

Draft Regulations

Draft Regulation

Building Act
(R.S.Q., c. B-1.1)

Construction Code — Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1), that the Regulation to amend the Construction Code, appearing below, may be approved by the Government, with or without amendment, on the expiry of 60 days following this publication.

The draft Regulation is to enact the Building Act for amusement rides and devices. It defines the amusement rides and devices concerned and also limits the scope of application of the “amusement rides and devices” chapter of the Construction Code regarding certain types of facilities intended for use by the public in order to renew the current situation.

The draft Regulation also establishes for the whole territory of Québec the measures to be complied with by designers and builders in order to ensure the quality of building work performed on amusement rides and devices. The standards are now made under the Building Act (R.S.Q., c. B-1.1).

The standards constitute Chapter IX of the Construction Code. The Regulation replaces and renews the current technical requirements by the requirements of CSA Standard CAN/CSA-Z267-00, which are generally the same level of technical requirements as those required by the Amusement Rides Regulation, made under the Public Building Safety Act, in order to reduce the impact on owners of amusement rides and devices. The making of the national standard adds clarifications which constitute the industry’s good practices. Modifications have been made to ensure compatibility with the policies and enforcement mechanisms provided for in the Building Act as well as coherence with the level of obligation already established for other fields regulated by that Act that may have similarities with the field.

The draft Regulation also includes regulation measures for the verification and control of requirements, in particular by a procedure for the verification of compliance of construction work by means of certificates of conformity that must be produced by persons recognized by the Board and provided by contractors and owner-builders.

The draft Regulation has an economic impact on certain enterprises that will have to provide a certificate of conformity to the Board for all construction work performed on an amusement ride or device. The new scope of the requirement concerns the production of about 10 certificates over a five-year period for new fixed or portable rides or devices. It results in additional expenses for verification of \$10,000 per certificate for a total cost of about \$100,000.

Further information may be obtained by contacting Stéphane Mercier, Régie du bâtiment du Québec, 545, boulevard Crémazie Est, 7^e étage, Montréal (Québec) H2M 2V2; telephone: 514 864-7249; fax: 514 873-1939.

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 60-day period to Michel Beaudoin, Chairman and Chief Executive Officer, Régie du bâtiment du Québec, 545, boulevard Crémazie Est, 3^e étage, Montréal (Québec) H2M 2V2.

LISE THÉRIAULT,
Minister of Labour

Regulation to amend the Construction Code*

Building Act
(R.S.Q., c. B-1.1, ss. 128.4, 173, 176, 176.1, 178, 179, 185, pars. 0.1, 0.2, 1, 2.1, 3, 7, 37 and 38, and s. 192)

1. The Construction Code is amended by inserting the following after section 8.218:

“CHAPTER IX AMUSEMENT RIDES AND DEVICES

DIVISION I INTERPRETATION

9.01. In this Chapter, unless the context indicates otherwise, “Code” means CSA Standard CAN/CSA Z267-00, Code de sécurité concernant les jeux et les manèges, including Appendix C concerning tests, and

* The Construction Code, approved by Order in Council 953-2000 dated 26 July 2000 (2000, *G.O.* 2, 4437), was last amended by the regulation approved by Order in Council 1062-2010 dated 1 December 2010 (2010, *G.O.* 2, 5495). For previous amendments, refer to the *Tableau des modifications et Index sommaire*, Québec Official Publisher, 2011, updated to 1 April 2011.

CSA Standard CAN/CSA Z267-00, Safety Code for Amusement Rides and Devices, including Appendix C concerning tests, prepared and published by the Canadian Standards Association.

DIVISION II APPLICATION

9.02. Subject to the exemptions and amendments set out in this Chapter, the Code and provisions of this Chapter apply to the design, construction procedure and all construction work carried out on an amusement ride or device referred to in the Code and designed as facilities intended for use by the public in section 9.03, including their vicinity.

The following are exempted from the application of this Chapter:

(1) amusement rides and devices on a base that are designed to be used as coin-operated rides or devices;

(2) children's playspaces and equipment complying with CSA Standard CSA Z614, Children's Playspaces and Equipment, published by the Canadian Standards Association, in public areas, play spaces and other similar areas;

(3) air-supported amusement devices and structures;

(4) soft contained play systems complying with ASTM Standard ASTM F 1918, Standard Safety Performance Specification for Soft Contained Play Equipment, published by the American Society for Testing and Materials;

(5) recoil tethered rides (bungee);

(6) water slides;

(7) sliding playground and equipment that depend on snow or ice;

(8) dry slides;

(9) aerial courses, track rides and zip-lines;

(10) go-kart tracks, karts and race tracks;

(11) mechanical bulls;

(12) hot-air balloons;

(13) live animal rides; and

(14) haunted houses, labyrinths and rides in darkness with no mechanical devices to move users.

9.03. For the purposes of section 10 of the Act, the amusement rides and devices referred to in CSA Standard CAN/CSA Z267, Safety Code for Amusement Rides and Devices, are facilities intended for use by the public.

DIVISION III REFERENCES

9.04. A reference in the Code to a standard or another code referred to in Table 1 is a reference to the standard or code referred to in the chapter of the Construction Code referring thereto.

TABLE 1

DESIGNATION	TITLE	CHAPTER of Construction Code
NRCC 38726	National Building Code of Canada	I
CAN/CSA-B44	Safety Code for Elevators	IV
CAN/CSA C22.10	Canadian Electrical Code, Part I, Safety Standard for Electrical Installations	V
CAN/CSA-Z98	Passenger Ropeways	VII

In the Code, a reference to CSA Standard CAN/CSA B51, Boiler, Pressure Vessel, and Pressure Piping Code, is a reference to the edition referred to in the regulation made under the Act respecting pressure vessels (R.S.Q., c. A-20.01).

DIVISION IV GENERAL

9.05. The design, construction procedure and construction work carried out on an amusement ride or device must be carried out so that the amusement ride or device provides, in normal conditions of use and when used as intended, satisfactory levels of performance while minimizing danger to the public.

9.06. A contractor or owner-builder must, during construction work carried out on an amusement ride or device,

(1) use construction procedures suitable for the work;

(2) use the materials, appliances, equipment or devices designed for that purpose;

(3) take the necessary precautions to prevent risk of accidents; and

(4) comply with the manufacturer's requirements regarding installation and assembly.

DIVISION V DECLARATION OF WORK

9.07. A contractor or owner-builder must, at least 45 days before the date of the beginning of construction work, except maintenance or repair work, on an amusement ride or device referred to in section 9.02, declare the work to the Board with the following information and documents:

(1) the name, address, telephone number and licence number of the contractor or owner-builder who will carry out the work;

(2) the name, address and telephone number of the person for whom the work is carried out;

(3) the name, address and telephone number of the person who prepared the plans and specifications related to the construction work;

(4) the address of the site and nature of the work;

(5) the type, trademark and model of the amusement ride or device, the name of the manufacturer and the technical specifications of the amusement ride or device;

(6) the date on which, the place where and the list of the tests and inspections were conducted together with the name of the person recognized under section 9.13 who will sign the certificate of conformity required under section 9.12; and

(7) the expected date on which the amusement ride or device will be put into service for the public.

The declaration may be made on the form provided by the Board or on any other document clearly and legibly written for that purpose and updated if any changes are made to the information provided.

Despite the first paragraph of this section, a contractor or owner-builder who carries out demolition work on an amusement ride or device must declare the work to the Board with the information and documents required under subparagraphs 1 to 5.

9.08. Despite the first paragraph of section 9.07, a contractor or owner-builder who carries out alteration work recommended by the manufacturer on an amusement ride or device following an incident or an accident involving a similar amusement ride or device must, within 2 working days after the end of the alteration

work, declare the work to the Board with the information required under subparagraphs 1 to 5 of that paragraph, and the nature of the work carried out.

DIVISION VI PLANS AND SPECIFICATIONS

9.09. A contractor or owner-builder may not begin construction work, except maintenance, repair or demolition work, on an amusement ride or device, referred to in section 9.02, unless plans and specifications have been prepared for the work.

The plans must be drawn to scale and must, with the specifications, indicate the nature and scope of the work. The plans and specifications must include the manufacturer's information and instructions on the erection and assembly of the amusement ride or device.

The plans and specifications must be signed and sealed by an engineer within the meaning of the Professional Code (R.S.Q., c. C-26), authorized to do so.

9.10. Despite section 9.09, a contractor or owner-builder may begin alteration work required following the issue of a bulletin by the manufacturer on an amusement ride or device if the contractor or owner-builder has in his or her possession the manufacturer's instructions, drawings and testing procedures concerning the work.

9.11. A contractor or owner-builder must, at the end of the construction work provided for in section 9.09, give the final plans of the amusement ride or device to the owner.

DIVISION VII CERTIFICATE OF CONFORMITY

9.12. A contractor or owner-builder must, at the end of the construction work on an amusement ride or device, except maintenance, repair, demolition or alteration work recommended by the manufacturer, provide the Board with a certificate of conformity with this Chapter produced and signed by a person recognized under section 9.13, stating that

(1) the design, construction procedure and construction work on the amusement ride or device were carried out in accordance with the Code and this Chapter, and the amusement ride or device may be safely put into service for the public;

(2) the installations related to the amusement ride or device, in particular, fences, ramps, stairs, guardrails, operator and supervisor stations, signals and signs, comply with the Code and this Chapter;

(3) equipment, wiring and electrical connectors are certified as complying with Chapter V of the Construction Code;

(4) the manufacturer's instructions concerning the assembly have been followed;

(5) the tests and inspections provided for in the Code for the amusement ride or device, by the designer and manufacturer, have been performed and their results are satisfactory;

(6) the information on the maintenance, operation and periodic testing required from the designer and manufacturer by the Code have been provided to the owner; and

(7) the pressure vessels are identified by their registration number.

The certificate must contain a declaration from the manufacturer certifying that the amusement device or its prototype has been designed and manufactured so as to withstand loads and constraints under all loading and operating conditions.

The certificate must also specify the information on the information plate required under Clause 4.1.3. of the Code, the components inspected, the means used and the data used as the basis for drawing up the certificate, the address of the site where the amusement ride or device was installed, the nature of the work, the date of the tests and inspections and the name and title of the person who performed them, the date of signature, name, address and telephone number of the recognized person that produced the certificate and the date of the end of the construction work.

The recognized person must provide the Board with information from the designer and manufacturer on the maintenance, operation and periodic testing of the amusement ride or device to which the certificate applies.

The certificate of conformity may be made on the form provided for that purpose by the Board or on any other document containing the same information clearly and visibly written for that purpose.

9.13. An engineer who is a member of the Ordre des ingénieurs du Québec, or a holder of a temporary licence issued under the Engineers Act (R.S.Q., c. I-9), whose professional activities are related to the field of amusement rides and devices, is a person recognized for producing and signing the certificate of conformity required under section 9.12.

9.14. A person who applies for recognition must

(1) file an application with the Board that contains

(a) the person's name, home address, telephone number and membership number of the person's professional order or the person's temporary licence number; and

(b) the description of the experience acquired in activities related to the field of design, construction or inspection of amusement rides or devices; and

(2) pay the fees of \$500.

9.15. The recognition of a person may be revoked by the Board for the following reasons:

(1) the person no longer meets the conditions set out in section 9.13; or

(2) the person has been convicted of an offence under paragraph 2, 3, 4 or 7 of section 194 of the Building Act.

DIVISION VIII AMENDMENTS TO THE CODE

9.16. The CAN/CSA Z267-00 Code, published by the Canadian Standards Association, is amended

(1) by replacing "inspection", "inspector" and "inspecté" wherever it appears in the French text by "vérification", "vérifier" and "vérifié" with the necessary modifications;

(2) by revoking Clause 1.4;

(3) by revoking Clause 1.5;

(4) by adding the following at the end of Clause 5.3.2:

"The amusement ride or device must be equipped with a device to restrain passengers under all loading and operating conditions planned for the amusement ride or device, in compliance with ASTM Standard ASTM F2291-04, Standard Practice for Design of Amusement Rides and Devices, published by the American Society for Testing and Materials. The restraining device must be of a type that cannot be inadvertently released when the amusement ride or device is in operation and be inaccessible to passengers.";

(5) by adding the following at the end of Clause 5.3.3:

"The following clearances are considered to comply with the requirements of Clause 5.3.3:

(1) 600 mm between a structural element and any point of the vehicle in contact with the passenger;

(2) 1,200 mm of vertical clearance between the seat and any fixed structural member located above such seat; and

(3) 2,000 mm of vertical clearance between the floor in front of the seat and any fixed structural member located above such floor, where the passenger is not restrained in the vehicle seat.

This section does not apply to a vehicle which is enclosed or has an openwork wire mesh preventing a 38-mm diameter spherical object from going through or 50-mm in the case of an amusement device to be used solely by adults.”

(6) by replacing Clause 5.4.3 by the following:

“**5.4.3** Welding and welding procedures must comply with CSA Standard CSA W59, Welded Steel Construction, or CSA Standard CSA W59.2, Welded Aluminum Construction, published by the Canadian Standards Association.

Welding must be performed by a qualified welder from a company that is certified according to CSA Standard CSA W47.1, Certification of Companies for Fusion Welding of Steel, or CSA Standard CSA W47.2, Certification of Companies for Fusion Welding of Aluminum, published by the Canadian Standards Association.”;

(7) by adding the following paragraph at the end of Clause 5.4.5:

“A rope tensioning device must be designed so that it will not release itself during the operation of an amusement ride or device and be equipped with a positive action manual reset slack rope device.”;

(8) by revoking Clause 5.4.6;

(9) by adding the following paragraph at the end of Clause 5.5.4:

“Lighting of a minimum of 100 lx at floor level must be installed at the loading and unloading areas and entrances and egresses.”;

(10) by adding the following at the end of Clause 5.5.5:

“No part of an amusement ride or device is to come nearer to an electrical conductor of more than 750 V than the distance specified in the following table:

Voltage (in volts)	Distance (in metres)
Less than 125,000	5
125,000 or more	30

.”;

(11) by adding the following after Clause 5.7.2:

“**5.7.3** A signal system must be provided during the starting or stopping of an amusement ride or device where the loading or unloading areas cannot be seen from the operating controls.

5.7.4 An amusement ride or device must be equipped with an emergency stop device that causes the stoppage of the amusement ride or device and the application of the brakes that complies with CSA Standard CAN/CSA Z431-M89, Colours of Indicator Lights and Push Buttons, published by the Canadian Standards Association and marked “Arrêt de secours”. The device must be of the push-pull type and be provided with contacts which open by positive mechanical separation.”;

(12) by adding the following after Clause 5.8.3:

“**5.8.4** An amusement ride or device must be equipped with devices to prevent the vehicles from making translatory or rotary movements when they are at a standstill in the loading or unloading area or be equipped, to that effect, with a parking brake, except in the case of a vehicle composed of a suspended seat.

5.8.5 A vehicle designed to be towed and each drive mechanism of such a vehicle must be equipped with backstop devices preventing any vehicle in the towing zone from moving back more than 150 mm.

5.8.6 An amusement ride or device must be installed so that it does not exceed the operating limits specified by the designer or manufacturer or be equipped, to that effect, with a speed limiting device.”;

(13) by adding the following after Clause 5.10:

“**5.11** Where a suspension or coupling device for a vehicle or any other moving part of an amusement ride or device is used as a single retainer, a safety retainer must be installed on the vehicle or the moving part to ensure the safety of passengers, unless the single coupling device has a safety factor of at least 10.

5.12 Glazing used in a vehicle must be certified as complying with CGSB Standard CAN/CGSB B-12.1-M90, Tempered or Laminated Safety Glass, or CGSB Standard CAN/CGSB B-12.12-M90, Plastic Safety Glazing Sheets, published by the Canadian General Standards Board (CGSB).

5.13 Every amusement ride or device equipped with a sloping channel and a receptacle basin, which uses water to generate or reduce the speed of a vehicle must be provided with devices allowing for the control of the water level of the basin and the water flow of the flume's feed pump.

In addition, the devices must automatically stop the operation of the amusement ride or device if the water level or flow does not comply with that required for the operation of the amusement ride or device.

5.14 Every amusement ride or device of the "roller coaster ride" type must comply with the following requirements:

- (1) be installed so as to allow for the presence of only one vehicle or only one train of vehicles, at the same time, in the space between each braking system along its path;
- (2) the nuts used to lock the wheels of a vehicle must be of the castle type and be locked with split pins;
- (3) every coupling device for vehicles must be locked, and any bolts, nuts or locks which are used must be equipped with a wire to prevent loosening or disengaging; and
- (4) operating controls must be located so as to allow the operator to monitor the entire loading and unloading area.

5.15 Where users are moved in darkness inside an enclosure or in the case of an amusement ride or device completely enclosed, the enclosure must be equipped with

- (1) a smoke alarm bearing a seal of approval from Underwriters' Laboratories of Canada (ULC) and installed in compliance with the manufacturer's instructions. The proper working order of the smoke alarm must be checked at every assembly of a portable amusement ride or device and every month in other cases;
- (2) signs, visible from the vehicle, indicating egresses;
- (3) an emergency lighting system of not less than 10 lx at floor level and egress signs, activated automatically when the main source of electrical supply is interrupted.

In addition, each egress must bear the inscription "SORTIE" in lettering at least 25 mm high and, if locked, it must be possible to open it from the inside without a key."

DIVISION IX OFFENCE

9.17. Every contravention of any of the provisions of this Chapter, except section 9.14, constitutes an offence."

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

1553

Draft Regulation

Building Act
(R.S.Q., c. B-1.1)

Safety Code — Amendment

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The draft Regulation also establishes for the whole territory of Québec basic standards applicable to amusement rides and devices as well as administrative measures for regulating and controlling the responsibilities of owners of amusement rides and devices, in particular a procedure for issuing permits to ensure the safety of the public using the rides and devices. The standards are now made by the Régie du bâtiment du Québec under the Building Act (R.S.Q., c. B-1.1).

The standards constitute Chapter VII of the Safety Code. The Regulation replaces and renews the current requirements by the requirements of CSA Standard CAN/CSA-Z267-00, which are generally the same level of requirements as those required by the Amusement Rides Regulation, made under the Public Building Safety Act, in order to reduce the impact on owners of amusement rides and devices. The making of the national standard