

Section 9.9. Means of Egress

9.9.1. General

9.9.1.1. Application

1) Stairways, handrails and *guards* in a *means of egress* shall conform to the requirements in Section 9.8. as well as to the requirements in this Section.

9.9.1.2. Fire Protection

1) In addition to the fire protection requirements provided in Subsection 9.9.4., *flame-spread ratings*, *fire-resistance ratings* and *fire-protection ratings* for *means of egress* shall conform to Section 9.10.

9.9.1.3. Occupant Load

1) Except for *dwelling units*, the *occupant load* of a *floor area* or part of a *floor area* shall be the number of persons for which such areas are designed, but not fewer than that determined from Table 3.1.17.1., unless it can be shown that the area will be occupied by fewer persons.

2) The *occupant load* for *dwelling units* shall be based on 2 persons per bedroom or sleeping area.

9.9.2. Types and Purpose of Exits

9.9.2.1. Types of Exits

1) Except as otherwise provided in this Section, an *exit* from any *floor area* shall be one of the following used singly or in combination:

- a) an exterior doorway,
- b) an exterior passageway,
- c) an exterior ramp,
- d) an exterior stairway,
- e) a fire escape,
- f) a *horizontal exit*,
- g) an interior passageway,
- h) an interior ramp, or
- i) an interior stairway.

2) Fire escapes shall only be used as *exits* on existing *buildings* and shall be designed and installed in conformance with Subsection 3.4.7.

3) Where a *horizontal exit* is used, it shall conform to Sentence 3.4.1.6.(1) and Article 3.4.6.10.

9.9.2.2. Purpose of Exits

1) An *exit* shall be designed for no purpose other than for exiting except that an *exit* may also serve as an access to a *floor area*.

9.9.2.3. Elevators, Slide Escapes and Windows as Means of Egress

1) Elevators, slide escapes and windows shall not be considered as part of a required *means of egress*.

9.9.2.4. Principal Entrances

1) Except for doors serving a single *dwelling unit*, at least one door at every principal entrance to a *building* providing access from the exterior at ground level shall be designed in accordance with the requirements for *exits*.

9.9.3. Dimensions of Means of Egress

9.9.3.1. Application

- 1) This Subsection applies to every *means of egress* except
 - a) *exits* that serve not more than one *dwelling unit*, and
 - b) *access to exits* within *dwelling units*.

9.9.3.2. Exit Width

- 1) Except for doors and corridors, the width of every *exit* facility shall be not less than 900 mm. (See Article 9.9.6.3. for doors, Article 9.8.2.1. for stairs, and Article 9.8.5.2. for ramps.)

9.9.3.3. Width of Corridors

- 1) The width of every *public corridor*, corridor used by the public, and *exit* corridor shall be not less than 1 100 mm. (See also Subsection 9.9.5. for obstructions in corridors.)

9.9.3.4. Clear Height

- 1) Except for stairways, doorways and *storage garages*, the minimum clear height in *exits* and *access to exits* shall be 2.1 m. (See Article 9.8.2.2. for stairs, Article 9.8.5.3. for ramps, Article 9.8.6.4. for landings and Article 9.9.6.2. for doorways.)
- 2) The clear height in *exits* and *access to exits* in *storage garages* shall be not less than 2 m.

9.9.4. Fire Protection of Exits

9.9.4.1. Application

- 1) Except as provided in Articles 9.9.4.4. and 9.9.4.6., this Subsection applies to the fire protection of all *exits* except *exits* serving not more than one *dwelling unit*.

9.9.4.2. Fire Separations for Exits

- 1) Except as provided in Sentences (2) and (5) and Article 9.9.8.5., every *exit* other than an exterior doorway shall be separated from each adjacent *floor area* or from another *exit*
 - a) where there is a floor assembly above the *floor area*, by a *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly above the *floor area* (See Article 9.10.9.10.), and
 - b) where there is no floor assembly above the *floor area*, by a *fire separation* having a *fire-resistance rating* not less than the greater of
 - i) that required by Subsection 9.10.8. for the floor assembly below, or
 - ii) 45 min.
- 2) **Reserved.**
- 3) A *fire separation* common to 2 *exits* shall be smoke-tight and not be pierced by doorways, duct work, piping or any other opening that may affect the continuity of the separation.
- 4) A *fire separation* that separates an *exit* from the remainder of the *building* shall have no openings except those for electrical wiring, *noncombustible* conduit and *noncombustible* piping that serve only the *exit*, and for standpipes, sprinkler piping, *exit* doorways and wired glass and glass block permitted in Article 9.9.4.3.
- 5) The requirements in Sentence (1) do not apply to an exterior *exit* passageway provided the passageway has not less than 50% of its exterior sides open to the outdoors and is served by an *exit* stair at each end of the passageway.

9.9.4.3. Wired Glass or Glass Block

(See Note A-3.1.8.19.(1).)

- 1) This Article applies to wired glass in doors, and wired glass or glass block in sidelights, where these are installed in *fire separations* between *exit* enclosures and *floor areas*.

2) Except as provided in Sentence (3), the combined area of glazing in doors and sidelights shall not exceed 0.8 m².

3) Where an *exit* enclosure connects with a *floor area* through an enclosed vestibule or corridor separated from the *floor area* by *fire separations* having not less than a 45 min *fire-resistance rating*, the glazed areas described in Sentence (1) need not be limited as required in Sentence (2).

9.9.4.4. Openings Near Unenclosed Exterior Exit Stairs and Ramps

1) Unprotected openings in exterior walls of the building shall be protected with wired glass in fixed steel frames, glass block conforming to Articles 9.10.13.5. and 9.10.13.7., or protection complying with the requirements of Sentence 3.2.3.13.(5)., where

- a) an unenclosed exterior exit stair or ramp provides the only means of egress from a suite and is exposed to fire from unprotected openings in the exterior walls of
 - i) another fire compartment, or
 - ii) another dwelling unit, and
- b) unprotected openings in the exterior walls of the building are within 3 m horizontally and less than 10 m below or less than 5 m above the exit stair or ramp.

9.9.4.5. Openings in Exterior Walls of Exits

1) Either openings in exterior walls of an *exit* or openings in adjacent exterior walls of the *building* the *exit* serves shall be protected with wired glass in fixed steel frames or glass block installed in accordance with Articles 9.10.13.5. and 9.10.13.7., where

- a) the *exit* enclosure has exterior walls that intersect the exterior walls of the *building* at an angle of less than 135° measured on the outside of the *building*, and
- b) the openings in the exterior walls of the *building* are within 3 m horizontally and less than 2 m above the openings in the exterior walls of the *exit*.

(See Note A-9.9.4.5.(1).)

2) The opening protection referred to in Sentence (1) may conform to Sentence 3.2.3.13.(4).

9.9.4.6. Openings Near Exit Doors

1) Where an exterior *exit* door in one *fire compartment* is within 3 m horizontally of an *unprotected opening* in another *fire compartment* and the exterior walls of these *fire compartments* intersect at an exterior angle of less than 135°, the opening shall be protected with

- a) wired glass in fixed steel frames conforming to Article 9.10.13.5.,
- b) glass block conforming to Article 9.10.13.7., or
- c) protection complying with the requirements of Sentence 3.2.3.13.(5).

2) The opening protection referred to in Sentence (1) may conform to Sentence 3.2.3.13.(4).

9.9.4.7. Stairways in 2 Storey, Group D or E Buildings

1) Where a *suite* of Group D or E *occupancy* is located partly on the *first storey* and partly on the second *storey*, stairways serving the second *storey* of that *suite* need not be constructed as *exit* stairs provided,

- a) the *building* is not greater than 2 *storeys* in *building height*,
- b) the *suite* is separated from other *occupancies* by at least a 45 min *fire separation*,
- c) the area occupied by the *suite* is not greater than 100 m² per *storey*,
- d) the maximum travel distance from any point in the *suite* to an exterior *exit* is not greater than 25 m,
- e) the floor assemblies have a *fire-resistance rating* of not less than 45 min or are of *noncombustible construction*, and
- f) the *basement* and *first storey* are separated by a *fire separation* having a *fire-resistance rating* of not less than 45 min.

9.9.5. Obstructions and Hazards in Means of Egress

9.9.5.1. Application

1) This Subsection applies to obstructions and hazards in every *means of egress* except those within a *dwelling unit* or serving not more than one *dwelling unit*.

9.9.5.2. Occupancies in Corridors

1) Where a corridor contains an *occupancy*, the *occupancy* shall not reduce the unobstructed width of the corridor to less than the required width of the corridor.

9.9.5.3. Obstructions in Public Corridors

1) Except as permitted in Sentence (2), obstructions located within 1 980 mm of the floor shall not project horizontally more than 100 mm into *exit* passageways, corridors used by the public or *public corridors* in a manner that would create a hazard for visually impaired persons travelling adjacent to walls.

2) The horizontal projection of an obstruction referred to in Sentence (1) is permitted to exceed 100 mm where the obstruction extends to less than 680 mm above the floor. (See Note A-3.3.1.9.(4).)

9.9.5.4. Obstructions in Exits

1) Except as permitted in Subsection 9.9.6. and Article 9.8.7.6., no fixture, turnstile or construction shall project within the required width of an *exit*.

9.9.5.5. Obstructions in Means of Egress

1) No obstructions such as posts or turnstiles shall be placed so as to restrict the width of a required *means of egress* from a *floor area* or part of a *floor area* to less than 750 mm unless an alternate unobstructed *means of egress* is provided adjacent to and plainly visible from the restricted egress.

2) Except as provided in Sentence (3), no obstructions, such as counter gates, that do not meet the requirements for *exit* doors, shall be placed in a required *means of egress* from a *floor area* or part of a *floor area* unless an alternate unobstructed *means of egress* is provided adjacent to and plainly visible from the restricted egress.

3) Obstructions, such as counter gates, that do not satisfy Sentence (2), are permitted to be placed in a required *means of egress* from a part of a *floor area* in *mercantile occupancies* and *business and personal services occupancies*, provided that the part of the *floor area* served by the obstructed *means of egress* is not generally accessible to the public.

9.9.5.6. Mirrors or Draperies

1) No mirror shall be placed in or adjacent to any *exit* so as to confuse the direction of *exit*, and no mirror or draperies shall be placed on or over *exit* doors.

9.9.5.7. Fuel-Fired Appliances

1) Fuel-fired *appliances* shall not be installed in an *exit* or corridor serving as an *access to exit*.

9.9.5.8. Service Rooms

1) *Service rooms* containing equipment subject to possible explosion, such as *boilers* designed to operate at a pressure in excess of 100 kPa, and certain types of refrigerating and transformer equipment, shall not be located under required *exits*.

9.9.5.9. Ancillary Rooms

1) Ancillary rooms such as storage rooms, washrooms, toilet rooms, laundry rooms and *service rooms* shall not open directly into an *exit*.

9.9.6. Doors in a Means of Egress

9.9.6.1. Obstructions by Doors

- 1) Except as provided in Sentence (4), obstructions created by doors shall be limited in accordance with Sentences (2) and (3)
 - a) at *exit* doors,
 - b) at doors that open into or are located within a *public corridor*, and
 - c) at doors that open into or are located within another facility that provides *access to exit* from a *suite*.
- 2) When fully open, doors described in Sentence (1) shall not decrease the required *exit* width by more than
 - a) 100 mm in *exit* corridors, and
 - b) 50 mm for other *exit* facilities.
- 3) The swing of doors described in Sentence (1) shall not reduce the width of the path of travel to less than
 - a) the required *exit* width in *exit* corridors and passageways, and
 - b) 750 mm on *exit* stairs or landings.
- 4) Doors serving a single *dwelling unit* need not comply with Sentences (2) and (3).

9.9.6.2. Clear Opening Height at Doorways

- 1) Except as provided in Sentences (2) and (3), the clear opening height of doorways shall be not less than 2 030 mm high at
 - a) *exit* doors,
 - b) doors that open into or are located within a *public corridor*, and
 - c) doors that open into or are located within another facility that provides *access to exit* from a *suite*.
- 2) The clear opening height under door closers and other devices in doorways described in Sentence (1) shall be not less than 1 980 mm.
- 3) Doorways serving a single *dwelling unit* need not comply with Sentences (1) and (2). (See also Article 9.5.5.1.)

9.9.6.3. Clear Opening Width at Doorways

- 1) Except as provided in Sentence (4), the clear opening width of doorways shall comply with Sentence (2) at
 - a) *exit* doors, and
 - b) doors that open into or are located within a *public corridor* or other facility that provides *access to exit* from a *suite*.
- 2) Doorways described in Sentence (1) shall be
 - a) not less than 800 mm wide where there is only one door leaf,
 - b) not less than 800 mm wide where multiple-leaf doors are installed with only one active leaf having a latching mechanism described in Article 9.9.6.7., and
 - c) not less than 1 210 mm wide where multiple-leaf doors are installed with two active leaves.
- 3) In doorways described in Sentence (1) that have multiple-leaf doors installed,
 - a) no active leaf shall be less than 810 mm wide where only one leaf is active, and
 - b) no single leaf shall be less than 610 mm wide where two leaves are active.
- 4) Doorways serving a single *dwelling unit* need not comply with Sentence (2). (See also Article 9.5.5.1.)

9.9.6.4. Door Action

- 1) Except as provided in Sentences (4) and (5), required *exit* doors and doors in required *means of egress*, except doors in *means of egress* within *dwelling units*, shall swing on the vertical axis.
- 2) Except as provided in Sentence (5), breakaway sliding doors, installed as required *exit* doors or required doors in *means of egress*, shall be identified as swinging doors by means of a label or decal affixed to the door.
- 3) Revolving doors shall comply with Article 3.4.6.15.

4) Movable *partitions* used to separate a *public corridor* from an adjacent *business and personal services occupancy* or a *mercantile occupancy* need not conform to Sentence (1), provided the partitions are not located in the only *means of egress*. (See Note A-3.3.1.12.(3).)

5) *Exit* doors need not conform to Sentences (1) or (2), where

- a) the doors serve accessory *buildings* where life safety is not adversely affected,
- b) the doors serve *storage garages* or other accessory *buildings* serving not more than one *dwelling unit*, or
- c) the doors
 - i) serve storage *suites* of not more than 20 m² in gross area that are in warehousing *buildings* of not more than one *storey*, and
 - ii) open directly to the exterior at ground level.

9.9.6.5. Direction of Door Swing

1) Except for doors serving a single *dwelling unit*, *exit* doors that are required to swing shall swing in the direction of *exit* travel.

2) Doors that open onto a corridor or other facility that provides *access to exit* from a room or *suite* having an *occupant load* of more than 60 persons shall swing on the vertical axis in the direction of *exit* travel.

3) Doors that divide a corridor that is not wholly contained within a *suite* shall swing in the direction of *exit* travel.

4) Where a pair of doors is installed in a corridor that provides *access to exit* in both directions, the doors shall

- a) swing in opposite directions, with the door on the right-hand side swinging in the direction of *exit* travel, or
- b) swing in both directions.

5) Principal entrance doors opening to an *acceptable* open space at ground level are not required to swing in the direction of *exit* travel provided

- a) the room or *suite* is located at ground level, and
- b) the *occupant load* is not more than 60 persons.

9.9.6.6. Nearness of Doors to Stairs

1) Except as provided in Sentence (2), the distance between a stair riser and the leading edge of a door during its swing, except for doors serving a single *dwelling unit*, shall be not less than 300 mm.

2) Where there is a danger of blockage from ice or snow, an *exit* door, including doors serving a single *dwelling unit*, may open onto not more than one step, provided the riser of such a step does not exceed 150 mm.

9.9.6.7. Door Latching, Locking and Opening Mechanisms

1) Principal entrance doors, *exit* doors and doors to *suites*, including exterior doors of *dwelling units*, and other doors in an *access to exit* shall

- a) be openable from the inside or in travelling to an *exit* without requiring keys, special devices or specialized knowledge of the door-opening mechanism, or
- b) be controlled by electromagnetic locking mechanisms in accordance with Sentence 3.4.6.16.(4).

2) Except for doors serving a single *dwelling unit*, and doors to accessory *buildings* and to garages serving a single *dwelling unit*, door release hardware on doors in a *means of egress* shall be operable with one hand and the door shall be openable with not more than one releasing operation. (See also Sentence 3.8.3.6.(4) and Note A-3.3.1.13.(4).)

3) Door release hardware on doors in a *means of egress* shall be installed not more than 1 200 mm above the finished floor.

4) Except for hotels and motels, a door opening onto a *public corridor* that provides *access to exit* from *suites* shall be designed not to lock automatically if it is equipped with an automatic self-closing device. (See Note A-3.3.4.5.(1).)

9.9.6.8. Effort Required to Open

1) Every *exit* door, except doors serving a single *dwelling unit*, shall be designed and installed so that when the latch is released the door will open in the direction of *exit* travel under a force of not more than 90 N applied to the door release hardware. (See Sentence 3.8.3.6.(8) for door opening forces in an *accessible* path of travel.)

9.9.7. Access to Exits

9.9.7.1. Egress from Roof Area, Podiums, Terraces, Platforms and Contained Open Spaces

- 1) An *access to exit* shall be provided from every roof intended for *occupancy* and from every podium, terrace, platform or contained open space.
- 2) Where a roof is intended for an *occupant load* of more than 60 persons, at least 2 separate *means of egress* shall be provided from the roof to stairs designed in conformance with the requirements for *exit* stairs and located remote from each other.
- 3) Where a podium, terrace, platform or contained open space is provided, egress requirements shall conform to the appropriate requirements for rooms or *suites* in Article 9.9.7.4.

9.9.7.2. Means of Egress from Suites

- 1) Except as required in Sentence 9.9.9.3.(1), each *suite* in a *floor area* occupied by more than one *suite* shall have
 - a) an exterior *exit* doorway,
 - b) a doorway to a *public corridor*, or
 - c) a doorway to an exterior passageway.
- 2) Except as provided in Sentences 9.9.7.3.(1) and 9.9.8.2.(2), from the point where a doorway described in Clause (1)(b) or (c) enters the *public corridor* or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate *exits*.

9.9.7.3. Dead-End Corridors

- 1) Except for a dead-end corridor that is entirely within a *suite* and except as permitted in Sentence 9.9.9.2.(1), a dead-end corridor is permitted provided it is not more than 6 m long.

9.9.7.4. Number and Spacing of Egress Doors

- 1) Except for *dwelling units*, at least 2 egress doors shall be provided when the area of a room or *suite*, or the distance measured from any point within the room or *suite* to the nearest egress door, exceeds the values in Table 9.9.7.4.
- 2) Doors required in Sentence (1) shall be spaced so that in the event that one door is made inaccessible by a fire within such room or *suite*, the other door will provide safe egress.
- 3) The travel distance required in Sentence (1) may be increased to 25 m for *sprinklered buildings*.

Table 9.9.7.4.
Maximum Areas and Travel Distances for Rooms, Suites and Mezzanines with a Single Means of Egress
 Forming Part of Sentences 9.9.7.4.(1) and 9.9.8.6.(2)

<i>Occupancy of Room, Suite or Floor Area</i>	<i>Maximum Area of Room, Suite or Floor Area, m²</i>	<i>Maximum Distance to Egress Door, m</i>
Group C (except <i>dwelling units</i>)	100	15
Group D	200	25
Group E	150	15
Group F, Division 2	150	10
Group F, Division 3	200	15

9.9.7.5. Independent Access to Exit

- 1) Required *access to exit* from *suites* shall not be through any other *dwelling unit*, *service room* or other *occupancy*.

9.9.7.6. Travel Distance within Rooms and Suites

1) Except for *dwelling units*, the travel distance from any point within the room or *suite* to the nearest egress door shall not exceed the maximum travel distance in Article 9.9.8.2.

9.9.8. Exits from Floor Areas**9.9.8.1. Measurement of Travel Distance**

1) Except as provided in Sentences (2) and (3), for the purposes of this Subsection, travel distance means the distance from any point in the *floor area* to an *exit* measured along the path of *exit* travel.

2) Where a room or *suite* is separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* of at least 45 min or, in a *sprinklered building*, by a *fire separation* which is not required to have a *fire-resistance rating*, the travel distance may be measured from an egress door of the room or *suite* to the nearest *exit*.

3) Where a *public corridor* is not less than 9 m wide and conforms to Subclauses 3.4.2.5.(1)(d)(i) to (d)(iv), the travel distance may be determined in accordance with those Subclauses.

9.9.8.2. Number of Required Exits

1) Except as provided in Sentence (2) and Subsection 9.9.9., at least 2 *exits* shall be provided from every *floor area*, spaced so that the travel distance to the nearest *exit* is not more than

- a) 40 m in the case of *business and personal services occupancies*,
- b) 45 m for all *occupancies* where the *floor area* is *sprinklered*, and
- c) 30 m for all other *occupancies*.

2) Except as provided in Subsection 9.9.9., a single *exit* is permitted from each *storey* in *buildings* of 1 and 2 *storeys* in *building height* provided the *floor area* and travel distance requirements conform to those required in Article 9.9.7.4. and the total *occupant load* served by an *exit* facility does not exceed 60 persons.

9.9.8.3. Contribution of Each Exit

1) Where more than one *exit* is required from a *floor area*, each *exit* shall be considered as contributing not more than half the required *exit* width.

9.9.8.4. Location of Exits

1) Where more than one *exit* is required from a *floor area*, at least 2 *exits* shall be independent of each other and be placed remote from each other along the path of travel between them. (See Note A-9.9.8.4.(1).)

9.9.8.5. Exiting through a Lobby

1) Not more than one *exit* from a *floor area* above or below the *first storey* is permitted to lead through a lobby.

2) The lobby referred to in Sentence (1) shall be not more than 4.5 m above *grade*, and the path of travel through the lobby to the outdoors shall not exceed 15 m.

3) The lobby referred to in Sentence (1) shall conform in all respects to the requirements for *exits*, except that rooms other than *service rooms*, storage rooms and rooms of *residential* or *industrial occupancy* are permitted to open directly onto such lobby.

4) Where the lobby referred to in Sentence (1) and adjacent *occupancies* that are permitted to open into the lobby are *sprinklered*, the *fire separation* between such *occupancies* and the lobby need not have a *fire-resistance rating*. (See Note A-3.4.4.2.(2)(c).)

5) Passenger elevators are permitted to open onto the lobby referred to in Sentence (1) provided the elevator doors are designed to remain closed except while loading and unloading passengers.

9.9.8.6. Mezzanine Means of Egress

1) Except as permitted by Sentences (2) and (3), the space above a *mezzanine* shall be served by *means of egress* leading to *exits* accessible at the *mezzanine* level, on the same basis as *floor areas*.

2) The *means of egress* from a *mezzanine* need not conform to Sentence (1), provided

- a) the *mezzanine* is not required to terminate at a vertical *fire separation*, as permitted by Sentence 9.10.12.1.(2),

- b) the *occupant load* of the *mezzanine* is not more than 60,
- c) the area of the *mezzanine* does not exceed the area limits stated in Table 9.9.7.4., and
- d) the distance limits stated in Table 9.9.7.4., measured along the path of travel, are not exceeded from any point on the *mezzanine* to
 - i) an egress door serving the space that the *mezzanine* overlooks if the space is served by a single egress door, or
 - ii) an egress stairway leading to an *access to exit* in the space below if that space is required to be served by 2 or more egress doorways in conformance with Sentence 9.9.7.4.(1).

3) Notwithstanding the limitations of Sentence (2), one *means of egress* from a *mezzanine* complying with Sentence 9.10.12.1.(2), need not terminate at a fire separation, and is permitted to lead through the room in which the *mezzanine* is located, provided all other *means of egress* from that *mezzanine* lead to *exits* accessible at the *mezzanine* level.

4) Except as provided in Sentence (2), the maximum travel distance from any point on a *mezzanine* to the nearest *exit* shall be not more than

- a) 40 m in a *business and personal services occupancy*,
- b) 45 m in a *floor area* that is *sprinklered* throughout, provided it does not contain a *high-hazard industrial occupancy*, or
- c) 30 m in any *floor area* not referred to in Clauses (a) or (b).

9.9.9. Egress from Dwelling Units

9.9.9.1. Travel Limit to Exits or Egress Doors

1) Except as provided in Sentences (2) and (3), every *dwelling unit* containing more than 1 *storey* shall have *exits* or egress doors located so that it shall not be necessary to travel up or down more than 1 *storey* in a building, or more than 2 storeys in a sprinklered building, to reach a level served by

- a) an egress door to a *public corridor*, enclosed *exit* stair or exterior passageway, or
- b) an *exit* doorway located within 1 storey of ground level.

2) Where a *dwelling unit* is not located above or below another *suite*, the travel limit from a floor level in the *dwelling unit* to an *exit* or egress door may exceed 1 *storey* where that floor level is served by an openable window

- a) providing an unobstructed opening of not less than 1 m in height and 0.55 m in width, and
- b) located so that the sill is not more than
 - i) 1 m above the floor, and
 - ii) 7 m above adjacent ground level.

3) The travel limit from a floor level in a *dwelling unit* to an *exit* or egress door may exceed 1 *storey* where that floor level has direct access to a balcony.

9.9.9.2. Two Separate Exits

1) Except as provided in Sentence 9.9.7.3.(1), where an egress door from a *dwelling unit* opens onto a *public corridor* or exterior passageway it shall be possible from the location where the egress door opens onto the corridor or exterior passageway to go in opposite directions to 2 separate *exits* unless the *dwelling unit* has a second and separate *means of egress*.

9.9.9.3. Shared Egress Facilities

1) A *dwelling unit* shall be provided with a second and separate *means of egress* where an egress door from the *dwelling unit* opens onto

- a) an *exit* stairway serving more than one *suite*,
- b) a *public corridor*
 - i) serving more than one *suite*, and
 - ii) served by a single *exit*,

- c) an exterior passageway
 - i) serving more than one *suite*,
 - ii) served by a single *exit* stairway or ramp, and
 - iii) more than 1.5 m above adjacent ground level, or
- d) a balcony
 - i) serving more than one *suite*,
 - ii) served by a single *exit* stairway or ramp, and
 - iii) more than 1.5 m above adjacent ground level.

2) Reserved.

9.9.10. Egress from Bedrooms

9.9.10.1. Egress Windows or Doors for Bedrooms

- 1) Except where the *suite* is *sprinklered*, each bedroom or combination bedroom shall have at least one outside window or exterior door openable from the inside without the use of keys, tools or special knowledge and without the removal of sashes or hardware. (See Article 9.5.1.2. and Note A-9.9.10.1.(1).)
- 2) The window referred to in Sentence (1) shall
 - a) provide an unobstructed opening of not less than 0.35 m² in area with no dimension less than 380 mm, and
 - b) maintain the required opening during an emergency without the need for additional support.(See Note A-9.9.10.1.(2).)
- 3) Where a window required in Sentence (1) opens into a window well, a clearance of not less than 760 mm shall be provided in front of the window. (See Note A-9.9.10.1.(3).)
- 4) Where the sash of a window referred to in Sentence (3) swings towards the window well, the operation of the sash shall not reduce the clearance in a manner that would restrict escape in an emergency.
- 5) Where a protective enclosure is installed over the window well referred to in Sentence (3), the enclosure shall be openable from the inside without the use of keys, tools or special knowledge of the opening mechanism.

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*.

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 obstructions shall be installed on 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 and 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 hand),
 - ii) E002 emergency exit (right hand),
 - iii) E005 Direction, arrow (90° increments), safe condition, and
 - iv) E006 Direction, 45° arrow (90° increments), safe condition.
- 3) Internally illuminated *exit* signs shall be continuously illuminated and
 - a) where illumination of the sign is powered by an electrical circuit, conform to CSA C22.2 No. 141, “Emergency Lighting Equipment,” or
 - b) where illumination of the sign is not powered by an electrical circuit, conform to CAN/ULC-S572, “Photoluminescent and Self-Luminous Exit Signs and Path Marking Systems.”
- 4) Externally illuminated *exit* signs shall be continuously illuminated and conform to CAN/ULC-S572, “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 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.

9.9.11.5. Floor Numbering

- 1) Arabic numerals indicating the assigned floor number shall be
 - a) mounted permanently on the stair side of the wall at the latch side of doors to *exit* stair shafts,
 - b) not less than 60 mm high, raised approximately 0.8 mm above the surface,
 - c) located 1 500 mm from the finished floor and not more than 300 mm from the door, and
 - d) contrasting in colour with the surface on which they are applied. (See Note A-3.4.6.19.(1)(d).)

9.9.12. Lighting

9.9.12.1. Application

- 1) This Subsection applies to the lighting of all *means of egress* except those within *dwelling units*.

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.”