

6. Section 64 is amended by replacing

(1) the first occurrence of “soudure” in the French text by “soudage”;

(2) “certificate issued by the Canadian Welding Bureau in accordance with the specifications of CSA Standard W47.1-1983: Certification of Companies for Fusion Welding of Steel Structures” by “valid certificate issued by the Canadian Welding Bureau in accordance with CSA Standard W47.1, Certification of companies for fusion welding of steel”.

7. 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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Draft Regulation

An Act respecting occupational health and safety (chapter S-2.1)

Safety Code for the construction industry — Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation to amend the Safety Code for the construction industry, appearing below, may be made by the Commission de la santé et de la sécurité du travail and submitted to the Government for approval, in accordance with section 224 of the Act respecting occupational health and safety (chapter S-2.1), on the expiry of 45 days following this publication.

The draft Regulation ensures the health, safety and physical well-being of workers on construction sites. It provides for amendments and new measures and standards regarding protection against falls from a height. It also amends the standards applicable to site-fabricated ladders and to bracket scaffolding used on sites, and updates various sections.

Study of the matter shows no impact on enterprises, including small and medium-sized businesses.

Further information may be obtained by contacting Pierre Bouchard, Commission de la santé et de la sécurité du travail, 524, rue Bourdages, bureau 250, Québec (Québec) G1K 7E2; telephone: 418 266-4699, extension 2014; email: pierre.bouchard@csst.qc.ca

Any person wishing to comment on the matter is requested to submit written comments within the 45-day period to Claude Sicard, Vice-President, Partenariat et expertise-conseil, Commission de la santé et de la sécurité du travail, 524, rue Bourdages, local 220, Québec (Québec) G1K 7E2.

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*Chair of the board of directors and
Chief Executive Officer of the
Commission de la santé et
de la sécurité du travail*

Regulation to amend the Safety Code for the construction industry

An Act respecting occupational health and safety (chapter S-2.1, ss. 63, 223, 1st par., subpars. 7, 14, 19 and 42, 2nd and 3rd pars.)

1. The Safety Code for the construction industry (chapter S-2.1, r. 4) is amended in section 1.1

(1) by inserting the following after paragraph 7:

“(7.0) “CAN/CSA” means the Canadian Standards Association;”;

(2) by replacing paragraph 7.1 by the following:

“(7.1) “life line” means a synthetic fibre rope, a steel wire rope or a strap attached to an anchorage system and used to guide a rope grab;”;

(3) by replacing paragraph 12.0 by the following:

“(12.0) “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;”;

(4) by inserting the following after paragraph 24:

“(24.0) “fall arrest connecting device”: all equipment, such as a lanyard, energy absorber, snap hook, connector, life line or rope grab, used to secure a safety harness to an anchorage system;”.

2. Section 2.5.4 is amended in paragraph *c* of subsection 2

(1) by striking out “after 1 May 1976;”;

(2) by replacing “the Ministère du Travail” by “the Commission”.

3. Section 2.9.1 is amended by replacing subparagraph 4 of the second paragraph by the following:

“(4) ensure that workers wear safety harnesses secured to an anchorage system by a fall arrest connecting device, the whole in accordance with sections 2.10.12 and 2.10.15 when they are working. When workers cannot position themselves without the help of their fall arrest connecting device, ensure that they also use a means of positioning, such as a plank on brackets, a positioning tether or strap, a suspension cable or a platform;”.

4. Section 2.9.2 is amended

(1) by replacing “water” in paragraph 1 of the first paragraph by “a dangerous liquid or substance”;

(2) by striking out “5 m from the periphery of roofs and” in paragraph 3 of the first paragraph;

(3) by replacing the second paragraph with the following:

“Despite the foregoing, such a guard-rail may be removed during work if it is a nuisance. In such a case, workers must wear a safety harness secured to an anchorage system by a fall arrest connecting device, the whole in accordance with sections 2.10.12 and 2.10.15. The work area must then be delimited in particular by a warning line as provided for in section 2.9.4.0, a continuous barrier or trestles of a minimum height of 0.7 m, located at a distance varying between 0.9 m and 1.2 m from the place where workers are at risk of falling, so as to prevent access thereto by persons not working therein.”.

5. The following is inserted after section 2.9.4:

“2.9.4.0. Warning line: Despite section 2.9.2, a warning line may be installed, during bridging or roofing work, on surfaces with a slope equal to or less than 15° (3/12), in order to replace the use of a guard-rail and delimit a work area.

In such a case, another recognized means of protection against falls, such as a safety harness secured to an anchorage system by a fall arrest connecting device, the whole in accordance with sections 2.10.12 and 2.10.15, must be used outside the area delimited by the warning line.

A warning line must be

(1) continuous and installed on all sides of the work area that it delimits;

(2) placed at a distance of 2 m or more from any place where a worker may fall from a height;

(3) made of a rigid strip, a cable or a chain able to withstand a tractive force of at least 2.22 kN;

(4) equipped with flags made of high-visibility materials and placed at intervals of not more than 2 m;

(5) capable of withstanding a load of 100 N applied horizontally at the line’s highest point or vertically at its midpoint between 2 stanchions;

(6) completed at each access point, storage area or hoisting area by a path formed by 2 parallel lines. However, when the path to a point of access to a work area is located at a distance of more than 5 m from it, the warning line does not have to be continued beyond that distance. In places where the access path starts at a roof edge, a guard-rail must be installed on the side of the roof, in compliance with section 2.9.2, so as to cover the first 3 metres on either side of the access path’s starting point; and

(7) installed so that the line is

(a) located between 0.7 m above the work surface at the line’s lowest point and 1.2 m above that surface at its highest point; and

(b) supported by stanchions placed at intervals of not more than 2.5 m;

(c) attached to each stanchion so that pushing on the line between 2 stanchions does not reduce the height of the line between adjacent stanchions by an equivalent amount.”.

6. Section 2.10.12 is replaced by the following:

“2.10.12. Safety harness:

(1) A safety harness must comply with CAN/CSA Standard Z259.10 Full Body Harnesses and be secured to an anchorage system, in compliance with section 2.10.15, by a fall arrest connecting device that limits the maximum fall arrest force to 6 kN.

This fall arrest connecting device must consist of one or more of the following pieces of equipment:

(a) an energy absorber and a lanyard in compliance with CAN/CSA Standard Z259.11 Energy Absorbers and Lanyards. The lanyard, including the energy absorber, must measure not more than 2 m in length;

(b) a self retracting lanyard in compliance with CAN/CSA Standard Z259.2.2 Self-Retracting Devices for Personal Fall-Arrest Systems;

(c) a rope grab in compliance with CAN/CSA Standard Z259.2.1 Fall Arresters, Vertical Lifelines and Rails;

(d) a vertical life line in compliance with CAN/CSA Standard Z259.2.1 Fall Arresters, Vertical Lifelines and Rails.

A vertical life line must

- i. be used by only 1 person;
- ii. be shorter than 90 m; and
- iii. never be brought into direct contact with a sharp edge.

(e) a connecting component, such as a spring hook, D-ring or snap hook in compliance with CAN/CSA Standard Z259.12 Connecting Components for Personal Fall Arrest Systems.

(2) A self-locking safety catch is not compulsory on a duckbilled snap hook located at the end of a rope used as a means of positioning by a worker assigned to the assembly of the latticework of reinforcing rods supporting a wall or pillar. In such a case, the rope must be less than 0.4 m long, be made of metal rings and be secured at the other end to the safety harness worn by the worker.

In addition to this means of positioning used by the worker, the employer must take at least one of the measures provided for in subparagraphs 3 and 4 of the second paragraph of section 2.9.1 to ensure the worker's protection.

(3) Where a worker assigned to the erection or checking of power line towers wears a safety harness, the harness must be equipped with one of the following systems:

(a) an energy absorber to which are fastened 2 lanyards, including 1 that must be attached at all times;

(b) an energy absorber to which is fastened 1 lanyard attached by a rope grab to a vertical life line;

(c) a self retracting lanyard equipped with an energy absorber or fastened thereto.

Where the worker moves a life line or the sling of a self retracting lanyard by means of a pole anchor hook, the worker must be attached to the tower only by means of his or her work positioning strap or tether that the worker must fasten to a structural member above him or her.”

7. Section 2.10.14 is amended by replacing the second paragraph by the following:

“Such a belt must comply with CAN/CSA Standard Z259.1 Body Belts and Saddles for Work Positioning and Travel Restraint.”

8. The following is inserted after section 2.10.14:

“2.10.15. Anchorage system:

The fall arrest connecting device of a safety harness must be secured to

(1) a single point of anchorage with one of the following characteristics:

(a) a breaking strength of at least 18 kN; or

(b) designed and installed in accordance with an engineer's plan in compliance with CSA Standard Z259.16 Design of Active Fall-Protection Systems, and having one of the following characteristics:

i. a strength equal to twice the maximum fall arrest force as certified by an engineer; or

ii. certified in accordance with EN 795 Protection against falls from a height – Anchor devices – Requirements and testing published by the European Committee for Standardization;

(2) a flexible continuous anchorage system (horizontal life line) with one of the following characteristics:

(a) in compliance with the following minimum standards:

i. a steel cable of a minimum diameter of 12 mm slackened to a minimum angle of 1 vertical to 12 horizontal, or 5° from horizontal;

ii. a maximum distance of 12 m between the end anchors;

iii. end anchors with a breaking strength of at least 90 kN;

iv. not to be used by more than 2 workers at a time;

(b) designed and installed in accordance with an engineer's plan in compliance with CSA Standard Z259.13 Flexible Horizontal Lifeline Systems and CSA Standard Z259.16 Design of Active Fall-Protection Systems;

(3) a rigid continuous anchorage system designed and installed in accordance with an engineer's plan in compliance with CSA Standard Z259.16 Design of Active Fall-Protection Systems.

An anchorage system:

(1) must be designed so that the D-ring of the suspension point of a worker's safety harness cannot be moved horizontally by more than 3 m or an angle of 22°;

(2) cannot be used by more than 1 person at a time, except in the case of a continuous anchorage system, such as a horizontal life line, or a rigid anchorage system, such as a rail; and

(3) must be designed so that properly attached personal protective equipment cannot be detached involuntarily.

The structure on which the anchorage system is installed must be able to withstand the effort exerted by the anchorage system in addition to the other efforts that it must ordinarily withstand.

An anchorage system with the characteristics described in subparagraph *b* of subparagraph 1 or 2 of the first paragraph, or in subparagraph 3 of that paragraph, must, before it is first brought into service, be inspected and tested by an engineer or a qualified person acting under the supervision of an engineer, to ensure that the system is in compliance with the design and installation plans.”

9. Section 3.2.4 is amended by replacing paragraph *i* by the following:

“(i) have no opening at floor or roof level, unless the opening is surrounded by guard-rails or closed by a load resistant cover for any loads to which it may be subjected, but not less than 2.4 kN/m². If the cover or guard-rails interfere with the carrying out of the work, the cover or the guard-rails may be removed and replaced, for the duration of the work, by installing a warning line as provided for in section 2.9.4.0, a continuous barricade or trestles of a minimum height of 0.7 m, at a distance varying between 0.9 m and 1.2 m from the opening.”

10. Section 3.5.4 is amended

(1) by replacing “9” in paragraph *a* of subsection 1 by “4.8”;

(2) by replacing “300” in paragraph *b* of subsection 1 by “400”;

(3) by adding “, unless the site where the ladder is used precludes this. In such a case, the width of the ladder may be reduced accordingly” at the end of paragraph *b* of subsection 1;

(4) by replacing “rungs” in paragraph *c* of subsection 1 by “cleats”;

(5) by replacing subsection 2 by the following:

“(2) Any wooden ladder must have:

(a) 2 side rails of at least:

i. 38 mm by 89 mm for single ladders; or

ii. 38 mm by 140 mm or 89 mm by 89 mm for double-width ladders;

(b) cleats:

i. of not less than 38 mm by 89 mm; and

ii. resting on filler blocks of not less than 38 mm by 38 mm.”;

(6) by adding “and not more than 2 m in width” after “1.5 m in width” in paragraph *b* of subsection 3;

(7) by striking out “or rungs” in paragraph *c* of subsection 3;

(8) by replacing “appropriate to the weight applied; “ in paragraph *d* of subsection 3 by “corresponding to those listed in subsections 1 and 2;”;

(9) by adding the following subsection:

“(5) Where it is foreseen that a site-fabricated ladder will exceed the permitted maximum length of 4.8 m, the ladder must be designed by an engineer, as attested to by a plan or certificate signed and sealed by the engineer.”

11. Section 3.7.1 is amended by replacing “or a certificate from the Ministère du Travail” in paragraph *g* by “or a Class A or B qualification certificate in pressure vessel welding issued by Emploi-Québec”.

12. Section 3.9.16 is amended by inserting the following after paragraph *c*:

“(d) be used with a safety harness secured by a fall arrest connecting device to an anchorage system, the whole in accordance with sections 2.10.12 and 2.10.15. However, when the suspended scaffolding is hung from

4 hoisting cables, the anchorage system may be installed on the platform. Where a rope grab fastened to a vertical life line is used, it must be a Class ADP rope grab.”

13. Section 3.9.17 is amended by replacing subsection 4 by the following:

“(4) A worker in a boatswain’s chair must wear a safety harness secured by a fall arrest connecting device to an anchorage system, the whole in accordance with sections 2.10.12 and 2.10.15. Where a rope grab fastened to a vertical life line is used, it must be a Class ADP rope grab.”

14. The following is inserted after section 3.9.25:

“**3.9.26. Bracket scaffolding:** Every bracket scaffolding must:

(1) be designed in conformity with plans signed and sealed by an engineer; a copy of the plans must be available on request; and

(2) undergo every 5 years a non-destructive examination, other than a visual examination, of its welds by an organization certified by the Canadian Welding Bureau in compliance with the requirements of CSA Standard W178.1 Certification of Welding Inspection Organizations.”

15. Section 3.10.3 is amended by inserting “, with the exception of rollers,” after “subsection 1” in subsection 2.

16. Section 3.10.7 is amended

(1) by replacing paragraph *c* of subsection 2 by the following:

“(c) every worker wears a safety harness secured by a fall arrest connecting device to an anchorage system, the whole in accordance with sections 2.10.12 and 2.10.15;”

(2) by replacing “or a certificate from the Ministère du Travail” in paragraph *g* of subsection 3 by “or a Class A or B qualification certificate in pressure vessel welding issued by Emploi-Québec”.

17. Section 3.10.8 is amended by replacing subsection 3 by the following:

“(3) A worker in an aerial device must wear a safety harness secured by a fall arrest connecting device to an anchorage system, the whole in accordance with sections 2.10.12 and 2.10.15.”

18. Section 3.11.8 is replaced by the following:

“**3.11.8.** The installation of solid fuel heating equipment, including the mounting, clearances and air supply of such equipment, must comply with CAN/CSA Standard B365 Installation Code for Solid-Fuel-Burning Appliances and Equipment.”

19. Section 3.13.10 is amended by replacing paragraph *b* by the following:

“(b) in an area delimited by a warning line as provided for in section 2.9.4.0, a continuous barricade or trestles of a minimum height of 0.7 m installed at a distance varying between 0.9 m and 1.2 m from all cylinders.”

20. Section 3.15.5 is amended

(1) by replacing “and barricades” in the heading by “, barricades or warning line”;

(2) by replacing “Barriers or barricades at least 900 mm high must be set up around the edge of any excavation or trench:” in subsection 1 by “Continuous barriers or barricades of a minimum height of 0.7 m or a warning line as provided for in section 2.9.4.0, must be set up on the edge of any escarpment or digging:”.

21. Section 3.16.9 is amended by striking out “The structural element shall conform to the requirements of Part IV of the Building Code (R.R.Q., 1981, c. S-3, r. 2)” in subsection 1.

22. Section 8.3.7 of the Code is amended by replacing paragraph *b* by the following:

“(b) be equipped with emission control devices, in accordance with the standards prescribed in the Motor Vehicle Safety Regulations (C.R.C., c. 1038) under the Motor Vehicle Safety Act (S.C. 1993, c. 16), with the same efficiency of performance as initially; and”;

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