

B.57 Any combination of 3 axles, 2 of which form a tandem axle located at the rear of the first semi-trailer of a Type C double train referred to in class A.86 or A.87 and the other one under the dolly of the trailer, and where the distance between the axes of the last axle of the tandem axle and the axle of the dolly is less than 3 metres belongs to this class.”;

(10) by striking out the words “identical pneumatic and” in the second paragraph; and

(11) by adding the following paragraphs at the end:

“For the purposes of this Schedule, the wheels that are not attached to an axle but that are attached under the vehicle in a common axis of rotation shall be included in the classes of axles.

On the vehicles assembled after June 1998, the axle referred to in paragraph 1 of B.44 or B.45 shall, in addition, be attached by a suspension designed to distribute evenly within 1 000 kilograms when the lift axle is lowered, without any possible adjustment, the mass that can be measured under the wheels of each axle. On the vehicles assembled after December 2002, that axle shall, in addition, be a self-steering axle.

From 1 January 2015, only the self-steering axle will remain prescribed by paragraph 1 of classes B.44 and B.45.”.

26. The Regulation is amended by adding the following at the end:

“SCHEDULE D

Exempted class

The following belongs to this class:

(1) the intersection of Chemin Manouane and Chemin DesAulnaies in the municipality of Saint-Michel-des-Saints.”.

27. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.

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Gouvernement du Québec

O.C. 1413-98, 28 October 1998

An Act respecting occupational health and safety (R.S.Q., c. S-2.1)

Safety Code for the construction industry — Amendments

Regulation to amend the Safety Code for the construction industry

WHEREAS under subparagraphs 3, 7, 9, 10, 19, 21 and 42 of the first paragraph of section 223 of the Act respecting occupational health and safety (R.S.Q., c. S-2.1), the Commission de la santé et de la sécurité du travail may make regulations on the matters mentioned therein;

WHEREAS under the second paragraph of section 223 of the Act, the content of the regulations may vary according to the categories of persons, workers, employers, workplaces, establishments or construction sites to which they apply;

WHEREAS under the third paragraph of section 223 of that Act, a regulation may refer to an approval, certification or homologation of the Bureau de normalisation du Québec or of another standardizing body;

WHEREAS under section 224 of the Act and sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1), a draft of the Regulation attached to this Order in Council was published in Part 2 of the *Gazette officielle du Québec* of 13 December 1995, with a notice that, at the expiry of 60 days following that notice, it would be adopted by the Commission with or without amendment and submitted to the Government for approval;

WHEREAS at its meeting of 21 May 1998, the Commission adopted the Regulation to amend the Safety Code for the construction industry with amendments;

WHEREAS it is expedient to approve the Regulation;

IT IS ORDERED, therefore, upon the recommendation of the Minister of Labour:

THAT the Regulation to amend the Safety Code for the construction industry, attached to this Order in Council, be approved.

MICHEL NOËL DE TILLY,
Clerk of the Conseil exécutif

Regulation to amend the Safety Code for the construction industry^(*)

An Act respecting occupational health and safety (R.S.Q., c. S-2.1, s. 223, 1st par., subpars. 3, 7, 9, 10, 19, 21, 42, 2nd and 3rd pars.)

1. Section 1.1. of the Safety Code for the construction industry is amended:

(1) by inserting the following after paragraph 25:

“(25.1) “protective wall”: an unbroken partition made of plywood at least 9 millimetres thick or made of another rigid material of an equivalent or greater resistance, that is at least 1.8 metres high and that is installed at not more than 100 millimetres above the ground;”;

(2) by renumbering paragraph 32 as “31.01”; and

(3) by inserting the following after paragraph 31.1:

“(32) “hazard signs”: a yellow, orange or red rigid strip, such as a trestle, or flexible strip, at least 70 millimetres wide and installed, according to the configuration of the land or of the structure, at a height varying between 0.7 metres and 1.2 metres;”.

2. Section 2.4.2. is amended by substituting the words “other accidents” for the words “other accident” in subparagraph *iii* of paragraph *f*.

3. Section 2.7.1. is amended by substituting the words “a protective wall” for the words “a fence or a wall at least 1.8 metres high” in paragraph *b*.

4. Section 2.7.3. is amended by substituting the words “protective wall” for the words “barricade or a fence not less than 1.8 metres high” at the end.

5. Section 2.10.12. is amended by substituting the words “une corde d’assurance horizontale” for the words “un câble de secours horizontal” in the French version of paragraph *c* of subsection 5.

6. The following is inserted after section 2.13.3.:

“2.13.3.1. All the extensible parts of a scaffold shoring, including adjustment screws, shall comply with one of the following requirements:

(a) bear a mark indicating that, beyond that mark, they are extended beyond the manufacturer’s requirements;

(b) be equipped with a locking device that prevents their extension beyond the manufacturer’s requirements.

A table of the allowable loads and corresponding extension heights shall be available on the construction site premises.”.

7. Section 2.15.7.2. is amended by adding the following after the first paragraph:

“A mobile crane log book shall be kept up-to-date in accordance with that standard and shall comply with Schedule 9.”.

8. Section 2.15.7.4. is amended by inserting the following after the first paragraph:

“A tower crane log book shall be kept up-to-date in accordance with that standard and shall comply with Schedule 10.”.

9. The following is inserted after section 2.15.7.6.:

“2.15.7.7. A digger derrick manufactured after 1 January 1987 shall comply with ANSI A10.31-1987 Standard “Digger Derricks - Safety Requirements, Definitions and Specifications”.

It is prohibited to use a digger derrick for purposes other than the purposes for which it was specifically designed and especially to use it to hoist materials.

For the purposes of this section, a digger derrick is an apparatus equipped with a knuckle-boom, mounted on a carrier vehicle and designed specifically to drill holes into the ground and to install posts therein and the material they support.”.

10. The following is substituted for section 2.19.1.:

“2.19.1. It is prohibited to use a liquified gas to freeze a water pipe unless the gas is physiologically inert and nonflammable.

2.19.2. When freezing a water pipe in a trench or in an obstructed space by using a liquified, physiologically inert and nonflammable gas, the following measures shall be taken:

(a) the trench or the obstructed space shall be ventilated by an exhaust ventilation system so that the concentration of oxygen in the air is at all times equal to or

* The Safety Code for the construction industry (R.R.Q., 1981, c. S-2.1, r.6) was last amended by the Regulation approved by Order in Council 1279-98 dated 30 September 1998 (1998, G.O. 2, 4259). For previous amendments, refer to the “Tableau des modifications et Index sommaire”, Éditeur officiel du Québec, 1998, updated to 1 September 1998.

greater than 19.5 % at the place occupied by the worker to carry out his work;

(b) a device to measure the concentration of oxygen in the air shall be available on the work site at all times.

For the purposes of this section, an obstructed space is a space marked off by a wall, a partition wall, a ceiling or any other physical obstacle where the circulation of air with the outside is insufficient to maintain a percentage of oxygen in the obstructed space equal to or greater than 19.5 % in air volume.

2.19.3. A worker freezing a water pipe shall wear mittens or gloves as a protection against chilblain.”.

11. Section 3.2.4. is amended by adding the following after paragraph *h*:

“(i) have no opening at floor or roof level, unless the opening is surrounded by guardrails or closed by a load resistant cover for any loads to which it may be subjected. If they interfere with the carrying out of the work, the cover or the guardrails may be removed and replaced, for the duration of the work, by installing a continuous barricade or trestle of a minimum height of 0.7 metres, at a distance varying between 0.9 metres and 1.2 metres from the opening.”.

12. The following is substituted for section 3.2.5.:

“**3.2.5. Hazard Signs:** A danger zone shall be marked off by hazard signs:

(a) below an outrigger scaffolding, a suspended scaffolding or a boatswain’s chair; and

(b) at any place where a mobile crane, concrete pump, derrick, jib crane, derrick crane, mechanically raised aerial platform apparatus or an aerial basket is used.”.

13. Section 3.7.1. is amended by substituting the word “Soudage” for the word “Soudure” in the French version of paragraph *g*.

14. Section 3.7.2. is amended by substituting the word “escalier” for the word “acier” in the French version of subsection 2.

15. Section 3.8.1. is amended

(1) by striking out the words “or any opening in a floor,” in subsection 1; and

(2) by substituting the words “of a continuous barricade or trestle of a minimum height of 0.7 metres” for the words “of a rope, barricade or fence” in subsection 2.”.

16. Section 3.9.21. is amended by substituting “and *c*” for “, *b*, *c* and *i*” in paragraph *b*.

17. The following is inserted after section 3.10.3.1.:

“**3.10.3.2.** Loader used for handling purposes

Subject to section 3.10.3.3., the use of a loader to handle materials, other than earthwork materials, is allowed under the following conditions:

(a) the handling of materials shall be carried out with equipment, excluding the bucket, designed by the manufacturer for the handling of materials; and

(b) the handling of materials shall be carried out in accordance with a method prepared in writing by the employer and indicating that no worker may be located under the load arms, any other part of the loader equipment being used for lifting, or under the load during handling.

3.10.3.3. Earth-moving machinery used for lifting purposes

The use of a hydraulic shovel, backhoe loader or loader for lifting purposes is allowed only for water, sewer or culvert works, if the following conditions are complied with:

(a) the lifting shall be carried out in accordance with a work method prepared in writing by the employer, available on the work site and indicating that no worker may be located under the boom, arm, load arm or bucket of the machine or under the load during lifting; and

(b) the hydraulic shovel, backhoe loader or loader shall also be equipped with a load hook-up device designed to avoid any accidental unhooking. The device shall be designed by the equipment manufacturer or be approved by an engineer.

The use of a sling or a mooring rope attached to the bucket teeth to lift a load is prohibited.”

3.10.3.4. Earth-moving machinery used for installing posts

The use of a hydraulic shovel or of a backhoe loader for the installation of posts is allowed if the following conditions are complied with:

(a) the lift cylinders of the boom, arm or bucket of the machine are provided with load lowering control devices complying with ISO Standard 8643, 1988 "Earth-moving machinery - Hydraulic excavator and backhoe loader boom lowering control device - Requirements and tests", *mutatis mutandis*; and

(b) the outriggers are provided with control devices installed in accordance with section 5.6 of that standard."

18. The following is substituted for section 3.10.8.:

"3.10.8. Vehicle-mounted aerial device:

(1) A vehicle-mounted aerial device manufactured before 1 January 2000 shall meet one of the following requirements:

(a) comply with CSA Standard C225-1976 "Vehicle-Mounted Aerial Devices";

(b) comply with ANSI A92.2-1979 Standard "Vehicle-Mounted Elevating and Rotating Aerial Devices" and be submitted to non-destructive testing of load bearing parts by a certified body before 1 January 2000; or

(c) comply with ANSI/SIA A92.2-1990 Standard "Vehicle-Mounted Elevating and Rotating Aerial Devices";

(2) A vehicle-mounted aerial device manufactured as of 1 January 2000 shall meet one of the following requirements:

(a) comply with CAN/CSA Standard C225-M88 "Vehicle-Mounted Aerial Devices"; or

(b) comply with ANSI/SIA A92.2-1990 Standard "Vehicle-Mounted Elevating and Rotating Aerial Devices" and have been manufactured by an enterprise certified in compliance with ISO 9001;

(3) A worker in an aerial device shall wear a safety belt complying with CSA Standard Z259.1-1976 "Fall-Arresting Safety Belts and Lanyards for the Construction and Mining Industries" and equipped with a lanyard attached to an anchoring point independent of the aerial device;

(4) Mobile cranes are not governed by this section;

(5) For the purposes of this section,

"non-destructive testing" means testing, other than visual, carried out and interpreted by a Level II inspec-

tor certified by the Canadian General Standards Board in compliance with the certification standards for personnel assigned to non-destructive inspection of materials;

"certified organization" means an organization certified by the Canadian Welding Bureau to the requirements of CSA Standard W178.1-1996 "Certification of Welding Inspection Organizations"; and

"load bearing device" means a device that carries or supports loads relative to the use of an aerial device."

19. Section 3.11.7. is amended

(1) by striking out the word "natural" in that part preceding subparagraph *a* of the first paragraph; and

(2) by substituting the following for subparagraph *a* of the first paragraph:

(a) comply with the CAN/CGA Standard B.149.1-M91 "Natural Gas Installation Code", if it is fired with natural gas, and with CAN/CGA Standard B.149.2-M91 "Propane Installation Code", if it is fired with propane gas; and"

20. The following is substituted for sections 3.13.1. to 3.13.5.:

"3.13.1. The piping through which compressed air or gas circulates shall be protected against any shock or shall be clearly identified as to the nature of its content.

3.13.2. Before disconnecting or repairing a connection or a section of piping through which compressed gas circulates, the piping supply shall be cut off and that piping shall be completely depressurized.

3.13.3. Air piping: Connections for flexible piping sections through which compressed air circulates shall be equipped with one of the following devices:

(a) a chain or steel rope attached to each side of the connection;

(b) a self-locking device; or

(c) a locking device.

3.13.4. It is prohibited to store oxygen cylinders less than 6 metres from a flammable gas cylinder or a combustible such as oil or grease, unless the oxygen cylinder is separated from it by a wall made of non-combustible material, of a minimum height of 1.5 metres and of a fire resistance of not less than 30 minutes.

3.13.5. Any compressed gas cylinder shall:

(a) comply with the Act respecting pressure vessels (R.S.Q., c. A-20.01) and its regulations, as well as with any future provision amending them;

(b) be kept away from any heat source liable to increase the temperature of the contents above 55 °C;

(c) be used only for the purposes for which it is intended; and

(d) be handled in such a way as not to damage it.

3.13.6. A compressed gas cylinder shall be used only under the following conditions:

(a) it shall be placed upright so that the pressure limiting device is in constant and direct contact with the gaseous phase; and

(b) it shall be fastened to a rigid structure or held on a cart designed for the transportation of such cylinder, or on the vehicle it supplies.

3.13.7. Where a compressed gas cylinder is not in use;

(a) it shall be held in place upright, with the valves on top;

(b) the protective cap shall be in place.

3.13.8. Compressed gas cylinders connected in series by a manifold shall be supported and maintained together, forming a unit, with the use of a rack or another installation designed for that purpose and the valves and safety devices shall be protected against shock.

3.13.9. It is prohibited to lift compressed gas cylinders by the collar or the protective cap.

3.13.10. Any propane gas cylinder that is not connected for use, shall be stored outside and protected from unauthorized handling:

(a) in a place where no vehicles or mobile equipment are used or moved; or

(b) in an area protected by a continuous barricade or trestles of a minimum height of 0.7 metres.”.

21. The following is substituted for section 3.14.2.:

“**3.14.2.** Any electric or gas welding or cutting operation and the installation, handling and maintenance of the equipment used for such operations shall comply

with CAN/CSA Standard W117.2-M87 “Safety in Welding, Cutting, and Allied Processes”, except for section 7.8.2.2.”.

22. Section 3.14.3. is amended by substituting the words “in accordance with subdivision 9.8 of CAN/CSA Standard W117.2-M87 “Safety in Welding, Cutting, and Allied Processes” for the words “to ensure the safety of workers” in paragraph *b*.

23. The following are substituted for sections 3.14.4. and 3.14.5.:

“**3.14.4** Protective screens against radiation shall be installed where electric arc welding or cutting operations are liable to constitute a danger to the health, safety and physical well-being of persons other than the welder.

3.14.5. A welding torch using oxygen and a combustible gas shall be equipped with a gas-check valve and with a flame arrester at the combustible gas supply point and the oxygen supply point located in the torch handle.

3.14.6. The chassis or hood of a welding machine supplied by a public power utility shall be grounded in accordance with CSA Standard C22.10-1992 “Canadian Electrical Code”, Part I, 16th Edition plus the Québec Amendments approved by Order in Council 1674-91 dated 4 December 1991, and any future provision amending it.

3.14.7. A portable welding machine supplied by an internal combustion engine shall be grounded if it is provided with auxiliary outlets of 120 V or 240 V and if those outlets are used simultaneously with the welding process.

3.14.8. It is prohibited to use electrical conductors or a pipeline containing flammable gases or liquids as a welding or cutting current neutral circuit.”.

24. Section 3.18.2. is amended by substituting the word “doivent” for the word “doit” in the French version of subsection 3.

25. The following is substituted for paragraph *c* of section 3.18.3.:

“(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;”.

26. Section 3.18.5. is amended by substituting the words “protective walls” for the word “fences” in paragraph *a*.

27. The following is substituted for section 6.1.3.:

“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.”.

28. The following is substituted for subsection 1 of section 6.6.2.:

“(1) the minimum length of the protrusion of a joist supported on a stringer shall not be less than 300 millimetres, 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.”.

29. Schedules 9 and 10 attached hereto shall be added after Schedule 8.

30. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.

