

THAT the Regulation to amend the Regulation respecting the issuance of competency certificates, attached to this Order in Council, be approved.

GILLES PAQUIN,
Clerk of the Conseil exécutif

Regulation to amend the Regulation respecting the issuance of competency certificates

An Act respecting labour relations, vocational training and workforce management in the construction industry (R.S.Q., c. R-20, s. 123.1, 1st par., subpars. 6 and 7, and 2nd par.)

1. The Regulation respecting the issuance of competency certificates (c. R-20, r. 5) is amended in section 1.2

(1) by adding “or an equivalent course according to the Commission de la santé et de la sécurité du travail” at the end of the first paragraph;

(2) by replacing “, specialty or, as the case may be, skills for which the qualification certificate or attestation of experience” in the second paragraph by “or specialty for which the qualification certificate”.

2. Section 1.3 is amended by replacing “, by an agency empowered to do so under the Statutes of Québec or issued in accordance with the provisions of the Interprovincial Standards Red Seal Program” by “or by an agency empowered to do so under the Statutes of Québec”.

3. The following is inserted after section 4.3:

“**4.4.** The Commission issues, upon application, an occupation competency certificate to a person who meets the following requirements:

(1) the person holds a Red Seal qualification certificate, issued in accordance with the provisions of the Interprovincial Standards Red Seal Program, or holds a qualification certificate issued by a regulatory authority recognized under an intergovernmental agreement in a trade considered to be an occupation in Québec;

(2) the person has successfully completed the safety course required by the Safety Code for the Construction Industry or an equivalent course according to the Commission de la santé et de la sécurité du travail.”.

4. 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. 858-2012, 1 August 2012

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

Construction Code — Amendment

Regulation to amend the Construction Code

WHEREAS, under section 173 of the Building Act (R.S.Q., c. B-1.1), the Régie du bâtiment du Québec by regulation adopts a building code containing building standards for buildings, facilities intended for use by the public, installations independent of a building and petroleum equipment installations or their vicinity;

WHEREAS, under section 189 of the Act, every code or regulation of the Board is subject to approval by the Government which may approve it with or without amendment;

WHEREAS the Board adopted the Regulation to amend the Regulation respecting the Construction Code to promote energy efficiency;

WHEREAS, in accordance with sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1), a draft of the Regulation to amend the Regulation respecting the Construction Code to promote energy efficiency was published in Part 2 of the *Gazette officielle du Québec* of 22 February 2012 with a notice that it could be approved by the Government with or without amendment on the expiry of 45 days following that publication;

WHEREAS the comments received have been examined;

WHEREAS it is expedient to approve the Regulation with amendments;

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

THAT the Regulation to amend the Construction Code attached hereto, be approved.

GILLES PAQUIN,
Clerk of the Conseil exécutif

Regulation to amend the Construction Code

Building Act

(R.S.Q., c. B-1.1, ss. 10, 173, 176, 176.1, 178, 185, 1st par., subpars. 0.1, 0.2 and 0.3)

1. Division II of Chapter I Building of the Construction Code (c. B-1.1, r. 2) is replaced by the following:

"DIVISION II APPLICATION

- 1.02. Subject to the exemptions in section 1.022, this Chapter applies to all construction work that is performed on a building to which the Building Act (R.S.Q., c. B-1.1) applies and to any facility intended for use by the public designated in section 1.021 and to the vicinity of that building or facility.

For the purposes of this Division, the definitions set out in the Code apply, unless otherwise provided.

- 1.021. The following facilities are intended for use by the public for the purposes of section 10 of the Act:

- (1) stands, grandstands or exterior terraces whose highest point, above the ground, is more than 1.2 m and whose load capacity is more than 60 persons,
- (2) tents or *air-supported structures* to which Chapter I of the Code applies and used
 - (a) as *dwelling*s or *care* or *detention occupancies* whose *floor area* is 100 m² or more, or
 - (b) as *assembly occupancies* or *mercantile occupancies* whose *floor area* is more than 150 m² and whose load capacity is more than 60 persons, and
- (3) belvederes built with materials other than backfill and constituted of horizontal platforms linked by their construction elements whose total area is more than 100 m² or whose load capacity is more than 60 persons including access facilities.

1.022. The following *buildings*, if used solely for one of the *major occupancy* provided for in the Code, are exempted from the application of this Chapter:

- (1) an *assembly occupancy* not covered by paragraph 6 that accommodates not more than 9 persons,
- (2) a *care or detention occupancy* which constitutes
 - (a) a prison,
 - (b) a supervised education centre with or without detention facilities used to shelter or accommodate not more than 9 persons, or
 - (c) a convalescence home, a *care occupancy* or assistance occupancy or a rehabilitation centre used to shelter or accommodate not more than 9 persons;
- (3) a *residential occupancy* which constitutes
 - (a) a rooming house or an outfitter offering no lodgings that has not more than 9 rooms,
 - (b) a single-family dwelling in which a bed and breakfast is operated by a natural person, which is also used as the person's residence, having not more than 5 bedrooms offered for rent,
 - (c) a single-family dwelling in which a school that accommodates less than 15 students at a time is operated by a natural person, which is also used as the person's residence,
 - (d) a monastery, a convent or a novitiate whose owner is a religious corporation incorporated under a special Act of Québec or the Religious Corporations Act (R.S.Q., c. C-71), where that building or part of the *building* divided by a *firewall* is occupied by not more than 30 persons and has not more than 3 *storeys* in *building height*,
 - (e) a shelter used to shelter or accommodate not more than 9 persons, or
 - (f) a building used as a *dwelling unit* having

- i. not more than 2 storeys in *building height*, or
 - ii. not more than 8 *dwelling units*;
- (4) a *business and personal services occupancy* having not more than 2 storeys in *building height*,
 - (5) a *mercantile occupancy* having a total floor area of not more than 300 m²,
 - (6) a day care centre used to shelter or accommodate not more than 9 persons,
 - (7) a subway station,
 - (8) an agricultural facility, and
 - (9) an *industrial occupancy*.

Despite the exemption provided for in the first paragraph, the energy efficiency requirements contained in Part 11 of the Code apply to the construction work performed on every *building*

- (1) having a *building area* of not more than 600 m²,
- (2) having a *building height* of not more than 3 storeys, and
- (3) of Group C *major occupancy* and housing only *dwelling units*".

2. Section 1.04 is amended by replacing Sentence (1) by the following:

"(1) by adding the following in the Table of Contents of Volume 1 after Part 9, Division B:

Part 10 Existing Buildings under Alteration, Maintenance or Repair

Part 11 Energy Efficiency".

3. Section 1.05. is amended

(1) by replacing Article 1.3.3.1 in Sentence (4) by the following:

"1.3.3.1. Application of Parts 1, 7, 8, 10 and 11

- (1) Parts 1, 7 and 8 of Division B apply to all *buildings* covered by the NBC. (See Article 1.1.1.1.)
 - (2) Part 10 of Division B applies to every *building* under *alteration*, maintenance or repair that has been built for not less than 5 years, in accordance with section 1.02.
 - (3) Part 11 of Division B on energy efficiency applies to the construction and addition work of all *buildings* covered by the NBC (see Article 1.1.1.1. and Appendix A)
 - (a) having a *building area* not more than 600 m²,
 - (b) having a *building height* of not more than 3 *storeys*, and
 - (c) having a Group C *major occupancy* and housing only *dwelling units*.";
- (2) by adding the following after Sentence (4):
- "(4.1) by replacing "9" in Sentence (3) of Article 1.4.1.1. by "11";
- (3) in Sentence (5)
- (a) by inserting the following after Clause (b):
- "(b.1) by inserting the following in alphabetical order:
- Overall thermal transmittance (U-value)* means the rate at which heat is transferred through a *building* assembly that is subject to a temperature difference. It represents the amount of heat transferred through a unit area in a unit of time induced under steady-state conditions by a unit temperature difference between the environments on its two faces. The U-value reflects the capacity of all elements to transfer heat through the thickness of the assembly, as well as, for instance, through air films on both faces for above-ground components.";

- (b) by inserting the following after Clause (d):

"(d.1) by inserting the following in alphabetical order:

Thermal bridge means a heat conductive member that results in a reduction of the *total thermal resistance* of a separation or as part of the *building envelope*.";

- (c) by inserting the following after Clause (f):

"(f.1) by inserting the following in alphabetical order:

Effective thermal resistance (RSIE value) means the *thermal resistance* of a separation calculated as equal to the weighted average of the *total thermal resistance RSIT* values of each of the separation surfaces having a separate *total thermal resistance RSIT* value, so as to allow for the effect of *thermal bridges*.

Thermal resistance (RSI value) means the inverse of the *overall thermal transmittance* (see Appendix A).

Total thermal resistance (RSIT value) means the *thermal resistance* of a separation equal to the sum of the *thermal resistance* of all the layers of material or little or unventilated air composing the separation, calculated through the insulated portion of the separation (see Appendix A).";

- (4) by adding the following after Sentence (5):

"(6) in Article 2.1.1.2., by replacing "in this Code" in Clause (a) of Sentence (1) by "in this Code except those that are intended to meet the requirements of Part 11 for the purposes of that Part only";

(7) in Article 3.1.1.2., by replacing "in this Code" in Clause (a) of Sentence (1) by "in this Code except those that are intended to meet the requirements of Part 11 for the purposes of that Part only".

4. Section 1.06. is amended

- (1) by inserting the following before Sentence (1):

"(0.1) by replacing "9" in Sentence (3) of Article 1.2.1.1. by "11";

(2) in Sentence (1)

(a) by inserting the following after Clause (a):

"(a.1) by inserting the following reference:

ANSI/AHRI	1060-2011	Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment	6.2.2.8.(7)
			”;

(b) by inserting the following after Clause (b):

"(b.1) by replacing the reference:

CAN/CSA	A-440-00	Windows	5.10.1.1.(3) Table 5.10.1.1. 9.7.2.1.(1) 9.7.2.1.(2) 9.7.6.1.(1)
			”;

by the following reference:

CAN/CSA	A-440-00	Windows	5.10.1.1.(3) Table 5.10.1.1. 9.7.2.1.(1) 9.7.6.1.(1) 11.2.2.4.(2)
			”;

(b.2) by inserting the following reference:

CAN/CSA	A-440.2-09/A440.3-09	Fenestration energy performance/User guide to CSA A440.2-09, Fenestration energy performance	11.2.2.4.(1)
			”;

(c) by inserting the following after Clause (d):

"(d.1) by replacing the reference:

"	CAN/CSA	C439-00	Standard laboratory methods of test for rating the performance of heat/energy-recovery ventilators	9.32.3.10.(4) 9.32.3.10.(5)	"
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by the following reference:

"	CAN/CSA	C439-09	Standard laboratory methods of test for rating the performance of heat/energy-recovery ventilators	6.2.2.8.(7) 9.32.3.3.(2) 9.32.3.10.(4) 9.32.3.10.(5)	"
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- (3) by replacing Sentence (7) of paragraph 82 of Article 6.2.2.8 by the following:

"(7) The main ventilation system of *dwelling units* must include

- (a) an exhaust air outlet located inside the *dwelling unit*,
- (b) air outlets that allow the supply of outdoor air to the *dwelling unit*, and
- (c) for *buildings* having a *building area* not more than 600 m², a *building height* not more than 3 storeys, and whose *major occupancy* is Group C, housing *dwelling units* only, a ventilator that is a heat recovery ventilator (HRV)
 - i. having sensible heat recovery efficiency certified by the Air Conditioning, Heating and Refrigeration Institute (AHRI) according to ANSI Standard ANSI/AHRI-1060, Rating Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment, or by the Home Ventilating Institute (HVI) according to CSA Standard CAN/CSA-C439, Standard laboratory methods of test for rating the performance of heat/energy-recovery ventilators,

- ii. having sensible heat recovery efficiency (SRE) of at least 54% for a *building* located in a municipality whose number of degree-days below 18°C is less than 6,000 and of 60% for a *building* located in another municipality,
 - iii. having sensible heat recovery efficiency determined at a dry temperature of 1.7°C for *appliances* certified by the AHRI, or -25°C for *appliances* certified by the HVI (see Appendix A), and
 - iv. whose operating and de-icing cycles do not generate air circulation between the *dwelling units*.";
- (4) by inserting the following after paragraph 92:
- "(92.1) by revoking Sentence (2) in Article 9.7.2.1.";
- (5) by replacing paragraph 116 by the following:
- "(116) in Article 9.32.3.3.,
- (a) by striking out "except as permitted by Article 9.32.3.6." in Clause (1)(b)";
 - (b) by replacing Sentence (2) by the following:
"(2) The principal ventilation fan shall
 - (a) be capable of operating at an exhaust capacity complying with Table 9.32.3.3., referred to hereinafter as the "normal operating exhaust capacity" (see Appendix A),
 - (b) include, in *buildings* whose *major occupancy* is Group C, housing *dwelling units* only, a heat recovery ventilator (HRV)

- i. having sensible heat recovery efficiency certified by the Home Ventilating Institute (HVI) according to CSA Standard CAN/CSA-C439, Standard laboratory methods of test for rating the performance of heat/energy-recovery ventilators, and
 - ii. having sensible heat recovery efficiency (SRE) of at least 54% for a *building* located in a municipality whose number of degree-days below 18°C is less than 6,000 and of 60% for a *building* located in another municipality and determined at a dry temperature of -25°C (see 6.2.2.8(7)(c)(iii) in Appendix A).";
- (6) by adding the following after paragraph 121:

"(122) by adding the following after Part 10:

PART 11

Energy Efficiency

- 11.1. General**
- 11.1.1. Scope and Definitions**
- 11.2. Thermal Insulation**
- 11.2.1. General**
- 11.2.2. Thermal Resistance**
- 11.2.3. Thermal Bridges**

Part 11

Energy efficiency

Section 11.1. General

- 11.1.1. Purpose and Definitions**
- 11.1.1.1. Purpose**

- (1) The purpose of this Part is as described in Subsection 1.3.3. of Division A.

11.1.1.2. Defined Terms

- (1) Terms that appear in italics are defined in Article 1.4.1.2. of Division A.

Section 11.2. Thermal Insulation

11.2.1. General

11.2.1.1. Scope of Application

- (1) This Section applies to all walls, floors, ceilings, windows, doors and skylights separating heated space from unheated space, the exterior air or ground of a *building* that is to be heated during the winter (see Appendix A).

11.2.1.2. General Requirements

- (1) Windows and skylights must conform to Section 9.7.
- (2) Foamed plastic must be protected in accordance with Article 9.10.17.10.
- (3) Walls, floors and roofs in contact with the ground must conform to Subsections 9.13.2. and 9.13.3.
- (4) Crawl spaces must conform to Section 9.18.
- (5) Roof spaces must conform to Section 9.19.
- (6) Thermal insulation and measures to control heat transfer, air leakage and condensation must conform to Section 9.25 (see Appendix A).
- (7) Cladding must conform to Section 9.27.
- (8) Ventilation must conform to Section 9.32 (see Appendix A).

11.2.2. Thermal Resistance

11.2.2.1. Thermal Resistance of Building Components

- (1) Subject to Sentences (2) to (4) of Articles 11.2.2.2. to 11.2.2.4. and Subsection 11.2.3., the *total thermal resistance* of a *building* component must have a value
- (a) at least equal to those in Table 11.2.2.1.A for a *building* located in a municipality whose number of degree-days below 18°C is less than 6,000, or
 - (b) at least equal to those indicated in Table 11.2.2.1.B for a *building* located in a municipality whose number of degree-days below 18°C is at least 6,000.

(See Appendix A.)

Table 11.2.2.1.A
Total thermal resistance of buildings located in a municipality whose number of degree-days below 18°C is less than 6,000
 Forming part of Sentence 11.2.2.1.(1)

<i>Building component</i>	<i>Total thermal resistance (RSIT)</i>
roof or ceiling separating heated space from unheated space or exterior air	7.22
wall above ground level, other than a <i>foundation</i> wall, separating heated space from unheated space or exterior air	4.31
<i>foundation</i> wall ¹ separating heated space from unheated space, exterior air or adjacent ground	2.99
floor separating heated space from unheated space or exterior air	5.20

- (1) A *foundation* wall having more than 50% of its surface exposed to exterior air, and the portion of a *foundation* wall that incorporates wood stud framing elements must have a *total thermal resistance* equal to that required for a wall above ground level.

Table 11.2.2.1.B
Total thermal resistance of buildings located in a municipality whose number of degree-days below 18°C is at least 6,000

Forming part of Sentence 11.2.2.1.(1)

<i>Building component</i>	<i>Total thermal resistance (RSIT)</i>
roof or ceiling separating heated space from unheated space or exterior air	9.00
wall above ground level, other than a <i>foundation</i> wall, separating heated space from unheated space or exterior air	5.11
<i>foundation</i> wall ¹ separating heated space from unheated space, exterior air or adjacent ground	2.99
floor separating heated space from unheated space or exterior air	5.20

(1) A *foundation* wall having more than 50% of its surface exposed to exterior air, and the portion of a *foundation* wall that incorporates wood stud framing elements must have a *total thermal resistance* equal to that required for a wall above ground level.

(2) The *total thermal resistance* required by Sentence (1) for flat roofs may be reduced by not more than 20% at its lowest point if the drainage slopes are created by insulating materials, provided that the *total thermal resistance* of the roof is increased so that the heat loss calculated through the roof is not greater than the heat loss that would result if the *thermal resistance* of the roof were conform to Sentence (1).

(3) The *total thermal resistance* required for roofs, ceilings and walls above ground level indicated in Tables 11.2.2.1.A and 11.2.2.1.B may be reduced if

(a) the annual energy consumption of the proposed construction does not exceed that of the reference construction that is conform to the requirements of Part 11, and

- (b) the only components the total thermal resistance of which may be upgraded are roofs, walls above ground level, doors, windows and skylights.

(See Appendix A.)

- (4) The *total thermal resistance* of heated garages must have a value of not less than

- (a) 5.2 for the floors and ceilings adjacent to the *dwelling unit*,
- (b) 3.5 for the walls adjacent to the *dwelling unit*, or
- (c) 2.99 over the entire vertical surface of the *foundation wall* between the garage and the *dwelling unit*.

(See Appendix A.)

11.2.2.2. Thermal Resistance of Slabs-on-Ground Other Than a Garage Floor

- (1) The *thermal resistance* of material insulating a slab-on-ground must have a value of not less than

- (a) 1.32 for a slab-on-ground located above the ground or not more than 600 mm below the adjacent ground level,
- (b) for a slab-on-ground located more than 600 mm below the adjacent ground level,
 - i. 0.88, or
 - ii. 1.32 and installed around the slab-on-ground over a width of at least 1.2 m,

- (c) 1.76 in the following situations:
 - i. heating pipes, tubes, ducts or cables are buried under the slab-on-ground and the insulating material is installed under the heating pipes, tubes, ducts or cables, or
 - ii. heating pipes, tubes, ducts or cables are contained in the slab-on-ground and the insulating material is installed under the slab-on-ground.

11.2.2.3. Thermal Resistance near Eaves

- (1) The *total thermal resistance* indicated in Table 11.2.2.1.A or 11.2.2.1.B for a roof or ceiling may be reduced near eaves if the roof slope and necessary ventilation clearances so require, provided that the value is not less than the value required by Table 11.2.2.1.A or 11.2.2.1.B for a wall above ground level.

11.2.2.4. Thermal Performance of Windows, Doors and Skylights

- (1) The thermal characteristics of windows, doors and skylights must
 - (a) be determined in accordance with CAN/CSA-A440.2/A440.3, "Fenestration energy performance/User guide to CSA A440.2-09, Fenestration energy performance", and
 - (b) conform to the values indicated in Table 11.2.2.4.A.

(See Appendix A.)

Table 11.2.2.4.A
Maximum overall thermal transmittance (U) and minimum energy rating (ER) of windows,
doors and skylights

Forming part of Sentence 11.2.2.4.(1)

<i>Building component</i>	<i>Building located in a municipality whose number of degree-days below 18°C is less than 6,000</i>	<i>Building located in a municipality whose number of degree-days below 18°C is of at least 6,000</i>
Maximum overall thermal transmittance (U) of doors without glazing	0.9	0.8
Maximum overall thermal transmittance (U) or Minimum energy rating (ER) of glazed doors	1.8 or 21	1.6 or 25
Maximum overall thermal transmittance (U)/Minimum energy rating (ER) of windows	2.0 / 21 or 1.8 / 13	2.0 / 25 or 1.6 / 17
Maximum overall thermal transmittance (U) of skylights	2.85	2.7

- (2) Windows and skylights including glazed doors must have a minimum airtightness rating of A2 according to Section 10.2 of CAN/CSA A440, "Windows".
- (3) The total area of rough openings in *building* components, that is to receive windows, doors, skylights and other similar components, must not be greater than 30% of the area of walls above ground level (see Appendix A).
- (4) The thermal performance required in Sentence (1) and the maximum area described in Sentence (3) may be different from the following conditions:
- (a) the annual energy consumption of the proposed construction does not exceed that of the reference construction that is conform to the requirements of Part 11, and
 - (b) the only components that may be altered in addition to those referred to in Sentence (4) are those described in Sentence 11.2.2.1.(3).

(See A-11.2.2.1.(3) in Appendix A.)

11.2.3. Thermal Bridges

11.2.3.1. Thermal Bridges in Walls

(See Appendix A.)

(1) *Building* components constituting a *thermal bridge* must be covered in insulating material having a *thermal resistance*

(a) for a wood frame, of

- i. at least 0.7 if the frame members are spaced less than 600 mm c/c, or
- ii. at least 0.53 in all other cases,

(b) for a metal frame, of

- i. at least 1.76 if the frame members are spaced less than 600 mm c/c, or
- ii. at least 1.32 in all other cases,

(See Appendix A.)

(c) for a concrete frame, of

- i. at least 0.88 in all cases.

(2) The insulating material must cover the *building* components constituting the *thermal bridge*, on the outside, on the inside or a combination of both.

(3) A wall between two heated spaces that incorporates a *thermal bridge* must be covered with insulating material to obtain a *total thermal resistance* of not less than 2.20 on each side of the wall over a minimum distance of 1.2 m from the exterior side of the exterior wall (see Appendix A).

(4) Subject to Sentence (5), the header must be insulated so as to have a *total thermal resistance* value equivalent to that required for a wall above ground level.

- (5) In the case of a concrete construction where the header may only be insulated on the outside, the *total thermal resistance* value may be lower than that required in Sentence (4) as long as the insulating material covering that component has a *thermal resistance* of at least 1.76.

11.2.3.2. Thermal Bridges in Floors

- (1) The *thermal resistance* of insulating material covering *thermal bridges* in floors must have a minimum value of 1.32 in the following areas:
- (a) cantilevered above-ground floors, and
 - (b) floors above unheated spaces.

11.2.3.3. Thermal Breaks in a Foundation Wall in Contact with a Slab-on-Ground other than a Garage Floor

- (1) The insulating material between the *foundation* wall and the slab-on-ground must have a *thermal resistance*
- (a) of not less than 1.32 for a slab-on-ground located above ground level or not more than 600 mm below ground level to a depth of 600 mm below ground level,
 - (b) for a slab-on-ground located more than 600 mm below ground level of not less than
 - i. 1.32 if heating pipes, tubes, ducts or cables are buried under or are contained in the slab-on-ground, or
 - ii. 0.7 for other slabs-on-ground.

11.2.3.4. Insulation of the Foundation Wall of a Heated Garage

- (1) The insulating material installed on the *foundation* wall of a heated garage must have a *thermal resistance* of not less than 1.76 and be installed not more than 600 mm below ground level.

5. Section 1.07. is amended by inserting the following before Sentence (1):

"(0.1) by replacing "9" in Sentence (3) of Article 1.2.1.1. by "11".

6. Section 1.08. is amended

- (1) by inserting the following after Sentence (1):

"(1.1) by inserting the following after Note A-1.2.1.1.(1)(b):

A-1.3.3.1.(3) Application of Part 11. Part 11 applies to the construction of new buildings having a building area not more than 600 m², a building height not more than 3 storeys and housing dwelling units only.

Part 11 also applies to the addition work of existing buildings to the extent where the building area, after the addition work, is not more than 600 m², the building height is not more than 3 storeys and the building houses dwelling units only.

Part 11 does not apply to the installation of new ventilation appliances in existing buildings or to opening replacements. It does not apply to renovation of existing buildings.";

- (2) by replacing Clause (a) of Sentence (2) by the following:

"(a) by inserting the following in alphabetical order:

"Residential Board and Care Occupancies

In this Code,

- (a) "rest home", "rehabilitation centre" or "residential and long-term care centre" means a residential and long-term care centre (CHSLD) within the meaning of section 83 of the Act respecting health services and social services (R.S.Q., c. S-4.2),
- (b) "lodge persons" means residence and other services provided to persons by a care occupancy,

- (c) "personal-support services" means services to compensate a temporary or permanent disability related to hygiene, food, maintenance, use of personal goods, movement of a person or rehabilitation and services for supervising medication or managing a possible crisis, emergency or evacuation of the building, and
- (d) "be assisted" means direct support to a person physically or mentally unable to move or direct himself or herself in case of evacuation.

Note: A building or part of building is considered to be a residential board and care occupancy when the occupancy occupies more than 10% of the floor area and becomes, as provided in 3.2.2.8., a major occupancy.

Thermal Resistance

To convert RSI value (metric unit) into R value (imperial unit), the RSI value is multiplied by 5.678263.

Total Thermal Resistance

The method for calculating the total thermal resistance of a component of the building envelope having a wood frame, for example, consists in determining the thermal resistance of the various materials as part of the component along a line crossing the insulated part and in adding the values obtained. The interior and exterior surface air film of the envelope are part of the building assembly."

7. Section 1.09. is amended

- (1) by inserting the following after paragraph 1:

"(1.1) by inserting "ASHRAE 140-2007 Test for the Evaluation of Building Energy Analysis Computer Programs A-11.2.2.1.(3)" after "ASHRAE 62.1-2004 Ventilation for Acceptable Indoor Air Quality A-29.25.1.2." in the list of documents in Table A-1.3.1.2.(1);

- (1.2) by inserting "CAN/CGSB-149.10-M86 Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method A-11.2.1.2.(6)" after "CAN/CGSB-93.2-M91 Prefinished Aluminum Siding, Soffits and Fascia, for Residential Use" in the list of documents in Table A-1.3.1.2.(1);";
- (2) by inserting the following after paragraph 11:
- "(11.1) by inserting the following after Note A-6.2.2.7.(1):
- "A-6.2.2.8.(7)(c)(iii) Heat Recovery Ventilation.** For the purposes of Part 11, sensible heat recovery efficiency from the heat recovery ventilation (HRV) must be determined with a flow rate equal to or greater than the expected flow rate for the normal operation at low speed of the HRV.";
- (3) by replacing paragraph 19 by the following:

"(19) by adding the following after Note A-9.34.2.:

A-10.2.2.2.(3) Major or Minor Alteration. The concepts of major or minor alteration are used for retrofitting. The term "retrofitting" means all the alteration work carried out in view of a different occupancy of the altered part. Alteration types, such as addition, change of major occupancy, alteration of the envelope or exterior elements, increase in occupant load, construction of or modification to a mezzanine or interconnected floor space, or the addition or modification of a vertical transportation facility are not governed by this type of alteration since they are already governed by other requirements of Part 10.

A-10.3.4.1.(1)(a) Capacity of Exits Serving an Altered Part. Even if the exits must have a minimum width of 760 mm, the exits must comply, for the altered part they serve, with the minimum capacity prescribed by Article 3.4.3.2., calculated according to the occupant load under Subsection 3.1.17. of this Code.

If the calculation of the capacity results in the exits having a width larger than 760 mm, they should be modified or another exit should be added.

This provision refers to an alteration, other than a minor alteration, that does not include an exit.

A-11.2.1.1.(1) Exemptions. Buildings that are not intended to be heated are exempt from the energy efficiency requirements. This could apply to storage and parking garages as well as small service buildings or service rooms and areas in larger buildings, where those buildings or spaces are not heated.

A-11.2.1.2.(6) Air Barrier Systems. To measure the air infiltration rate of a construction, it is recommended that it be determined in accordance with CAN/CGSB-149.10, "Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method".

A-11.2.1.2.(8) Ventilation Requirements. The ventilation requirements with which new constructions must comply also include the requirements of Article 9.32.3.9. on carbon monoxide alarms.

A-11.2.2.1.(1) Building Components. For the purposes of Part 11, wall assemblies inclined less than 60° from horizontal are considered to be roof assemblies, and roof assemblies inclined 60° or more from horizontal are considered to be wall assemblies.

Except for tubular daylighting devices, the effective thermal resistance for walls required in Table 11.2.2.1.A. or 11.2.2.1.B. also applies to shafts for skylights.

A-11.2.2.1.(3) Performance Benchmark by Comparison of the Annual Energy Consumption. The concept of measuring performance by comparing the annual energy consumption of a reference construction to a proposed construction is one way to benchmark the performance of a proposed construction to Part 11 requirements. The performance requirements of this Code are consistent with an objective-based code of demonstrating a similar level of performance regardless of the path used.

The term "reference construction" means a hypothetical replica of the proposed construction design using the same energy sources for the same functions and having the same environmental requirements, occupancy and climate data, but made to comply with all applicable prescriptive requirements of Part 11.

The term "construction energy target" means the annual energy consumption of the reference construction.

The term "annual energy consumption" means the annual sum of heating energy consumption and space conditioning energy consumption of the proposed construction design. It must be noted that the annual energy consumption is not the real consumption but rather that provided by energy simulation.

The calculation procedure must determine the annual energy consumption for the proposed construction and a construction energy target for a reference construction. The annual energy consumption of the proposed construction must not exceed the construction energy target of the reference construction. Proof of those results must be available on request.

If a computer program is used to carry out the compliance calculations, the calculation methods shall be computed for both the referenced and the proposed construction models, and be tested according to ASHRAE 140, "Test for the Evaluation of Building Energy Analysis Computer Programs", and variations of the computer program from the recommended different values must be calculated.

Where construction techniques or components used for construction are more energy efficient than those prescribed by the prescriptive requirements, performance compliance calculations are permitted to take this increased performance level in the determination of the annual energy consumption, provided it can be quantified and is not dependent on occupant interaction.

The energy model calculations must account for the annual energy consumption of facilities and equipment required for space heating and conditioning and for ventilation. The energy model calculations must account for heat transfer through wall assemblies, roof-ceiling assemblies and exposed floor assemblies due to thermal characteristics of the particular assembly and thermal bridging. The roof-ceiling assembly includes the attic. The building envelope assemblies and components required to be addressed are assemblies above and not in contact with the ground (walls and roof-ceiling assembly), assemblies in contact with the ground (floors and walls), and doors, windows and skylights.

Where the energy model calculations account for the effect of thermal mass, that thermal mass must exclude the contents of the construction.

Where skylights are installed in the roof, the gross roof area does not exclude the gross roof area of skylights.

The calculation procedure for the reference construction must include the same values as those used for the proposed construction with regards to the floor area, the heated volume, and the number and type of rooms.

The calculation procedure for the proposed construction must be consistent with the proposed construction specifications with regards to fenestration and opaque envelope assembly type, effective thermal resistance and areas but more specifically to

- the area of above ground portion of basement walls,
- thermal resistance of walls, below ground walls, ceiling below attics, roof assemblies and header joists ,
- maximum overall thermal transmittance for doors,
- total thermal resistance of below ground walls and floors on ground,
- exterior walls, roof-ceiling assemblies, exposed floors, doors, walls and floors in contact with the ground,
- configuration of insulation in assemblies in contact with the ground, and
- thermal resistance of foundation walls.

The drawings and specifications provided for the proposed construction must include information to analyze construction compliance with regulations. It is suggested to include the following information:

- the values of thermal resistance and their respective areas for all opaque building envelope assemblies which includes all roof/ceiling, wall, and floor assemblies, above and below ground,
- the overall thermal transmittance of all fenestration and door components and their respective areas,
- the ratio of total fenestration and door area to exterior wall area,
- the design basis for the ventilation rates, and

- any additional features used in the compliance calculation that account for a significant difference in the proposed construction energy performance.

A proposed construction energy performance compliance calculation report must be provided for each proposed construction design that does not comply with the requirements of Part 11. In addition to the information of the drawings and specifications, the registration of which is suggested, the proposed construction performance compliance calculation report must contain

- a project information section consisting of
 - project description,
 - project address,
 - name and version of the calculation tool,
 - geographic region in which proposed construction is to be built;
- a summary of proposed construction envelope, HVAC characteristics,
- an energy performance data summary containing
 - the annual energy consumption of all energy sources calculated for the proposed construction,
 - the energy target of all energy sources calculated for the reference construction, and
- where a software program is used for compliance calculations
 - the software program used.

A-11.2.2.1.(4) Thermal Resistance of Garages. This Sentence seeks to mitigate discomfort in spaces adjacent to a garage. Despite the presence of a heating system in the garage, the temperature is sometimes lowered to save on heating costs because the garage is seldom used or the garage door does not close tightly or is left open for extended periods. This causes discomfort in the rooms above, below or adjacent to the garage.

A-11.2.2.4.(1) Windows. For the purposes of Part 11, sliding doors must comply with the requirements on windows.

Not more than 1.85 m² of glass block may be installed in the same construction where glass block has a maximum overall thermal transmittance equivalent to that of skylights as indicated in Table 11.2.2.4.A.

The overall thermal transmittance of doors may be obtained by the door or door assembly / storm door or door assembly / unheated vestibule enclosure panels.

A garage door giving access to vehicles need not comply with the values indicated in Table 11.2.2.4.A. even if that door has windows.

To minimize surface condensation on the warm side of windows, doors or skylights, it is recommended to install those components inside the insulation or near the vertical axis of the centre of the RSI value of insulating material. That recommendation does not apply to openings in foundation walls.

A-11.2.2.4.(3) Rough Openings. The area of rough openings includes the area occupied by frame openings. The term "opening" means windows, doors and other similar components such as glass blocks, clerestories, skylights, translucent wall panels, transoms or sidelights. Despite the foregoing, openings occupied by garage doors giving access to vehicles even if those doors have windows may be excluded in calculating the total area of openings.

Despite the fact that Part 11 does not contain requirements to minimize overheating that may be caused by translucent openings according to their size and direction, it is recommended to take it into consideration in order to minimize the energy load that would be needed to condition certain spaces.

A-11.2.3.1. Thermal Bridges. Minor penetrations such as ties, shims or any similar fastener such as members that may constitute a thermal bridge need not be taken into account.

Insulation of thermal bridges excludes the interior and exterior finishes of all construction and surface air films behind those finishes.

A-11.2.3.1.(1)(b) Thermal Bridge of Metal Frame Walls. In the case of a metal frame, the thermal resistance of insulating material covering a thermal bridge may be less than that set out in Sentence 11.2.3.1.(1) as long as it is high enough to ensure efficient thermal resistance value equivalent to similar composition made of wood.

A-11.2.3.1.(3) Thermal Bridge in a Wall Between Two Heated Spaces. A portion of a wall between two heated spaces incorporating a thermal bridge must be covered with insulating material to obtain a *total thermal resistance* of not less than 2.20 on each side of the wall over a minimum distance of 1.2 m from the exterior side of the exterior wall.

8. Section 3.3 and paragraphs 1, 2 and 3 of section 3.4 of the Regulation respecting the application of the Building Act (c. B-1.1, r. 1) are struck out.
9. This Regulation comes into force on 30 August 2012.

Despite the foregoing, the provisions of the Regulation respecting energy conservation in new buildings (c. E-1.1, r. 1) may be applied to the construction and enlargement of a building having a building area not more than 600 m², a building height not more than 3 storeys and whose major occupancy is Group C and housing only dwellings, on the following conditions:

- (a) the plans and specifications are filed with a municipality for the purpose of obtaining a construction permit before 30 August 2012; and
- (b) work begins before 28 November 2012.

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M.O., 2012

Order number AM 2012-002 of the Minister of Labour dated 1 August 2012

An Act respecting labour relations, vocational training and workforce management in the construction industry (R.S.Q., c. R-20)

Recognized clients that must be consulted by certain sector-based employers' associations pursuant to section 42 of the Act respecting labour relations, vocational training and workforce management in the construction industry (R.S.Q., c. R-20)

THE MINISTER OF LABOUR,

CONSIDERING section 42 of the Act respecting labour relations, vocational training and workforce management in the construction industry, which provides that, upon receiving or sending a notice for the negotiation of a collective agreement, the sector-based employers' association for the institutional and commercial sector, the industrial sector or the civil engineering and roads

sector must consult the recognized clients in order to obtain their comments and suggestions on the renewal of the collective agreement;

CONSIDERING subparagraph *i.1* of the first paragraph of section 1 of the Act, which defines "recognized client" as an enterprise that is the client of an employer, or an association of such enterprises, recognized by the Minister of Labour for the purpose of the consultation held under section 42 of the Act, after consultation with the Minister of Economic Development, Innovation and Export Trade;

CONSIDERING that the consultation required by the Act has been held;

ORDERS AS FOLLOWS:

In the civil engineering and roads sector, the following are recognized as recognized clients for the purposes of the consultation provided for in section 42 of the Act respecting labour relations, vocational training and workforce management in the construction industry:

— the Fédération québécoise des municipalités;