-2015, s. 29.

4.4.5. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.5; O.C. 1959-86, s. 48.

4.4.6. *Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.6; O.C. 57-2015, s. 30.

4.4.7. In a depot, explosives and their packages must be stored safely, in particular by

(a) limiting the height of piles so as to prevent explosives from tipping over;

(b) keeping sufficient space between the explosive piles, walls, roof and ventilation openings, so as to maintain proper air circulation;

(c) not opening packages or wooden containers closed with metal ties or strips. The other types of packaging or containers may be opened, one at a time, for inspection purposes or to remove the explosives;

(d) storing only explosive packages or containers that are clean, dry and free of small abrasive materials or any contamination.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.7; O.C. 57-2015, s. 31.

4.4.8. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.8; O.C. 1959-86, s. 48.

4.4.9. At the end of a workday, empty containers that were used to pack explosives must be destroyed according to the manufacturer's instructions or be returned to the supplier so that they may not be used for other purposes.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.4.9; O.C. 1959-86, s. 49;
O.C. 57-2015, s. 32.

4.4.10. An explosive depot must be farther from a 44 kV or more overhead electric power line than the distance between the supports of the line located near the depot. Where the distance between the supports of the line is greater than 15 m, the depot must be placed from that line at the greater of the following distances:

(a) 15 m;

(b) the result of the following formula: P / 2 – H (in meters), where "P" is the distance between the supports of the transmission line and "H" is the height of the supports of the transmission line; or

(c) the distance provided for in column 2 of the table in Schedule 2.3.

O.C. 57-2015, s. 32.

§4.5. Drilling

4.5.1. No drilling may be done closer than

(a) 1.5 m from a misfire or blowout. If necessary, holes may be drilled closer but not less than 600 mm on condition that drilling is performed by remote control under supervision and that all precautions are taken to ensure the safety of workers should an explosion occur at the blasting face;

(b) 8 m from any loaded blasthole or explosive loading site.

Despite the foregoing, a blasthole may be drilled closer than 8 m if adaptation to specific job-sites conditions is required, particularly for trench work or work in permafrost zones in unstable conditions. The employer must then ensure that

i. loading and drilling are performed alternately;

ii. the shot-firer supervises and controls the drilling operations;

iii. only cartridge explosives are used. However, if soil degradation does not allow for the insertion of cartridge explosives in the boring hole, the shot-firer may use a blasting agent to load the hole. That method may not be used for more than 3 holes per blasting;

iv. a carpenter's level is used to make sure that blastholes are vertical;

v. the minimum distance from any loaded hole is 1.5 m or 20% of the hole depth to a maximum depth of 12 m, using the greater distance between the two;

vi. if the holes have a depth of 6 m or more, the first drilling rod must be replaced by a guide tube or another means providing equivalent precision to avoid the blasting of another loaded hole in the vicinity;

vii. loaded holes must be marked by stakes of a distinct color or carrying a distinct ribbon.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.5.1; O.C. 1959-86, s. 50;
O.C 57-2015, s. 33.

4.5.2. The diameter of the explosive used must be smaller than the diameter of the borehole throughout the depth of the latter.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.5.2; O.C. 1959-86, s. 50.

4.5.3. Before being loaded, all holes must be examined and corrected where necessary.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.5.3; O.C. 1959-86, s. 50;
O.C. 57-2015, s. 34.

4.5.4. Drilling and loading of explosives may not be carried out simultaneously less than 8 m from one another, or one on top of the other.

O.C. 57-2015, s. 35.

4.5.5. Before drilling any surface of a digging where blasting was performed, all bottoms of blastholes must bemarked in either of the following manners:

(a) by a circle in paint or crayon of a colour contrasting with the soil;

(b) by inserting a stick into the hole.

O.C. 57-2015, s. 35.

4.5.6. It is prohibited to deepen holes remaining intact after blasting.

O.C. 57-2015, s. 35.

§4.6. Loading of blastholes

4.6.1. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.1; O.C. 57-2015, s. 37.

4.6.1.1. A loading area must be delimited by means of ribbons, trestles or a warning line provided for in section 2.9.4.1. Only persons holding a valid general permit, issued under the Act respecting explosives (chapter E-22), may access the area.

O.C. 57-2015, s. 38.

4.6.2. The primer cartridge of a blasthole shall be prepared only when priming the hole.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.2; O.C. 1959-86, s. 51.

4.6.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.3.; O.C. 57-2015, s. 39.

4.6.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.4; O.C. 1959-86, s. 52;
O.C. 57-2015, s. 39

4.6.5. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.5; O.C. 1959-86, s. 52
O.C. 57-2015, s. 39.

4.6.6.-4.6.7. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 1959-86, s. 53.

4.6.8. **Tamping rod and punch:** For loading, only a tamping rod and punch made of non-ferrous material may be used.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.8; O.C. 1959-86, s. 54.

4.6.9. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.9; O.C. 1959-86, s. 55.

4.6.9.1. **Conditions for untamping and repriming a blasthole or misfire:** Prior to the untamping or repriming of a blasthole or misfire, the employer must prepare a written procedure that takes into account the types of explosives and the manufacturer's instructions in that regard, as well as environmental conditions.

The employer must also make sure that

(a) the procedure is available on the construction site;

(b) the untamping of the collar is done by the shot-firer who loaded and fired the blasthole, unless it is impossible for him to do so;

(c) during all untamping, repriming and firing operations, all persons except the shot-firer are outside the blasting area;

(d) the constituents of the material used for untamping the blasthole and inserted in it is made of non-ferrous materials.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.9.1; O.C. 1959-86, s. 56;
O.C. 57-2015, s. 40.

4.6.10. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.10; O.C. 1959-86, s. 57.

4.6.11. At the first signs of a thunderstorm, the employer must stop all loading and detonator connecting operations. The employer must evacuate the blasting area, prohibit access thereto and supervise the situation from a distance.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.11.
O.C. 57-2015, s. 41.

4.6.12. Electric blasting operations:

(a) For electritc blasting operations, the entire length of the lead wires must be made of 2 insulated conductors that do not come in contact with the ground or other conductor and must reach the immediate vicinity of the firing point. These conductors must not be intertwined with conductors intended for any other purpose whatsoever, nor run in the same tube with them, nor have the possibility of coming in contact with them;

(b) To avoid stray electric currents or current leaks to ground, bare connections between the lead wires and the cap leg wires or between the cap leg wires must not come in contact with the ground or equipment.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.12; O.C. 1959-86, s. 58.

4.6.13. During the final connection of lead wires and the various electric blasting caps, the entire firing circuit must be checked using a blasting ohmmeter.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.13; O.C. 1959-86, s. 58;
O.C. 57-2015, s. 42.

4.6.14. Blasting machine:

(1) The blasting machine shall be stored in a cool, dry place.

(2) It shall be kept in good operating condition and shall be tested regularly.

(3) The capacity of the blasting machine shall be clearly marked on each machine and such capacity shall never be exceeded. Only the shot-firer shall have access to the operating components of such apparatus.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.14.

4.6.15. Detonating fuse: When the lead wires are composed of detonating fuses, the employer must ensure that the following safety measures are complied with:

(a) spliced pieces are not used in a single blasthole;

(b) after priming, the down line is cut from the reel and a sufficient length, approximately 200 mm, protrudes from the blasthole to prevent a possible settlement of the load prior to make final connections;

(c) main fuses are connected to detonating fuses at right angles;

(d) when priming a detonating fuse with a detonator, the end with the explosive charge is set in the same direction as the expected shock wave;

(e) no detonating relay is placed in a blasthole;

(f) the shot-firer has visually checked all the connections;

(g) the firing point of the detonating fuse must be located outside the surface covered by the blasting mats;

(h) the detonator used for starting the detonating fuse must be set in place only once the covering operations have been completed.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.15; O.C. 1959-86, s. 59
O.C. 57-2015, s. 43.

4.6.16. **Blending of ANFO:** The blending of ammonium nitrate and fuel oil or of other nitrocarbonitrates must not be carried out unless a licence has been granted or written permission given under the Explosives Act (R.S.C. 1985, c. E-17).

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.16; O.C. 1959-86, s. 60.

4.6.17. When explosives in bulk are loaded, a semiconductor loading hose must be used and the loading equipment must be grounded according to the manufacturer's instructions.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.17; O.C. 1959-86, s. 60,
O.C. 57-2015, s. 44.

4.6.18. **Unloading and refiring:** It is prohibited to unload or clean out a blasthole or a misfire.

If the starting operation or refiring is impracticable, the explosives must be pulled out in accordance with a procedure prepared in writing by an engineer, taking into account the types of explosives and the manufacturer's instructions in that regard, as well as environmental conditions.

The procedure must be available on the work site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.18; O.C. 1959-86, s. 60
O.C. 57-2015, s. 45.

4.6.19. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.6.19; O.C. 1959-86, s. 60
O.C. 57-2015, s. 46.

§4.7. Firing

4.7.1. All loaded holes must be primed and fired in the same round. When firing cannot be done at the end of the loading, the blasting area must remain under supervision, be evacuated, and no access shall be permitted until after the firing.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.1; O.C. 1959-86, s. 61
O.C. 57-2015, s. 47.

4.7.2. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.2.; O.C. 57-2015, s. 48.

4.7.3. Lead wires must be connected to the blasting machine after the signal indicating that blasting is imminent. Lead wires must always be disconnected from the blasting machine immediately after the firing or after the attempted blast. Both ends of the lead wires must be short-circuited and insulated to guard against stray currents.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.3; O.C. 1959-86, s. 62.

4.7.4. Firing may be done from a power line or from a portable generator, provided that:

(a) voltage does not exceed 220 V;

(b) the blasting switch be designed so that:

i. the weighted handle of the blasting switch automatically gravitates to the "off" position and short-circuits the lead wires; and

ii. the door of the box housing the blasting switch is provided with a device that prevents it from being locked or closed unless the blasting switch is in the "off" position. The door must be kept locked except when firing and only the shot-firer shall have the key;

(c) a fused switch is installed between the power source and the blasting switch;

(d) the fused switch and the blasting switch are situated in the proper place for blasting and at a distance of 1.5 to 1.8 m from each other as a precaution against lightning. Underground they will be placed on either side of a tunnel or gallery.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.4; O.C. 1959-86, s. 63.

4.7.5. When blasting is done in the vicinity of a structure such as a building, railway or road, the employer must limit the quantity of explosives so that the vibrations caused by the blasting do not damage those structures.

To that end, the employer must comply with the most stringent standards between those provided for in specifications designed for that purpose by a public authority and those provided for in blasting specifications signed and sealed by an engineer. Failing such specifications, the employer must comply with one of the standards provided for in Schedule 2.6.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.5; O.C. 1959-86, s. 64;
O.C. 57-2015, s. 50.

4.7.5.1. During blasting, projections must stay with in the blasting area. To that end, the employer must take appropriate measures to reduce and control projections, in particular by using blasting mats.

When blasting mats are used, they must be deposited, not slid, onto blastholes loaded with explosives.

O.C. 57-2015, s. 50.

4.7.6. The firing procedures are as follows:

(a) before proceeding with the firing, the shot-firer must ensure with the employer that all persons have taken shelter;

(b) sound signals must be emitted with a siren of at least 120 dB:

i. immediately before blasting, 12 short horn signals at one-second intervals;

ii. 30 seconds must elapse between the last warning signal and the time of firing;

iii. after blasting, once the blasting area is safe, one continuous 15-second horn signal must announce that work may be resumed in the area;

(c) the employer must make sure that workers take shelter outside the blasting area before the first signal and that they remain there until the 15-second signal is sounded;

(d) a code of sound signals reserved for blasting operations must be written in coloured letters 150 mm high, against a contrasting background, on a board 1.2 m high by 2.4 m wide, placed at all points of access to the work site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.6; O.C. 1959-86, s. 64
O.C. 57-2015, s. 51.

4.7.7.-4.7.8. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 1959-86, s. 65.

4.7.9. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.9; O.C. 57-2015, s. 52.

4.7.10. **Blasting logbook:** The blasting logbook must at least contain the information provided for in Schedule 2.2 and it must be maintained and signed by the shot-firer. The employer must keep it for 3 years and make it available at all times on the work site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.7.10; O.C. 1959-86, s. 66;
O.C. 57-2015, s. 53.

§4.8. Work after blasting

4.8.1. After blasting, the shot-firer must be the first to enter the blasting area to make sure it is safe. For that purpose, the shot-firer must

(a) wait for the smoke to dissipate;

(b) make sure, using a device to measure the concentration of carbon monoxide, that the carbon monoxide concentration is below the exposure limit values indicated in Schedule I to the Regulation respecting occupational health and safety;

(c) examine the work site;

(d) look for possible misfires, blowouts and bootlegs;

(e) mark those found.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.8.1; O.C. 1959-86, s. 67
O.C. 57-2015, s. 55.

4.8.2. When the shot-firer considers that the blasting area is safe, the shot-firer informs the employer that the employer may

(a) sound the 15-second signal;

(b) remove the blasting mats as soon as possible after the end of blasting;

(c) excavate blasting debris.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.8.2; O.C. 1959-86, s. 68;
O.C. 57-2015, s. 56.

4.8.3. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.8.3; O.C. 1959-86, s. 69;
O.C. 57-2015, s. 57.

4.8.4. When it is found that a defect in the electrical circuit has prevented the charges from detonating at time of firing, the shot-firer may immediately check over the circuit after having made sure that:

(a) the ends of the lead wires are disconnected from the power supply and short-circuited;

(b) the blasting machine is locked or under a worker's surveillance; and

(c) if used, the blasting switch is locked and in open circuit.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.8.4.

§4.9. *(Revoked).*

4.9.1. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.9.1; O.C. 1959-86, s. 70;
O.C. 57-2015, s. 58.

4.9.2. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.9.2; O.C. 1959-86, s. 71;
O.C. 57-2015, s. 58.

4.9.3. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 4.9.3; O.C. 1959-86, s. 71;
O.C. 57-2015, s. 58.

DIVISION V
WORK IN THE PROXIMITY OF ELECTRICAL LINES

§5.1. Scope

5.1.1. This Division applies to any construction work carried out near an aerial electrical line.

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.1.1.

5.1.2. However, this Division does not apply to:

(a) a neutral conductor;

(b) an insulated cable less than 750 V of the duplex, triplex or quadruplex assembly type;

(c) a consumer or distributor branching less than 750 V;

(d) the electrical installation of the consumer;

(e) the construction, repair or maintenance of an electrical line carried out by a worker of an electrical power company or by an employer authorized by it;

(f) the construction, repair or maintenance of a communications network performed on a structure supporting an electrical line by an employer authorized by an electrical power company; or

(g) work performed near an electrical line 750 V or less, provided that there is insulation between the worker and the non-insulated live parts.

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.1.2.

§5.2. Interdictions

5.2.1. The employer shall ensure that no one performs work liable to bring any part, load, scaffolding, machine component or person closer than the minimum approach distance specified in the following table:

Tension between phases (volts)	*Minimum approach distance (metres)*
Less than 125 000	3
125 000 to 250 000	5
250 000 to 550 000	8
More than 550 000	12

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.2.1; O.C. 35-2001, s. 22.

5.2.2. The employer who wishes to carry out work liable to bring any part, load, scaffolding, machine component or person closer to a power line than the minimum approach distance specified in section 5.2.1 may proceed with such work provided that

(a) that power line has been turned off. The employer shall ensure that no one runs any risk of being electrocuted before turning the power on again;

(b) the employer has come to an agreement with the electrical power company as to safety measures to be adopted. Before the work begins, the employer shall transmit a copy of such agreement as well as the work plan to the Commission. Such measures shall be carried out before the work begins and shall be maintained throughout the course of the work; or

(c) the employer uses extensible construction equipment, such as a backhoe, a power shovel, a crane or a dump truck, and complies with the following conditions:

i. the extensible construction equipment is equipped with a device having a first function of warning the operator or stopping the equipment from operating so that the minimum approach distance specified in section 5.2.1 is respected, and a second function of stopping the equipment from operating should the device fail to perform its first function. A written declaration signed by an engineer, certifying that the extensible equipment performs those functions and that it neither damages the equipment nor renders it unstable when it stops the equipment from operating, shall be obtained by the employer. If the device fails to operate partially or completely, or is inoperative, the employer shall cease to use the extensible construction equipment and shall obtain a new written declaration signed by an engineer before re-using the equipment;

ii. the operator of the extensible construction equipment equipped with the device referred to in subparagraph *i* must have received the manufacturer's training on the proper use of the device.

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.2.2; O.C. 1959-86, s. 72; O.C. 53-90, s. 10; O.C. 35-2001, s. 23; O.C. 483-2021, s. 8.

5.2.3. The employer who carries out work less than 30 m away from an electrical line with a voltage higher than 250,000 V shall ensure that the following requirements are respected:

(a) refueling shall be done outside the area;

(b) construction equipment on tires shall be equipped with an electrostatic link between the metallic part and the ground; and

(c) during the installation or manipulation of a metal duct, fence or above ground structure, it shall be grounded every 30 m.

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.2.3.

5.2.4. Before carrying out work near an electrical line held at each supporting point otherwise than by one wooden post, the employer shall obtain in writing the line voltage from the electrical power company.

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.2.4.

§5.3. Warning sign

5.3.1. The employer shall ensure that the owner or lessee of any piece of machinery used to lift a load and capable of vertical, lateral or rotational motion, posts on such machinery, in a conspicuous place so as to be seen by the operator, a warning sign reading: DANGER — N'APPROCHEZ PAS DES LIGNES ELECTRIQUES, in letters at least 12 mm in height.

R.R.Q., 1981, c. S-2.1, r. 6, s. 5.3.1.

DIVISION VI
SHORING OF CONCRETE FORMWORK

§6.1. Shoring drawing

6.1.1. A copy of the drawing mentioned in paragraph *b* of subsection 2 of section 2.4.1 shall be kept on the construction site for the entire duration of the work.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.1.1.

6.1.2. If, for a construction, there is repetition of the form of the structure and it is not necessary to change the shoring drawing, the same drawing may be used for the following stages on the same site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.1.2.

6.1.3. The shoring drawing shall specifically mention all the information respecting the installation of the shoring; the drawing shall contain the following information in particular:

(1) spacing of load bearing elements;

(2) bracing;

(3) size of the parts;

(4) design loads;

(5) resistance of the materials;

(6) bearing surface;

(7) method for pouring the concrete; and

(8) any other information taken into account by the engineer who signed the drawing.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.1.3; O.C. 1413-98, s. 26.

§6.2. Concreting work

6.2.1. Before commencing concreting work, the employer shall:

(a) obtain from an engineer:

i. a signed and sealed declaration attesting that the work complies with all the points in the shoring drawing filed; and

ii. the authorization to proceed with the concreting work;

(b) transmit immediately a copy of the declaration to the Commission; and

(c) keep a copy of such declaration at the work site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.2.1; O.C. 1959-86, s. 73.

§6.3. Exception

6.3.1. In the case of the construction of slabs and beams that are uniform and horizontal, Subdivisions 6.1 and 6.2 do not apply when the 4 following conditions are respected:

(a) the thickness of the concrete slab does not exceed 150 mm and the concrete beams are not higher than 300 mm including the thickness of the slab;

(b) the distance between the underside of the poured concrete and the bearing surface of the posts does not exceed 4.9 m;

(c) Subdivisions 6.4 and 6.9 are complied with;

(d) prior notice is given to the Commission.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.3.1; O.C. 1959-86, s. 74.

§6.4. Materials

6.4.1. All formwork and shoring parts shall be designed to support:

(a) the dead load of the formwork;

(b) the dead load of the concrete and the embedded materials;

(c) a minimum vertical live load evenly distributed of 2,400 N/m^2 or more to the satisfaction of the engineer; and

(d) a minimum horizontal live load evenly distributed of 1,500 N/m^2 of vertical surface or more, to the satisfaction of the engineer.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.4.1.

6.4.2. *(Revoked)*.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.4.2; O.C. 393-2011, s. 19.

§6.5. Bearing surface

6.5.1. The bearing surface shall be level and firm.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.1.

6.5.2. The size of the sills shall be determined by taking into account the bearing capacity of the soil and the imposed loads.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.2.

6.5.3. A sill shall be installed between the posts and the soil surface. To ensure continuity of the sills, a piece of the same section as the sill and of sufficient length to support at least 2 posts shall be used over the joint. If it is impossible to ensure such continuity, the sill shall support at least 3 posts and shall be at least equal in length to the number of posts multiplied by their spacing.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.3.

6.5.4. If the shores rest on concrete slabs, the loads due to the shoring of the upper floors shall not exceed the initial design loads. For slabs:

(a) 100 mm thick or less, the sill shall support a minimum of 3 posts and shall be at least equal in length to the number of posts multiplied by their spacing;

(b) more than 100 mm thick, wooden pieces covering more than the entire telescoping jack flange area shall be used between the slab and the telescopic jacks.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.4.

6.5.5. The bearing surface of shores shall be so designed as not to damage the concrete.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.5.

6.5.6. During the freezing and thawing period of the soil, the ice and snow shall be removed and the frozen soil shall be covered with a layer of gravel or sand dust before the sills are installed. The soil shall be:

(a) protected against a possible thaw; or

(b) thawed completely before undertaking the works.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.6.

6.5.7. The construction of embankments or earth fills on which sills rest shall be carried out by successive layers and each layer shall be compacted mechanically. A granulated cohesive material shall be used to form a compact, resistant and waterproof base.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.5.7.

§6.6. Support parts

6.6.1. Telescopic steel jacks, timber shores and scaffold shoring shall comply with the requirements of Subdivision 2.13.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.6.1.

6.6.2. Posts, joists and stringers:

(1) the minimum length of the protrusion of a joist supported on a stringer shall not be less than 300 mm, unless the joist is affixed by ties, in which case the joist shall be supported at least on the full width of the stringer.

(1.1) on a same linear section of the perimeter of the shoring of the framework of a slab, the length of the protrusion of the joists and stringers shall be equal.

(2) Stringers shall be long enough to be supported by at least 3 posts.

(3) The continuity of stringers shall be ensured in one of the following ways:

(a) by a piece of wood 50 mm in nominal thickness and as wide as that of the stringer or the head of the telescopic jack, whichever is the smallest, and long enough to ensure solid attachment to the 2 stringers when the posts are placed immediately below the joint of the stringer and when:

i. telescopic jacks with flanges of 100 × 100 mm or 100 × 150 mm are used; or

ii. stringers of 100 mm wide are used;

(b) by a part of the same section as that of the stringers nailed to the latter and of sufficient length to be supported by at least 2 posts when the posts are placed on each side of the joint and not at the extremities of the stringers;

(c) by the flange of the telescopic jack if the dimensions are sufficient to do so, that is when:

i. telescopic jacks with flanges of 100 × 200 mm are used;

ii. stringers of 100 × 100 mm are used; and

iii. the posts are placed directly beneath the joints of the stringers.

(4) Posts shall be firmly fixed, supported, and secured at each extremity.

(5) Formworks for reinforced concrete beams shall be supported by at least 2 rows of posts.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.6.2; O.C. 1413-98, s. 27.

§6.7. Bracing

6.7.1. Horizontal bracing:

(1) A horizontal bracing shall be placed horizontally in 2 directions at right angles to each post of any shoring when:

(a) this post is 1.8 m high or more and is placed on the soil;

(b) this post is 3.5 m high or more and rests on a concrete slab.

(2) The horizontal bracing shall be placed:

(a) as close as possible to the mid-height of the posts unless another point of buckling is indicated by the calculations; and

(b) when posts are 5.5 m long or more, at heights not exceeding 2.7 m between this bracing and:

i. the bottom or the top of the post; or

ii. another bracing on the same post.

(3) The bracing required in subsection 1 may be omitted if the engineer who drew up the calculations of the concrete shoring plan indicates on the plan he submits that it is not necessary.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.7.1.

6.7.2. Diagonal bracing: At every 4 rows of telescopic jacks, a diagonal bracing placed at a 45º angle shall be installed on both vertical planes perpendicular to each other. This bracing shall alternate from top to bottom and from bottom to top.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.7.2.

6.7.3. Especially solid bracing shall be provided for scaffold shoring and for structures when the imposed loads are not axial.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.7.3.

6.7.4. Only one telescopic jack shall be used for each level of shoring.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.7.4.

§6.8. Shoring of multistory structures

6.8.1. Concrete slabs resting on the ground or on foundation piles and which cannot be shored shall be designed to support the loads due to the shoring of the upper floors.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.8.1.

§6.9. Shoring, dismantling and deforming

6.9.1. The following provisions shall be respected during deforming:

(a) during construction, shoring shall remain in place for 21 days, unless an engineer delivers an attestation establishing that the cement has attained sufficient strength to support its own mass and the loads that it may have to support;

(b) forms shall be removed progressively by section:

i. by taking care to place one's feet on a steady support;

ii. by taking care not to damage the concrete elements; and

iii. by proceeding continuously ahead and foreseeing a free exit path in case of falling objects;

(c) in the case of building framework, the columns shall be deformed first; and

(d) the forms under the slabs and those on the side of the beams and arches shall be removed before the shoring of the beams and arches.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.9.1.

6.9.2. Telescopic jacks shall be removed by means other than a sledgehammer or other heavy objects.

R.R.Q., 1981, c. S-2.1, r. 6, s. 6.9.2.

DIVISION VII
PORTABLE TOOLS

R.R.Q., 1981, c. S-2.1, r. 6, sec. VII; O.C. 329-94, s. 7; O.C. 483-2021, s. 9.

§7.0. General

7.0.1. For the purposes of this Division, "portable tool" means a tool whose weight is supported by a person during its use.

O.C. 483-2021, s. 9.

7.0.2. A portable tool shall not compromise the safety of workers. To that end, it shall

(1) be maintained in good working condition;

(2) be verified by a qualified person, where it is powered by a source of energy other than manual, before its initial use on the site and daily thereafter when it is used; and

(3) be maintained in accordance with the manufacturer's instructions.

O.C. 483-2021, s. 9.

7.0.3. A portable tool shall be used in accordance with the manufacturer's instructions.

It shall not be used if weather conditions may make its use dangerous.

O.C. 483-2021, s. 9.

7.0.4. Unless the manufacturer's instructions so allow, a portable tool shall not be in operation while it is being recharged, repaired or adjusted, maintained or cleaned.

In addition, the engine shall be cooled before refuelling and the portable tool shall not be started less than 3 m from the place where it was refuelled.

O.C. 483-2021, s. 9.

7.0.5. Subject to section 7.1.1.3, a portable tool shall not be modified unless the manufacturer or an engineer certifies in writing that the modification does not compromise its safety or offers the same safety as the original tool.

O.C. 483-2021, s. 9.

7.0.6. A portable tool powered by an internal combustion engine shall be used in accordance with section 3.10.17.

O.C. 483-2021, s. 9.

7.0.7. A portable tool powered by an electrical source shall be used in accordance with subdivision 2.11.

O.C. 483-2021, s. 9.

7.0.8. Subject to a special provision in this Division, the personal protective equipment provided for in subdivision 2.10 for the protection of workers against the risks of injury caused by a portable tool shall be worn during the use of the tool.

O.C. 483-2021, s. 9.

§7.1. Special provisions relating to certain portable tools

R.R.Q., 1981, c. S-2.1, r. 6, sec. VII, ss. 7.1; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

§7.1.1. Explosive actuated tool

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.1.1; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.1.1.1. Only a low velocity explosive actuated tool may be used.

O.C. 483-2021, s. 9.

7.1.1.2. A low velocity explosive actuated tool shall

(1) be unloaded when not in use; and

(2) never be left without supervision when it is loaded.

O.C. 483-2021, s. 9.

7.1.1.3. Only the manufacturer may modify a low velocity explosive actuated tool.

O.C. 483-2021, s. 9.

7.1.1.4. A low velocity explosive actuated tool may only be operated by a worker having received training and holding the certificate of low velocity explosive actuated tool operator, as provided for in Schedule 8.

O.C. 483-2021, s. 9.

7.1.1.5. No work may be performed by a low velocity explosive actuated tool operator who is less than 18 years of age.

O.C. 483-2021, s. 9.

7.1.1.6. An operator may not use a low velocity explosive actuated tool to drive

(1) fasteners into

(a) curved or rounded objects, except if the tool is equipped with a protective device designed for such work;

(b) plaster tiles, hollow bricks or slates;

(c) cast iron, marble, granite, glazed linings and other hard and brittle materials;

(d) steel or alloys that are harder than the fastener used;

(e) hard materials in which holes have already been made, except if the tool is equipped with a device that is capable of holding back the fasteners;

(f) corner bricks or vertical mortar joints; and

(g) steel where

i. the steel is less than 4.83 mm thick;

ii. the point of entry of the fasteners is less than 50 mm from a weld;

iii. the point of entry of the fasteners is less than 13 mm from an edge;

(2) fasteners with a shaft diameter equal to or less than 4.83 mm into concrete where

(a) the concrete is less than 65 mm thick or equal to 3 times the depth of penetration of the shaft of the fasteners;

(b) the point of entry of the fasteners is less that 50 mm from an unsupported edge; and

(c) the point of entry of the fasteners is less that 75 mm from another fastener that is broken.

O.C. 483-2021, s. 9.

7.1.1.7. Before firing, the operator shall ensure

(1) that the low velocity explosive actuated tool

(a) is placed in a stable firing position; and

(b) is held so that the barrel of the tool is perpendicular to the firing surface; and

(2) that there is no other person within firing range.

O.C. 483-2021, s. 9.

7.1.1.8. **Firing incident**: Where a firing incident or a misfire occurs, the low velocity explosive actuated tool shall be held in its firing position for at least 15 seconds; the tool shall then be unloaded. In such a case, the barrel of the tool shall

(1) not be pointed toward the operator or any other person;

(2) be held pointing obliquely toward the ground; and

(3) be held as far as possible from the body of the operator.

O.C. 483-2021, s. 9.

7.1.1.9. The employer shall prohibit the use of a low velocity explosive actuated tool in shops or any other area where the concentration of inflammable vapours, gases or dust has reached the lower explosive limit.

O.C. 483-2021, s. 9.

7.1.1.10. The employer shall ensure

(1) that a low velocity explosive actuated tool is

(a) checked before its first use each day; and

(b) regularly inspected to detect worn or damaged parts, in accordance with the manufacturer's recommendations;

(2) that all parts of the low velocity explosive actuated tool have been cleaned after its use; and

(3) that the safety devices on a low velocity explosive actuated tool are in proper working order.

O.C. 483-2021, s. 9.

7.1.1.11. Only spare parts recommended by the manufacturer shall be used.

O.C. 483-2021, s. 9.

7.1.1.12. No low velocity explosive actuated tool may be used where any of its parts or accessories is defective.

O.C. 483-2021, s. 9.

7.1.1.13. When it is not in use, a low velocity explosive actuated tool shall be placed in a case designed for that purpose. The case shall contain

(1) a copy of the manufacturer's instructions for the use and maintenance of the tool;

(2) all the accessories and implements necessary for the maintenance of the tool at the work site; and

(3) a logbook recording the date of each inspection provided for in subparagraph *b* of paragraph 1 of section 7.1.1.10 as well as the date and type of each repair made.

O.C. 483-2021, s. 9.

7.1.1.14. The case provided for in section 7.1.1.13 and the boxes containing the fasteners and cartridges shall be put in a place that

(1) is kept locked; and

(2) is inaccessible to unauthorized persons.

O.C. 483-2021, s. 9.

7.1.1.15. The operator shall

(1) pick up, as work progresses, the cartridge cases that exploded;

(2) store unused cartridges in accordance with section 7.1.1.14; and

(3) dispose of used cartridges that did not explode in accordance with the manufacturer's instructions.

O.C. 483-2021, s. 9.

7.1.1.16. The following notices shall be affixed permanently and shall be clearly legible:

(1) on each low velocity explosive actuated tool:

(a) the manufacturer's name or trademark;

(b) the type and model of the tool;

(c) the strength of the maximum charge permitted by the manufacturer's specifications;

(2) on the accessories, the manufacturer's name or trademark;

(3) on each box containing fasteners:

(a) the manufacturer's name or trademark;

(b) the nominal dimensions of the fasteners;

(4) on each box containing explosive charges:

(a) the manufacturer's name or trademark;

(b) the place where it was manufactured;

(c) the strength of the explosive charge of the cartridges.

O.C. 483-2021, s. 9.

§7.1.2 Nailing gun

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.1.2; O.C. 329-94, s. 73.

7.1.2.1. **Definitions:** For the purposes of this subdivision,

"**nailing gun**" means a device held by hand by a single operator and in which energy is transmitted in a linear manner to a steel nail charged into the device in order to drive the nail. The energy required for driving comes in particular from compressed air, combustion gas or an electrical load, but not from propellant powder;

"**dual-action contact-trip command**" means a command method in which the trigger and the nose contact element must be interlocked so that only one drive operation is carried out by pressing the trigger while the nose contact element is pressed on the material. To repeat the operation, the trigger and the nose contact element must first return to their idle position;

"**trigger**" means a finger-actuated part that controls the arrival of energy to the driving mechanism of a nailing gun;

"**nose contact element**" means a mechanism at the end of a nailing gun that, for as long as it is not touching a material, prevents the firing of a nail;

"**framing work**" means construction work related to the structure of walls, floors and roofs. Finishing work and work for covering roofs with shingles are excluded.

O.C. 483-2021, s. 9.

7.1.2.2. A nailing gun used for framing work shall

(1) be equipped with a trigger and a nose contact element; and

(2) operate by dual-action contact-trip command.

O.C. 483-2021, s. 9.

7.1.2.3. A nailing gun shall be used

(1) in a stable position;

(2) while wearing the protective glasses described in section 2.10.5; and

(3) without pointing the nailing gun at the operator or any other person.

O.C. 483-2021, s. 9.

7.1.2.4. A nailing gun shall be disconnected from its energy source before its maintenance or unblocking.

O.C. 483-2021, s. 9.

§7.1.3 Saws

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.1.3; O.C. 1959-86, s. 75; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

§7.1.3.1. Circular saws

7.1.3.1.1. A circular saw, except a cut-off machine, shall comply with paragraph 2 of section 3.10.15.

O.C. 483-2021, s. 9.

§7.1.3.2. Chainsaws

7.1.3.2.1. A chainsaw shall comply with CSA Standard Z62.1-15, Chainsaws, for Classes 1A and 2A.

O.C. 483-2021, s. 9.

7.1.3.2.2. A chainsaw shall not be used to cut materials other than wood, unless such use is specified by the manufacturer and the required recommended modifications have been made, if applicable.

It shall not be used inside a closed building if it has an internal combustion engine.

O.C. 483-2021, s. 9.

7.1.3.2.3. The user of a chainsaw shall wear protective footwear from among the following:

(1) footwear referred to in section 2.10.6

(a) that complies with the recommendations for the user of a chainsaw; or

(b) that has protective gaiters and that complies with Part 9 of EN Standard 381-9, Personal protective equipment for users of hand chainsaw;

(2) footwear that complies with ISO Standard 17249, Safety footwear with resistance to chainsaw cutting;

(3) footwear that complies with ISO Standard 20345, Personal protective equipment — Safety footwear, that has protective gaiters and that complies with Part 9 of EN Standard 3819, Personal protective equipment for users of hand chainsaw.

O.C. 483-2021, s. 9.

7.1.3.2.4. The user of a chainsaw shall wear pants or chaps complying with Class A, C or D of ASTM Standard F 3325-18, Standard Specification for Leg Protective Devices for Chainsaw Users.

O.C. 483-2021, s. 9.

7.1.3.2.5. The user of a chainsaw shall wear gloves that allow a grip on the chainsaw's handles.

O.C. 483-2021, s. 9.

7.1.3.2.6. The user of a chainsaw shall

(1) start the chainsaw by firmly maintaining the front handle with the left hand and the rear handle between the knees or on the ground by standing with the right foot in the rear handle;

(2) hold the chainsaw with both hands and with feet solidly set during use; and

(3) apply the chain brake during a displacement when the engine is on.

During its use, a chainsaw shall not be held higher than the shoulders.

O.C. 483-2021, s. 9.

7.1.4.-7.1.6.

(Replaced).

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

§7.2. Operator of a low velocity explosive actuated tool

(Replaced).

R.R.Q., 1981, c. S-2.1, r. 6, sec. VII, ss. 7.2; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.2.1. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.2.1; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.2.2. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.2.2; O.C. 1959-86, s. 76; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.2.3.-7.2.5. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 329-94, s. 73.

§7.3. Precautions

(Replaced).

R.R.Q., 1981, c. S-2.1, r. 6, sec. VII, ss. 7.3; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.3.1.-7.3.3. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.3.4. *(Replaced).*

O.C. 329-94, s. 73; O.C. 483-2021,s . 9.

§7.4. Maintenance and repair

(Replaced).

R.R.Q., 1981, c. S-2.1, r. 6, sec. VII, ss. 7.4; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.4.1. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.4.1; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.4.2. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 7.4.2; O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.4.3.

(Replaced).

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

§7.5. Storage

(Replaced).

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.5.1. *(Replaced).*

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.5.2. *(Replaced).*

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

§7.6. Notices

(Replaced).

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

7.6.1. *(Replaced).*

O.C. 329-94, s. 73; O.C. 483-2021, s. 9.

DIVISION VIII
UNDERGROUND WORK SITES

§8.1. Fire prevention and protection

8.1.1. A temporary building built on the surface less than 12 m away from an opening giving access to an underground work site or erected in the underground work site shall:

(1) be of non-combustible construction; or

(2) be protected against fire in the following way:

(a) the building shall be equipped, inside and outside, with portable fire extinguishers complying with section 3.4.4 of this Code;

(b) the construction site shall be equipped with:

i. a water supply system not less than 300 litres per minute during at least 30 minutes under a minimum residual pressure of 80 kPa; and

ii. flexible rubber or plastic hoses not more than 15 m in length and not less than 19 mm inside diameter, equipped with nozzles. Moreover, hoses shall be so located that every part of the building can be sprayed with a stream of water and sprayed areas must be within 6 m from the nozzle of the hose supplying the spray.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.1; O.C. 329-94, s. 74.

8.1.2. In addition to complying with the provisions of NFPA 30 Flammable and Combustible Liquids Code, the storage of flammable liquids in an underground work site must

(a) be in closed reservoirs of 200 litres with a tap or in safety tanks holding not more than 20 litres equipped with a neck which closes by means of a spring cover and so designed as to allow the safe release of interior pressure where they are subjected to fire; and

(b) be limited to the amount needed for 1 day's work.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.2; O.C. 393-2011, s. 20.

8.1.3. Waste timber, scrap paper, rags and other combustible waste materials shall daily:

(a) be taken from the underground work site; and

(b) be cleared away from around the temporary surface buildings.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.3.

8.1.4. No gasoline or liquid petroleum gases shall be lowered into, stored or used in an underground site. However, the propane kept in cylinders may be used for welding.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.4.

8.1.5. Oil and grease shall be stored underground in hermetically sealed containers:

(a) placed at safe distances from explosive depots, electric stations and shaft stations; and

(b) in quantities not exceeding those necessary for 1 week.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.5.

8.1.6. Every self-propelled vehicle shall be equipped with a portable fire estinguisher complying with section 3.4.4 of this Code.

The driver of the vehicle shall have the necessary knowledge concerning the type of fire extinguisher with which the vehicle is equipped and how it is operated.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.6; O.C. 329-94, s. 75.

8.1.7. **Temporary building:** A temporary building for an underground work site shall not be installed in traffic areas.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.1.7.

§8.2. Ground stability

8.2.1. The employer shall ensure that experienced workers scale or shore up the earth liable of coming away from a wall.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.1.

8.2.2. The employer shall ensure that experienced workers continually check and examine the vault, heading-face, partition walls of each work area and travelways for workers or equipment.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.2.

8.2.3. Overhanging masses and materials liable to fall off from the banks during the work shall be cut down or shored up immediately.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.3.

8.2.4. Scaling bars shall be:

(a) of an appropriate length so as to work safely and efficiently;

(b) pointed at one end; and

(c) equipped with a protector for hands.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.4.

8.2.5. Workers who check or scale earth liable of falling shall:

(a) proceed by starting from solid ground;

(b) place their feet in a firm stance; and

(c) have enough free space to allow get away.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.5.

8.2.6. Equipment placed at the disposal of workers for scaling shall be designed so as not to endanger them.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.6.

8.2.7. Pieces of timber or steel, shotcrete or other supports necessary for shoring shall be put into place quickly and solidly.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.7.

8.2.8. Damaged or dislocated supports shall be repaired or replaced without delay and new supports shall be put into place if possible, before the damaged supports are removed.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.8.

8.2.9. Shoring, if necessary, shall follow shaft-sinking in order to prevent the fall of rocks from the partition walls.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.9.

8.2.10. During rock bolting, the required bolts shall be:

(a) put into place as soon as a zone has been exposed; and

(b) equipped with a stress distribution plate on the rock.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.2.10.

§8.3. Ventilation and air quality

8.3.1. The concentration of impurities in the air shall be kept at less than the permissible values indicated in Schedule I to the Regulation respecting occupational health and safety (chapter S-2.1, r. 13). The underground site shall be supplied with fresh air. The minimum volume of air must be equivalent to the greatest of the following requirements:

(a) 5.5 m^3 per minute of fresh air for each worker underground;

(b) 15 m^3 of fresh air per minute for each square metre of section for tunnels; or

(c) where there is mobile equipment driven by a diesel engine:

i. certified by the National Institute for Occupational Safety and Health (NIOSH), the supply of fresh air shall be based on the values given in Schedules 24 and 31 of that Institute;

ii. certified by the Department of Energy, Mines and Resources of Canada, the supply of fresh air shall be that specified at the time of certification of the equipment; or

iii. not certified, the fresh air supply shall correspond to a minimum rate of 5.5 m^3 per minute per kilowatt measured at the motor shaft and the total quantity of fresh air necessary when several of these machines are in operation at the same time shall be:

(a) 100% of the given supply for the most stringent unit from the point of view of ventilation;

(b) 75% of the given supply for the second unit; and

(c) 50% of the given supply for each additional unit;

(d) the fresh air supply, as specified in paragraphs *a*, *b* and *c* shall be increased where applicable until the concentration of impurities in the air is reduced to the permissible value indicated in Schedule I to the Regulation respecting occupational health and safety.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.1; O.C. 885-2001, s. 377.

8.3.2. The test samples of the fresh air supply for concentration of carbon monoxide, nitrogen dioxide or other noxious gases in an underground work site shall be performed as often as necessary, but at least 2 times each day, and one of these, one hour after the beginning of operations. All test results shall be compiled and made available for the inspector's examination.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.2.

8.3.3. Ventilators shall:

(a) operate at all times when workers are in the underground work site and if ventilators are stopped while the underground work site is unoccupied, they shall be put into

operation for a sufficient period of time prior to the beginning of operations in order to ensure proper ventilation;

(b) be placed in constructions of fireproof materials; and

(c) be equipped with a surface remote control device.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.3.

8.3.4. The employer shall ensure that the fresh air supply for the ventilation system is without impurities, and for this purpose:

(a) the ventilation ducts shall be placed so as to prevent the return of foul air into the air supply system through the shaft or tunnel entrance; and

(b) vehicles not directly involved in the underground work site shall be kept at a distance of at least 15 m from the access or opening connected to the underground work site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.4.

8.3.5. The access to abandoned zones and any non-ventilated sector of the work site shall be declared prohibited for workers.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.5; O.C. 885-2001, s. 375.

8.3.5.1. Traffic lanes used by vehicles shall be free from any obstruction.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.5.1.

8.3.6. Self-propelled vehicles used for performing work in underground work sites shall:

(a) if they are powered by an internal combustion diesel type engine, be equipped with an exhaust-gas cooling system making it possible to keep the gas at 83 °C, whatever the motor's operating conditions may be;

(b) be equipped with position lights indicating their maximum width;

(c) not discharge into the air non-diluted exhaust gas containing over 0.25% carbon monoxide.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.6; O.C. 885-2001, s. 376.

8.3.7. On an underground construction site, any motor vehicle with a gasoline-powered engine and used for supervising operations shall:

(a) have an engine with a displacement of less than 6 litres;

(b) be equipped with emission control devices, in accordance with the standards prescribed in the Motor Vehicle Safety Regulations (C.R.C., chapter 1038) under the Motor Vehicle Safety Act (Statutes of Canada, 1993, chapter 16), with the same efficiency of performance as initially; and

(c) have a maximum gross mass of 2,720 kg.

When such a motor vehicle stops in an underground construction site, its driver shall turn off the engine.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.7; O.C. 606-2014, s. 21.

8.3.8. When a vehicle used for the surveillance of underground work is immobilized, the engine shall be turned off.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.8.

8.3.9. The standard grades of distilled diesel fuel shall have:

(a) a flash point of a minimum of 65 ºC; and

(b) a sulphur content less than 0.25%.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.9.

8.3.10. A warning system shall be set up to warn operators to stop the motor of the self-propelled vehicle and to prohibit the firing of explosives in case the ventilation system should break down.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.10.

8.3.11. When the concentration of vapours or flammable gases is greater than 25% of the lowest explosion limit, the work shall be stopped immediately in the affected zone and workers evacuated.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.11; O.C. 805-2020, s. 5.

8.3.12. The scrubber system or the oxy-catalyst exhaust purifier system shall be:

(a) checked at frequent intervals; and

(b) kept in good working order.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.3.12.

§8.4. Explosives

8.4.1. The provisions of Division IV of the Code that are consistent with this subdivision apply with the necessary modifications.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.1; O.C. 1959-86, s. 77.

8.4.2. Only explosives or a combination of explosives developing Class I blasting fumes as established by the Department of Energy, Mines and Resources of Canada may be used in an underground job-site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.2; O.C. 1959-86, s. 77.

8.4.3. Explosives and detonators must be transported directly to the site where they will be used in the underground job-site only at loading time, once all other operations have been completed and the equipment not required for the loading of explosives has been moved away.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.3; O.C. 1959-86, s. 77.

8.4.4. If explosives are transported in a shaft:

(a) explosives and detonators shall not be transported together;

(b) only the operator of the cage may travel with the explosives;

(c) the operator of the winch and the cage operator's helpers must be notified; and

(d) the transportation of other materials in the shaft is prohibited.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.4; O.C. 1959-86, s. 77.

8.4.5. When explosives or blasting accessories are hauled by a locomotive:

(a) explosives and blasting accessories must not be transported on the locomotive; and

(b) explosives carriers must be pulled. They may, however, be pushed by hand only.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.5; O.C. 1959-86, s. 77.

8.4.6. If explosives are stored in an underground job-site, the employer must establish the supply of explosives for a 24-hour period and not store underground a greater amount of explosives.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.6; O.C. 1959-86, s. 77.

8.4.7. Storage:

(1) Explosives and detonators may be stored in an underground job site only if they are kept in a depot or powder house. This depot must be situated at least:

(a) 750 m from a blasting area;

(b) 450 m from the firing switch;

(c) 90 m from the shaft or work zone; and

(d) 7.5 m from a travelway.

(2) There must be at least one right angle turn in the pathway which connects the storage area with any work zone or travelway.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.4.7; O.C. 1959-86, s. 77.

8.4.8.-8.4.9. *(Replaced)*.

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 1959-86, s. 77.

§8.5. Drilling

8.5.1. Workers who use or work near drilling machines shall be positioned so as not to be hit or to lose their balance in case a drill-bit breaks, slips or is jammed.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.1.

8.5.2. Workers shall not hold the steel drill-bit with their hands.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.2.

8.5.3. The supply of compressed air in the hose shall be cut off and drained before the displacement of the portable drills from one face to the other.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.3.

8.5.4. The platforms of jumbos shall be equipped:

(a) on their sides with fixed or removable guardrails if their height is greater than 1.2 m; and

(b) with an access ladder if their height is greater than 1.8 m.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.4.

8.5.5. Jumbos shall be solidly fixed in positions to avoid accidental displacement.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.5.

8.5.6. Drill-bits and their accessories shall be placed on the jumbos in boxes, and placed on supports or their equivalent when not used on the platform.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.6.

8.5.7. Unless equipped with a threaded coupling, compressed air hoses of 50 mm or more in interior diameter, mounted on a jumbo, shall be equipped at each end with a steel cable 5 mm in diameter or with an equivalent safety chain to prevent a whipping action.

Compressed air hoses smaller in diameter shall be equipped with a self-tightening device.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.7.

8.5.8. Any air line installed underground shall be:

(a) if metallic, placed so that it is protected from any shock capable of being caused by equipment or self-propelled vehicles; or

(b) if flexible, equipped with collars attached by a chain on each side of the coupling.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.5.8.

§8.6. Transportation of personnel and materials in a shaft

8.6.1. If the depth of a shaft is less than 60 m, hoisting apparatus or equipment governed by Subdivision 3.10 may be used for the transportation of personnel in a shaft.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.6.1.

8.6.2. If the depth of a shaft is to exceed or exceeds 60 m the transportation of personnel and materials shall be done according to the Regulation respecting occupational health and safety in mines (chapter S-2.1, r. 14).

A copy of the Regulation respecting occupational health and safety in mines shall be available on any construction site where underground work is being performed.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.6.2; O.C. 213-93, s. 540.

§8.7. Traffic

8.7.1. The employer shall prepare a compartment reserved exclusively for the circulation of workers by means of ladders or stairs in:

(a) any shaft over 30 m in depth;

(b) a raise inclined more than 55º with respect to the horizontal and dug on a length of more than 18 m except when the equipment used allows safe access.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.1.

8.7.2. The compartment for ladders or stairs in a shaft shall be separated from the compartment or the section of the shaft in which material, hoisting engines, or a counterweight are moved about, by a wire mesh made of No. 9 AWG galvanized steel wire and forming links of not more than 40 mm on a side so that the persons travelling in the compartment will not be struck by the conveyance or the counterweight or be hit by objects that may fall into the shaft.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.2; O.C. 393-2011, s. 21.

8.7.3. Shafts and raises inclined more than 30º with respect to the horizontal shall be equipped with ladders or stairs.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.3.

8.7.4. The minimum open space required for movement on a ladder shall be 600 mm × 600 mm.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.4.

8.7.5. A clearance space shall be ensured along the length of travelways.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.5.

8.7.6. Hazards which may result due to an abrupt change in the clearance space shall be clearly indicated in a travelway.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.6.

8.7.7. A flexible ladder may be used if the use of a rigid ladder is impossible and on condition that it is:

(a) solidly anchored at both ends; and

(b) suspended so that movement of hands and feet is not restricted.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.7.

8.7.8. Any travelway in an underground work site shall be provided with shelter spaces:

(a) if the travelway does not have, when a piece of equipment travels on tracks or by any other guided system, a minimum free space of 500 mm between the widest part of the machinery and the wall of each side of the equipment, or a free space of 600 mm on one side of the equipment;

(b) if the width of the travelway does not exceed the width of the equipment not travelling on tracks by at least 1.5 m.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.8.

8.7.9. The shelter spaces shall:

(a) have a free space of 750 mm and have a height of 1.8 m or be the height of the travelway if it is less than 1.8 m;

(b) be clearly indicated;

(c) be at maximum intervals of 30 m; and

(d) be free of any obstruction.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.7.9.

§8.8. Loading and transportation

8.8.1. Pneumatic equipment shall be equipped with a valve which cuts the air supply to the machine and this valve shall be kept closed when the equipment is not in operation.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.1.

8.8.2. If shelter spaces are required, self-propelled vehicles shall reduce speed to walking speed, and they shall sound a warning when they approach:

(a) workers or a work zone; or

(b) a zone where visibility is limited.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.2.

8.8.3. Any locomotive shall be equipped with:

(a) alarm signals;

(b) lights which can light up the travelway in 2 directions;

(c) marker lights indicating its maximum width; and

(d) an amber flashing light visible from any direction when in movement.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.3.

8.8.4. Railroads shall be:

(a) kept in good condition;

(b) constructed so as to prevent derailment;

(c) reasonably level; and

(d) free of bumps and obstructions.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.4.

8.8.5. A stop block shall be provided for a convoy or a car stationed on a plane with an incline greater than 1 1/2%.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.5.

8.8.6. Passenger wagons:

(1) If wagons are used to transport workers to their work areas, they shall:

(a) be passenger type wagons;

(b) be pulled at speeds appropriate to the condition of the travelway and the equipment used;

(c) be in sufficient number; and

(d) not carry materials and tools other than hand tools.

(2) The convoy shall be under the responsibility of a qualified person.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.6.

8.8.7. Workers who use passenger wagons shall:

(a) remain seated; and

(b) not board or leave the convoy while it is moving.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.7.

8.8.8. Only those self-propelled vehicles directly involved in an underground work site may be stationed during the periods when the underground work site is not in operation.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.8.8.

§8.9. Hygiene

8.9.1. Underground work site - Changing room and shower: In every underground work site, the employer must provide workers with a changing room located on the surface that complies with section 3.2.11 and a shower that complies with section 3.2.15.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.9.1; O.C. 393-2011, s. 22.

8.9.2.-8.9.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 393-2011, s. 23.

8.9.4. The employer shall put waterproof clothing at the disposal of any worker who works in an excessively damp zone.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.9.4.

§8.10. Lighting

8.10.1. Any worker shall carry a miner's lamp unless a fixed system of lighting is available in the underground work site.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.10.1.

8.10.2. If a fixed lighting system exists, the lighting intensity shall be appropriate to the nature of the areas or to the work done in any place where persons work or circulate.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.10.2.

8.10.3. Stairs and ladders in shafts shall be lighted from top to bottom and landings shall also be lighted.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.10.3.

8.10.4. If workers do not have miner's lamps or portable lamps, an emergency lighting system with an automatic relay shall be available in the underground work site. This system shall be kept in good working condition for a takeover in case of a break in the main supply of electrical current.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.10.4.

§8.11. Communication and standard signals

8.11.1. During the sinking of a shaft, a temporary communications system must be provided.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.1.

8.11.2. At the end of all shaft sinking operations and before tunnelling operations, each shaft used for hoisting whose depth is more than 15 m shall be equipped between the bottom of the shaft and the surface with 2 distinct signalling systems which may be electric, pneumatic or mechanical. One of these systems shall be connected to a telephone or to a speaking-tube.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.2.

8.11.3. Hoisting signals shall be adopted and used at each hoisting shaft in conformity with Schedule 4, if visual signals cannot be understood.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.3.

8.11.4. Standardized signals may be established which correspond with local conditions, provided that they are easily discernible and do not conflict with established standard signals.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.4.

8.11.5. A legible copy of standard signals and of standardized signals if need be, shall be posted in full view of the hoisting operator and in all locations where signals may be given or received.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.5.

8.11.6. No worker shall be taken into a shaft as long as the appropriate signals have not been previously given.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.6.

8.11.7. The devices for transmitting signals shall be kept within easy reach at the bottom of the shaft during sinking operations.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.7.

8.11.8. When tunnels cover a distance of more than 150 m from the base of a shaft, a telephone system shall be installed with extensions:

(a) at the surface;

(b) at the base of the shaft; and

(c) at a maximum distance of 75 m from the face.

Telephone outlets shall be installed at intervals of 150 m along the tunnel.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.8.

8.11.9. The beginning of any fire, explosion or other emergency shall be signalled by 9 intermittent signals originating from the lighting system.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.11.9.

§8.12. Emergency measures

8.12.1. An evacuation and rescue procedure shall be set up and kept up-to-date. All means of egress shall be indicated and all workers shall be familiar with this procedure and the means of egress.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.12.1.

8.12.2. A rescue team shall be available at all times. This team shall be made up of at least 3 persons who shall:

(a) be in excellent physical condition;

(b) have received pertinent training:

i. in rescue procedures;

ii. in the use, maintenance and the ultimate capacity of oxygen respirators; and

iii. in the use and maintenance of fire fighting equipment; and

(c) carry out rescue drills.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.12.2.

8.12.3. A control system for entrances and exits shall be enforced in an underground work site and register of workers involved in the underground works shall be available at the surface.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.12.3.

§8.13. Minimum age

8.13.1. No person below 18 years of age shall be employed underground, at the face of an open pit site or at the controls of hoisting or moving equipment.

R.R.Q., 1981, c. S-2.1, r. 6, s. 8.13.1.

DIVISION IX
Revoked, O.C. 1005-2015, s. 1.

§9.1. Generalities
Revoked, O.C. 1005-2015, s. 1.

9.1.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.1; O.C. 1005-2015, s. 1.

9.1.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.2; O.C. 1005-2015, s. 1.

9.1.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.3; O.C. 1005-2015, s. 1.

9.1.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.4; O.C. 1005-2015, s. 1.

9.1.5. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.5; O.C. 1959-86, s. 78; O.C. 1005-2015, s. 1.

9.1.6. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.6; O.C. 1005-2015, s. 1.

9.1.7. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.7; O.C. 1005-2015, s. 1.

9.1.8. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.8; O.C. 1005-2015, s. 1.

9.1.9. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.1.9; O.C. 1005-2015, s. 1.

§9.2. Hours of work and rest periods
Revoked, O.C. 1005-2015, s. 1.

9.2.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.1; O.C. 1005-2015, s. 1.

9.2.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.2; O.C. 1005-2015, s. 1.

9.2.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.3; O.C. 1005-2015, s. 1.

9.2.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.4; O.C. 1005-2015, s. 1.

9.2.5. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.5; O.C. 1005-2015, s. 1.

9.2.6. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.6: O.C. 1005-2015, s. 1.

9.2.7. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.7; O.C. 1005-2015, s. 1.

9.2.8. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.8; O.C. 1005-2015, s. 1.

9.2.9. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.9; O.C. 1005-2015, s. 1.

9.2.10. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.2.10; O.C. 1005-2015, s. 1.

§9.3. Air supply
Revoked, O.C. 1005-2015, s. 1.

9.3.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.3.1; O.C. 1005-2015, s. 1.

9.3.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.3.2; O.C. 1005-2015, s. 1.

9.3.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.3.3; O.C. 1005-2015, s. 1.

9.3.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.3.4; O.C. 1005-2015, s. 1.

§9.4. Air locks and working chambers
Revoked, O.C. 1005-2015, s. 1.

9.4.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.1; O.C. 1005-2015, s. 1.

9.4.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.2; O.C. 1005-2015, s. 1.

9.4.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.3; O.C. 1005-2015, s. 1.

9.4.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.4; O.C. 1005-2015, s. 1.

9.4.5. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.5; O.C. 1005-2015, s. 1.

9.4.6. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.6; O.C. 1005-2015, s. 1.

9.4.7. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.7; O.C. 1005-2015, s. 1.

9.4.8. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.8; O.C. 1005-2015, s. 1.

9.4.9. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.9; O.C. 1005-2015, s. 1.

9.4.10. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.4.10; O.C. 1005-2015, s. 1.

§9.5. Pressure gauges
Revoked, O.C. 1005-2015, s. 1.

9.5.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.5.1; O.C. 1005-2015, s. 1.

9.5.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.5.2l; O.C. 1005-2015, s. 1.

9.5.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.5.3; O.C. 1005-2015, s. 1.

9.5.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.5.4; O.C. 1005-2015, s. 1.

§9.6. Electric power supply and lighting
Revoked, O.C. 1005-2015, s. 1.

9.6.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.6.1; O.C. 1005-2015, s. 1.

9.6.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.6.2; O.C. 1005-2015, s. 1.

9.6.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.6.3; O.C. 1005-2015, s. 1.

§9.7. Hygiene and welfare
Revoked, O.C. 1005-2015, s. 1.

9.7.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.7.1; O.C. 393-2011, s. 24; O.C. 1005-2015, s. 1.

9.7.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.7.2; O.C. 1005-2015, s. 1.

§9.8. Medical examinations and services
Revoked, O.C. 1005-2015, s. 1.

9.8.1. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.1; O.C. 1005-2015, s. 1.

9.8.2. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.2; O.C. 1005-2015, s. 1.

9.8.3. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.3; O.C. 1005-2015, s. 1.

9.8.4. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.4; O.C. 1005-2015, s. 1.

9.8.5. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.5; O.C. 1005-2015, s. 1.

9.8.6. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.6; O.C. 1005-2015, s. 1.

9.8.7. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.7; O.C. 1005-2015, s. 1.

9.8.8. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.8; O.C. 1005-2015, s. 1.

9.8.9. *(Revoked).*

R.R.Q., 1981, c. S-2.1, r. 6, s. 9.8.9; O.C. 1005-2015, s. 1.

DIVISION X
WORK ON ROADS OPEN TO TRAFFIC

§10.1. Definitions

10.1.1. In this subdivision:

"public highway" means a public highway within the meaning of the Highway Safety Code (chapter C-24.2); (chemin public)

"road vehicle" means a road vehicle within the meaning of the Highway Safety Code. (véhicule routier)

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.1.1; O.C. 995-91, s. 12.

§10.2. Scope

10.2.1. This Division applies to any construction site or part thereof located on or bordering on a public highway or private road open to public vehicular traffic.

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.2.1; O.C. 995-91, s. 12.

10.2.2.-10.2.3. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6, O.C. 995-91, s. 12.

§10.3. Traffic signs

10.3.1. The principal contractor must ensure that any construction site or part of a construction site situated on or near a public highway or a private road open to public vehicular traffic has traffic signs that comply with the standards of Chapters 1, 4 and 6 of Volume V of the manual entitled "Traffic Control Devices", determined and set out by the Minister of Transport under the second paragraph of section 289 of the Highway Safety Code (chapter C-24.2).

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.3.1; O.C. 995-91, s. 12;
O.C. 873-2003, s. 1.

10.3.2. Where traffic must be directed by a flag person for road users, the employer must ensure that the flag person

(1) is aware of all the responsibilities inherent in his or her work;

(2) has undergone training relating to his or her responsibilities recognized by the Joint Sector-Based Construction Association on Occupational Health and Safety;

(3) wears high-visibility safety apparel and is equipped with other accessories in compliance with the standards determined by the Minister of Transport and recorded in Volume V of the manual entitled "Traffic Control Devices", determined and set out by the Minister of Transport under the second paragraph of section 289 of the Highway Safety Code (chapter C-24.2).

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.3.2; O.C. 995-91, s. 12; O.C. 1078-2015, s. 7.

§10.4. Other precautions

10.4.1. **High-visibility safety apparel:** Subject to paragraph 1 of section 2.8.4 and to paragraph 3 of section 10.3.2, the wearing of fluorescent orange high-visibility safety apparel of Class 2 or 3 and of Level 2 that complies with CSA Standard Z96, High-Visibility Safety Apparel, is mandatory for every worker who performs tasks on or near a road where self-propelled vehicles are likely to hit a worker.

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.4.1; O.C. 995-91, s. 12; O.C. 1078-2015, s. 8.

10.4.2. **Electric lighting:** Electric lighting used in work areas must be positioned in such a manner as not to dazzle users of the road.

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.4.2; O.C. 995-91, s. 12.

10.4.3. **Protection of manholes:**

(1) A portable guardrail made of steel or wood must be used to prevent falls into manholes.

(2) Where the guardrail is made of steel, it must:

(a) be made of metal tubes at least 22 mm in diameter enclosing the manhole on 3 sides, the fourth side being closed off with 2 chains;

(b) be bright in colour, have a middle rail and bear flags with reflective bands; and

(c) conform to figure 1 in Schedule 5.

(3) Where the guardrail is made of wood, it must:

(a) be made of boards 100 mm in width and must enclose the manhole on 3 sides, the fourth being closed off with 2 chains;

(b) bear vertical black bands 100 mm in width on an orange background;

(c) be fitted with flags with reflective bands; and

(d) conform to figure 2 of Schedule 5.

R.R.Q., 1981, c. S-2.1, r. 6, s. 10.4.3; O.C. 995-91, s. 12.

10.4.4.-10.7.4. *(Replaced).*

R.R.Q., 1981, c. S-2.1, r. 6; O.C. 995-91, s. 12.

DIVISION XI
WORK ABOVE OR NEAR WATER

11.1. On a site where work will be carried out above or near water, the principal contractor must, before the work begins,

(1) prepare a description of the body of water or watercourse indicating, in particular,

(a) the type of body of water or watercourse and its characteristics during the time of the work;

(b) the means used to know the water temperature and weather conditions;

(2) prepare a description of the work indicating, in particular,

(a) the work sites;

(b) the nature of the work;

(c) the number of workers on the work sites;

(d) the work schedules;

(e) the dates on which the work begins and ends;

(f) the location of the work, lunch and rest areas;

(g) the platforms, barges and other boats, specifying their dimensions, capacity and respective use;

(3) prepare a water transportation plan adapted to the specific conditions of the work and the characteristics of the body of water or watercourse indicating, in particular,

(a) the name of each person in charge of water transportation operations;

(b) the location of the boarding and landing areas;

(c) the boats used to transport workers, specifying the name of each driver, the routes and the direction of the boats;

(d) the safety rules to be complied with during water transportation;

(4) prepare a rescue plan adapted to the specific conditions of the work and the characteristics of the body of water or watercourse indicating, in particular,

(a) the name of each person in charge of rescue operations;

(b) the name of each person in charge of the maintenance or inspection of rescue equipment;

(c) the rescue procedures in case of a worker falling into water, wreck, fire or other accident, and the instructions regarding those matters;

(d) the name of each rescue attendant and each first-aider;

(e) the emergency call code used to start rescue operations;

(f) the location of rescue equipment;

(g) the location of first-aid stations;

(h) if applicable, the type and number of boats intended for rescue.

The descriptions of the work and body of water or watercourse, as well as transportation and rescue plans, must be posted at work sites. They must also be integrated into the prevention program, specifying the means used to inform workers of their content, in particular with regard to safety rules and instructions intended for workers.

O.C. 513-2015, s. 5.

11.2. The principal contractor or the person designated by the principal contractor to prepare the descriptions and plans prescribed by section 11.1 and each person in charge of transportation or rescue operations must hold a certificate from the Association paritaire pour la santé et la sécurité du travail du secteur de la construction or the Lifesaving Society issued following training of at least 7 hours pertaining in particular to the following:

(a) the hazards associated with working above or near water and the prevention measures to counter those hazards;

(b) the hazards associated with cold water immersion and the prevention measures to counter those hazards;

(c) the identification of the various pieces of safety equipment required to work above or near water and their use;

(d) the identification of the various pieces of rescue equipment required to recover a person in the water and their use;

(e) the requirements of the federal and provincial legislation regarding work above or near water and the use of a boat on a body of water or watercourse;

(f) the preparation and application of transportation and rescue plans.

O.C. 513-2015, s. 5.

11.3. The equipment required by a rescue plan referred to in subparagraph 4 of the first paragraph of section 11.1, as well as any accessories, must be

(a) adapted to the intended use, to the specific conditions of the work and the characteristics of the body of water or watercourse;

(b) inspected and kept in good working order;

(c) present and visible on the premises during working hours;

(d) accessible so that a quick intervention is possible.

O.C. 513-2015, s. 5.

11.4. Where a rescue plan includes the use of a boat, the boat must, in addition to the requirements provided for in section 11.3,

(1) in particular, be

(a) adapted and equipped for the research and recovery of persons;

(b) equipped with a propulsion system adapted to the boat;

(c) equipped with the following rescue equipment:

i. 2 rope bags, each containing 1 single-length buoyant heaving line that remains flexible, with a minimum diameter of 9.5 mm and a minimum length of 15 m;

ii. a life buoy with an outside diameter of 762 mm, approved by Transport Canada or by a body recognized by Transport Canada, as evidenced by the tag or approval stamp affixed to it;

iii. a boat hook;

(2) be used by a team of at least 2 rescue attendants trained in the approach and recovery of a person in conditions and according to the characteristics of the body of water or watercourse where their assistance is needed, and who meet either of the following conditions:

(a) hold a Pleasure Craft Operator Card issued by Transport Canada and a certifi cate from the Lifesaving Society attesting that training was received in the approach and recovery of persons; or

(b) hold a certificate of competency issued by Transport Canada, other than a Pleasure Craft Operator Card, and a certifi cate attesting that training was received in Marine Emergency Duties (MED) issued by Transport Canada.

O.C. 513-2015, s. 5.

11.5. During work above or near water, life buoys with an outside diameter of 762 mm must be placed and spread out over the entire length of the site where work is performed, at a maximum linear distance of 60 m between life buoys. The life buoys must be approved by Transport Canada or by a body recognized by Transport Canada, as evidenced by the tag or approval stamp affixed to each of them.

O.C. 513-2015, s. 5.

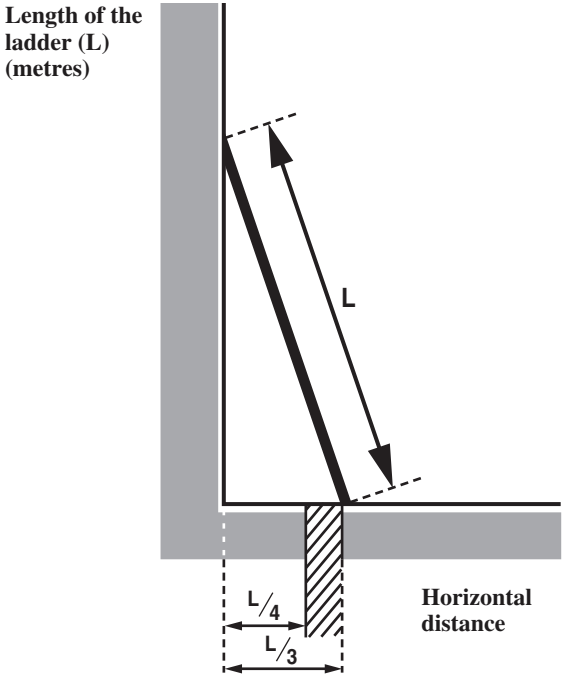
11.6. A sound alarm system intended to start rescue operations must be present on the work sites.

O.C. 513-2015, s. 5.

SCHEDULE

SCHEDULE 0.1
(s. 3.5.6)

INCLINE OF A LADDER NOT PERMANENTLY FASTENED



Indicates the zone within which the foot of the ladder must be placed.

Horizontal distance between the foot of the ladder and the vertical plane against which it is propped, in relation to the length of the ladder

Length of the ladder (L) (metres)	Horizontal distance	
	1/4 × L (metres)	1/3 × L (metres)
8	2	2.7
10	2.5	3.3
12	3	4
14	3.5	4.7
15	3.75	5

O.C. 329-94, s. 76.

SCHEDULE 0.2

(s. 3.9.10)

ANCHORS OF A SCAFFOLDING LESS THAN 18 METRES WHEN A TARPAULIN OR NET IS USED

Table 1 - Types of anchors necessary for holding a scaffolding covered with a tarpaulin[1] according to its dimensions and the region

Region	Surface 3m x 3m	Surface 3m x 6m
Gaspésie–Îles-de-la-Madeleine/ Côte-Nord / Nord-du-Québec	Tube[2]	n.a.
Bas-Saint-Laurent	Pin #9[3]	n.a.
Chaudière-Appalaches / Estrie / Laurentides / Laval / Mauricie / Montérégie / Montréal / Outaouais / Capitale-Nationale / Saint-Jean-sur-Richelieu / Valleyfield / Yamaska	Pin #9[3]	Tube[2]
Abitibi-Témiscamingue/ Lanaudière / Saguenay–Lac-Saint-Jean	Pin #9[3]	Tube[2]

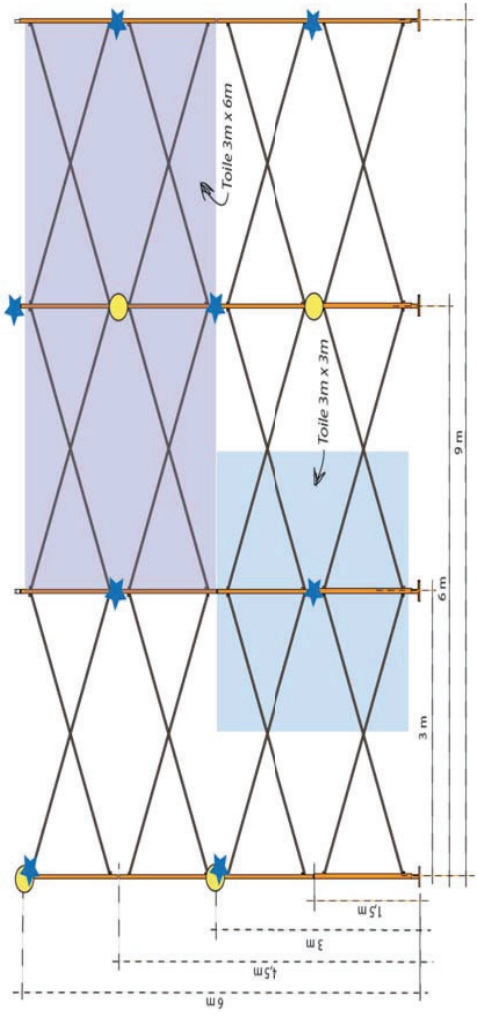


Figure 1 – Position of anchorage points with a **tarpaulin of**:

- 3m x 3m
- 3m x 6m

Table 2 - Types of anchors necessary for holding a scaffolding covered with a net according to its dimensions and the region

Region	Surface 3 m x 6 m	Surface 3 m x 9 m
Gaspésie–Îles-de-la-Madeleine/ Côte-Nord / Nord-du-Québec	Tube[2]	n.a.
Bas-Saint-Laurent	Pin #9[3]	Tube[2]
Chaudière-Appalaches / Estrie / Laurentides / Laval / Mauricie / Montérégie / Montréal / Outaouais / Capitale-Nationale / Saint-Jean-sur-Richelieu / Valleyfield / Yamaska	Pin #9[3]	Tube[2]
Abitibi-Témiscamingue/ Lanaudière / Saguenay–Lac-Saint-Jean	Pin #9[3]	Tube[2]

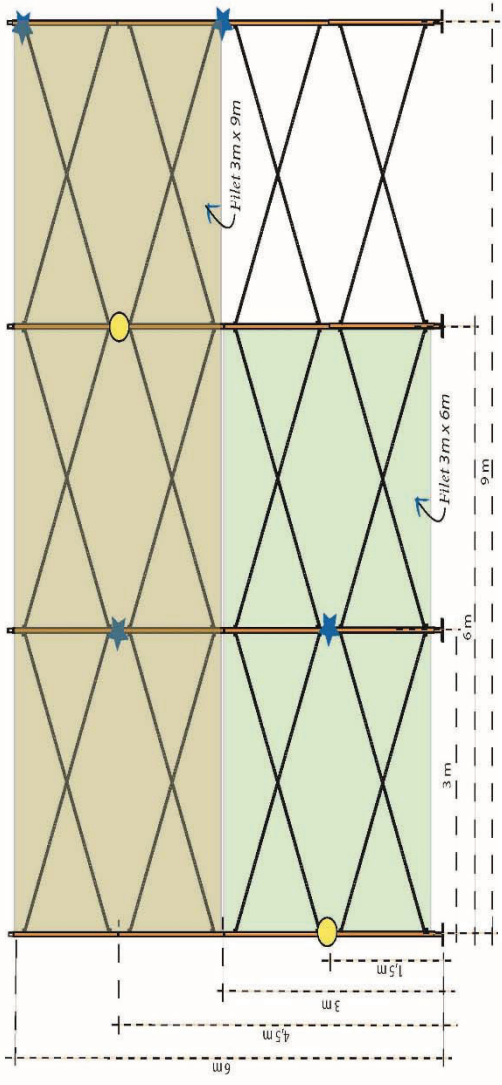


Figure 2 – Position of anchorage points with a **net** of:

- 3 m X 6 M
- 3 m X 9 m

NOTES:

(1) The tarpaulin or net shall be able to resist the loads and wind gusts to which it is exposed.

(2) Tube: metal tube with a welded bracket, and a hole at one of its ends The tube is linked to the front by a concrete mechanical anchor or the equivalent, and to the scaffolding by a metal fastener The minimum capacity of the mechanical anchor shall be 9.0 kN with a safety factor of 2.

(3) Pin #9: metal wire caliber #9 with a double loop, having a diameter of 3.8 mm, used as tie rod, fastened to the scaffolding at one end and at the other end to a mechanical anchor (expansion shield, eye bolt, etc.), in accordance with CSA standards S269.2-M87 and Z797-09. The minimum capacity of the anchor shall be 5.4 kN with a safety factor of 2.

O.C. 640-2019, s. 5.

SCHEDULE 1

(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 1; O.C. 425-2010, s. 5.

SCHEDULE 2
HANDLING AND USE OF EXPLOSIVES

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 2.

SCHEDULE 2.1

(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 2.1; O.C. 57-2015, s. 59.

"SCHEDULE 2.2 Blasting logbook (s. 4.7.10.)

Name of enterprise:_____ Address (optional):_____

Location of site:_____ Client:_____

Information on blasting

- Location:_____
- Date:_____
- Hour: _____
- Chaining (option):_____

Weather conditions

- Temperature: _____ °C
- Sunny:_____
- Cloudy: _____
- Rain/snow:_____

Data on drilling

- Number of holes and drilling diameter:_____
- Burden and spacing: _____
- Height of drilling in metres:_____
- Height of collar: _____
- Height of overburden: _____

Nature of tamping (clean, crushed stone): _____

Blasting mats (type): _____ Distance from closest structures (building/bridge/road): _____

Explosives

- Type:_____
- Number of detonator:_____
- Quantity of explosives used (primers, explosives) in units, bags, cases or kg:_____

Remarks: _____

_____

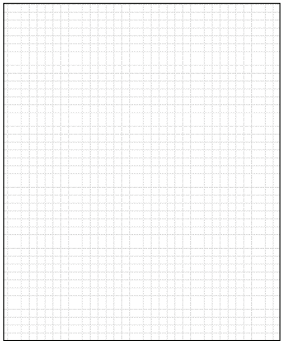
_____

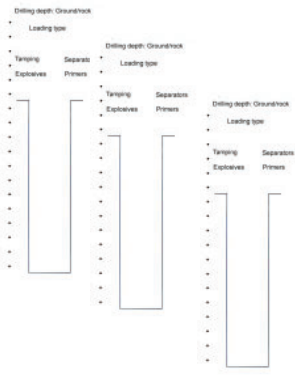
_____

Name of shot-firer: _____ Signature: _____

Blasting pattern *(Required information)*

- Number and orientation of free faces
- Blasting direction
- Identification of the firing sequence (including delays)
- Description of explosives per hole (dimensions, number and weight)
- Disposition of blastholes
- Description of blasting agents (weight/hole in kg)
- Identification of connections/delay millisecond (hole bottom and surface)
- Positioning of closest structures (distance in meters)
- Blasting area (outline and distances in metres)





R.R.Q., 1981, c. S-2.1, r. 6, sch. 2.2; O.C. 1959-86, s. 79; O.C. 57-2015, s. 60.

SCHEDULE 2.3
(s. 4.4.1)

TABLE OF DISTANCES PROPORTIONAL TO QUANTITIES OF EXPLOSIVES CONTAINED IN DEPOTS

Quantity of explosives in kilograms	Distance in metres between the depot and (1)	(2)	(3)	Quantity of explosives in kilograms
50	23	23	9	50
100	23	32	11	100
200	26	52	14	200
250	30	60	15	250
300	34	68	16	300
400	41	82	18	400
500	47	94	19	500
600	53	105	20	600
800	65	130	23	800
1 000	75	150	24	1 000
1 500	100	200	27	1500
2 000	120	240	30	2 000

2 500	135	270	32	2 500
3 000	150	300	34	3 000
4 000	175	350	38	4 000
5 000	190	380	41	5 000
6 000	200	400	44	6 000
7 000	210	420	46	7 000
10 000	240	480	52	10 000
15 000	270	540	59	15 000
20 000	300	600	66	20 000
25 000	320	640	70	25 000
30 000	340	680	74	30 000
40 000	380	760	82	40 000
50 000	410	820	88	50 000
75 000	470	940	100	75 000
100 000	525	1 050	110	100 000
125 000	558	1 115	120	125 000
150 000	588	1 175	128	150 000

References respecting the Table of Distances in Schedule 2.3.

(1) any outdoor meeting place, road, railroad or waterway, except a road leading to the depot.

(2) any building or any other depot.

(3) any other depot surrounded by dikes.

Remark: For computing the distance,

(a) 1,300 detonators or 150 detonating relays are equal to 1 kilogram of explosives;

(b) except for the depot for detonators and detonating relays, 2 depots placed side by side may be considered as a single depot having a capacity equal to the total capacity of both depots.

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 2.3; O.C. 1959-86, s. 80; O.C. 57-2015, s. 61.

SCHEDULE 2.4
(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 2.4; O.C. 1959-86, s. 81.

SCHEDULE 2.5
(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 2.5; O.C. 1959-86, s. 81.

SCHEDULE 2.6
Evaluation of the maximum authorized particle speed, of the distance between blasting and buildings or of the acceptable frequency of vibrations *(s. 4.7.5)*

The employer must comply with the prescribed limits, according to one of the following 3 methods:

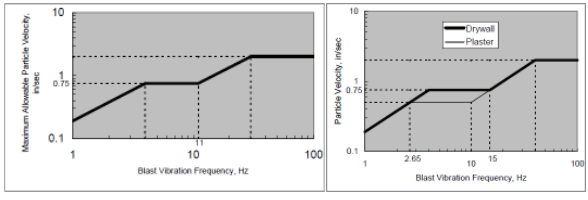
1. in the table below:

TABLE 2.6.1 - MAXIMUM AUTHORIZED PARTICLE SPEED ACCORDING TO THE DISTANCE OF STRUCTURES

Distance from blasting site	*Maximum speed authorized*
0 to 90 m (300 ft)	*31.75 mm/s (1.25 in/s)*
91 to 1,524 m (301 to 5,000 ft)	*25.4 mm/s (1 in/s)*
1.525 m and more (5,000 ft)	*19 mm/s (0.75 in/s)*

2. in one of the graphs below:

GRAPHS 2.6.2 - ESTIMATE OF THE MAXIMUM AUTHORIZED PARTICLE SPEED ACCORDING TO THE FREQUENCY OF VIBRATION (IN/S)



The employer must use, according to the manufacturer's instructions, a seismograph to monitor the velocity of particles to ensure the compliance of the results with table 2.6.1 or graphs 2.6.2 as provided above. The method for monitoring vibrations and the calculation of frequency must be approved by an engineer.

3. in the proportionate distance equation shown in the table below:

TABLE 2.6.2 - COMPUTATION OF THE MINIMUM DISTANCE TO BE KEPT BETWEEN A STRUCTURE AND A BLASTING BASED ON EXPLOSIVE LOAD

Distance from blasting site	*Maximum quantity of explosives fired in less than 8 milliseconds*	
	Metric Units (W in kg and D in m) Impériale	*English Units (W in lb and D in ft)*
Less than 92 m (300 ft)	$W = (D/22.6)^2$	$W = (D/50)^2$
92 to 1,524 m (301 to 5000 ft)	$W = (D/24.9)^2$	$W = (D/55)^2$
More than 1,524 m (5000 ft)	$W = (D/29.4)^2$	$W = (D/65)^2$

W = Maximum quantity of explosives (in kilograms or pounds) that may detonate in less than 8 milliseconds.
D = Distance to be kept between the blasting area and the closest structure to be protected.

O.C. 57-2015, s. 62.

SCHEDULE 3

(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 3; O.C. 1005-2015, s. 1.

SCHEDULE 3.1

(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 3.1; O.C. 1005-2015, s. 1.

SCHEDULE 3.2

(Revoked).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 3.2; O.C. 1005-2015, s. 1.

SCHEDULE 4 *(s. 8.11.3)*
CODE OF SIGNALS

(1) The following code of signals shall be used in underground work sites:

1 bell — Stop immediately — if in motion (executive signal).

1 bell — Hoist (executive signal).

3-3-1 bells — Hoist slowly.

2 bells — Lower (executive signal).

3-3-2 bells — Lower slowly.

1-2 bells — Chairing and unchairing.

3 bells — (Cautionary signal). Men about to ascend or descend. This signal shall be given before men are permitted to enter or leave the hoisting conveyance. It shall also be given in case a stop has been made at a level and men in the conveyance are to be hoisted or lowered to another level. In all cases, after the 3-bell signal has been given, the conveyance shall not be moved until the signals to hoist or lower have been given.

4 bells — (Blasting signal). Hoistman shall answer by raising the bucket, cage or skip a few feet and letting it back slowly. Following a 4-bell signal, only a 1-bell signal shall be required to signal for hoisting of men away from a blast, and the hoistman shall remain at the controls until the act of hoisting has been completed.

5 bells — (Release signal). The hoistman may, after receiving this signal, act at his own discretion to perform any movement or series of movements involving the hoisting conveyance.

9 bells — (Danger signal, special cautionary). To be given only in case of accident, fire or other danger. The signal for the level at which the emergency exists shall be given following the giving of the danger signal. These signals should be given on the voice communication system or the call system except in shaft sinking or at shaft stations which are not provided with such communication systems.

(2) The following method and order shall be observed in giving signals:

(a) strokes on the bell shall be made at regular intervals;

(b) when men are being hoisted or lowered, signals shall be given in the order designated:

1st — cautionary signal,
2nd — destination signal,
3rd — executive signal.

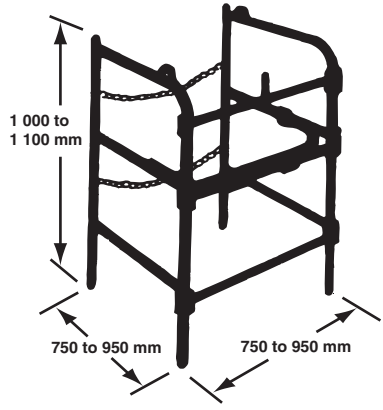
(3) The hoistman shall delay briefly before moving the hoisting conveyance after receiving a signal designating a movement at any time that men are carried. In case he is unable to act within one minute of the time he has received any complete signal, he shall not move the hoisting conveyance until he has again received another complete signal.

(4) When a hoistman has received a 3-bell signal, he shall remain at the hoist controls until he has received the signal designating the movement required and has completed that movement. After he has commenced the movement, he shall complete it without interruption, unless he receives a stop signal or in case of emergency.

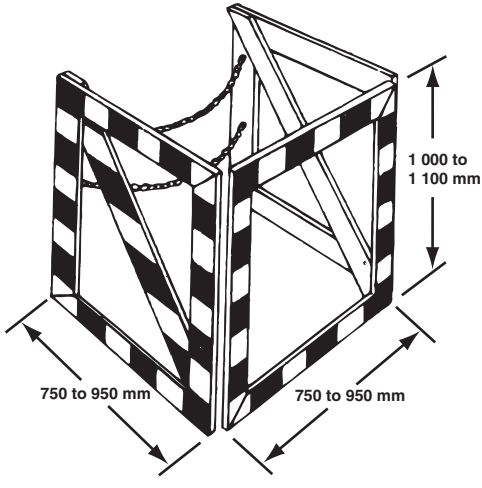
R.R.Q., 1981, c. S-2.1, r. 6, Sch. 4.

SCHEDULE 5
(S. 10.4.3)

PORTABLE GUARDRAILS



Steel guardrail. Fig. 1



Wooden guardrail. Fig. 2

R.R.Q., 1981, c. S-2.1, r. 6, sch. 5 ; O.C. 995-91, s. 13.

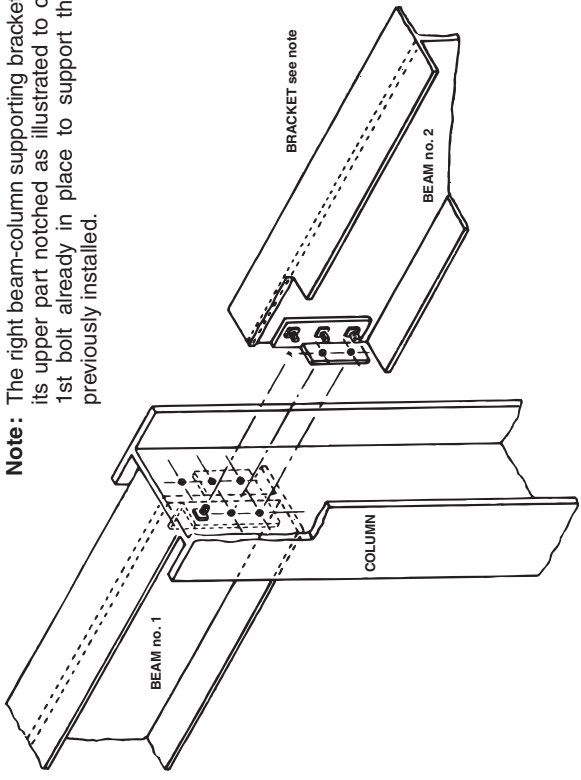
SCHEDULES 5.1 TO 5.3
(Replaced).

R.R.Q., 1981, c. S-2.1, r. 6, Sch. 5.1;
R.R.Q., 1981, c. S-2.1, r. 6, Sch. 5.2;
R.R.Q., 1981, c. S-2.1, r. 6, Sch. 5.3;
O.C. 995-91, s. 13.

SCHEDULE 6

(s. 3.24.18)

Note: The right beam-column supporting bracket will have its upper part notched as illustrated to clear the 1st bolt already in place to support the beam previously installed.



R.R.Q., 1981, c. S-2.1, r. 6, Sch. 6;
O.C. 391-2011, s. 3.

SCHEDULE 7

(Revoked).

O.C. 53-90, s. 11; O.C. 483-2021, s. 10.

SCHEDULE 8

(s. 7.2.1)

TRAINING AND CERTIFICATE OF A LOW VELOCITY EXPLOSIVE ACTUATED TOOL OPERATOR

8.1 Only persons so authorized by the manufacturer of a low velocity explosive actuated tool may be instructors and, in that capacity, supervise the training and qualification of workers wishing to use a low velocity explosive actuated tool.

8.2 Any worker wishing to use a low velocity explosive actuated tool shall have received training covering the following points:

(1) identification of the tool's parts and accessories;

(2) how to operate the tool and its accessories, such as a spall stop;

(3) maintenance of the tool;

(4) identification of damaged or worn parts;

(5) identification of the strength of explosive charges.

8.3 A low velocity explosive actuated tool operator's certificate shall be issued to any worker who:

(1) has received the training provided for in section 8.2;

(2) has demonstrated to his instructor that he is able to perform the operations provided for in section 8.2.

The certificate is issued by the instructor who dispenses the training.

8.4 A low velocity explosive actuated tool operator's certificate shall contain the following information:

(1) the worker's name;

(2) the attestation that the worker has received the training provided for in section 8.2 and has demonstrated that he is able to perform the operations provided for in that section;

(3) the date of issue of the certificate;

(4) the name or trademark of the manufacturer of the tool;

(5) the model of the tool;

(6) the name and signature of the instructor who dispensed the training provided for in section 8.2.

O.C. 329-94, s. 77.

SCHEDULE 9
(s. 2.15.7.2.)

MOBILE CRANE LOG

Sheet 1 Crane No. _____ Serial No. _____ Make and Model _____

Some of the tests recommended below may not apply depending on the type of crane or on the kind of work to be carried out.

Indicate the result of each field inspection by checking (✓), if the element tested is in good condition.

Blacken the square (■) in case of defects and specify those defects on sheet 2.

This log shall be filled during regular working hours by the worker who has carried out the testing, test, field inspection or repair.

Daily inspection for the month of _____ 20 _____

NAME OF OPERATOR (write legibly)	
Number of work hours (Cumulative)	
(Crane)	

DAY:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
GENERAL																															
1. Manufacturer's manual																															
2. Windows, windshield wipers and window defroster																															
3. Horn, mirrors and backup alarm																															
4. Boom angle indicator																															
5. Two-blocking warning device																															
6. Boom length indicator																															
7. Drum rotation indicator																															
8. Dials, gauges																															
9. Engine — upperworks, oil, water and belts																															
10. Machinery guards																															
11. Boom angle limit switch																															
12. Fire extinguishers																															
13. Power line approach limiting device																															
14. Greasing and lubrication																															
15. Cab locking																															
SWING AND HOISTS																															
16. Brakes, clutches and controls																															
17. Pawls, ratchets and locking devices																															
BOOM AND JIB (Summary visual inspection)																															
18. Pins, cotter pins and hinge pins																															
19. Boom stop																															
20. Oil and hoses (hydraulic boom)																															

ROPES AND ACCESSORIES
(Summary visual inspection)

21.	Main and auxiliary hoist ropes																															
22.	Boom hoist rope																															
23.	Rope spooling on drums																															
24.	Boom and jib pendants																															
25.	Rope attachments																															
26.	Pulley blocks, hooks and safety latches																															
27.	Sheaves, bearings and harnesses																															

CARRIER

28.	Brakes																															
29.	Tires and wheel lugs																															
30.	Engine oil and water																															
31.	Lights and flashers																															
32.	Heater and window defroster																															
33.	Outriggers																															

Sheet 2 Crane No. _____ Serial No. _____ Make and Model _____ MOBILE CRANE

Monthly inspection for the month of _____ 20 _____

	Points
34.	Hand rails, footridges, non-skid floors
35.	Exhaust pipe
36.	Electrical system and batteries
37.	Hoist drums
38.	Cylinders and hydraulic system
39.	Turntable
40.	Counterweight fastening
41.	Gantry and live mast

	Points
42.	Load chart
43.	Detailed inspection of boom and jib structure
44.	Load indicator
45.	Machinery guards
46.	Cable keepers on all sheaves
47.	Compressed air equipment
48.	Crawler (caterpillars, rollers, sprockets, etc.)

INSPECTED BY: _____ FUNCTION: _____ DATE: _____

NOTE: All the monthly tests prescribed by the manufacturer's manual shall be carried out.

Enter below the complete details with respect to any maintenance, inspections, tests and the revisions and modifications carried out. All incidents, mishaps, damage or repairs shall be recorded in detail (ref. CSA Z-150).

DATE	INITIALS	COMMENTS

O.C. 1413-98, s. 29.

SCHEDULE 10
(s. 2.15.7.4.)

TOWER CRANE LOG

Sheet 1 Crane No. _____ Serial No. _____ Make and Model _____

Daily inspection for the month of _____ 20_____

Some of the tests recommended below may not apply depending on the type of crane or on the kind of work to be carried out.

Indicate the result of each field inspection by checking (✓), if the element tested is in good condition.

Blacken the square (■) in case of defects and specify those defects on sheet 2.

This log shall be filled during regular working hours by the worker who has carried out the testing, test, field inspection or repair.

NAME OF OPERATOR (write legibly)																														
Number of work hours (Cumulative)																														
(Crane)																														

STATIONARY AND TRAVELLING TOWER CRANES	DAY:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1. Windows and windshield wipers																																
2. Telephone or radio communication																																
3. Anemometer																																
4. Jib weathervaning device																																
5. Controls and deadman device																																
6. Horn																																
7. Trolley position indicator																																
8. Heater and window defroster																																
9. Hook height limit switch																																
10. Trolley limit switches																																
11. Hoist brake																																
12. Trolley brake																																
13. Slewing brake																																
14. Guy, support and anchorage systems																																
15. Hoisting rope, attachments, hook and safety latch																																
16. Slings and rigging																																
17. Grounding																																
18. Noise and running order																																
19. Cab locking																																
20. Structure (welds, deformations, joints, etc.)																																
21. Load limit switch																																
22. Safety belt																																
23. Lanyard																																
24. Fire extinguisher																																

TRAVELLING CRANE

25.	Rails gauge, levelling and anchorage																															
26.	Rails and longitudinal sleepers splices																															
27.	Rails electrical junction (grounding)																															
28.	End stops and buffers																															
29.	Travel switches limit																															
30.	Electric power cable																															
31.	Rail clamps																															
32.	Carriage ballast																															
33.	Travelling brakes																															
34.	Railroad cluttering																															
35.	Water drainage or snow removal																															

Sheet 2 Crane No. Serial No. Make and Model TOWER CRANE

Monthly inspection for the month of _____ 20_____

POINT
36. Brake adjustment (wear)
37. Counterweight fastening and supports
38. Thorough verification of ropes and attachments
39. Drums, sheaves and bearings
40. Crown and pinion
41. Wheels and bearings (trolley)
42. Junction box waterproofness
43. Contactors (visual inspection)
44. Motors, wiring, cabling (visual inspection)

POINT
45. Other electrical devices (visual inspection)
46. Bolting
47. Guarding of moving parts
48. Handles, steps and safety line
49. Footbridges, guardrail and ladders
50. Operator's seat
51. Hoisting rope, attachment, hook and safety latch
52. Slings and rigging accessories

INSPECTED BY: _____ FUNCTION: _____ DATE: _____

NOTE: All the tests prescribed by the manufacturer's manual shall be carried out.

Enter below the complete details in respect of any maintenance, inspections, testings and revisions and modifications carried out. All incidents, mishaps and all damage sustained and repairs carried out shall be recorded in detail (ref. CSA standard Z-248).

DATE	INITIALS	COMMENTS

O.C. 1413-98, s. 29.

2015
(O.C. 428-2015)
Section 9

Sections 1 to 5 of this Regulation apply, from the following dates, to open sites that the number of workers indicated will occupy simultaneously at a particular stage of the work or for the duration of the work:

(1) 18 June 2015 if there are 100 or more workers;

(2) 18 December 2015 if there are between 50 and 99 workers;

(3) 18 June 2016 if there are 50 workers or fewer.

Despite section 8, sections 162 to 165 of the Regulation respecting occupational health and safety continue to apply to construction sites or, where applicable, to the categories of sites specified in that Regulation, until the rules provided for in sections 1 to 5 apply to them in accordance with the first paragraph.

R.R.Q., 1981, c. S-2.1, r. 6
Decision 83-11-17, 1984 G.O. 2, 849
O.C. 21-85, 1985 G.O. 2, 331
O.C. 1959-86, 1987 G.O. 2, 188
S.Q. 1986, c. 89, s. 50
O.C. 1960-86, 1987 G.O. 2, 202
S.Q. 1988, c. 23, s. 73
O.C. 53-90, 1990 G.O. 2, 333
O.C. 54-90, 1990 G.O. 2, 335
O.C. 995-91, 1991 G.O. 2, 2913
O.C. 807-92, 1992 G.O. 2, 2869
O.C. 213-93, 1993 G.O. 2, 1757
O.C. 329-94, 1994 G.O. 2, 1335
O.C. 1279-98, 1998 G.O. 2, 4259
O.C. 1413-98, 1998 G.O. 2, 4441
O.C. 459-99, 1999 G.O. 2, 1115
O.C. 35-2001, 2001 G.O. 2, 1035
O.C. 885-2001, 2001 G.O. 2, 3888
O.C. 873-2003, 2003 G.O. 2, 2729
O.C. 119-2008, 2008 G.O. 2, 682
O.C. 425-2010, 2010 G.O. 2, 1313
O.C. 391-2011, 2011 G.O. 2, 970
O.C. 393-2011, 2011 G.O. 2, 975
O.C. 476-2013, 2013 G.O. 2, 1255
O.C. 606-2014, 2014 G.O. 2, 1413
O.C. 57-2015, 2015 G.O. 2, 94
S.Q. 2015, c. 13
O.C. 428-2015, 2015 G.O. 2, 1001
O.C. 513-2015, 2015 G.O. 2, 1086
O.C. 1005-2015, 2015 G.O. 2, 3023
O.C. 1078-2015, 2015 G.O. 2, 3277
O.C. 1186-2015, 2015 G.O. 2, 3477
S.Q. 2015, c. 15, s. 237
S.Q. 2016, c. 25, s. 45
S.Q. 2018, c. 19, s. 19
O.C. 640-2019, 2019 G.O. 2, 1094
O.C. 805-2020, 2020 G.O. 2, 2007
O.C. 890-2020, 2020 G.O. 2, 2329
O.C. 483-2021, 2021 G.O. 2, 1207
O.C. 48-2022, 2022 G.O. 2, 187
O.C. 645-2022, 2022 G.O. 2, 1057
O.C. 646-2022, 2022 G.O. 2, 1059
S.Q. 2021, c. 27, s. 267
O.C. 820-2023, 2023 G.O. 2 923
O.C. 781-2021, 2021 G.O. 2, 1676
O.C. 1112-2023, 2023 G.O. 2, 1776
O.C. 1393-2024, 2024 G.O. 2, 3562
O.C. 63-2025, 2025 G.O. 2, 555.

INTRODUCTION

The analytical index enables the user to find, by means of a descriptor or keyword, a concept developed in matters of legislation or regulation.

The analytical index consists essentially of two elements: a) the descriptor and b) the reference.

THE DESCRIPTOR

Descriptors are classified in alphabetical order and are organized by levels.

The main descriptor is complemented by secondary descriptors of 1st and 2nd level; each level clarifies the preceding one.

Exemple:

SUPERIOR COURT: Main descriptor

Appeal : Secondary descriptor 1st

Delay : Secondary descriptor 2nd

The descriptor's function is not to inform on the content of the concept but to indicate its localization. Therefore, the descriptor has a synthetized form so as to make the index easier to consult.

THE REFERENCE

There are two types of reference:

– the reference SEE indicates that a descriptor is rejected to the advantage of another descriptor;

– the reference SEE ALSO acts as a link between descriptors so as to enable the user to carry out a more thorough research in the analytical index.

chapter S-2.1, r. 4

SAFETY CODE FOR THE CONSTRUCTION INDUSTRY

PROVISIONS LISTED IN SECTION 2 OF THE REGULATION RESPECTING OCCUPATIONAL HEALTH AND SAFETY AND APPLICABLE TO CONSTRUCTION SITES

Excerpt of Regulation respecting occupational health and safety

chapter S-2.1, r. 13

Act respecting occupational health and safety
(chapter S-2.1, s. 223).

2. **Scope:** Notwithstanding any provisions to the contrary, this Regulation applies to all establishments.

Sections 1 to 5, 17, 40, 42, 44 to 48, 64 and 65, subparagraphs 1 to 3 of the first paragraph and the second paragraph of section 66, sections 107 to 111, 113 to 115, 121 to 124 and 144, the first paragraph of section 145 and sections 148 to 151 and Division XXVI.1 also apply, with the necessary modifications, to construction sites or, if applicable, to categories of sites specified therein.

O.C. 885-2001, s. 2; O.C. 119-2008, s. 8; O.C. 425-2010, s. 1; O.C. 428-2015, s. 8; O.C. 287-2021, s. 1.

Provisions listed in section 2 of the Regulation respecting occupational health and safety

1. **Definitions:** In this Regulation,

"ACNOR" means the Canadian Standards Association or the Association canadienne de normalisation;

"aerial basket lifting device" means any elevator equipped with an extendable/retractable or jointed arm designed to be fitted with a carrier and used to lift workers or supplies by means of a basket on work sites;

"air recirculation" means local exhaust ventilation by extraction, filtering of the air and redistribution of the filtered air in a work area;

"all-terrain vehicle" means any passenger vehicle designed for sports driving off public highways and whose net weight does not exceed 450 kg;

"ANSI" means the American National Standards Institute;

"asbestos" means the fibrous form of mineral silicates belonging to rock-forming minerals of the serpentine group, namely chrysotile, and the amphibole group, namely actinolite, amosite, anthophyllite, crocidolite, tremolite or any mixture containing one or more of these minerals;

"asbestos dust" means airborne asbestos particles or deposited asbestos particles liable to become airborne in the work area;

"ASME" means the American Society of Mechanical Engineers;

"ASTM" means the American Society for Testing and Materials;

"calculator" means a calculation tool that can be used to evaluate the daily noise exposure level ($L_{EX,8h}$ or $L_{ex,8h}$) for the purpose of reducing the duration of workers' daily exposure to noise;

"CEN" means the European Committee for Standardization;

"CGA" means the Canadian Gas Association or the Association canadienne du gaz;

"confined space" means any space that is completely or partially enclosed, such as a reservoir, a silo, a vat, a hopper, a chamber, a vault, a pit, including a pit and a reception pit for manure, a sewer, a pipe, a chimney, an access shaft, a truck or freight car tank, or a wind turbine blade, and that presents one or more of the following risks due to the confinement:

(1) a risk of asphyxia, intoxication, loss of consciousness or judgment, fire or explosion associated with the atmosphere or internal temperature;

(2) a risk of being buried;

(3) a risk of drowning or being carried away due to the level or flow of a liquid;

"CSA" means the Canadian Standards Association or the Association canadienne de normalisation;

"daily noise exposure level" means the equivalent continuous sound pressure level (dBA) for an 8-hour working day. It results from measurements that include all the types of noise present, including impulse noises;

"dBA" means an A-weighted decibel measurement - the weighting reduces the significance of extreme frequencies, in particular low frequencies below 200 Hz,and increases the significance of frequencies around 2 500 Hz. A-weighting must be used for all measurements to evaluate $L_{EX,\ 8h}$ or $L_{ex,8h}$;

"dBC" means a C-weighted decibel measurement - the weighting reduces the significance of frequencies at or below 31 Hz and increases the significance of frequencies at or above 8 000 Hz. C-weighting must be used for all measurements to evaluate peak sound pressure level;

"EN" a European standard issued by the European Committee for Standardisation;

"equivalent continuous sound pressure level (dBA)" means the A-weighted continuous sound pressure level measured over a given period of time. It is identical to the sound pressure level of a constant noise having the same total A-weighted sound energy over the same period of time. It results from measurements that include all the types of noise present, including impulse noises. In the formulas used to calculate daily noise exposure level, it corresponds to $L_{p,\mathrm{A},\mathrm{eq}T\mathrm{e}}$ or $\mathrm{L}_{\mathrm{eq,t}}$, which is the A-weighted equivalent continuous sound pressure level for the duration of the working day in hours (T_{e} or T_{w});

"free fall distance" means the vertical distance measured from the beginning of a fall, from the harness D-ring to which the fall arrest connecting device is attached, to the point where the fall arrest system begins to apply force to stop the fall;

"friable material" means material that can be crumbled, pulverized or powdered by hand pressure when dry or that is crumbled, pulverized or powdered;

"heat stress" means heat unbalance in a worker caused by working in a hot environment;

"high-efficiency filter" means any filter capable of filtering particles 0.3 µm in size at an efficiency rate of at least 99.97%;

"hoisting apparatus" includes cranes, travelling cranes, gantries, winches, blocks, lift trucks, aerial basket lifting devices, work platform lifts, screw-type jacks, rack-type jacks and other similar apparatus but does not include elevators and dumb-waiters;

"impulse noise" means a noise of short duration (generally less than one second), peaking at a high level and characterized by a sharp increase and rapid decrease in sound level. The parameter used to measure an impulse noise is the C-weighted peak sound pressure level;

"IEC" means the International Electrotechnical Commission;

"instructor" means a person in charge of the practical training and communication of theoretical knowledge required for the acquisition of occupational skills;

"ISO" means the International Organization for Standardization;

"lanyard" means a rope or strap fastened at one end to a safety harness and at the other end to an anchorage system or other component of a fall arrest connecting device;

"lifeline" means a synthetic fibre rope, a steel wire rope or a strap attached to an anchorage system and used to guide a rope grab;

"machine" means an assembly, fitted with or intended to be fitted with a drive system other than directly applied human or animal effort, consisting of linked parts or components, at least one of which moves, and which are joined together for a specific application;

"NF EN" means the European standard, the French version of which (NF) is published in France by the Association française de normalisation;

"NFPA" means the National Fire Protection Association;

"NIOSH" means the National Institute for Occupational Safety and Health;

"peak sound pressure level" means the instantaneous peak sound pressure level measured in C-weighted decibels;

"rated load" means the maximum load set by the manufacturer or an engineer;

"respirable asbestos fibre" means asbestos fibre having a ratio of length to diameter of more than 3:1; only fibres longer than 5 μm must be taken into account for measurement purposes;

"respiratory zone" means the zone within a hemisphere having a 300 mm radius extending in front of the face and measured from the midpoint of an imaginary line joining the ears;

"SAE" means the Society of Automotive Engineers;

"safety factor" means the ratio between the rupture load and the working load;

"self-propelled vehicle" means a motor vehicle mounted on wheels, on tracks or on rails, used for the transportation of objects or materials, or for towing or pushing trailers or materials, with the exception of an all-terrain vehicle or an elevating or lifting device;

"stationary work station" means any work station in which a worker is required to perform his duties for at least 4 hours of his working day over a usual work surface of 30 m^2 or less;

"washroom" means any room containing one or several toilets, urinals, sinks or showers to meet the sanitary needs of the workers of an establishment;

"work station" means any place, including a vehicle occupied by a worker to perform his work;

"ULC" means the Underwriters' Laboratories of Canada or the Laboratoires des assureurs du Canada.

O.C. 885-2001, s. 1; O.C. 510-2008, s. 1; O.C. 1411-2018, s. 1; O.C. 49-2022, s. 1; O.C. 1223-2021 s. 1; O.C. 644-2022, s. 1; O.C. 821-2023, s. 1; O.C. 781-2021, s. 1; O.C. 43-2023, s. 1; O.C. 1112-2023, s. 1.

3. **Purpose:** The purpose of this Regulation is to establish standards pertaining in particular to the quality of air, temperature, humidity, heat stress, lighting, noise and other contaminants, sanitary facilities, ventilation, hygiene, sanitation and cleanliness in establishments, area conditions, storage and handling of dangerous substances, machine and tool safety, certain high risk tasks, individual protective equipment and the transportation of workers to ensure the quality of the work environment, to safeguard the health of workers and to ensure their safety and physical well-being.

O.C. 885-2001, s. 3.

4. **Employer's obligations:** The employer shall comply with the standards set hereunder, with the exception of those of sections 312.5 and 339.

O.C. 885-2001, s. 4; O.C. 425-2010, s. 2.

5. **Operational status of equipment:** Any equipment used or installed in an establishment for purposes of preventing the emission of gases, dusts, fumes and vapours, to ensure proper conditions for lighting, ventilation, temperature, salubrity and hygiene prescribed hereunder or to ensure that noise or heat stress conditions comply with the requirements hereunder, shall always be in operational

condition and shall give optimal performance during the establishment's business hours in such manner as to provide the performance for which it was designed.

O.C. 885-2001, s. 5.

17. **Cleaning:** Subject to section 326, the upkeep of the work premises of an establishment shall be ensured through vacuuming, wet mopping or any other method that controls and reduces to a maximum the stirring up of dust.

O.C. 885-2001, s. 17.

40. No worker in an establishment shall be exposed to:

(1) a concentration of airborne oxygen below 19.5% in volume at normal atmospheric pressure;

(2) gases, fumes, vapours, dusts or mists, beyond the limits provided for in Schedule I.

Subparagraph 2 of the first paragraph also applies to a work station located in a vehicle, wherever situated.

O.C. 885-2001, s. 40; O.C. 49-2022, s. 3.

42. **Carcinogenic and isocyanate substances:** When a worker is exposed to a substance identified in Schedule I as having a known or suspected carcinogenic effect on humans or being diisocyanate or isocyanate oligomers, such exposure shall be reduced to a minimum, even when it remains within the standards in that Schedule.

O.C. 885-2001, s. 42.

44. **Methods:** Dusts, gases, fumes, vapours and mists found in the workplace environment shall be measured in the respiratory zone of workers or, if this proves to be impossible owing to the lack of equipment for taking a sampling in this zone, then outside the breathing zone but in a place located as close as possible to such zone.

These dusts, gases, fumes, vapours and mists found in the workplace environment shall be sampled and analyzed to obtain an accuracy equivalent to that obtained by applying the methods described in the Sampling Guide for Air Contaminants in the Workplace published by the Institut de recherche Robert-Sauvé en santé et sécurité du travail du Québec.

The sampling strategy for these contaminants shall be carried out in accordance with common practices in industrial hygiene as summarized in the aforementioned guide.

O.C. 885-2001, s. 44.

45. **Respirator**: The employer must provide the worker with a respirator in the following cases:

(1) during the period required to implement a measure provided for in section 41;

(2) in case of an emergency where the values provided for in section 40 are not complied with;

(3) if no measure makes it possible to comply with the values provided for in section 40.

O.C. 885-2001, s. 45; O.C. 49-2022, s. 6.

45.1. Every respirator provided by the employer must be certified by the NIOSH or the CSA.

When providing such a device, the employer must draft and apply a respiratory protection program in compliance with CAN/CSA Standard Z94.4-11, Selection, Use and Care of Respirators, as published in September 2016.

O.C. 49-2022, s. 7; O.C. 280-2024, s. 1.

46. **Prohibition:** Notwithstanding section 45.1, an employer may not provide the worker with a self-contained or air-supplied protective respiratory apparatus equipped with an automatic device which interrupts or restricts the air supply in the part of the apparatus covering the face.

O.C. 885-2001, s. 46; O.C. 49-2022, s. 8.

47. *(Revoked)*.

O.C. 885-2001, s. 47; O.C. 49-2022, s. 9.

48. **Air supply:** Compressed breathing air for supplied-air respirators or self-contained respiratory protective apparatuses must comply with CSA Standard CAN/CSA-Z180.1-00, Compressed Breathing Air and Systems. Systems that produce, store and distribute air must comply with the standard that applies to them.

Samples of compressed breathing air shall be taken and analyzed to obtain an accuracy equivalent to that obtained by applying the methods described in the Sampling Guide for Air Contaminants published by the Institut de recherche Robert-Sauvé en santé et sécurité du travail du Québec. The analyses must be made at least every 6 months, except for ambient air systems. The results of these analyses shall be entered in a register that shall be kept for a period of at least 5 years.

Breathable compressed air supply and distribution systems shall be maintained in compliance with the manufacturers' instructions. The date on which such maintenance is performed as well as the name of the person who performed it shall be recorded by the employer in a register that shall be kept for a period of at least 5 years.

O.C. 885-2001, s. 48; O.C. 915-2011, s. 1; O.C. 1104-2015, s. 1; O.C. 49-2022, s. 10.

64. **Lead:** The recovery of lead or lead products and other related operations shall be performed inside an establishment in compliance with the requirements under section 107.

O.C. 885-2001, s. 64.

65. **Floor:** In any establishment where lead, mercury or their compounds are handled, stored or used in either solid or liquid form, the floor covering shall be made of a non-porous material.

O.C. 885-2001, s. 65.

66. **Protective clothing:** The employer shall make sure that workers wear protective clothing used exclusively for their work when performing any of the following activities:

(1) the recovery or melting of lead or lead products;

(2) the manufacturing of lead batteries;

(3) the manufacturing of lead powders or salts, chlorine, fluorescent lamps or caustic soda where workers must handle lead or mercury;

not applicable

(4) any work involving exposure to crocidolite asbestos, amosite or any other type of amphibole;

(5) any work involving exposure to chrysotile asbestos fibres that cannot be contained within the exposure value levels specified in Schedule I.

Before reuse, the employer shall ensure that such clothing has been cleaned with a vacuum equipped with a high-efficiency filter, unless the clothing has been washed.

O.C. 885-2001, s. 66.

107. **Local ventilation:** Any localized source at a stationary work station that emits dusts, gases, fumes, vapours or mists shall be equipped with a local exhaust ventilation system for trapping the dusts, gases, fumes, vapours or mists at their source.

O.C. 885-2001, s. 107.

108. **Recirculation of air:** Any air recirculation system shall be designed so that:

(1) the concentration of dusts, fumes, gases, vapours and mists in any work station is lower than the weighted average exposure value permissible in the work environment and the permissible recirculation concentration provided for in Schedule I;

(2) a duct is provided for evacuating contaminated air outside the establishment in case the air filtering system breaks down or is not working properly;

(3) no dusts, fumes or mists are discharged into a room where no dusts, fumes or mists were present before the air recirculation system is put into operation; and

(4) there is no recirculation of gases, vapours, mists, fumes or dusts which are identified under Schedule I as a substance whose recirculation is prohibited.

O.C. 885-2001, s. 108.

109. **Fresh air intake:** Subject to section 108, an establishment ventilated mechanically shall be equipped with a fresh air intake system designed to replace the volume of air evacuated from the work environment with fresh air from the atmosphere.

The fresh air intake shall be situated so that no air already evacuated from an establishment is reintroduced.

O.C. 885-2001, s. 109.

110. **Adjacent facilities:** All establishments shall be designed, built, equipped and operated so that they do not emit gases, dusts, fumes, vapours, odours or mists through ceilings, walls, floors, corridors, stairwells, or freight or passenger elevator hoistways into any building or facility adjacent to the establishment.

O.C. 885-2001, s. 110.

111. **Ventilation of change rooms and toilets:** During the hours of operation of an establishment, the change rooms and washrooms shall be ventilated toward the outside of the establishment, either naturally in accordance with section 102, or mechanically by extraction in accordance with the standards prescribed in the following table:

Place		Ventilation (in cubic metres of air per hour)
Change rooms	hooks or lockers for street clothes or unsoiled work clothes	18 m^3/h per square metre of the room's surface area.
	hooks or lockers for damp work clothes (drying facilities)	the greater of: 36 m^3/h per square metre of the room's surface area, and 12 m^3/h per locker.
Toilets and urinals		the greater of: – 36 m^3/h per square metre of the room's surface area, and – 45 m^3/h per toilet or urinal, but not less than 350 m^3/h.
Showers		the greater of: – 36 m^3/h per square metre of the room's surface area, and – 90 m^3/h per shower head, but not less than 350 m^3/h.

Where a washroom is ventilated naturally, the ventilation area per toilet shall be 0.1 m^2.

O.C. 885-2001, s. 111.

113. **Combustion products:** Except in the cases provided for in sections 114 and 115, combustion products vented by the air heating facilities of an establishment shall be evacuated directly outside the establishment by means of a duct.

O.C. 885-2001, s. 113.

114. **Infrared heating:** In any establishment heated by a gas-fired infrared device, air contaminated by combustion gases shall be evacuated outside by natural or mechanical ventilation at the minimum rate of

$$\frac{9\ m^3/h}{MJ/h.}$$

O.C. 885-2001, s. 114.

115. *(Revoked).*

O.C. 885-2001, s. 115; O.C. 889-2020, s. 1.

121. Compulsory measurements: In any establishment employing 50 workers or more where workers are exposed to heat stress conditions in which the heat stress index reaches or exceeds the continuous work curve in the graph in Schedule V, this index shall be measured twice a year, once during the summer, at each work station where the index is reached or exceeded.

The measurements obtained in accordance with the first paragraph shall be entered in a register. The register shall be kept for at least 5 years.

O.C. 885-2001, s. 121.

122. **Method:** For the purposes of this Regulation, the heat stress index is measured by the Wet BulbGlobe Temperature Index (W.B.G.T. method) as established in Schedule V.

O.C. 885-2001, s. 122.

123. **Index exceeds the continuous work curve:** In any establishment where workers are exposed to heat stress conditions such that the heat stress index exceeds the continuous work curve in the graph in Schedule V, the employer shall ensure that the workers thus exposed undergo medical supervision and shall provide them with water at a temperature of between 10 °C and 15 °C, and one shower per 15 exposed workers.

O.C. 885-2001, s. 123.

124. **Special measures:** In any establishment where workers are exposed to heat stress conditions such that the heat stress index exceeds the continuous work curve in the graph in Schedule V, the following measures shall be taken:

(1) re-equip the exposed work station with reflecting screens, additional insulation or ventilation to reduce the heat stress index of the work station to a value less than or equal to the values of the continuous work curve;

(2) if the application of paragraph 1 proves impossible or does not allow the continuous work curve to be reached, control the work load, the time of exposure and the rest time in accordance with the alternate work-rest regimen prescribed for that purpose in Schedule V;

(3) if the application of paragraphs 1 and 2 proves impossible or does not allow the continuous work curves indicated in the graph in Schedule V to be reached or while waiting for the alterations required under paragraph 1 to be done, ensure that the workers wear appropriate individual equipment in accordance with the nature of the heat stress.

O.C. 885-2001, s. 124.

144. **Ionizing radiation:** Workers exposed to ionizing radiation shall be monitored by dosimetry.

In the event of an overdose, workers thus exposed shall undergo medical examinations at more or less regular intervals, depending on the duration of exposure.

O.C. 885-2001, s. 144.

145. **Drinking water:** Any establishment shall provide workers with drinking water whose quality complies with the Regulation respecting the quality of drinking water (chapter Q-2, r. 40).

not aplicable

The quantity of drinking water provided to the workers must be sufficient to meet their daily physiological and personal hygiene needs while taking into account, in

Without limiting the scope of the second paragraph, the quantity must at least enable each worker to drink 1 litre of drinking water, wash their hands 4 times over a period of 8 hours and take a shower once a day, when this Regulation requires that it be put at the disposal of the workers. The quantity must also ensure the proper functioning of emergency showers, if applicable.

O.C. 885-2001, s. 145; O.C. 287-2021, s. 2.

146. *(Revoked)*.

O.C. 885-2001, s. 146; I.N. 2020-01-01; O.C. 287-2021, s. 3.

148. **Bottled water:** Any bottled water distributed in an establishment shall comply with the stipulations in the Regulation respecting bottled water (chapter P-29, r. 2).

O.C. 885-2001, s. 148.

149. **Distributors:** All establishments shall be equipped with distributors of drinking water intended for consumption by the workers in a proportion of one distributor per group of 75 workers and an additional distributor for any fraction of that number above 75 workers. In an establishment with less than 75 workers, at least one drinking water distributor shall be provided.

Drinking water distributors shall be easy to clean and made of leakproof material. They shall be kept free from any source of water contamination.

O.C. 885-2001, s. 149.

150. **Water unsafe for drinking:** Any drinking water distribution system intended for workers' consumption shall be designed and installed to eliminate any possibility of cross-connection or contamination with any piping system likely to contain water that is unsafe for drinking.

Any tap for water that is unsafe for drinking shall be identified.

O.C. 885-2001, s. 150.

151. **Paper cups:** Except where workers are provided with water fountains, they shall have at their disposal sanitary individual disposable paper cups.

The use of a common glass or cup is prohibited.

When workers are provided with paper cups, a refuse container shall be placed less than 2 m from the drinking water distributor.

O.C. 885-2001, s. 151.

Regulation respecting prevention mechanisms specific to construction sites

chapter S-2.1, r. 8.2

Act respecting occupational health and safety
(chapter S-2.1, s. 58).

CHAPTER I
SCOPE

S.Q. 2021, c. 27, s. 243.

1. For the purposes of the Act respecting occupational health and safety (chapter S-2.1), this Regulation determines the rules applicable on construction sites with regard to the job-site committee, the health and safety representative and the health and safety coordinator.

S.Q. 2021, c. 27, s. 243.

CHAPTER II
JOB-SITE COMMITTEE

S.Q. 2021, c. 27, s. 243.

DIVISION I
COMPOSITION OF JOB-SITE COMMITTEE AND DESIGNATION OF MEMBERS

S.Q. 2021, c. 27, s. 243.

2. The maximum number of employers' representatives on the job-site committee must be equal to the number of health and safety representatives and representatives of each of the representative associations that sit on the committee.

If the number of employers present on the construction site exceeds the maximum number of representatives prescribed in the first paragraph, the employers' representatives on the committee are respectively those of the employers that employ the greatest number of workers present on the construction site.

S.Q. 2021, c. 27, s. 243.

3. Where two or more health and safety representatives or two or more health and safety coordinators are designated on a construction site, the number of representatives or coordinators on the committee is equal to the minimum number prescribed in sections 13 and 16, according to the category of construction site.

S.Q. 2021, c. 27, s. 243.

4. The health and safety representatives on the job-site committee are designated by all the representative associations.

Failing that, they are designated by a majority of the construction workers present on the construction site.

S.Q. 2021, c. 27, s. 243.

DIVISION II
RULES OF OPERATION FOR JOB-SITE COMMITTEE

S.Q. 2021, c. 27, s. 243.

5. The job-site committee holds its first meeting within 14 days after the date on which the work begins.

S.Q. 2021, c. 27, s. 243.

6. Despite the minimum frequency of meetings prescribed in the first paragraph of section 207 of the Act, the job-site committee of a construction site employing 100 workers or more must meet at least once a week.

S.Q. 2021, c. 27, s. 243.

7. The agenda of a job-site committee meeting is determined by the principal contractor.

Any committee member may, at the beginning of the meeting and with the other members' agreement, propose amendments to the agenda.

S.Q. 2021, c. 27, s. 243.

8. The quorum at a meeting is at least one representative of the principal contractor, at least one employer's representative and at least half the members referred to in paragraphs 3 and 4 of section 205 of the Act who represent workers.

S.Q. 2021, c. 27, s. 243.

9. Any vacancy on the job-site committee must be filled not later than 14 days after the committee is informed of it if the construction site employs at least 20 workers or not later than 7 days if the construction site employs at least 100 workers.

A vacancy is filled according to the method of designation prescribed for designating the member to be replaced, if any.

S.Q. 2021, c. 27, s. 243.

10. The principal contractor must draw up the minutes of the job-site committee's meetings.

At each meeting, the committee adopts the minutes of the previous meeting. Adopted minutes are kept by the principal contractor, in a register established for that purpose, for at least one year after the date on which the work ends.

Committee members may, by request to the principal contractor, obtain copies of the committee's minutes.

S.Q. 2021, c. 27, s. 243.

DIVISION III
TRAINING OF JOB-SITE COMMITTEE MEMBERS

S.Q. 2021, c. 27, s. 243.

11. A job-site committee member must obtain a certificate for at least one hour of theoretical training issued by the Commission or by a body recognized by it.

The training must pertain, in particular, to the following subjects:

(1) prevention mechanisms applicable on a construction site;

(2) the role of the job-site committee and its rules of operation;

(3) follow-up on the prevention program;

(4) analysis of accident notices and follow-up on them;

(5) follow-up on suggestions and complaints regarding occupational health and safety received from construction workers, representative associations, the joint sector-based construction association referred to in section 99 of the Act, employers and the principal contractor; and

(6) follow-up on reports regarding inspections carried out on the construction site.

A member who holds a health and safety coordinator training certificate or a health and safety representative training certificate under section 15 is not required to take such training.

S.Q. 2021, c. 27, s. 243.

CHAPTER III
HEALTH AND SAFETY REPRESENTATIVE

S.Q. 2021, c. 27, s. 243.

12. The minimum amount of time that a health and safety representative may devote daily to the exercise of his or her functions, except the functions referred to in paragraphs 2, 6 and 7 of section 210 of the Act, is as follows, according to the number of workers present on the construction site:

(1) 10 to 24 workers: 1 hour;

(2) 25 to 49 workers: 3 hours;

(3) 50 to 74 workers: 4 hours;

(4) 75 to 99 workers: 6 hours; and

(5) 100 workers and more: 8 hours.

S.Q. 2021, c. 27, s. 243.

13. The minimum number of health and safety representatives designated in accordance with section 212.1 of the Act is as follows, according to the number of workers present on the construction site:

(1) 100 to 199 workers: 1;

(2) 200 to 599 workers: 2;

(3) 600 to 899 workers: 3;

(4) 900 to 1,199 workers: 4; and

(5) 1,200 workers and more: 5.

S.Q. 2021, c. 27, s. 243.

14. A health and safety representative designated in accordance with section 209 of the Act must obtain a certificate for at least three hours of theoretical training issued by the Commission or by a body recognized by it.

The training must pertain, in particular, to the following subjects:

(1) prevention mechanisms applicable on a construction site;

(2) the representative's role, functions and responsibilities;

(3) inspection of workplaces;

(4) assistance to workers in the exercise of their rights recognized by the Act and the regulations;

(5) the representative's role during an inspector's visit; and

(6) accident investigation and analysis of reported incidents.

S.Q. 2021, c. 27, s. 243.

15. A health and safety representative designated in accordance with section 212.1 of the Act must obtain a certificate for at least 40 hours of theoretical training issued by the Commission or by a body recognized by it.

In addition to the subjects listed in the second paragraph of section 14, the training must pertain to the prevention program and the operation of a job-site committee.

S.Q. 2021, c. 27, s. 243.

CHAPTER IV
HEALTH AND SAFETY COORDINATOR

S.Q. 2021, c. 27, s. 243.

16. The minimum number of health and safety coordinators designated in accordance with section 215.1 of the Act is as follows, according to the number of workers present on the construction site:

(1) 100 to 199 workers: 1;

(2) 200 to 599 workers: 2;

(3) 600 to 899 workers: 3;

(4) 900 to 1,199 workers: 4; and

(5) 1,200 workers and more: 5.

S.Q. 2021, c. 27, s. 243.

17. A health and safety coordinator must obtain a certificate for at least 240 hours of theoretical training issued by the Commission or by a body recognized by it.

The training must pertain, in particular, to the following subjects:

(1) the legislative and regulatory framework for occupational health and safety applicable to a construction site;

(2) prevention mechanisms applicable on a construction site;

(3) the coordinator's role and general functions, including coordinating a job-site committee;

(4) preparing and updating a prevention program specific to a construction site;

(5) the coordinator's role during an inspector's visit on the construction site;

(6) the main safety measures applicable on a construction site, taking into account the priorities for action established by the Commission;

(7) the main occupational health rules applicable on a construction site;

(8) the occupational health and safety management audit;

(9) inspection of workplaces;

(10) accident investigation and analysis of reported incidents;

(11) preparation of work directives specific to a construction site; and

(12) interpersonal relations and communication skills.

S.Q. 2021, c. 27, s. 243.

CHAPTER V
TRANSITIONAL PROVISION

S.Q. 2021, c. 27, s. 243.

18. A person who, on 31 December 2022, holds an attestation of safety officer delivered by the Commission under paragraph c of subsection 2 of section 2.5.4 of the Safety Code for the construction industry (chapter S-2.1, r. 4) and who is designated health and safety representative or health and safety coordinator is not required to obtain the training certificates required under sections 15 and 17.

S.Q. 2021, c. 27, s. 243.