# Building Code

## Extracts from the National Building Code of Canada 2020

### 3.2.6. ADDITIONAL REQUIREMENTS FOR HIGH BUILDINGS

(See Note A-3.2.6.)

3.2.6.1. APPLICATION

1. Except as provided in Sentence (2), this Subsection applies to a building
   a) of Group A, D, E or F major occupancy classification that is more than
      i) 36 m high, measured between grade and the floor level of the top storey, or
      ii) 18 m high, measured between grade and the floor level of the top storey, and in which the cumulative or total occupant load on or above any storey above grade, other than the first storey, divided by 1.8 times the width in metres of all exit stairs at that storey, exceeds 300,
   b) containing a Group B major occupancy in which the floor level of the highest storey of that major occupancy is more than 18 m above grade,
   c) containing a floor area or part of a floor area located above the third storey designed or intended as a Group B, Division 2 or 3 occupancy, or
   d) containing a Group C major occupancy whose floor level is more than 18 m above grade.
2. This Subsection applies to a building or part of a building constructed in conformance with Article 3.2.2.57. in which the floor level of the highest storey is more than 18 m above grade.

### 3.2.7. LIGHTING AND EMERGENCY POWER SYSTEMS

3.2.7.3. EMERGENCY LIGHTING

1. Emergency lighting shall be provided to an average level of illumination not less than 10 lx at floor or tread level in
   a) exits
   b) principal routes providing access to exit in open floor areas and in service rooms,
   c) corridors used by the public,
   d) corridors serving sleeping rooms in a treatment occupancy,
   e) corridors serving sleeping rooms in a care occupancy, except corridors serving sleeping rooms within individual suites of care occupancy,
   f) corridors serving classrooms,
   g) underground walkways,
   h) public corridors,
   i) floor areas or parts thereof where the public may congregate
      i) in Group A, Division 1 occupancies, or
      ii) in Group A, Division 2 and 3 occupancies having an occupant load of 60 or more,
   j) floor areas or parts thereof of daycare centreswhere persons are cared for, and
   k) food preparation areas in commercial kitchens.
   l) public washrooms that are equipped to servemore than one person at a time,
   m) locations where doors are equipped with an electromagnetic lock as described in Clauses 3.4.6.16.(5)(k) and (6)(g), and
   n) universal washrooms, universal shower rooms and accessible change spaces required by Article 3.8.2.8.
2. Emergency lighting to provide an average level of illumination of not less than 10 lx at floor or catwalk level shall be included in a service space referred to in Sentence 3.2.1.1.(8).
3. The minimum value of the illumination required by Sentences (1) and (2) shall be not less than 1 lx.
4. In addition to the requirements of Sentences (1) to (3), the installation of battery-operated emergency lighting in buildings or part thereof where treatment is provided shall conform to the appropriate requirements of CSA Z32, “Electrical Safety and Essential Electrical Systems in Health Care Facilities”.

3.2.7.4. EMERGENCY POWER FOR LIGHTING

1. An emergency power supply shall be
   a) provided to maintain the emergency lighting required by this Subsection from a power source such as batteries or generators that will continue to supply power in the event that the regular power supply to the building is interrupted, and
   b) so designed and installed that upon failure of the regular power it will assume the electrical load automatically for a period of
      i) 2hfora building within the scope of Subsection 3.2.6.,
      ii) 1hfora building of Group B major occupancy classification that is not within the scope of Subsection 3.2.6.,
      iii) 1hfora building constructed in accordance with Article 3.2.2.51. or 3.2.2.60., and
      iv) 30 min for a building of any other occupancy.

      (See Note A-3.2.7.4.(1).)

2. If self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, “Emergency Lighting Equipment.”

3.2.7.5. EMERGENCY POWER SUPPLY INSTALLATION

1. Except as required by Articles 3.2.7.6. and 3.2.7.7., an emergency electrical power supply system shall be installed in conformance with CSA C282, “Emergency electrical power supply for buildings.” (See Sentence 3.2.7.8.(1) for emergency electrical power supply for voice communication systems.)

### 3.4.5. EXIT SIGNS

3.4.5.1. EXIT SIGNS

1. Every exit door shall have an exit sign providing visual information placed over or adjacent to it if the exit serves
   a) a building more than 2 storeys in building height,
   b) a building having an occupant load of more than 150, or
   c) a room or floor area that has a fire escape as part of a required means of egress
2. Every exit sign providing visual information shall
   a) be visible on approach to the exit,
   b) consist of a green and white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO 3864-1, “Graphical symbols – Safety coloursand safety signs–Part 1: Design principlesfor safety signs and safety markings,” and
   c) conform to ISO 7010, “Graphical symbols – Safety colours and safety signs – Registered safety signs,” for the following symbols (see Note A-3.4.5.1.(2)(c)):
      i) E001 emergency exit left,
      ii) E002 emergency exit right,
      iii) E005 90-degree directional arrow, and
      iv) E006 45-degree directional arrow.
3. Internally illuminated exit signs shall be continuously illuminated and
   a) where illumination of the sign is powered by an electrical circuit, be constructed in conformance with CSA C22.2 No. 141, “Emergency lighting equipment,” or
   b) where illumination of the sign is not powered by an electrical

REPRODUCED WITH THE PERMISSION OF THE NATIONAL RESEARCH COUNCIL OF CANADA, COPYRIGHT HOLDER

# Building Code

## Extracts from the National Building Code of Canada 2020

circuit, be constructed in conformance with CAN/ULC-S572, “Standard for Photoluminescent and Self-Luminous Exit Signs and Path Marking Systems.”

4. Externally illuminated exit signs shall be continuously illuminated and be constructed in conformance with CAN/ULC-S572, “Standard for Photoluminescent and Self-Luminous Exit Signs and Path Marking Systems.” (See Note A-3.4.5.1.(4).)

5. The circuitry serving lighting for externally and internally illuminated exit signs shall

   a) serve no equipment other than emergency equipment, and
   b) be connected to an emergency power supply as described in Article 3.2.7.4.

6. Where no exit is visible from a public corridor, from a corridor used by the public in a Group A or B major occupancy, or from principal routes serving an open floor area having an occupant load of more than 150, an exit sign conforming to Clauses (2)(b) and (c) with an arrow or pointer indicating the direction of egress shall be provided.

7. Except for egress doorways described in Sentence 3.3.2.4.(4), an exit sign conforming to Sentences (2) to (5) shall be placed over or adjacent to every egress doorway from rooms with an occupant load of more than 60 in Group A, Division 1 occupancies, dance halls, licensed beverage establishments, and other similar occupancies that, when occupied, have lighting levels below that which would provide easy identification of the egress doorway.

3.4.5.2 EXIT SIGNS WITH TACTILE INFORMATION

1. An exit sign displaying the word "EXIT" in tactile form that complies with Subsection 3.8.3. shall be mounted on the approach side of exit doors described in Sentence 3.4.5.1.(1), in the direction of travel to the exit.

3.4.5.3. SIGNS FOR STAIRS AND RAMPS AT EXIT LEVEL

1. In a building more than 2 storeys in building height, any part of an exit ramp or stairway that continues up or down past the lowest exit level shall have a posted sign clearly indicating that it does not lead to an exit.

### DIVISION B
### NOTES TO PART 3
### FIRE PROTECTION, OCCUPANT SAFETY AND ACCESSIBILITY

A-3.1.2.1.(1) MAJOR OCCUPANCY CLASSIFICATION.

The following are examples of the major occupancy classifications described in Table 3.1.2.1.:

**Group A, Division 1**
Motion picture theatres
Opera houses
Television studios admitting a viewing audience
Theatres, including experimental theatres

**Group A, Division 2**
Art galleries
Auditoria
Bowling alleys
Churches and similar places of worship
Clubs, nonresidential
Community halls
Courtrooms
Dance halls
Exhibition halls (other than classified in Group E)
Gymnasia
Lecture halls
Libraries
Licensed beverage establishments
Museums
Passenger stations and depots
Recreational piers
Restaurants
Schools and colleges, nonresidential
Undertaking premises

**Group A, Division 3**
Arenas
Indoor swimming pools, with or without spectator seating
Rinks

**Group A, Division 4**
Amusement park structures (not elsewhere classified)
Bleachers
Grandstands
Reviewing stands
Stadia

**Group B, Division 1**
Jails
Penitentiaries
Police stations with detention quarters
Prisons
Psychiatric hospitals with detention quarters
Reformatories with detention quarters

**Group B, Division 2**
Care facilities with treatment
Convalescent /recovery/rehabilitation centres with treatment
Hospices with treatment Hospitals Infirmaries
Nursing homes with treatment
Psychiatric hospitals without detention quarters
Respite centres with treatment

**Group B, Division 3**
Assisted/supportive living facilities
Care facilities without treatment
Children's custodial homes
Convalescent/recovery/rehabilitation centres without treatment
Group homes
Hospices without treatment
Nursing homes without treatment
Reformatories without detention quarters
Respite centres without treatment

**Group C**
Apartments
Boarding houses
Clubs, residential
Colleges, residential
Convents
Dormitories
Hotels
Houses
Lodging houses
Monasteries
Motels
Schools, residential

**Group D**
Banks
Barber and hairdressing shops
Beauty parlours

REPRODUCED WITH THE PERMISSION OF THE NATIONAL RESEARCH COUNCIL OF CANADA, COPYRIGHT HOLDER

# Building Code

## Extracts from the National Building Code of Canada 2020

Dental offices
Dry cleaning establishments, self-service, not using flammable or explosive solvents or cleaners
Laundries, self-service
Medical offices
Offices
Police stations without detention quarters
Radio stations
Small tool and appliance rental and service establishments

**Group E**

Department stores
Exhibition halls
Markets
Shops
Stores
Supermarkets

**Group F, Division 1**

Bulk plants for flammable liquids
Bulk storage warehouses for hazardous substances
Cereal mills
Chemical manufacturing or processing plants
Distilleries
Dry cleaning plants
Feed mills
Flour mills
Grain elevators
Lacquer factories
Mattress factories
Paint, varnish and pyroxylin product factories
Rubber processing plants
Spray painting operations
Waste paper processing plants

**Group F, Division 2**

Aircraft hangars
Box factories
Candy plants
Cold storage plants
Dry cleaning establishments not using flammable or explosive solvents or cleaners
Electrical substations
Factories
Freight depots
Helicopter landing areas on roofs
Laboratories
Laundries, except self-service
Mattress factories
Planing mills
Printing plants
Repair garages
Salesrooms
Service stations
Storage rooms
Television studios not admitting a viewing audience
Warehouses
Wholesale rooms
Woodworking factories
Workshops

**Group F, Division 3**

Creameries
Factories
Laboratories
Light-aircraft hangars (storage only)
Power plants
Salesrooms
Sample display rooms
Storage garages, including open air parking garages
Storage rooms
Warehouses
Workshops

REPRODUCED WITH THE PERMISSION OF THE NATIONAL RESEARCH COUNCIL OF CANADA, COPYRIGHT HOLDER

# Building Code

## Extracts from the National Building Code of Canada 2020

### 9.9.11. SIGNS

9.9.11.1. APPLICATION

1. This Subsection applies to all exits except those serving not more than one dwelling unit or a house with a secondary suite.

9.9.11.2. VISIBILITY OF EXITS

1. Exits shall be located so as to be clearly visible or their locations shall
   be clearly indicated.
2. Where an exit door leading directly to the outside is subject to being obstructed by parked vehicles or storage because of its location,
   a visible sign or a physical barrier prohibiting such obstruction shall
   be installed or the exterior side of the door.

9.9.11.3. EXIT SIGNS

1. Every exit door shall have an exit sign placed over it or adjacent to it
   if the exit serves
   a) a building that is 3 storeys in building height,
   b) a building having an occupant load of more than 150, or
   c) a room or floor area that has a fire escape as part of a required means of egress.
2. Every exit sign shall
   a) be visible on approach to the exit,
   b) Consist of a green pictogram and a white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO 3864-1, “Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs in workplaces and public areas,” and
   c) conform to the dimensions indicated in ISO 7010, “Graphical symbols – Safety colours and safety signs – for the following symbols
      (see A-3.4.5.1.(2)(c)
      i) E001 emergency exit left,
      ii) E002 emergency exit right,
      iii) E005 90-degree directional arrow, and
      iv) E006 45-degree directional arrow.
3. Internally illuminated exit signs shall be continuously illuminated and
   a) where illumination of the sign is powered by an electrical circuit, be constructed in conformance with CSA C22.2 No. 141, “Emergency Lighting Equipment,” or
   b) where illumination of the sign is not powered by an electrical circuit,
      be constructed in conformance with CAN/ULC-S572, “Photoluminescent and Self-Luminous Signs and Path Marking Systems.”
4. Externally illuminated exit signs shall be continuously illuminated and
   be constructed in conformance with CAN/ULC-S572, “Photoluminescent
   and Self-Luminous Signs and Path Marking Systems.”
   (See A-3.4.5.1.(4).)
5. The circuitry serving lighting for externally and internally illuminated
   exit signs shall
   a) serve no equipment other than emergency equipment, and
   b) be connected to an emergency power supply as described in Sentences 9.9.12.3.(2), (3) and (7).
6. Where no exit is visible from a public corridor, from a corridor used by the public, or from principal routes serving an open floor area having an occupant load of more than 150, an exit sign conforming to Clauses (2)(b) and (c) with an arrow or pointer indicating the direction of egress shall be provided.

9.9.11.4. SIGNS FOR STAIRS AND RAMPS AT EXIT LEVEL

1. In buildings that are 3 storeys in building height, any part of an exit ramp or stairway that continues up or down past the lowest exit level shall be clearly marked to indicate that it does not lead to an exit, if the portion beyond the exit level may be mistaken as the direction of exit travel.

### 9.9.12. LIGHTING

9.9.12.2. REQUIRED LIGHTING IN EGRESS FACILITIES

1. Every exit, public corridor or corridor providing access to exit for the public shall be equipped to provide illumination to an average level
   of not less than 50 lx at floor or tread level and at all points such
   as angles and intersections at changes of level where there are stairs
   or ramps.
2. The minimum value of the illumination required by Sentence (1) shall be not less than 10 lx

9.9.12.3. EMERGENCY LIGHTING

1. Emergency lighting shall be provided in
   a) exits,
   b) principal routes providing access to exit in an open floor area,
   c) corridors used by the public,
   d) underground walkways, and
   e) public corridors.
2. Emergency lighting required in Sentence (1) shall be provided from
   a source of energy separate from the electrical supply for the building.
3. Lighting required in Sentence (1) shall be designed to be automatically actuated for a period of at least 30 min when the electric lighting in the affected area is interrupted.
4. Illumination from lighting required in Sentence (1) shall be provided
   to average levels of not less than 10 lx at floor or tread level.
5. The minimum value of the illumination required by Sentence (4) shall be
   not less than 1 lx.
6. Where incandescent lighting is provided, lighting equal to 1 W/m2 of floor area shall be considered to meet the requirement in Sentence (4).
7. Where self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, “Emergency Lighting Equipment.”

REPRODUCED WITH THE PERMISSION OF THE NATIONAL RESEARCH COUNCIL OF CANADA, COPYRIGHT HOLDER