# **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 90 days following this publication.

The draft Regulation designates specifically the bathing places to which section 10 of the Building Act (R.S.Q., c. B-1.1) applies and limits the scope of application of the "bathing places" chapter of the Construction Code.

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 the work in building bathing places. The standards are made under the Building Act (R.S.Q., c. B-1.1).

The standards constitute Chapter X of the Construction Code. They take up in part the provisions of the Regulation respecting safety in public baths (S-3, r. 3), administered by the Board, and those of the Regulation respecting public wading and swimming pools (Q-2, r. 17) now repealed.

The Board has updated the standards and has taken into consideration the recommendations of coroner Ramsay regarding compliance of diving facilities to make them safer and to introduce provisions regarding the design of systems that will prevent a bather from being trapped by the excessive suction of a drain or recirculation outlet with which the bather comes into contact.

Certain provisions could result in additional costs to bodies or enterprises during the construction of new facilities and, depending on the size of the basin, the harmonization of diving installation criteria could restrict certain diving installations. Further information may be obtained by contacting Guy Trudel, Régie du bâtiment du Québec, 545, boulevard Crémazie Est, 7<sup>e</sup> étage, Montréal (Québec) H2M 2V2; telephone: 514 864-4028; fax: 514 873-1939.

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 90-day period to Michel Beaudoin, Chairman and Chief Executive Officer, Régie du bâtiment du Québec, 545, boulevard Crémazie Est, 3<sup>e</sup> étage, Montréal (Québec) H2M 2V2.

LISE THÉRIAULT, Minister of Labour

# **Regulation to amend the Construction Code**<sup>\*</sup>

Building Act (R.S.Q., c. B-1.1, ss. 10, 12, 13, 14, 15, 173, 176, 176.1, 178, 179, 185, pars. 0.1, 0.2, 1, 2.1, 6.2, 6.3, 37 and 38, and s. 192)

**I.** The Construction Code is amended by inserting the following after section 9.17:

## **"CHAPTER X**

BATHING PLACES

#### DIVISION I INTERPRETATION

**10.01.** In this Chapter, unless the context indicates otherwise,

(a) "accessory" means a water slide, a dry slide or any structure in or projecting into a bathing place; (accessoire)

(b) "wading pool" means an indoor or outdoor artificial pool with a water depth not exceeding 600 millimetres; (pataugeoire)

<sup>\*</sup> The Construction Code, approved by Order in Council 953-2000 dated 26 July 2000 (2000, *G.O.* 2, 4203) was last amended by the regulation approved by Order in Council 1062-2010 dated 1 December 2010 (2010, *G.O.* 2, 3864). For previous amendments, refer to the *Tableau des modifications et Index sommaire*, Québec Official Publisher, 2011, updated to 1 April 2011.

(c) "swimming pool" means an indoor or outdoor artificial pool having a water depth exceeding 600 millimetres; (*piscine*)

(*d*) "diving platform" means a rigid and non-flexible, stationary diving platform; (*plate-forme*)

(e) "deck" means the surface immediately surrounding a swimming pool, to which bathers have direct access when leaving the water. (promenade)

### **DIVISION II**

APPLICATION

**10.02.** The provisions of this Chapter apply to all construction work on a swimming pool or wading pool constructed in a building to which Chapter I of the Construction Code applies, or constituting a facility intended for use by the public designated by section 10.03 of this Regulation.

**10.03.** For the purposes of section 10 of the Act, the following are facilities intended for use by the public:

swimming pools and wading pools constructed and operated as bathing places, offered to the general public or a restricted group of persons;

outdoor swimming pools of an immovable used as a dwelling unit that has more than 8 dwelling units, a rooming house that has more than 9 rooms or a supervised residence used to shelter or accommodate more than 9 persons

(a) the area of which exceeds  $100 \text{ m}^2$ ; or

(b) that have a diving board.

#### DIVISION III SWIMMING POOLS

#### §1. Construction

**10.04.** The basin, deck, pipe-work and accessories of a swimming pool must be constructed with materials that are inert, non-toxic for humans, impermeable, durable and non-corrosive, with smooth surfaces that may easily be cleaned, unless otherwise indicated in this Chapter.

**10.05.** The basin of the swimming pool, taking its useful life into account, must

(*a*) be constructed in such a way as to have sufficient structural resistance and integrity to safely withstand all the loads, effects and other forces that may be reasonably expected; (b) be designed to avoid resonance; and

(c) be essentially waterproof, durable and smooth, without cracks, corners or sharp edges.

**10.06.** The walls of a pool must be vertical down to 150 millimetres from the bottom for the section that is between 750 millimetres and 1,400 millimetres deep, and vertical down to 75 millimetres from the bottom for the section that is less than 750 millimetres deep, except for the section occupied by stairs or a ladder.

**10.07.** The walls of a pool must be equipped with recessed fittings in the shallow end, at a minimum distance of 300 millimetres before the change in slope of the pool bottom from gentle to steep, to which a safety line supported by buoys can be attached to warn bathers of the change in slope.

10.08. The maximum slope of the pool bottom must be

(*a*) 300 millimetres vertically in 3.6 metres horizontally for a water depth less than 1,400 millimetres; and

(*b*) 300 millimetres vertically in 900 millimetres horizontally for a water depth between 1,400 millimetres and 2,000 millimetres.

10.09. A ladder or stairs must be installed

(*a*) in the shallow end of the pool if the difference in elevation between the bottom of the pool and the deck is greater than 600 millimetres; and

(b) on both sides of the deep end of the pool.

10.10. Swimming pool stairs have steps

(a) with a uniform rise between 125 and 200 millimetres;

(b) with a uniform tread of at least 250 millimetres;

(c) with nosing in a contrasting colour; and

(*d*) with a non-slip surface.

The stairs may not project into the pool.

10.11. A swimming pool ladder must have rungs

(a) with a minimum length of 300 millimetres between the rails; and

(b) with a non-slip surface.

**10.12.** Swimming pools must be surrounded by a deck adjacent to the top of the walls. The deck must

(a) have a non-slip surface;

(b) have a minimum clear width of 1.5 metres;

(c) provide a clear passage of at least 900 millimetres behind a springboard, diving platform or accessory and its supporting structure;

(*d*) provide a clear passage of at least 900 millimetres in front of or behind a structural column; and

(e) be equipped with a guardrail having a height of 1,070 millimetres if a drop greater than 600 millimetres exists between the level of the deck and the level of the adjacent surface.

Despite the first paragraph, in the section of the pool where the water is 1,400 millimetres or less in depth, there may be a deck along one side of the pool only, provided that no point in the pool is further than 3.6 metres from the edge of the deck.

**10.13.** The submerged surfaces of the pool must be white or a pastel colour, except for the markings indicating swimming corridors.

Basins used exclusively for underwater diving may be another colour.

**10.14.** The markings for swimming corridors must be a contrasting colour, no more than 250 millimetres wide and placed in a single direction.

**10.15.** The water depth must be clearly marked on the deck in letters at least 100 millimetres high, in a contrasting colour, on each side of the basin and opposite

(a) the deepest point;

(b) the change in slope between the gentle and steep bottom slopes; and

(c) the shallow end.

**10.16.** A black circle 150 millimetres in diameter must be placed at the deepest point of the swimming pool.

**10.17.** A "no diving" sign must be placed on the deck, using a pictogram or letters at least 100 millimetres high, in the section where the water depth is 1,400 millimetres or less.

**10.18.** A swimming pool may be constructed with a slope towards the centre from the deck and such pool is not subject to sections 10.06 to 10.13, 10.15, 10.16, 10.26, 10.27, 10.29 and 10.35 to 10.37, provided that

(*a*) the bottom is covered with a rigid white or pastel finish;

(b) the maximum slope of the bottom is 300 millimetres vertically in 3.6 metres horizontally;

(c) the water depth does not exceed 1.8 metres;

(d) the entire pool is surrounded by a deck that is at least 3 metres wide;

(e) the bottom of the pool is marked, along its length, with a broken black line 250 millimetres wide; and

(f) there is no diving platform or springboard.

#### §2. Water treatment

**10.19.** The water supply and recirculation system for a swimming pool must be separated from the drinking water system by a shut-off valve and backflow preventer, in accordance with the provisions of Chapter III "Plumbing" of this Code.

**10.20.** The devices in the filtration system, overflows and floor drains in the deck must be connected indirectly to the drainage system in accordance with the provisions of Chapter III "Plumbing" of this Code.

**10.21.** Pipes, fittings, joints and filtration equipment in the water recirculation system of a swimming pool must be designed to resist at least  $1\frac{1}{2}$  times the maximum rated operating pressure.

**10.22.** The water recirculation system of a swimming pool must be designed to avoid trapping any swimmer who comes into contact with a drain or suction outlet. The system must be equipped, for each pump, with

(a) at least two drain or suction outlets at least one metre apart;

(b) a device to limit the water flow through the openings in each outlet to the maximum prescribed by the drain cover manufacturer;

(c) an emergency shut-off easily accessible to swimmers at a clearly indicated location; and

(d) drain or suction outlets covered by drain covers that comply with the standard "Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Whirlpool Bathtub Appliances", ASME 112.19.8 M, and designed so that bathers cannot remove them without tools.

#### §3. Lighting and access

**10.23.** An outdoor pool used after sunset or an indoor pool must have

(*a*) a lighting system which illuminates the underwater areas of the pool and also illuminates all parts of the deck and water surface with an illumination level of at least

i. 30 decalux, for an indoor swimming pool; and

ii. 10 decalux, for an outdoor swimming pool; and

(b) an emergency lighting system supplied by a generator or a recharging battery with an automatic relay to illuminate the bottom of the pool, the deck and the changing room for an average illumination of at least one decalux at floor level, the steps and water surface in case of a failure of the electric lighting power supply. Any self-contained emergency lighting units must comply with CSA Standard CSA C22.2 No. 141-M, "Unit Equipment for Emergency Lighting".

**10.24.** A swimming pool must be designed in such a way as not to be accessible to the public outside opening hours. The enclosure used for that purpose must have a minimum height of 1.20 metres and have no fixture, projection or opening enabling it to be climbed. It may, however, have openings provided that a spherical object of 100 millimetres in diameter cannot pass through them or, in the case of a chain link fence, that each link measures no more than 38 millimetres.

**10.25.** When the deck of the swimming pool is adjacent to an area used for purposes other than bathing, an enclosure with a minimum height of 900 millimetres must separate the deck from that area. The enclosure used for that purpose must have no fixture, projection or opening enabling it to be climbed. It may, however, have openings provided that a spherical object of 100 millimetres in diameter cannot pass through them or, in the case of a chain link fence, that each link measures no more than 38 millimetres. The enclosure must be equipped at each entrance with a lockable barrier.

#### §4. Springboards, platforms and accessories

**10.26.** The installation of a springboard or diving platform must comply with the minimum dimensions indicated in the table in Schedule 1. The reference point when measuring is the plummet or vertical line passing through the centre of the end of the springboard or diving platform.

The dimensions indicated in rows B and C of the table in Schedule 1 apply to diving platforms having the width indicated in the table. For diving platforms of greater width, the dimensions must be increased by onehalf of the extra width.

10.27. A springboard, diving platform or accessory

(a) must be accessible only by stairs or a ladder; and

(b) must have a walking surface designed with a nonslip finish, and the end of the springboard must be in a contrasting colour.

**10.28.** A springboard, diving platform or accessory of 3 metres or more in height may only be accessible by stairs equipped with a lockable barrier to control access at the entrance level.

**10.29.** The part of a springboard, diving platform or accessory that is not over water and that is one metre high or more must be equipped with a guardrail on both sides.

**10.30.** The ladder of a springboard, diving platform or accessory must

(a) have rungs of a minimum length of 300 millimetres between the rails; and

(b) have rungs with a non-slip surface.

The part of the ladder above a height of one metre must be equipped with handrails.

**10.31.** The stairs of a springboard, diving platform or accessory must have steps

(a) with a rise between 125 and 200 millimetres;

(b) with a tread between 210 and 355 millimetres;

(c) with a depth between 235 and 355 millimetres;

(d) with nosing in a contrasting colour; and

(e) with a non-slip surface.

Each flight of stairs must have a vertical height of not more than 3.7 metres and be equipped, between each flight, with a landing of a length and width at least equal to the width of the stairs.

The stairs of a springboard, diving platform or accessory of one metre or more in height must be equipped with a guardrail.

**10.32.** The guardrails referred to in sections 10.29 and 10.31 must be equipped with handrails that prevent bathers from passing through but allow them to be seen by the safety supervisors. They must not have any opening allowing a spherical object of over 100 millimetres in diameter to pass through.

10.33. The handrails required under section 10.32 must

(a) offer a non-slip and secure handhold for users of all ages;

(b) be not more than 40 millimetres in diameter;

(c) be continuous with the handrail around all horizontal areas; and

(*d*) be placed at a minimum height of 1,070 millimetres around horizontal areas and between 865 and 965 millimetres on stairs.

**10.34.** A springboard must be equipped with a mechanism allowing the adjustable fulcrum to be locked at its lowest level.

**10.35.** A swimming pool equipped with a diving platform exceeding 3 metres in height must be designed exclusively for diving or, to delimit the diving area, be equipped with a rigid barrier or recessed fittings to which a double safety line supported by buoys can be attached, the two lines being at least 300 millimetres apart. The minimum distance between the pool wall under the diving platform and the double safety line or rigid barrier must be as indicated in the following table:

Height of the diving platform	Distance from the pool wall				
m	m				
5	11.5				
7.5	12.5				
10	15				

**10.36.** The surface of a submersible platform must be free of cracks and corners, have a non-slip finish and be of a contrasting colour.

**10.37.** A device to agitate the surface water must be installed in order to allow divers to distinguish the water surface under diving installations of 3 metres or more.

# DIVISION IV

## WADING POOLS

**10.38.** The submerged area of a wading pool must be white or of a pastel colour. The bottom of the wading pool must have a non-slip surface.

**10.39.** Sections 10.04, 10.05, and 10.19 to 10.25 apply to wading pools, adapted as required.

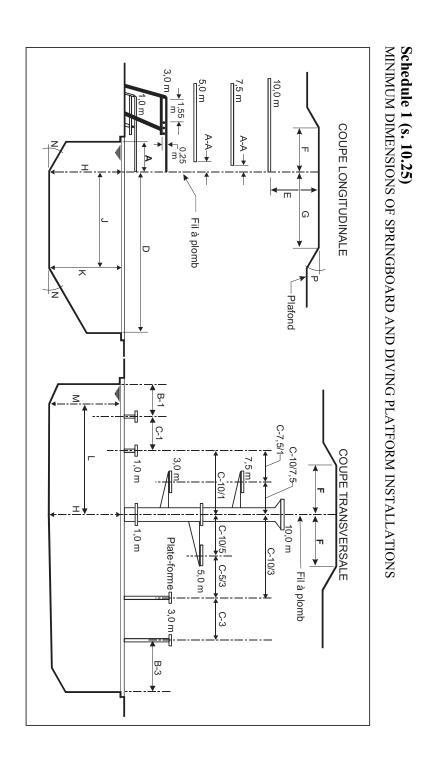
Despite the first paragraph, section 10.24 does not apply to a wading pool that is emptied before the supervisor leaves.

## DIVISION V

OFFENCES

**10.40.** Every contravention of any of the provisions of this Chapter constitutes an offence.".

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



	Springboard			Diving platform					
	≤ 0.5 m	$0.5 \mathrm{m} < \mathrm{h}$	3 m	1 m	3 m	5 m	7.5 m	10 m	
	_ 010 111	<1 m		0.6 m in	0.6 m in	1.5 m in	1.5 m in	2.5 m in	
		_		width	width	width	width	width	
A. From plummet to	1.50	1.50	1.50	1.25	1.25	1.50	1.50	1.50	
pool wall behind									
AA. From plummet						0.75	0.75	0.75	
back to plummet for									
platform below									
B. From plummet to	2.50	2.50	3.50	2.30	2.90	4.25	4.50	5.25	
side pool wall									
C. From plummet to	2.40	2.40	2.60	1.95	2.10	5/3	7.5/5	10/7.5/5	
adjacent plummet						2.50 m	2.50 m	2.75 m	
						5/1	7.5/3/1	10/3 or 1	
						2.50 m	2.50 m	2.75 m	
D. From plummet to	9.00	9.00	10.25	8.00	9.50	10.25	11.00	13.50	
pool wall ahead									
E. From plummet to	5.00	5.00	5.00	3.50	3.50	3.50	3.50	5.50	
ceiling above									
F. Clearance above,	2.50	2.50	2.50	2.75	2.75	2.75	2.75	2.75	
behind and to each									
side of plummet									
G. Clearance above	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	
and ahead of									
plummet									
H. Depth of water at	3.05	3.50	3.80	3.40	3.60	3.80	4.50	5.00	
plummet									
J/K. Distance and	at a	at a	at a	5.0 dist.	6.00	6.00	8.00	12.00	
depth ahead of	distance of	distance of	distance of	3.30 depth	3.50	3.70	4.40	4.75	
plummet	4.60	6.00	6.00						
	minimum	minimum	minimum						
	depth of	depth of	depth of						
LACD: 1	2.90	3.40	3.70	2.05	2.65	4.95	4.50	5.05	
L/M. Distance and	at a	at a	at a	2.05 3.30	2.65	4.25	4.50 4.40	5.25 4.75	
depth to each side of plummet	distance of 2 50	distance of 2 50	distance of 3 25	5.50	3.50	3.70	4.40	4.75	
pluillillet	2.50 minimum	2.50 minimum	minimum						
	depth of	depth of	depth of						
	3.40	3.40	3.70						
N. Maximum angle	30 degrees	30 degrees	30 degrees		30 degrees				
of slope to reduce	50 degrees	50 degrees	50 degrees		50 degrees				
pool depth beyond									
area of required									
depth									
P. Maximum angle	30 degrees	30 degrees	30 degrees		30 degrees				
of slope to reduce					2.5 408.005				
ceiling height									
beyond area of									
required clearance									

1612