

Building Code

- 3) The number of lamps connected to a single unit equipment shall not result in a load in excess of the watts output rating marked on the equipment for the emergency period required by the National Building Code of Canada, and the load shall be computed from the information in the list of lamps referred to in Subrule (2).

46-400 Exit signs (See Appendices B and G)

- 1) Where exit signs are connected to an electrical circuit, that circuit shall be used for no other purpose.
- 2) Notwithstanding Subrule (1), exit signs shall be permitted to be connected to a circuit supplying emergency lighting in the area where these exit signs are installed.
- 3) Exit signs in Subrule (1) and (2) shall be illuminated by an emergency power supply where emergency lighting is required by the National Building Code of Canada.

Extracts from the National Building Code of Canada - 2005

3.2.6. Additional Requirements for High Buildings (see Appendix B)

3.2.6.1. Application

- 1) 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 occupancy, and
- d) containing a Group C major occupancy whose floor level 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 patients' sleeping rooms,
 - e) corridors serving classrooms,
 - f) underground walkways,
 - g) public corridors,
 - h) 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,
 - i) floor areas or parts thereof of daycare centres where persons are cared for, and
 - j) food preparation areas in commercial kitchens.
- 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 health care facilities shall conform to the appropriate requirements of CSA Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities."

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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) 2 h for a building within the scope of Subsection 3.2.6.,
 - ii) 1 h for a building of Group B major occupancy classification that is not within the scope of Subsection 3.2.6., and
 - iii) 30 min for a building of any other occupancy. (See Appendix A.)
- 2) If self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, "Unit Equipment for Emergency Lighting."

3.4.5. Exits

3.4.5.1. Exit Signs

- 1) Every exit door shall have an exit sign 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 shall
 - a) be visible from the exit approach,
 - b) have the word EXIT or SORTIE displayed in plain legible letters, and
 - c) be illuminated continuously while the building is occupied.
- 3) Exit signs shall consist of
 - a) red letters on a contrasting background or contrasting letters on a red background, with the letters not less than 114 mm high and having a 19 mm stroke, if the sign is internally illuminated, and
 - b) white letters on a red background or red letters on a contrasting background that is white or a light tint, with letters not less than 150 mm high and having a 19 mm stroke, if the sign is externally illuminated.
- 4) If illumination of an exit sign is provided from an electrical circuit, that circuit shall
 - a) serve no equipment other than emergency equipment, and
 - b) be connected to an emergency power supply as described in Sentence 3.2.7.4.(1).
- 5) If necessary, the direction of egress in public corridors and passageways shall be indicated by a sign conforming to Sentence (3) with a suitable arrow or pointer indicating the direction of egress.
- 6) Except for egress doorways described in Sentence 3.3.2.4.(4), an exit sign conforming to Sentences (2), (3) and (4) 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. 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.

9.9.10. Signage

9.9.10.1. Application

- 1) This Subsection applies to all exits except those serving not more than one dwelling unit.

9.9.10.2. Visibility of Exits

- 1) Exits shall be located so as to be clearly visible or their locations shall be clearly indicated.

9.9.10.3. Required Exit Signs

- 1) Every exit door in a building that is 3 storeys in building height or in a building having an occupant load greater than 150 shall have an exit sign over it or adjacent to it.

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9.9.10.4. Exit Direction Signs

- 1) Exit direction signs shall be placed in corridors and passageways where necessary to indicate the direction of exit travel.

9.9.10.5. Visibility of Exit Signs

- 1) Exit signs shall be installed so as to be visible from the exit approach and shall be illuminated continuously while the building is occupied.

9.9.10.6. Lettering

- 1) Exit signs shall have the word EXIT or SORTIE in red letters on a contrasting background or a red background with contrasting letters when the sign is internally lighted, and white letters on a red background or red letters on a white background when the sign is externally lighted.
- 2) Lettering referred to in Sentence (1) shall be made with not less than 19 mm wide strokes and be not less than 150 mm high when the sign is externally lighted, and not less than 114 mm high when the sign is internally lighted.

9.9.10.7. Illumination

- 1) Illumination of exit signs required in Article 9.9.10.3. shall conform to Sentences 9.9.11.3.(2) and (3).
- 2) Where illumination of exit signs required in Article 9.9.10.3. is provided by an electrical circuit, that circuit shall serve no equipment other than emergency equipment.

9.9.10.8. 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.

9.9.11. Lighting

9.9.11.3. 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) Where incandescent lighting is provided, lighting equal to 1 W/m² of floor area shall be considered to meet the requirement in Sentence (4).
- 6) Where self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, "Unit Equipment for Emergency Lighting."

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Classification by Group

Examples

		Group	Group
Motion picture theatres	Television studios admitting a viewing audience	A	1
Opera houses	Theatres, including experimental theatres		
Art Galleries	Lecture halls		
Auditoria	Libraries		
Bowling alleys	Licensed beverage establishments		
Churches and similar places of worship	Museums	A	2
Club, non-residential	Passenger stations and depots		
Community halls	Recreational piers		
Court rooms	Restaurants		
Dance halls	Schools and colleges, non-residential		
Exhibition halls (other than classified in Group E)	Undertaking premises		
Gymnasia			
Arenas	Indoor swimming pools with	A	3
Rinks or without spectator seating	Grandstands		
Amusement park structures	Reviewing stands	A	4
(not elsewhere classified)	Stadia		
Bleachers	Psychiatric hospitals with detention quarters		
Jails	Reformatories with detention quarters	B	1
Penitentiaries	Prisons		
Police stations with detention quarters			
Children's custodial homes	Psychiatric hospitals without detention quarters		
Convalescent homes	Reformatories without detention quarters	B	2
Hospitals	Sanatoria without detention		
Infirmaries	Nursing homes		
Orphanages			
Apartment Hotels	Houses		
Boarding houses	Loading houses		
Clubs, residential	Monasteries	C	
Colleges, residential	Motels		
Convents	Schools, residential		
Dormitories			
Banks	Laundries, self-service		
Barber and hairdressing shops	Medical offices		
Beauty parlors	Offices		
Dental offices	Police stations without detention quarters	D	
Dry Cleaning establishments	Radio stations		
Self-service, not using flammable	Small tool and appliance rental		
or explosive solvents or cleaners	and service establishment		

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Classification by Group

Examples

		Group	Group
Department stores Exhibition halls Markets	Shops Stores Supermarkets	E	
Bulk plants for flammable liquids Bulk storage warehouses for hazardous substances Cereal mills Chemicals 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	F	1
Aircraft hangars Box factories Candy plants Cold storage plants Dry Cleaning establishments not using flammable or explosive solvents for cleaners Electrical substations Factories Freight depots Helicopter landing areas on roofs Laboratories Workshops	Mattress factories Planning mills Printing plants Repair garages Salesroom Services stations Storage rooms Television studios admitting a viewing audience Warehouses Wholesale rooms Woodworking factories Laundries except self-service	F	2
Creameries Factories Laboratories Power plants Salesrooms Workshops	Storage garages including open air Parking garages Storage rooms Warehouses Samples display rooms	F	3