3.2.6. REQUIREMENTS FOR HIGH BUILDINGS

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 or 3 occupancy,
      or
   d) containing a Group C major occupancy whose floor level is more than
      18 m above grade.

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 centres where persons are cared
      for, and
   k) 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 not be 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 C22.2, "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) 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, "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 CAN/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 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 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 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
   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
   where illumination of the sign is not powered by an electrical
   circuit, be constructed in conformance with CAN/ULC-S5772,
   “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-S5772, “Photoluminescent and
   Self-Luminous 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 (6) 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.
9.9.11. 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.” (See A-3.4.5.1.(4)
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.”
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 This Subsection applies to the lighting of all means of egress except those within dwelling units or a house with a secondary suite.

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."
APPENDIX A
EXPLANATORY MATERIAL

A-3.1.2. Use Classification
The purpose of classification is to determine which requirements apply. This Code requires classification in accordance with every major occupancy for which the building is used or intended to be used. Where necessary, an application clause has been inserted in this Part to explain how to choose between the alternative requirements which multiple occupancy classification may present.

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.:
### Building Code

**Extracts from the National Building Code of Canada 2015**

<table>
<thead>
<tr>
<th>EXAMPLES</th>
<th>GROUP</th>
<th>DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>Medical offices</td>
<td></td>
</tr>
<tr>
<td>Barber and hairdressing shops</td>
<td>Offices</td>
<td></td>
</tr>
<tr>
<td>Beauty parlours</td>
<td>Police stations without detention quarters</td>
<td></td>
</tr>
<tr>
<td>Dental offices</td>
<td>Radio stations</td>
<td></td>
</tr>
<tr>
<td>Dry cleaning establishments, self-service, not using flammable or explosive solvents or cleaners</td>
<td>Small tool and appliance rental and service establishments</td>
<td></td>
</tr>
<tr>
<td>Laundries, self-service</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>Department stores</td>
<td>Shops</td>
<td>E</td>
</tr>
<tr>
<td>Exhibition halls</td>
<td>Stores</td>
<td></td>
</tr>
<tr>
<td>Markets</td>
<td>Supermarkets</td>
<td></td>
</tr>
<tr>
<td>Bulk plants for flammable liquids</td>
<td>Flour mills</td>
<td></td>
</tr>
<tr>
<td>Bulk storage warehouses for hazardous substances</td>
<td>Grain elevators</td>
<td></td>
</tr>
<tr>
<td>Cereal mills</td>
<td>Lacquer factories</td>
<td></td>
</tr>
<tr>
<td>Chemical manufacturing or processing plants</td>
<td>Mattress factories</td>
<td></td>
</tr>
<tr>
<td>Distilleries</td>
<td>Paint, varnish and pyroxylin product factories</td>
<td></td>
</tr>
<tr>
<td>Dry cleaning plants</td>
<td>Rubber processing plants</td>
<td></td>
</tr>
<tr>
<td>Feed mills</td>
<td>Spray painting operations</td>
<td></td>
</tr>
<tr>
<td>Aircraft hangars</td>
<td>Waste paper processing plants</td>
<td></td>
</tr>
<tr>
<td>Box factories</td>
<td>Printing plants</td>
<td></td>
</tr>
<tr>
<td>Candy plants</td>
<td>Repair garages</td>
<td></td>
</tr>
<tr>
<td>Cold storage plants</td>
<td>Salesrooms</td>
<td></td>
</tr>
<tr>
<td>Dry cleaning establishments not using flammable or explosive solvents or cleaners</td>
<td>Service stations</td>
<td></td>
</tr>
<tr>
<td>Electrical substations</td>
<td>Storage rooms</td>
<td></td>
</tr>
<tr>
<td>Factories</td>
<td>Television studios not admitting a viewing audience</td>
<td></td>
</tr>
<tr>
<td>Freight depots</td>
<td>Warehouses</td>
<td></td>
</tr>
<tr>
<td>Helicopter landing areas on roofs</td>
<td>Wholesale rooms</td>
<td></td>
</tr>
<tr>
<td>Laboratories</td>
<td>Woodwarding factories</td>
<td></td>
</tr>
<tr>
<td>Laundries, except self-service</td>
<td>Workshops</td>
<td></td>
</tr>
<tr>
<td>Mattress factories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planing mills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creameries</td>
<td>Sample display rooms</td>
<td></td>
</tr>
<tr>
<td>Factories</td>
<td>Storage garages, including open air parking garages</td>
<td></td>
</tr>
<tr>
<td>Laboratories</td>
<td>Storage rooms</td>
<td></td>
</tr>
<tr>
<td>Light-aircraft hangars</td>
<td>Storage rooms</td>
<td></td>
</tr>
<tr>
<td>Power plants</td>
<td>Warehouses</td>
<td></td>
</tr>
<tr>
<td>Salesrooms</td>
<td>Workshops</td>
<td></td>
</tr>
</tbody>
</table>

**A-3.4.5.1.(2)(C) GRAPHICAL SYMBOLS FOR EXIT SIGNS**

ISO 7010, “Graphical symbols – Safety colours and safety signs – Registered safety signs” identifies the following internationally recognized symbols for use at required exits.

**“EMERGENCY EXIT RIGHT” (E001) SYMBOL FROM ISO 7010**

Figure A-3.4.5.1.(2)(c)-B

90-degree directional arrow (E005) from ISO 7010

A-3.4.5.1.(4) Externally Illuminated Signs

An external lighting source is required to properly charge photoluminescent signs. These types of signs must be lit in conformance with the charging requirements stated in CAN/ULC-S572.

**A-3.4.6. Application to Means of Egress**

The requirements in Subsection 3.4.6. apply to interior and exterior exits, as well as to ramps, stairways and passageways used by the public as access to exit. The treads, risers, landings, handrails and guards for the latter access to exit facilities must thus be provided in conformance with the appropriate requirements for exit facilities.