| Articles             | Amendments  |
|----------------------|---|
| Division A<br>Part 1 |   |
| 1.1.1.1.             | Replace Sentence (1) by the following:  "(1) The NBC applies to the construction work performed on every building and facility intended for use by the public as provided in section 1.02 of Chapter I of the Construction Code (chapter B-1.1, r. 2) made pursuant to the Building Act (chapter B-1.1) (see Note A-1.1.1.1.(1)).";  Strike out Sentence (2).   |
| 1.2.1.1.             | Insert the following after "acceptable solutions" in Clause (1)(b): "approved by the Régie du bâtiment du Québec or, in the case of buildings or facilities over which the Régie does not have jurisdiction, by the authority having jurisdiction".   |
| 1.3.3.1.             | Replace the title by the following:  "Application of Parts 1, 7, 8, 10 and 11";  Add the following Sentences:  "(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  (a) having a building area not more than 600 m²,  (b) having a building height not more than 3 storeys, and  (c) having a Group C major occupancy and housing only dwelling units.  (See Article 1.1.1.1. and Note A-1.3.3.1.(3).)". |

| 1.3.3.2. | Add the following sentence:  "(2) Parts 3, 4, 5 and 6 of Division B apply to every facility intended for use by the public as provided in section 1.03 of Chapter I of the Construction Code (chapter B-1.1, r. 2).".  |
|----------|--|
| 1.3.3.4. | Replace Clause (2)(a) by the following:  "(a) each separated portion is not more than 3 storeys in building height and is used only for residential services occupancies, and".  |
| 1.4.1.1. | Replace "9" in Sentence (3) by "11".   |
| 1.4.1.2. | Replace the respective definitions of the following terms in Sentence (1) by the following definitions:  "Air-supported structure means a movable structure consisting of a pliable membrane which achieves and maintains its shape and support by internal air pressure that is erected for a maximum period of 6 months.";  "Authority having jurisdiction means the Régie du bâtiment du Québec, a regional county municipality or a local municipality.";  "Boiler means pressure equipment equipped with a direct power source used to heat a heat-carrying liquid or transform it into steam.";  "Care means the provision of assistance services other than treatment by or through care facility management to residents who require these services because of cognitive, physical or behavioural limitations (see Note A-1.4.1.2.(1)).";  "Care occupancy means a building or part thereof where care is provided to residents or of a building or part thereof occupied by a private seniors' residence (see Note A-1.4.1.2.(1)).";  "Dwelling unit means a suite used or intended to be used by one or more persons as a residence and usually containing sanitary, cooking, eating and sleeping facilities.";  "Grade means the lowest of the average levels of finished ground, measured along each exterior wall of a building that must face a street in conformance with Subsection 3.2.2. or Subsection 9.10.20.";  "Plenum means a chamber forming part of an air duct system."; |

- "Stage means a space that is designed primarily for public performances with provision for quick change scenery and overhead lighting, including environmental control for a wide range of lighting and sound effects and that is traditionally, but not necessarily, separated from the audience by a proscenium wall and curtain opening.";
- "Theatre means a place of assembly intended for public performances of viewing of plays, operas, cinematographic works or other similar performances or viewing consisting of an auditorium with permanently fixed seats intended solely for a viewing audience.";
- "Treatment occupancy (Group B, Division 2) means a *building* or part thereof for the provision of treatment (see Note A-1.4.1.2.(1)).";
- "Vertical service space means a shaft oriented essentially vertically that is provided in a building to facilitate the installation of building services including mechanical, electrical and plumbing installations and facilities such as elevators, freight elevators, refuse chutes and linen chutes.";

Replace the corresponding term defined in Sentence (1) by the following: "*Fire separation* means a construction assembly, with or without *fire-resistance rating,* that acts as a barrier against the spread of fire. (See Note A-1.4.1.2.(1).)";

Insert the following definitions in Sentence (1), in alphabetical order:

- "Ambulatory clinic occupancy means a Group B, Division 2 treatment occupancy, other than a hospital, that provides treatment for a period not exceeding one day and does not provide overnight accommodation (see Note A-1.4.1.2.(1)).";
- "Overall thermal transmittance (U-value) means the rate at which heat is transferred through a building assembly that is subject to a temperature difference. The overall thermal transmittance 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 of above-ground components.";
- "**Private seniors' residence** (Group B, Division 3) means a private seniors' residence as defined in the Act respecting health services and social services (chapter S-4.2).";
- "Single-family type care occupancy means a single-family dwelling not more than 2 storeys in building height in which a natural person who resides in that dwelling operates a care occupancy and lodges no more than 9 persons. A single-family type private seniors' residence is a single-family type care occupancy.";

| eans a single-family dwelling not more than 2 storeys in building height which a natural person who resides in that dwelling operates a private eniors' residence and lodges no more than 9 persons."; Thermal bridge means a heat conductive member that results in a duction of the total thermal resistance of a separation or a part of the vilding envelope."; Total thermal resistance (RSIT value) means the thermal resistance of separation equal to the sum of the thermal resistance of all the layers material or little or unventilated air composing the separation, alculated through the insulated portion of the separation (see one A-1.4.1.2.(1))."; Tent means a flexible, portable shelter made of canvas set up outdoors in not more than 6 months."; |
|---|
| dd "(see Note A-1.4.1.2.(1))" at the end of the definition of " <b>Alteration</b> " Sentence (1).   |
|   |
| eplace Clause (5)(a) by the following:  a) detached houses, semi-detached houses, houses with a secondary vite, duplexes, triplexes, townhouses and row houses (see ote A-1.4.1.2.(1), Secondary Suite),";  |
| eplace Sentence (6) by the following:  6) Objective OE, Environment, as well as Objectives OE1, Resources, E1.1, excessive use of energy, and OE1.2, excessive use of water, oply only to   |
| ) buildings covered by Part 11 of Division B,   |
| ) the Sentences included in that Part, and  |
| ) air conditioning or drinking water cooling systems.".   |
|   |

|                                  | Add the following chiesting and a chiestine "OF 4.4"   |
|----------------------------------|--|
| 2.2.1.1.                         | Add the following objective under objective "OE 1.1 – excessive use of energy" in Sentence 1:  |
|                                  | "OE1.2 – excessive use of water".  |
| Division A                       |  |
| Part 3                           |  |
|                                  | Replace Clause (3)(a) by the following:  |
|                                  | "(a) detached houses, semi-detached houses, houses with a <i>secondary suite</i> , duplexes, triplexes and townhouses and row houses (see Note A-1.4.1.2.(1), Secondary Suite),";  |
| 3.1.1.2.                         |  |
| 3.1.1.2.                         | Replace Sentence (4) by the following:   |
|                                  | "(4) Functional Statements F92, F98 and F130 apply only to   |
|                                  | (a) <i>buildings</i> covered by Part 11 of Division B,   |
|                                  | (b) the Sentences included in that Part, and   |
|                                  | (c) air conditioning or drinking water cooling systems.".  |
| 2011                             | Add the following functional statements in Sentence (1):   |
| 3.2.1.1.                         | "F130 To limit excessive water consumption.".  |
| Division A<br>Notes in<br>Part 1 |  |
|                                  | Replace the Note by the following:   |
|                                  | "A-1.1.1.(1) Application of NBC to buildings.  |
|                                  | Existing building  |
| A-1.1.1.(1)                      | It is permitted to apply Part 10 of the NBC as provided for in Article 1.3.3.1. of Division A during the alteration, maintenance, repair or change of occupancy of an existing building that has been built for not less than 5 years. |
|                                  |  |

|                      | Building built in Nunavik  |
|----------------------|--|
|                      | Considering that the construction of buildings in permafrost differs from the construction practices described in the NBC, it is recommended to refer to the document Housing Construction in Nunavik – Guide to Good Practices, Second Edition (2018), published by the Société d'habitation du Québec for that type of construction and available at http://www.habitation.gouv.qc.ca/fileadmin/internet/documents/English/HousingConstructionInNunavik.pdf.". |
| A-1.1.1.(2)          | Strike out the Note.   |
| A-<br>1.2.1.1.(1)(b) | Add the following after "alternative solution" at the end of the first sentence in the first paragraph: "and be approved by the Régie on the conditions it sets pursuant to section 127 of the Building Act or, in the case of buildings or facilities over which the Régie does not have jurisdiction, by the authority having jurisdiction.".  |
|                      | Insert the following Note:   |
|                      | "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 m <sup>2</sup> , 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 the replacement of openings. Nor does it apply to the renovation of existing buildings. However, addition work representing 50% or more of the initial building area must meet the ventilation requirements for the additional portion only.  |
|                      | A parking garage for more than 4 cars does not have to meet the ventilation requirements in Part 11 even if the parking garage serves dwelling units of a building having a building area not more than 600 m <sup>2</sup> and the number of storeys in building height is not more than 3 storeys. The parking garage must meet the ventilation requirements in Part 6.".   |

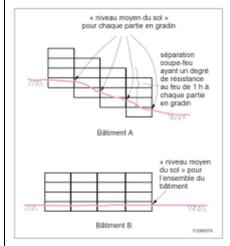
Replace the Note by the following:

## A-1.3.3.4.(1)

"A-1.3.3.4.(1) Buildings Divided by Firewalls. This concept relates to the requirements in Section 3.2.2. of the NBC for determining dimensions only. For the other requirements, the designer determines whether a building divided by a firewall or 2 separate buildings as defined in Article 1.4.1.2. are to be built. Where the designer designs 2 separate buildings, each building must conform to all the requirements in the NBC.".

Replace the Note by the following:

"A-1.3.3.4.(2) Buildings on Sloping Sites. Application of the definition of grade to stepped buildings on sloping sites often results in such buildings being designated as being greater than 3 storeys in building height even though there may be only 2 or 3 storeys at any one location. Figure A-1.3.3.4.(2) below illustrates this application compared to a similar building on a flat site.



## A-1.3.3.4.(2)

Figure A-1.3.3.4.(2)

## Application of the definition of grade

According to that Sentence, the building can be considered has as being 3 storeys in building height instead of 6 storeys in building height. Both Building A and B are comparable with regard to fire safety and egress. This relaxation applies to the determination of building height only. All other requirements continue to apply as appropriate.".

Replace the following Appendix Notes by the following Notes, respectively:

"Care Occupancy. Support services rendered by or through care facility management refer to care provided by the organization that is responsible for the care for a period exceeding 24 consecutive hours. They do not refer to care arranged directly by residents with outside agencies. They do not include services provided to a family member.

In the context of care occupancies, these services may include a daily assessment of residents' functioning, awareness of their whereabouts, the making of appointments for residents and reminding them of those appointments, the ability and readiness to intervene if a crisis or emergency arises for a resident, supervision in areas of nutrition or medication, provision of transient medical services, and assistance in case of emergency or building evacuation. Services may also include activities of daily living such as bathing, dressing, feeding, and assistance in the use of washroom facilities, etc. No actual treatment is provided by or through care facility management.

Care occupancies offering lodging in rooms include nursing homes, rehabilitation centres, palliative care facilities, convalescent homes, birthing centres and private seniors' residences.

Care occupancies offering lodging in dwellings include private seniors' residences where services or care may be provided.

Care occupancies do not include residential and long-term care centres (CHSLDs) within the meaning of the Act respecting health services and social services (chapter S-4.2) or any other occupancy with a similar use.":

"Treatment Occupancy. "Treatments" may include such things as surgery, intensive care and emergency medical intervention. Treatment services differ from the services provided by care occupancies, like personal care assistance or the administration of medication, and from those provided by business and personal services occupancies, like dentistry.

Treatment occupancies include residential and long-term care centres (CHSLDs) within the meaning of the Act respecting health services and social services (chapter S-4.2) and any other occupancy with a similar use.";

"Suite. The term "suite" applies to both rental and ownership tenure. In a condominium arrangement, for example, dwelling units are considered separate suites. In order to be of complementary use, a series of rooms

A-1.4.1.2.(1)

that constitute a suite must be in reasonably close proximity to each other and have access to each other either directly by means of a common doorway or indirectly by a corridor, vestibule or other similar arrangement.

The term "suite" does not apply to rooms such as service rooms, common laundry rooms and common recreational rooms that are not leased or under a separate tenure in the context of the NBC. Similarly, the term "suite" is not normally applied in the context of buildings such as schools and hospitals, since the entire building is under a single tenure. However, a room that is individually rented is considered a suite. A compartment or warehousing unit in a mini-warehouse is a suite.

For certain requirements in the NBC, the expression "room or suite" is used (e.g., travel distance). This means that the requirement applies within the rooms of suites as well as to the suite itself and to rooms that may be located outside the suite. In other places the expression "suite, and rooms not located within a suite" is used (e.g., for the installation of smoke and heat detectors). This means that the requirement applies to individual suites as defined, but not to each room within the suite. The rooms "not within a suite" would include common laundry rooms, common recreational rooms and service rooms, which are not considered as tenant-occupied space.

A room occupied by a patient or resident in a care or treatment occupancy is not a suite within the meaning of the NBC. A room is a single sleeping room that may include sanitary facilities.";

Insert the following Notes, in alphabetical order:

- "Alteration. An alteration does not include the types of work such as work required to bring the building into conformance with the regulations in force and the maintenance and repairs that do not affect the characteristics and functions of the elements involved. It does, however, include the following types of intervention:
- (1) a change of occupancy without modification, including a change in the same Group or Division.
- (2) a change such as an addition, restoration, rehabilitation, renovation or retrofitting related in particular to
- (a) an increase in building height,
- (b) an increase in building area,
- (c) an increase in floor area,
- (d) the creation of an interconnected floor space,

- (e) the installation of a barrier-free access to a building or a barrier-free path of travel in the building,
- (f) a modification of the provisions for firefighting, or
- (g) a modification or addition affecting the safety and health conditions of a building or part of a building.

"Ambulatory Clinic Occupancy. The occupancies covered are care units where surgical or medical procedures are performed and may result in limitations making it impossible for a person to move or direct himself or herself unassisted in case of evacuation. Such procedures include a local or general anesthesia, administration of a sedative through a catheter or by other means, or treatment that requires a special procedure to terminate it. Dialysis, medical examinations and medical imaging may take place in ambulatory clinic occupancies. Any pre-existing conditions a person who enters a building may have do not affect the building's designation as an ambulatory clinic occupancy.

Occupancies covered by this definition are variously called

- day clinics,
- outpatient clinics,
- day surgery clinics,
- · ambulatory surgery clinics,
- · kidney dialysis clinics,
- oncology clinics,
- specialized medical centres (SMCs) (surgery).

To be eligible under the provisions relating to ambulatory clinic occupancies, an occupancy must not offer accommodation. If it does, it is subject to the requirements applicable to a treatment occupancy classified as Group B, Division 2.";

"Care. Personal assistance services may be required for some residents. Assistance services are intended to compensate for a temporary or permanent disability in order to provide for personal hygiene, feeding, grooming, the use of personal property, the movement or rehabilitation of a person, and services to supervise medication or manage a crisis, emergency or building evacuation situation.

In a private seniors' residence, assistance services include personal assistance services such as

- feeding, daily personal hygiene, dressing and bathing assistance services,
- the care services involved in assistance with activities of daily living.

|                      | Some services provided by a care facility are not care, including  |
|----------------------|--|
|                      | <ul> <li>domestic help services such as         <ul> <li>housekeeping services in rooms or apartments,</li> <li>laundry services for clothing and bedding,</li> </ul> </li> <li>recreation services such as         <ul> <li>organized recreation or entertainment services to promote socialization, in particular in the form of physical, mental, social or creative activities,</li> </ul> </li> <li>meal services such as the supply, on a daily basis, of one or more meals,</li> <li>security services such as the full-time presence in a residence of a staff member providing supervision or the supply to residents of a call-for-help system.";</li> </ul> |
|                      | "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.";  |
|                      | Strike out the Note on grade.  |
| A-2.1.1.2.(6)        | Strike out the Note.   |
| Division B<br>Part 1 |  |
|                      | Replace "9" in Sentence (3) by "11".   |
| 1.2.1.1.             | Add the following Sentence:  |
|                      | "(4) Alternative solutions referred to in Division C are those referred to in Clause 1.2.1.1.(1)(b) of Division A.".   |
| 1.3.1.2.             | Replace the relevant standards in Table 1.3.1.2 by the following standards:  "AHRI   |
|                      | ANSI/AHRI 1060 (I-P)-2018  |

Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment 6.2.2.9.(8)"; "ASHRAE ANSI/ASHRAE 62-2001 Ventilation for Acceptable Indoor Air Quality (except Addendum n) A-9.25.5.2."; "ASHRAE ANSI/ASHRAE 62.1-2004 Ventilation for Acceptable Indoor Air Quality 6.3.1.1.(2) 6.3.2.2.(1)"; "ASHRAE ANSI/ASHRAE 140-2011 **Evaluation of Building Energy Analysis Computer Programs** A-11.2.2.1.(3)"; "ASME/CSA ASME A17.1-2007/CSAB44-07 Safety Code for Elevators and Escalators 3.2.6.7.(2) 3.5.2.1.(1) 3.5.2.1.(3) 3.5.2.1.(4) 3.5.4.1.(3) 3.5.4.2.(1) A-3.5.2.1.(1) Table 4.1.5.11. Table 4.1.8.18."; "ASTM C 1363-11

Thermal Performance of Building Materials and Envelope Assemblies by

Means of a Hot Box Apparatus

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A-5.9.4.1.(1)
A-11.2.2.1.(1)";
"ASTM
D 2898-10
Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing
3.1.5.5.(3)
3.1.5.24.(1)
3.2.3.7.(4)
9.10.14.5.(3)
9.10.15.5.(3)";
"CCBFC
NRC-CONST-56215
National Energy Code of Canada for Buildings 2017
A-2.2.1.1.(1)<sup>(4)</sup>
A-3.2.1.1.(1)<sup>(4)</sup>";
"CCBFC
NRCC 56192
National Fire Code of Canada 2015
1.4.1.2.(1)<sup>(4)</sup>
2.1.1.2.(4)(4)
A-2.2.1.1.(1)<sup>(4)</sup>
A-3.2.1.1.(1)<sup>(4)</sup>
1.1.4.1.(1)
3.1.13.1.(1)
3.2.3.21.(1)
3.2.5.16.(1)
3.3.1.2.(1)
3.3.1.10.(1)
3.3.2.3.(1)
3.3.2.16.(1)
3.3.4.3.(4)
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| T                                     |
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| 3.3.5.2.(1)                           |
| 3.3.6.1.(1)                           |
| 3.3.6.3.(1)                           |
| 3.3.6.3.(2)                           |
| 3.3.6.4.(1)                           |
| 3.3.6.4.(2)                           |
| 3.3.6.6.(1)                           |
| 3.7.3.1.(1)                           |
| A-3.1.2.3.(1)                         |
| A-3.2.4.6.(2)                         |
| A-3.2.6.                              |
| A-3.2.7.8.(3)                         |
| A-3.3.                                |
| A-3.3.1.7.(1)                         |
| A-3.3.3.1.(1)                         |
| A-3.3.6.1.(1)                         |
| A-3.9.3.1.(1)                         |
| 6.3.4.3.(1)                           |
| 6.3.4.4.(1)                           |
| 6.9.1.2.(1)                           |
| 9.10.20.4.(1)                         |
| Appendix C";                          |
| "CCBFC                                |
| NRCC 56193                            |
| National Plumbing Code of Canada 2015 |
| 2.1.1.2.(4) <sup>(4)</sup>            |
| A-2.2.1.1.(1) <sup>(4)</sup>          |
| A-3.2.1.1.(1) <sup>(4)</sup>          |
| A-4.1.6.4.(3)                         |
| 5.6.2.2.(2)                           |
| 6.3.2.15.(5)                          |
|                                       |

7.1.2.1.(1) 9.31.6.2.(1) Appendix C"; "CCBFC NRCC 56194 Structural Commentaries (User's Guide – NBC 2015: Part 4 of Division B) A-4.1.1.3.(1) A-4.1.1.3.(2) A-4.1.2.1. A-4.1.2.1.(1) A-4.1.3. A-4.1.3.2.(2) A-4.1.3.2.(4) A-4.1.3.2.(5) A-4.1.3.3.(2) A-4.1.3.4.(1) A-4.1.3.5.(1) A-4.1.3.5.(3) A-4.1.3.6.(1) A-4.1.3.6.(2) A-4.1.3.6.(3) A-4.1.5.8. A-4.1.5.17. A-4.1.6.2. A-4.1.6.3.(2) A-4.1.6.4.(1) A-4.1.7.2. A-4.1.7.3.(5)(c) A-4.1.7.3.(10) A-4.1.7.9.(1)

A-4.1.8.2.(1)

A-4.1.8.3.(4)

A-4.1.8.3.(6)

A-4.1.8.3.(7)(b) and (c)

A-4.1.8.3.(8)

A-4.1.8.4.(3) and Table

4.1.8.4.-A

A-Table 4.1.8.5.

A-Table 4.1.8.6.

A-4.1.8.7.(1)

A-4.1.8.9.(4)

A-4.1.8.9.(5)

A-4.1.8.10.(4)

A-4.1.8.10.(5)

A-4.1.8.10.(7)

A-4.1.8.11.(3)

A-4.1.8.12.(1)(a)

A-4.1.8.12.(1)(b)

A-4.1.8.12.(3)

A-4.1.8.12.(4)(a)

A-4.1.8.13.(4)

A-4.1.8.15.(1)

A-4.1.8.15.(3)

A-4.1.8.15.(4)

A-4.1.8.15.(5)

A-4.1.8.15.(6)

A-4.1.8.15.(7)

A-4.1.8.15.(8)

A-4.1.8.16.(1)

A-4.1.8.16.(4)

A-4.1.8.16.(6)(a)

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A-4.1.8.16.(7)
A-4.1.8.16.(8)(a)
A-4.1.8.16.(10)
A-4.1.8.17.(1)
A-4.1.8.18.
A-4.1.8.18.(13)
A-4.1.8.18.(14) and (15)
A-4.1.8.19.(3)(a)
A-4.1.8.19.(4) and 4.1.8.21.(5)
A-4.1.8.21.(4)(a)
A-4.2.4.1.(3)
A-4.2.4.1.(5)
A-4.2.5.1.(1)
A-4.2.6.1.(1)
A-4.2.7.2.(1)
A-4.3.6.1.(1)
A-4.4.2.1.(1)
A-5.1.4.2.
A-5.2.2.(4)";
"CSA
AAMA/WDMA/CSA 101/I.S.2/A440-17
North American Fenestration Standard (NAFS)/Specification for
Windows, Doors, and Skylights
5.9.2.2.(1)
A-5.3.1.2.
A-5.9.2.3.(1)
A-5.9.3.1.(1)
Table 9.7.3.3.
9.7.4.1.(1)
9.7.4.2.(1)
9.7.5.1.(1)
9.7.5.3.(1)
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A-9.7.4.2.(1)
11.2.2.4.(2)";
"CSA
A440S1-19
Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440-17, NAFS
- North American Fenestration Standard/Specification for Windows,
Doors, and Skylights
5.9.2.2.(1)
5.9.3.5.(3)
A-5.9.2.2.
A-5.9.3.5.(3)
9.7.4.2.(1)
A-9.7.4.2.(1)";
"CSA
A440.2-14/A440.3-19
Fenestration Energy Performance/User Guide to CSA A440.2-19,
Fenestration Energy Performance
11.2.2.4.(1)";
"CSA
A440.3-19
User guide to CSA A440.2-19, Fenestration energy performance
A-5.3.1.2.";
"CSA
CSA-A440.4-19
Window, door, and skylight installation
A-5.9.2.3.(1)
9.7.6.1.(1)
A-9.7.4.2.(1)";
"CSA
B52-13
Mechanical Refrigeration Code
3.6.3.1.(6)
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6.2.1.5.(1)
9.33.5.2.(1)";
"CSA
B149.1-15
Natural gas and propane installation code
6.2.1.5.(1)
9.10.22.1.(1)
9.31.6.2.(2)
9.33.5.2.(1)
A-9.10.22.";
"CSA
B214-16
Installation code for hydronic heating systems
6.2.1.1.(1)
9.33.4.2.(1)";
"CSA
B355-09
Private Residence Lifts for Persons With Physical Disabilities
A-3.8.2.3.(2)(j)
3.8.3.7.(1)
3.8.3.7.(2)(d)
3.8.3.7.(3)
A-3.8.3.7.(1)";
"CSA
C22.1-18
Canadian Electrical Code, Part I
3.2.4.5.(1)
3.3.6.2.(4)
3.6.1.2.(1)
3.6.2.1.(6)
3.6.2.7.(1)
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A-3.1.4.3.(1)(b)(i)
A-3.2.4.5.(1)
A-3.2.4.20.(7)(a)
A-3.3.6.2.(4)
6.2.1.5.(1)
9.31.6.2.(2)
9.33.5.2.(1)
9.34.1.1.(1)
A-9.10.22.
A-9.34.2.
A-9.35.2.2.(1)";
"CSA
C22.2 No. 0.3-09
Test Methods for Electrical Wires and Cables
3.1.4.3.(1)
3.1.4.3.(3)
3.1.5.21.(1)
3.1.5.21.(3)
3.1.5.21.(5)
9.34.1.5.(1)";
"CSA
CAN/CSA-C439-09
Standard laboratory methods of test for rating the performance of
heat/energy-recovery ventilators
6.3.1.8.(8)
9.32.3.10.(4)
9.32.3.10.(5)";
"CSA
F280-12
Determining the required capacity of residential space heating and
cooling appliances
9.33.5.1.(1)";
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"CSA
Z240.2.1-09
Structural Requirements for Manufactured Homes
9.12.2.2.(6)
9.15.1.3.(1)";
"CSA
Z240.10.1-16
Site Preparation, Foundation, and Installation of Buildings
9.15.1.3.(1)
9.23.6.3.(1)";
"NFPA
13-2013
Installation of Sprinkler Systems
3.1.9.1.(4)
3.1.11.5.(3)
3.2.4.8.(2)
3.2.4.15.(1)
3.2.5.12.(1)
3.3.2.14.(3)
A-3.1.11.5.(3)
A-3.2.4.9.(3)(f)
A-3.2.5.12.(1)
A-3.2.5.12.(6)
A-3.2.5.13.(1)
A-3.2.8.2.(3)
9.10.9.6.(11)";
"NFPA
13D-2016
Installation of Sprinkler Systems in One- and Two-Family Dwellings and
Manufactured Homes
3.2.4.1.(2)
3.2.5.12.(3)
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A-3.2.5.12.(6)
A-3.2.5.13.(1)
9.10.18.2.(3)";
"CGSB
CAN/CGSB-149.10-M86
Determination of the Airtightness of Building Envelopes by the Fan
Depressurization Method
A-11.2.1.2.(6)";
"SMACNA
ANSI/SMACNA 006-2006
HVAC Duct Construction Standards – Metal and Flexible
9.33.6.5.(2)";
"ULC
CAN/ULC-S139-12
Standard Method of Fire Test for Evaluation of Integrity of Electrical
Power, Data and Optical Fibre Cables
3.2.7.10.(2)
3.2.7.10.(3)
3.2.6.5.(6)";
"ULC
CAN/ULC-S524-19
Installation of Fire Alarm Systems
3.1.8.11.(3)
3.1.8.14.(3)
3.2.4.5.(1)
3.2.4.20.(8)
3.2.4.20.(13)
A-3.2.4.5.(1)
A-3.2.4.7.(4)
A-3.2.4.18.(8) and (9)
A-3.2.4.20.(8)
9.10.19.4.(3)
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9.10.19.6.(2)";
"ULC
CAN/ULC-S537-19
Verification of Fire Alarm Systems
3.2.4.5.(2)";
"ULC
CAN/ULC-S540-13
Residential Fire and Life Safety Warning Systems: Installation,
Inspection, Testing and Maintenance
3.2.4.1.(2)
3.2.4.5.(3)
9.10.19.8.(1)";
"ULC
CAN/S701.1-17
Thermal Insulation, Polystyrene Boards
Table 5.9.1.1.
9.15.4.1.(1)
Table 9.23.17.2.-A
9.25.2.2.(1)";
"ULC
CAN/ULC-S702-14
Mineral Fibre Thermal Insulation for Buildings
Table 5.9.1.1.
A-5.9.1.1.(1)
Table 9.23.17.2.-A
9.25.2.2.(1)";
"ULC
CAN/ULC-S703-09
Standard for Cellulose Fibre Insulation (CFI) for Buildings
Table 5.9.1.1.
9.25.2.2.(1)";
"ULC
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CAN/ULC-S704-11

Standard for Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced

Table 5.9.1.1.

Table 9.23.17.2.-A

9.25.2.2.(1)";

"ULC

CAN/ULC-S705.1-15

Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density – Material Specification

Table 5.9.1.1.

9.25.2.2.(1)";

"ULC

CAN/ULC-S710.1-11

Thermal Insulation – Bead-Applied One Component Polyurethane Air Sealant Foam, Part 1: Material Specification

Table 5.9.1.1.";

"ULC

CAN/ULC-S711.1-11

Thermal Insulation – Bead-Applied Two Component Polyurethane Air Sealant Foam, Part 1: Material Specification

Table 5.9.1.1.";

"ULC

CAN/ULC-S741-08

Air Barrier Materials – Specification

5.4.1.2.(1)";

Insert the following standards in Table 1.3.1.2., respecting the order of the organizations:

"AHRI

ANSI/AHRI 1061(SI)- 2018

Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation

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6.2.2.9.(8)";
"ANSI
ANSI/BHMA A 156.10-2005
Power Operated Pedestrian Doors
A-3.8.3.6.(6) and (7)";
"BNQ
NQ 2621-905/2018
Ready-Mix Concrete - Certification Program
4.1.1.6.(1)
9.3.1.1.(5)";
"BNQ
NQ 2560-500/2003
Granulats – Détermination de l'indice pétrographique du potentiel de
gonflement sulfatique des matériaux granulaires – Méthode d'essai pour
l'évaluation de l'IPPG
A-4.2.5.8.(2)";
"BNQ
NQ 2560-510/2003
Granulats – Guide d'application de la méthode d'essai pour la
caractérisation du potentiel de gonflement sulfatique des matériaux
granulaires
A-4.2.5.8.(2)";
"BNQ
3624-120/2016
Polyethylene (PE) Pipe and Fittings - Smooth Inside Wall Open Profile
Pipes for Storm Sewer and Soil Drainage - Characteristics and Test
Methods
9.14.3.1.(1)";
"BNQ
NQ 3624-130/2015
Unplasticized Poly(Vinyl Chloride) (PVC) Rigid Pipe and Fittings, 150 mm
in Diameter or Smaller, for Underground Sewage Applications
9.14.3.1.(1)";
"BNQ
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NQ 3624-135/2015

Unplasticized Poly(Vinyl Chloride) [PVC-U] Pipe and Fittings - Pipes of 200 mm to 600 mm in Diameter for Underground Sewage and Soil Drainage - Characteristics and Test Methods

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9.14.3.1.(1)";
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"BNQ

BNQ 3661-500/2012

Dépôts d'ocre dans les systèmes de drainage des bâtiments – Partie I : Évaluation du risque pour la construction de nouveaux bâtiments et diagnostic pour des bâtiments existants et Partie II : Méthodes d'installation proposées pour nouveaux bâtiments et bâtiments existants

A-4.2.2.1.(1)

A-5.7.1.2.(1)

A-9.14.2.1.(1)";

"CSA

CAN/CSA-Z91-17

Health and safety code for suspended equipment operations

3.5.5.1.(1)";

"CSA

CAN/CSA-Z271-10 (C2015)

Safety Code for Suspended Elevating Platforms

3.5.5.1.(1)";

"NFPA

45-2011

Fire Protection for Laboratories Using Chemicals

3.1.8.8.(3)

6.3.4.3.(1)";

"NFPA

92-2018

Standard for Smoke Control Systems

A-3.2.6.2.(3)";

"NFPA

701-2019

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Fire Tests for Flame-Resistant Textiles and Films
3.1.6.5.(1)";
"ULC
CAN/ULC-S533-08
Egress Door Securing and Releasing Devices
3.4.6.16.(8)";
"ULC
ULC/ORD-C263.1-99
Sprinkler-Protected Window Systems
3.1.7.6.(1)";
Strike out the following standards in Table 1.3.1.2.:
"ACGIH
28th Edition
Industrial Ventilation: A Manual of Recommended Practice for Design
6.2.1.1.(1)
6.3.2.14.(2)
A-6.3.1.6.";
"AHAM
ANSI/AHAM RAC-1-1982
Room Air Conditioners
Table 9.36.3.10.";
"AHRI
ANSI/AHRI 210/240-2008
Performance Rating of Unitary Air-Conditioning and Air-Source Heat
Pump Equipment
Table 9.36.3.10.";
"AHRI
BTS-2000
Efficiency of Commercial Space Heating Boilers
Table 9.36.3.10.";
"ANSI/CSA
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ANSI Z21.10.3-2013/CSA 4.3-2013

Gas-Fired Water Heaters, Volume III, Storage Water Heaters With Input Ratings Above 75,000 Btu Per Hour, Circulating and Instantaneous

Table 9.36.4.2.":

"ANSI/CSA

ANSI Z21.56-2013/CSA 4.7-2013

**Gas-Fired Pool Heaters** 

Table 9.36.4.2.";

"ANSI/CSA

ANSI Z83.8-2013/CSA 2.6-2013

Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-Fired Duct Furnaces

Table 9.36.3.10.";

"ASHRAE

2013

ASHRAE Handbook - Fundamentals

A-9.36.2.4.(1)";

"ASHRAE

ANSI/ASHRAE 103-2007

Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers

Table 9.36.3.10.";

"ASTM

C 177-13

Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus

9.36.2.2.(1)";

"ASTM

C 518-10

Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

9.36.2.2.(1)";

"ASTM

E 2357-11

Determining Air Leakage of Air Barrier Assemblies

9.36.2.9.(1)

A-9.36.2.9.(1)";

"CCBFC

NRCC 35951

Guidelines for Application of Part 3 of the National Building Code of Canada to Existing Buildings

A-1.1.1.(1)<sup>(4)</sup>";

"CCBFC

NRCC 38730

Model National Energy Code of Canada for Houses 1997

A-9.36.3.10.(1)

A-9.36.4.2.(1)";

"CCBFC

NRCC 40383

User's Guide – NBC 1995, Fire Protection, Occupant Safety and Accessibility (Part 3)

A-1.1.1.1.(1)<sup>(4)</sup>";

"CCBFC

NRCC 43963

User's Guide – NBC 1995, Application of Part 9 to Existing Buildings

A-1.1.1.1.(1)<sup>(4)</sup>";

"CSA

A277-16

Procedure for Certification of Prefabricated Buildings, Modules, and Panels

A-1.1.1.(2)<sup>(4)</sup>";

"CSA

B140.12-03

Oil-Burning Equipment: Service Water Heaters for Domestic Hot Water, Space Heating, and Swimming Pools

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Table 9.36.4.2.";
"CSA
CAN/CSA-B211-00
Energy Efficiency of Oil-Fired Storage Tank Water Heaters
Table 9.36.4.2.";
"CSA
B212-00
Energy Utilization Efficiencies of Oil-Fired Furnaces and Boilers
Table 9.36.3.10.";
"CSA
B415.1-10
Solid-Fuel-Burning Heating Appliances
Table 9.36.3.10.";
"CSA
CAN/CSA-C191-04
Performance of Electric Storage Tank Water Heaters for Domestic Hot
Water Service
Table 9.36.4.2.";
"CSA
C368.1-14
Energy Performance of Room Air Conditioners
Table 9.36.3.10.";
"CSA
C656-14
Split-System and Single-Package Air Conditioners and Heat Pumps
Table 9.36.3.10.";
"CSA
CAN/CSA-C745-03
Energy Efficiency of Electric Storage Tank Water Heaters and Heat Pump
Water Heaters
Table 9.36.4.2.";
"CSA
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CAN/CSA-C746-06

Rating Large and Single Packaged Vertical Air Conditioners and Heat Pumps

Table 9.36.3.10.";

"CSA

C748-13

Direct-Expansion (DX) Ground-Source Heat Pumps

Table 9.36.3.10.";

"CSA

CAN/CSA-C749-07

Performance of Dehumidifiers

Table 9.36.3.10.":

"CSA

C828-13

Thermostats Used with Individual Room Electric Space Heating Devices 9.36.3.6.(3)";

"CSA

CAN/CSA-C13256-1-01

Water-Source Heat Pumps - Testing and Rating for Performance - Part 1: Water-to-Air and Brine-to-Air Heat Pumps (Adopted ISO 13256-1:1998, with Canadian Deviations)

Table 9.36.3.10.";

"CSA

CAN/CSA-C13256-2-01

Water-Source Heat Pumps - Testing and Rating for Performance - Part 2: Water-to-Water and Brine-to-Water Heat Pumps (Adopted ISO 13256-2:1998, with Canadian Deviations)

Table 9.36.3.10.";

"CSA

CAN/CSA-P.2-13

Measuring the Annual Fuel Utilization Efficiency of Residential Gas-Fired or Oil-Fired Furnaces and Boilers

Table 9.36.3.10.";

"CSA

CAN/CSA-P.3-04

Measuring Energy Consumption and Determining Efficiencies of Gas-Fired Storage Water Heaters

Table 9.36.4.2.";

"CSA

P.6-09

Measuring Thermal Efficiency of Gas-Fired Pool Heaters

Table 9.36.4.2.";

"CSA

CAN/CSA-P.7-10

Measuring Energy Loss of Gas-Fired Instantaneous Water Heaters

Table 9.36.4.2.";

"CSA

CAN/CSA-P.8-09

Thermal Efficiencies of Industrial and Commercial Gas-Fired Package Furnaces

Table 9.36.3.10.";

« CSA

CAN/CSA-P.9-11

Performance of Combined Space and Water Heating Systems(Combos)

9.36.3.10.(3)

Table 9.36.3.10.

Table 9.36.4.2.

Table 9.36.5.15.-C";

"CSA

P.10-07

Performance of Integrated Mechanical Systems for Residential Heating and Ventilation

9.36.3.9.(2)

Table 9.36.3.10.

Table 9.36.4.2.

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Table 9.36.5.15.-C";
"CSA
CAN/CSA-P.11-07
Measuring Efficiency and Energy Consumption of Gas-Fired Unit Heaters
Table 9.36.3.10.";
"CSA
Z240 MH Series-16
Manufactured Homes
A-1.1.1.(2)<sup>(4)</sup>";
"CTI
STD-201RS-04
Certification of Water-Cooling Tower Thermal Performance
Table 9.36.3.10.";
"DOE
10 CFR, Part 430-2011
Energy, Energy Conservation Program for Consumer Products
Table 9.36.4.2.";
"DOE
10 CFR, Part 431-2011
Energy, Energy Efficiency Program for Certain Commercial and Industrial
Equipment
Table 9.36.4.2.";
"EPA
40 CFR, Part 60-2008
Protection of Environment, Standards of Performance for New Stationary
Sources
Table 9.36.3.10.";
"HRAI
SAR-G1
HRAI Digest 2005
6.2.1.1.(1)
9.32.2.3.(4)
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9.32.3.2.(1)
9.33.4.1.(1)
A-9.36.3.2.(1)
A-9.36.3.2.(2)
A-9.36.3.4.(1)";
"HVI
HVI Publication 911
Certified Home Ventilating Products Directory
A-9.36.3.9.(3)";
"ICC
400-2012
Design and Construction of Log Structures
9.36.2.2.(5)
A-9.36.2.2.(5)";
"IRC-CNRC
DCC 230F
Application des codes aux bâtiments existants
A-1.1.1.1.(1)<sup>(4)</sup>";
"NFRC
100-2010
Determining Fenestration Product U-factors
9.36.2.2.(3)";
"NFRC
200-2010
Determining Fenestration Product Solar Heat Gain Coefficient and Visible
Transmittance at Normal Incidence
9.36.2.2.(3)";
"NRCA
2nd Edition, 2009
Vegetative Roof Systems Manual
A-5.6.1.2.(2)";
"UL
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731-1995

Oil-Fired Unit Heaters

Table 9.36.3.10.";

"ULC

CAN/ULC-S712.1-17

Thermal Insulation - Light Density, Open Cell Spray Applied Semi-Rigid Polyurethane Foam - Material Specification

A-9.36.2.4.(1)";

"ULC

CAN/ULC-S742-11

Air Barrier Assemblies – Specification

9.36.2.9.(1)

A-9.36.2.9.(1)

A-9.36.2.10.(5)(b)";

"ULC

CAN/ULC-S770-15

Determination of Long-Term Thermal Resistance of Closed-Cell Thermal Insulating Foams

A-9.36.2.4.(1)";

"U.S. Congress

National Appliance Energy Conservation Act of 1987

Table 9.36.4.2.

Table 9.36.5.16.".

Insert the following in Sentence (1), in alphabetical order:

"NBC 1995 am. Québec

Construction Code of Québec, Chapter I, Building, and National Building Code of Canada 1995 (amended), National Building Code - Canada 1995 (NRCC 38726), including the revisions of July 1998 and November 1999 and the Code national du bâtiment - Canada 1995 (CNRC 38726F), including the revisions of July 1998 and November 1999, published by the Canadian Commission on Building and Fire Codes of the National Research Council of Canada (O.C. 953-2000, 2000-07-26)";

| 4004                 | "NBC 2005 am. Québec   |
|----------------------|--|
| 1.3.2.1.             | Construction Code of Québec, Chapter I, Building, and National Building Code of Canada 2005 (amended), National Building Code - Canada 2005 (NRCC 47666) and Code national du bâtiment-Canada 2005 (CNRC 47666F) published by the Canadian Commission on Building and Fire Codes of the National Research Council of Canada (O.C. 293-2008, 2008-03-19)";  |
|                      | "NBC 2010 am. Québec   |
|                      | Construction Code of Québec, Chapter I, Building, and National Building Code of Canada 2010 (amended), National Building Code of Canada 2010 (NRCC 53301) and Code national du bâtiment-Canada 2010 (CNRC 53301F) published by the Canadian Commission on Building and Fire Codes of the National Research Council of Canada (O.C. 347-2015, 2015-04-15)". |
| Division B<br>Part 3 |  |
| Table of             | Add the following Subsections in numerical order:  "3.5.5. Window Cleaning Systems";   |
| Contents             | "3.7.4. Windows".  |
| 3.1.2.5.             | Strike out the Article.  |
|                      | Add the following Article:   |
|                      | "3.1.2.7. Ambulatory Clinic Occupancy  |
|                      | (1) Despite the provisions on <i>treatment occupancies</i> and except as permitted by Sentences (2) to (6), an <i>ambulatory clinic occupancy</i> is permitted to be built in compliance with the <i>business and personal services occupancy</i> requirements.  |
|                      | (2) The floor area of a building of combustible construction containing an ambulatory clinic occupancy shall be sprinklered if the ambulatory clinic occupancy is located above the first storey or in the basement.   |
|                      | (3) The floor area of a building of noncombustible construction containing an ambulatory clinic occupancy shall be sprinklered if  |
|                      | (a) the <i>ambulatory clinic occupancy</i> is located above the <i>first storey</i> and the floor of the <i>storey</i> on which the <i>ambulatory clinic occupancy</i> is located forms a <i>fire separation</i> with <i>no fire-resistance rating</i> ,   |

(b) the ambulatory clinic occupancy is located above the second storey and the floor of the storev on which the ambulatory clinic occupancy is located forms a fire separation with a fire-resistance rating not more than 1 h. or (c) the *ambulatory clinic occupancy* is located in the *basement*. (4) The ambulatory clinic occupancy shall meet the requirements in Subsection 3.3.3. (5) The treatment area of an ambulatory clinic occupancy, which includes the operating, treatment or recovery rooms, shall be separated from the remainder of the floor area by a fire separation having a fire-resistance rating not less than 1 h such that it forms one or more fire compartments having an area not exceeding (a) 250 m<sup>2</sup> if the *floor area* is not *sprinklered*, (b) 500 m<sup>2</sup> if the *floor area* is *sprinklered*, or (c) 1000 m<sup>2</sup> if the *floor area* is *sprinklered* and has a smoke-control system in conformance with Clause 3.3.3.6.(1)(b). (6) Except as provided by Sentence (7), a treatment area contained within an ambulatory clinic occupancy shall provide direct access to at least one exit. (7) An ambulatory clinic occupancy whose treatment area provides direct access to a public corridor meets the requirements in Sentence (6) if (a) the part of the *public corridor* providing access to the *exit* is separated from the remainder of the floor area by fire separations having a fireresistance rating not less than 1 h, or (b) the floor area of the ambulatory clinic occupancy is sprinklered.". Add in the column "Minimum Fire-Resistance Rating of Fire Separation, h" in Table 3.1.3.1., under Adjoining Major Occupancy D, for Major Occupancy E, the reference to Note "(7)"; "Minimum Fire-Resistance Rating of Fire Add in the column Separation, h" in Table 3.1.3.1., under Adjoining Major Occupancy E, for 3.1.3.1. Major Occupancy D, the reference to Note "(7)"; Replace "2 h" in notes (3) and (4) of Table 3.1.3.1. by "1 h 30";

| the following note in Table 3.1.3.1.:   |
|---|
| n the case of buildings built in conformance with Article 3.2.2.50. or .58., a <i>fire separation</i> with a 1 h 30 <i>fire-resistance rating</i> is required een the Group D and Group E, <i>major occupancies</i> .". |
| ace Sentences (3) and (5) by the following:   |
| A building conforming to Sentence 3.2.2.50.(3) shall not contain  |
| xcept as provided in Sentence (5), a Group A, Division 1 or 3, or p B <i>major occupancy</i> , an <i>ambulatory clinic occupancy</i> referred to in e 3.1.2.7., or Group F, Division 2 or 3 <i>major occupancy</i> , or |
| Group A, Division 2 or Group E <i>major occupancy</i> above the second <i>y</i> .   |
| building conforming to Article 3.2.2.58. shall not contain  |
| Group A, Division 1 or 3, or Group B <i>major occupancy</i> , an <i>ulatory clinic occupancy</i> referred to in Article 3.1.2.7., or Group F <i>r occupancy</i> , or  |
| Group A, Division 2 or Group E <i>major occupancy</i> above the second <i>y</i> .   |
| building conforming to Article 3.2.2.50. or 3.2.2.58. is permitted to ain a storage garage below the fourth storey.".   |
| ace "A <i>building</i> " at the beginning of Sentence (1) by "Except as red by Sentence (3), a <i>building</i> ";   |
| the following Sentence:   |
| The <i>exit</i> stairwells of a <i>building</i> conforming to Sentence 3.2.2.50. or .58 shall be of <i>noncombustible construction</i> .".  |
| e out "(See Note A-3.1.4.2.(1).)" at the end of Sentence (1).   |
| ace the Article by the following:   |
| 4.8. Combustible Terrace  |
| terrace constructed on a <i>building</i> conforming to Sentence 3.2.2.50. 2.2.58. may have <i>combustible loadbearing</i> elements and floor ded  |
|   |

|          | (a) the space between the underside of the terrace floor and the roofing   |
|----------|--|
|          | is not more than 150 mm,   |
|          | (b) the floor of the terrace is not more than 18 m above <i>grade</i> , and  |
|          | (c) no combustible component is more than 25 m above <i>grade</i> .".  |
|          | Replace Clauses (g) and (h) by the following:  |
| 3.1.5.2. | "(g) wood blocking within wall assemblies intended for the attachment of window components,  |
|          | (h) wood blocking within wall assemblies intended for the attachment of handrails, fixtures, and similar items mounted on the surface of the wall, and   |
|          | (i) similar minor components.".  |
|          | Add the following Sentence:  |
|          | "(4) Factory-assembled panels containing foamed plastic insulation used for the construction of air ducts network or air handling units that are part of a ventilation system are permitted to be used in a <i>sprinklered building</i> for which a <i>noncombustible construction</i> is required, provided |
|          | (a) the panels   |
|          | (i) are factory-assembled,   |
|          | (ii) contain only thermosetting foamed plastic insulation in the core,   |
|          | (iii) have the core protected on both sides by corrosion-resistant steel sheet not less than 0.38 mm thick,  |
| 3.1.5.7. | (iv) do not have any air space,  |
|          | (v) have a <i>flame-spread rating</i> of not more than 75 for the foamed plastic and not more than 25 for the panel, and   |
|          | (vi) have a smoke developed classification of not more than 500 for the foamed plastic and not more than 50 for the panel,   |
|          | (b) the air-handling unit  |
|          | (i) is manufactured, assembled or preassembled,  |
|          | (ii) complies with CSA-C22.2 No. 236, "Heating and cooling equipment", and   |
|          | (iii) if it contains foamed plastic, complies with the requirements of Clause (a) in each of the parts containing foamed plastic.".  |

|           | Replace the title in the French text by the following:  "Bandes et fonds de clouage";  |
|-----------|--|
|           | Add the following Sentences:  "(2) Wood nailing elements for covering a roof or a bead-type copper wall  |
| 3.1.5.8.  | are permitted in a <i>building</i> required to be of <i>noncombustible construction</i> , provided they are installed directly on Type X gypsum board that is at least 15.9 mm thick.  |
|           | (3) Continuous wood nailing elements in the walls of a washroom or a bathroom for the installation of grab bars or accessories around a bathtub, a shower, a lavatory or a water closet are permitted in a <i>building</i> required to be of <i>noncombustible construction</i> ."   |
|           | Add the following Sentence:  |
| 3.1.5.12. | "(5) Ceilings consisting of a heavy timber roof, as permitted in Article 3.2.2.16., shall be authorized in a <i>building</i> for which a <i>non-combustible</i> construction is required, provided the heavy timber has a <i>flame-spread</i> rating of not more than 150.".   |
| 3.1.5.21. | Add the following Sentence:  "(5) The requirements in Clause (1)(a) are met if the wires or cables exhibit a horizontal flame distance of not more than 1.5, an average optical smoke density of not more than 0.15, and a peak optical smoke density of not more than 0.5 when tested in conformance with CAN/ULC-S102.4, "Test for Fire and Smoke Characteristics of Electrical Wiring, Cables and Non-Metallic Raceways," (FT6 rating).". |
|           | Replace the title of the Article in the French text by the following:  |
| 3.1.5.22. | "Câbles d'accompagnement combustibles d'ascenseurs, de monte-<br>charges et de petits monte-charges";  |
|           | Replace the title of the Article by the following:   |
|           | "Combustible Travelling Cables for Elevators and Dumbwaiters";   |
|           | Strike out "dumbwaiters" after "elevating devices" in Sentence (1).  |

| 3.1.6.1. | Replace Sentence (1) by the following:  "(1) Except as permitted by Sentences (2) and 3), tents and air-supported structures shall conform to Sections 3.3. and 3.4.";   |
|----------|--|
|          | Add the following Sentences:   |
|          | "(2) Tent doors need not swing on a vertical axis.   |
|          | (3) Where the clearance between adjacent facilities or between a facility and a property line serves as a <i>means of egress</i> , the minimum unobstructed width shall meet the requirements for a <i>means of egress</i> but not be less than 3 m.". |
|          | Replace Sentence (1) by the following:   |
| 3.1.6.2. | "(1) Tents and air-supported structures shall not be erected inside or on a building.";  |
|          | Replace Sentence (3) by the following:   |
|          | "(3) Except as permitted by Sentence (4), tents or air-supported structures shall be designed as open floor space without interior walls, mezzanines, intermediate floors or other similar construction.";   |
|          | Add the following Sentence:  |
|          | "(4) Canvas panels are permitted to be installed to divide space inside a tent or an air-supported structure provided the panels are installed not less than 1 m from the ceiling (see Note A-3.1.6.2.(4)).".  |
| 3.1.6.3. | Replace "Except as permitted by Sentences (2), (3) and (4)" at the beginning of Sentence (1) by "Except as permitted by Sentence (2)";   |
|          | Strike out ",except as permitted by Sentences (3) and (4)" in Clause (2)(a);   |
|          | Strike out Sentences (3) and (4).  |

|          | Replace Sentence (1) by the following:  |
|----------|---|
| 3.1.6.4. | "(1) The ground enclosed by a <i>tent</i> or an <i>air-supported structure</i> and not less than 3 m of the ground outside the structure shall be cleared of  |
|          | (a) all flammable material or vegetation that will spread fire, and   |
|          | (b) all tanks containing gas or flammable liquids.".  |
| 3.1.6.5. | Add the following after "Films" in Sentence (1): "or NFPA 701, "Fire Tests for Flame-Resistant Textiles and Films".".   |
|          | Add the following Articles:   |
|          | "3.1.6.8. Fire Alarm and Detection Systems  |
|          | (1) Tents or air-supported structures designed to accommodate more than 1000 people shall be provided with a fire alarm system and a one-way voice communication system.  |
|          | 3.1.6.9. Bleachers  |
|          | (1) Where a <i>tent</i> or an <i>air-supported structure</i> contains bleachers, the latter shall conform to Subsection 4.1.5.  |
|          | 3.1.6.10. Plumbing Facilities   |
|          | (1) Except as permitted by Sentence (2), the minimum number of water closets required shall conform to Article 3.7.2.2.   |
|          | (2) Chemical toilets and similar sanitary facilities are permitted to be used instead of water closets provided they are located at a minimum distance of 3 m from the <i>tent</i> or <i>air-supported structure</i> .  |
|          | 3.1.6.11. Access for Firefighting   |
|          | (1) Every tent or air-supported structure shall have a fire access route.   |
|          | 3.1.6.12. Heat-Producing Equipment  |
|          | (1) It is prohibited to install cooking equipment or a combustion <i>appliance</i> in a <i>tent</i> or an <i>air-supported structure</i> that is accessible to the public.  |
|          | (2) A special fire extinguishing system conforming to Article 2.1.3.5. of the NFC shall be provided where cooking equipment is installed inside a <i>tent</i> or an <i>air-supported structure</i> not open to the public and consists of more than 2 deep fryer baskets (see Note A-3.1.6.12.(2)). |
|          | 3.1.6.13. Structural Soundness  |
|          | (1) The structure of a <i>tent</i> or an <i>air-supported structure</i> shall be designed and erected so as to withstand the applicable loads (see Note A-3.1.6.13(1)).".   |
|          |   |

| 3.1.7.5. | Replace "Except for <i>noncombustible</i> roof assemblies required by Clauses 3.2.2.50.(2)(c) and 3.2.2.58.(2)(c), if" in Sentence (3) by "If".   |
|----------|---|
|          | Add the following Article:  "3.1.7.6. Sprinkler-Protected Fixed Glass Walls (See Note A-3.1.7.6.)  (1) The fire-resistance rating of a fixed glass wall system may be ensured by a sprinkler system designed in compliance with ULC/ORD-C263.1, "Sprinkler-Protected Window Systems".  (2) A sprinklered fixed glass wall system shall not be installed in  (a) a fire separation required to have a fire-resistance rating of more than 2 h,  (b) a firewall,  (c) a fire separation with a fire-resistance rating separating a patients' or residents' sleeping room in a Group B, Division 2 or 3 occupancy, |
|          | <ul> <li>(d) a fire separation with a fire-resistance rating separating an area of refuge described in Article 3.3.3.6,</li> <li>(e) a high-risk industrial occupancy, or</li> <li>(f) any part of an exit.</li> <li>(3) A sprinklered fixed glass wall system is permitted to be installed in a building provided the building is sprinklered throughout.".</li> </ul>   |
| 3.1.8.5. | Insert "or in the <i>fire separations</i> of a <i>fire compartment</i> provided for partial egress of the <i>building</i> in a <i>care occupancy</i> " after "in Sentence 3.3.3.5.(4)" in Clause (6)(b);  Strike out "that are a <i>horizontal exit</i> referred to in Sentence 3.3.3.5.(3)" in Clause (6)(d).  |
| 3.1.8.8. | Add the following Sentence:  "(3) An exhaust duct of a chemical hood that penetrates a fire separation separating a vertical service space from the remainder of the building need not be equipped with a fire damper at the fire separation provided (a) the exhaust duct conforms to NFPA 45, "Standard on Fire Protection for Laboratories Using Chemicals", and   |

| one hanger supporting the duct conforms to good practice   |
|--|
| t described in the SMACNA Manuals, and is installed less than me the wall of the <i>vertical service space</i> .".   |
| auses (2)(c) and (2)(d) by the following:  |
| ents' or residents' sleeping room and a corridor serving the residents' sleeping room, provided the room and corridor are ecompartment that complies with the requirements of Article ints' or residents' sleeping room and an adjacent room that patients' or residents' sleeping room, provided these rooms a fire compartment that complies with the requirements of 3.5.". |
| entence(1) by the following:   |
| t as provided in Sentences 3.1.8.10.(2) and 3.1.8.11.(3), a device is permitted to be used on a <i>closure</i> in a required <i>fire</i> other than on an <i>exit</i> stair door serving more than 3 <i>storeys</i> loor for a vestibule required by Article 3.3.5.7., provided the designed to release the <i>closure</i> in conformance with this                            |
| n a <i>fire compartment</i> provided for partial egress of the <i>building</i> ccupancy" after "or Sentence 3.3.3.5.(4)" in Clause (3)(e).   |
| entence (3) by the following:  |
| quired <i>fire-resistance rating</i> of a <i>firewall</i> , except for <i>closures</i> , ovided by masonry or concrete.";  |
| Sentence (4).  |
| .4 m of <i>combustible</i> projections and window or door openings cent <i>building</i> " at the end of Sentence (2) by "1.2 m of the of the <i>firewall</i> ".  |
| nd as required in" in Sentence (1) by "and except as provided  |
|  |

|            | Replace Sentence (3) by the following:  |
|------------|---|
|            | "(3) Horizontal concealed spaces within a floor assembly or roof assembly of a <i>building</i> conforming to Article 3.2.2.50. or 3.2.2.58. shall   |
|            | (a) be filled with <i>noncombustible</i> insulation, or   |
|            | (b) be <i>sprinklered</i> in conformance with NFPA 13, "Installation of Sprinkler Systems".   |
|            | (See Note A-3.1.11.5.(3).)";  |
|            | Strike out Sentence (4).  |
| 3.1.13.7.  | Insert "ou de monte-charge" after "pour les cabines d'ascenseur" in Sentence (2) of the French text;  |
| 0.1110.71  | Add "ou de monte-charge" in Table 3.1.13.7. of the French text, under the column "Endroit ou composant" in line "Cabines d'ascenseur".  |
| 3.1.13.11. | Replace the Article in the French text by the following:  |
|            | "3.1.13.11. Cabines d'ascenseurs et de monte-charges  1) Les parois et le plafond des cabines d'ascenseurs et de monte-charges doivent avoir un <i>indice de propagation de la flamme</i> d'au plus 75. |
|            | 2) Les parois, le plafond et le plancher des cabines d'ascenseurs et de monte-charges doivent avoir un indice de dégagement des fumées d'au plus 450.".   |
|            | Strike out Clauses (2)(a) and (2)(b);   |
| 3.1.15.2.  | Replace Sentence (3) by the following:  |
|            | "(3) Where a <i>building</i> conforming to Article 3.2.2.50. or 3.2.2.58. has a rooftop terrace, the roof covering the <i>building</i> must have a Class A classification.";                            |
|            | Strike out Sentence (4).  |

In Table 3.1.17.1, under "Type of Use of *Floor Area* or Part Thereof", add the following uses at the end of the list of "*Assembly uses*":

"Arcades

Dance floors

Exhibition halls and interpretation centres

Gymnasiums and physical fitness facilities

Libraries, museums and skating rinks

Swimming pools";

In Table 3.1.17.1., under "Area per person, m<sup>2</sup>", add the following values opposite

Arcades, "1.85";

Dance floors, "0.40";

Exhibition halls and interpretation centres, "3.00";

Gymnasiums and physical fitness facilities, "9.30";

Libraries, museums and skating rinks, "3.00";

Swimming pools, the reference to Note "(2)";

#### 3.1.17.1.

In Table 3.1.17.1., in the column "Type of Use of Floor Area or Part Thereof", replace the term "suites" under "Care, treatment or detention uses" by "dwelling units";

In Table 3.1.17.1, in the column "Area per person, m2",

replace the reference to Note "(2)" opposite "suites" by a reference to Note "(3)";

replace the reference to Note "(3)" opposite "public corridors intended for occupancies in addition to pedestrian travel" by "(4)";

Replace the Notes to Table 3.1.17.1. by the following:

- "(1) See Clause 3.1.17.1.(1)(a).
- (2) The occupant load in a swimming pool is obtained by allowing 1.40  $\text{m}^2$  of water area per person in the part of the pool where the depth is 1.40 m or less, and 2.20  $\text{m}^2$  in the other part.
- (3) See Clause 3.1.17.1.(1)(b) (apply values for dwelling units to sleeping rooms in care occupancies).
- (4) See Note A-3.3.".

| 3.2.1.1.  | Replace ", les escaliers" in Sentence (1) of the French text by "ou monte-charge, les escaliers, les vestibules d'ascenseur";   |
|-----------|---|
|           | Replace "a stairway" in Sentence (1) by "a stairway, a passenger elevates vestibule".   |
| 3.2.1.2.  | Replace "in conformance with Clause 3.1.10.2.(4)(a), except as permit by Sentence (2). (See Notes A-3.1.10.2.(4) and A-3.2.5.12.(2).)" at end of Sentence (1) by "in conformance with Sentence 3.1.10.2. except as permitted by Sentence (2). (See Note A-3.2.1.2.(1).)".   |
| 3.2.2.3.  | Insert "de monte-charges," after "guides d'ascenseurs," in Clause (1 of the French text.  |
| 3.2.2.7.  | Replace Sentences(3) and (4) by the following:  "(3) A building conforming to Article 3.2.2.50. or 3.2.2.58. shall comwith the requirements of Article 3.1.3.2.  (4) A building conforming to Article 3.2.2.50. or 3.2.2.58. having macocupancies above other major occupancies shall be built in accordate with the type of construction and the dimensions described in the Articles.". |
| 3.2.2.8.  | Insert "they are not <i>private seniors' residences</i> or" after "this Subsection provided" in Sentence (1).   |
| 3.2.2.10. | Replace "street or streets" at the end of Sentence (3) by "a street (8) Note A-3.2.2.10.(3))".  |
| 3.2.2.14. | Insert "ou de monte-charge" after "machinerie d'ascenseur" in Senter (1) of the French text;  |
|           | Insert "ou de monte-charge" after "machinerie d'ascenseur" in Senter (2) of the French text.  |
| 3.2.2.18. | Strike out Articles "3.2.2.45." and "3.2.2.46." in Sentence (1);  |

|           | 1   |
|-----------|---|
|           | Insert "or Sentences" after "Articles" in Sentence (1);   |
|           | Add the following Article and Sentences in numerical order in Sentence (1): "3.2.2.46.(3)", "3.2.2.46.(4)" and "3.2.2.58.";                           |
|           | Insert the following before "3.2.2.20." in Sentence (2): "3.1.2.7.,".   |
|           | Replace the Article by the following:   |
|           | "3.2.2.44. Group B, Division 3, up to 2 Storeys, Sprinklered  |
|           | (1) A <i>building</i> classified as Group B, Division 3 is permitted to conform to Sentence (2) provided  |
|           | (a) except as permitted by Sentences 3.2.2.7.(1) and 3.2.2.18.(2), the building is <i>sprinklered</i> throughout,                                     |
|           | (b) it is not more than 2 <i>storeys</i> in <i>building height</i> ,  |
|           | (c) it has a <i>building area</i> not more than   |
|           | (i) 2400 m <sup>2</sup> if 1 <i>storey</i> in <i>building height</i> , or   |
| 3.2.2.44. | (ii) 1600 m <sup>2</sup> if 2 <i>storeys</i> in <i>building height</i> , and  |
|           | (d) it has no mezzanines or interconnected floor spaces.  |
|           | (2) The building referred to in Sentence (1) is permitted to be of combustible construction and   |
|           | (a) floor assemblies shall be <i>fire separations</i> with a <i>fire-resistance rating</i> not less than 45 min, and                                  |
|           | (b) struck out,   |
|           | (c) <i>loadbearing</i> walls, columns and arches shall have a <i>fire-resistance</i> rating not less than that required for the supported assembly.". |
|           | Replace the Article by the following:   |
|           | "3.2.2.45. Group B, Division 3, 1 Storey  |
| 3.2.2.45. | (1) A <i>building</i> classified as Group B, Division 3, is permitted to conform to Sentence (2) provided   |
|           | (a) it is not more than1 <i>storey</i> in <i>building height</i> ,  |
|           | (b) it has a <i>building area</i> not more than 600 m <sup>2</sup> ,  |
|           | (c) it has residential accommodation for not more than 16 persons,  |
|           | (d) it has not more than 8 dwelling units, and  |
|           |   |

- (e) it has no mezzanines or interconnected floor spaces.
- (2) The building referred to in Sentence (1) is permitted to be of combustible construction and
- (a) floor assemblies shall be fire separations with a fire-resistance rating not less than 45 min,
- (b) its roof shall have a *fire-resistance rating* not less than 45 min, and
- (c) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.".

Replace the Article by the following:

# "3.2.2.46. Group B, Division 3, up to 2 Storeys

- (1) A building classified as Group B, Division 3, is permitted to conform to Sentence (2) provided
- (a) it is not more than 2 storeys in building height,
- (b) the building consists of a single-family type care occupancy, and
- (c) except as provided in Sentence (4), each storey accessible to the persons provided with lodging is served by 2 means of egress, one of which
- (i) is an exterior doorway conforming to Article 3.3.3.8., and

- (ii) leads to another *floor area* separated from adjoining spaces by a *fire* separation.
- (2) The building referred to in Sentence (1) is permitted to be of combustible construction and
- (a) the floor structure shall be entirely covered by plaster board, and
- (b) the loadbearing walls, columns and arches shall be covered by plaster board.
- (3) A single-family type care occupancy other than a single-family type private seniors' residence shall be sprinklered throughout.
- (4) The exterior doorway on the second *storey* and the separation of adjoining spaces of the second means of egress are not required in a single-family type private seniors' residence that is sprinklered throughout.".

# 3.2.2.46.

Replace the Article by the following:

# "3.2.2.50. Group C, up to 6 Storeys, Sprinklered

- **(1)** A *building* classified as Group C is permitted to conform to Sentence (2) provided
- (a) the building is sprinklered throughout,
- (b) it is not more than 6 storeys in building height,
- (c) it has a height
- (i) not more than 18 m, measured between *grade* and the uppermost floor level, and
- (ii) not more than 25 m, measured between *grade* and the highest point of the roof assembly (see Note A-3.2.2.50.(1)(c)(ii)), and
- (d) it has a *building area* not more than
- (i) 9000 m<sup>2</sup> if 1 storey in building height,
- (ii) 4500 m<sup>2</sup> if 2 storeys in building height,
- (iii) 3000 m<sup>2</sup> if 3 storeys in building height,
- (iv) 2250 m<sup>2</sup> if 4 storeys in building height,
- (v) 1800 m<sup>2</sup> if 5 storeys in building height, or
- (vi) 1500 m<sup>2</sup> if 6 storeys in building height.
- (2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction*, and
- (a) except as permitted in Sentence (3), floor assemblies shall be *fire* separations with a *fire-resistance* rating not less than 1 h,
- (b) the roof assembly shall have a fire-resistance rating not less than 1 h,
- (c) *exit* stairwells and their rooftop enclosure extension must be of noncombustible construction,
- (d) mezzanines shall have a fire-resistance rating not less than 1 h,
- (e) *loadbearing* walls, columns and arches shall have a *fire-resistance* rating not less than that required for the supported assembly,
- (f) except as permitted in Sentence (4), any floor area of a storage garage shall be of noncombustible construction,
- (g) cladding on the exterior wall shall be *noncombustible* not less than 2 m above and 1 m either side of an *unprotected opening* and any opening or element capable of spreading fire, and

3.2.2.50.

- (h) pipes, wires, cables and ducts must be *noncombustible* or conform to Articles 3.1.5.18.. 3.1.5.21. and 3.1.5.23.
- **(3)** In a *building* that contains *dwelling units* that have more than one *storey*, subject to Sentence 3.3.4.2.(3), the floor assemblies, including floors over basements, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.
- **(4)** A *floor area* of a *storage garage* conform to Sentence 3.3.4.2.(4) may be of combustible construction."

# Replace the Article by the following:

## "3.2.2.58. Group D, up to 6 Storeys, Sprinklered

- (1) A *building* classified as Group D is permitted to conform to Sentence (2) provided
- (a) the building is sprinklered throughout,
- (b) it is not more than 6 storeys in building height, and
- (c) it has a height
- (i) not more than 18 m between grade and the uppermost floor level, and
- (ii) not more than 25 m between *grade* and the highest point of the roof assembly (see Note A-3.2.2.50.(1)(c)(ii)), and
- (d) it has a building area not more than
- (i) 18 000 m<sup>2</sup> if 1 storey in building height,
- (ii) 9000 m<sup>2</sup> if 2 storeys in building height,
- (iii) 6000 m<sup>2</sup> if 3 storeys in building height,
- (iv) 4500 m<sup>2</sup> if 4 storeys in building height,
- (v) 3600 m<sup>2</sup> if 5 storeys in building height, or
- (vi) 3000 m<sup>2</sup> if 6 storeys in building height.
- (2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* and
- (a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h.
- (b) roof assemblies shall have a *fire-resistance rating* not less than 1 h,
- (c) exit stair shafts and their roof-top enclosure shall be of noncombustible construction,
- (d) mezzanines shall have a fire-resistance rating not less than 1 h,

### 3.2.2.58.

|          | (e) <i>loadbearing</i> walls, columns and arches shall have a <i>fire-resistance</i> rating not less than that required for the supported assembly,   |
|----------|---|
|          | (f) a floor area with a storage garage shall be of noncombustible construction,   |
|          | (g) the cladding of an exterior wall shall be <i>noncombustible</i> not less than 2 m above and 1 m on each side of an <i>unprotected opening</i> or any component that could spread fire, and  |
|          | (h) ducts, wires, cables and raceways shall be <i>noncombustible</i> or conform to Articles 3.1.5.18., 3.1.5.21. and 3.1.5.23.".  |
| 3.2.3.1. | Insert "B, Division 3," after "for Groups A," in Table 3.2.3.1B, in the title of the column on the right.   |
| 3.2.3.6. | Replace Sentence (1) by the following:  "(1) Except for a building containing one or 2 dwelling units only, combustible projections on the exterior of a wall that could expose an adjacent building to fire spread and are more than 1 m above ground level, including balconies, platforms, canopies and stairs, shall not permitted within 1.2 m of  (a) a property line or the centreline of a public way, or  (b) any imaginary line used to determine the limiting distance between 2 buildings located on the same property.";  Add the following Sentence:  "(7) The underside of balconies on a building conforming to Article 3.2.2.50. or 3.2.2.58. shall be covered with a noncombustible finish material." |
| 3.2.3.7. | Strike out the reference to Note "(1)" in Table 3.2.3.7., in the column "Type of Cladding Required";  Strike out Note (1) in Table 3.2.3.7.   |
|          | Replace "Except as provided in Article 3.1.4.8., the" at the beginning of Sentence (3) by "The";  |
|          | Replace "Except as provided in Article 3.1.4.8., the" at the beginning of Sentence (4) by "The".  |

| 3.2.3.16. | Replace "patients" in Sentence (1) by "patients' or residents".   |
|-----------|---|
| 3.2.3.20. | Replace Sentence (1) by the following:  "(1) An underground walkway shall not be designed or used for any purpose other than pedestrian travel, unless (a) the walkway is sprinklered, (b) the occupancies are limited to major occupancies in Groups D and E, a restaurant or a licensed beverage establishment, and (c) the walkway and spaces occupied by the occupancies referred to in Clause (b) are in conformance with the requirements in the NBC regarding floor areas and occupancy separation. (See Sentence 3.8.1.2.(5) that contains requirements regarding accessibility.)". |
| 3.2.4.1.  | Add "; in a single-family type care occupancy, a residential fire warning system conforming to CAN/ULC-S540, "Residential Fire and Life Safety Warning Systems: Installation, Inspection, Testing and Maintenance" shall be installed and shall comply with the requirements in Article 3.2.4.21" after "comply with Sentence (1)" at the end of Sentence (2);  Replace "Buildings" at the beginning of Sentence (3) by "Except single-family type care occupancies, buildings";  Replace Clause (4)(d) by the following:   |
|           | "(d) an occupant load more than 150, in the case of a Group A, Division 1 building, or 300 in all other cases, except in open air seating areas,";  Replace Clauses (4)(k) and (4)(l) by the following:  "(k) a high-hazard industrial occupancy with an occupant load more than 25,  (l) an occupant load more than 300 below an open air seating area,  (m) a building with an ambulatory clinic occupancy referred to in Article 3.1.2.7., or  (n) a care occupancy except a single-family type private seniors' residence."   |

| 3.2.4.2. | Add the following at the end of Sentence (1): "(See Note A-3.2.4.2.(1).)".  |
|----------|---|
| 3.2.4.3. | Replace Clauses (1)(b) and (1)(c) by the following:  "(b) a 2-stage system  (i) except as permitted in Clause (c), in a Group B occupancy, and  (ii) where there is at least one horizontal exit that is an exit from one building to another by means of a doorway in a firewall, or  (c) a single- or 2-stage system in a Group B, Division 3 occupancy where the building is 3 storeys or less in building height and the floor area is not divided for evacuation purposes, and".   |
| 3.2.4.5. | Add the following after "Alarm Systems" at the end of Sentence (1):  "and, notwithstanding section 1.05 of the Construction Code (chapter B-1.1, r. 2), the provisions on fire alarm systems in Section 32 of CSA C22.1, "Canadian Electrical Code, Part I"  (See Note A-3.2.4.5.(1).)";  Replace "Vérification des réseaux avertisseurs d'incendie" in Sentence (2) of the French text by "Vérification des systèmes d'alarme incendie";  Add the following Sentence:  "(3) Residential fire alarm systems shall be installed, inspected and tested in accordance with CAN/ULC-S540, "Residential Fire and Life Safety Warning Systems: Installation, Inspection, Testing and Maintenance", and, notwithstanding section 1.05 of the Construction Code (chapter B-1.1, r. 2), with the provisions on fire alarm systems in Section 32 of CSA C22.1, "Canadian Electrical Code, Part I"." |
| 3.2.4.7. | Replace "and Sentence (1)" in Sentence (5) by "and any of Sentences (1), (7) or (8)";  Add the following Sentences:  "(7) A fire alarm system installed in a <i>building</i> containing an <i>ambulatory clinic occupancy</i> referred to in Article 3.1.2.7. shall be designed to notify the fire department, in conformance with Sentence (4), that an <i>alarm signal</i> has been initiated.  |

|           | (8) A single-stage fire alarm system installed in a <i>care occupancy</i> shall be designed to notify the fire department, in conformance with Sentence (4), that an <i>alarm signal</i> has been initiated.".   |
|-----------|--|
| 3.2.4.8.  | Replace Clauses (2)(h) and (2)(i) by the following:  "(h) fire compartment required by Sentence 3.3.3.5.(2) or for egress purposes in a care occupancy,  (i) walkway having an occupancy permitted by Sentence 3.2.3.20.(1),  (j) ambulatory clinic occupancy referred to in Article 3.1.2.7.,  (k) sprinkler-protected window system installed in conformance with Article 3.1.7.6., and  (l) floor area on either side of a horizontal exit.  (See Note A-3.2.4.8.(2).)";  Replace Clauses (5)(b) and (5)(c) by the following:   |
|           | <ul> <li>(b) that has an aggregate area for all <i>storeys</i> of not more than 2000 m²,</li> <li>(c) that is not more than 3 <i>storeys</i> in <i>building height</i>, and</li> <li>(d) that has a single-stage fire alarm system.".</li> </ul>   |
| 3.2.4.10. | Replace Clauses (2)(e) and (2)(f) by the following:  "(e) elevator hoistways and dumbwaiter shafts,  (f) laundry rooms in buildings of residential occupancy, but not those within dwelling units,  (g) rooms or premises not intended for the public of a building classified as Group A, Division 1 major occupancy,  (h) suites whose major occupancy is Group C and the whose detector must be installed near a doorway,  (i) rooms not within a suite in a building classified as a Group C major occupancy, and  (j) elevator landings located inside a dwelling unit."; |

|           | Add the following Sentence:  |
|-----------|--|
|           | "(5) Fire detectors required by Clauses (2)(e),(f),(g),(h) and (j) and Sentence (4) shall be minimum fixed temperature and rate-of-rise heat detectors."   |
|           | Strike out "except as permitted in Sentence (2)," in Clause (1)(a);  |
|           | Replace Clauses (1)(f) and (1)(g) by the following:  |
|           | "(f) the vicinity of draft stops required by Article 3.2.8.6.,   |
|           | (g) elevator machine rooms,  |
|           | (h) intake openings for a linen and refuse chutes conforming to Sentence 3.6.3.3.(6), and  |
|           | (i) a <i>floor area</i> having an <i>ambulatory clinic occupancy</i> referred to in Article 31.2.7.  |
| 3.2.4.11. | (i) in the public corridor serving the ambulatory clinic occupancy, and  |
|           | (ii) in the corridor inside the <i>ambulatory clinic occupancy</i> or if there is no corridor, near accesses to the treatment area, which includes treatment, operating or recovery rooms.";   |
|           | Strike out Sentence (2);   |
|           | Replace "rappeler les ascenseurs desservis par le local de machinerie d'ascenseur" in Sentence (4) of the French text by "rappeler les ascenseurs ou monte-charges desservis par le local de machinerie d'ascenseur ou de monte-charge". |
| 3.2.4.14. | Add "et monte-charges" at the end of the title of the Article in the French text;  |
|           | Insert "ou monte-charges" after "ayant des ascenseurs" at the beginning of Sentence (1) of the French text;  |
|           | Insert "ou monte-charges" after "rappel des ascenseurs" at the end of Sentence (1) of the French text;   |
|           |  |

|              | Add the following Sentence:  |
|--------------|--|
|              | "(4) Upon activation of the fire alarm, all elevators of the <i>building</i> equipped with automatic emergency recall shall be recalled to the recall level.".   |
|              | Replace "toute <i>aire de plancher</i> située" in Sentence (1) of the French text by "chaque <i>aire de plancher</i> ";  |
|              | Strike out "that is <i>sprinklered</i> throughout" in Sentence (2);  |
| 3.2.4.16.    | Replace Sentence (3) by the following:   |
| <b>0.2</b> 0 | "(3) In a building not more than 3 storeys in building height containing only dwelling units, a manual station is not required at each egress doorway from a dwelling unit.";  |
|              | Insert "or the landing of an <i>exit</i> stair shaft on which a <i>dwelling unit</i> door opens directly" after "shared interior corridors" in Sentence (4).   |
|              | Replace Sentence (4) by the following:   |
|              | "(4) The <i>fire alarm</i> signal sound pressure level shall be not more than 95 dBA measured at a distance of 3 m from each audible signal device.";  |
|              | Replace Sentences (8) and (9) by the following:  |
| 3.2.4.18.    | "(8) Audible signal devices within a dwelling unit or a suite of residential occupancy or a dwelling unit of care occupancy shall be connected to the fire alarm system  |
|              | (a) in a manner such that a single open circuit at one device will not impair<br>the operation of other audible signal devices on that same circuit that<br>serve the other <i>dwelling units</i> or <i>suites</i> of <i>residential occupancy</i> or other<br><i>dwelling units</i> of <i>care occupancy</i> , or |
|              | (b) on separate signal circuits that are not connected to the devices in any other dwelling unit, public corridor or suite of residential occupancy or in other dwelling units or public corridors of care occupancy.  |
|              | (See Note A-3.2.4.18.(8) and (9).)   |
|              | (9) In a building or part thereof classified as a residential or care occupancy,   |

|           | (a) separate circuits shall be provided for audible signal devices on each   |
|-----------|--|
|           | floor area, and  |
|           | (b) audible signal devices within dwelling units or suites of residential occupancy or in dwelling units of care occupancy shall be wired on separate signal circuits from those not within dwelling units or suites of residential occupancy or dwelling units of care occupancy. |
|           | (See Note A-3.2.4.18.(8) and (9).)".   |
|           | Add the following Sentence:  |
| 3.2.4.19. | "(3) Visual signal devices connected to the alarm system shall be installed near each audible signal installed in a dwelling unit or a suite of a residential occupancy and in each dwelling unit of a care occupancy.".   |
|           | Replace Sentence (2) by the following:   |
|           | "(2) Except as required by Sentences (5) and (8), smoke alarms conforming to CAN/ULC-S531, "Smoke Alarms", shall be installed  |
|           | (a) in each <i>dwelling unit</i> and in each sleeping room not within a <i>dwelling unit</i> , except  |
|           | (i) patients' or residents' rooms in a <i>care</i> or <i>treatment occupancy</i> designed in accordance with Sentences 3.3.3.5.(2) to (13),  |
|           | (ii) sleeping rooms not within a dwelling unit of a detention occupancy, and   |
|           | (iii) a single-family type care occupancy sprinklered according to NFPA 13D, and   |
| 3.2.4.20. | (b) in a single-family type private seniors' residence not equipped with a residential fire alarm system   |
|           | (i) on each <i>storey</i> of the <i>building</i> ,   |
|           | (ii) in each sleeping room,  |
|           | (iii) in a location between the sleeping rooms and the remainder of the <i>suite</i> and if the sleeping rooms are served by a hallway within the <i>suite</i> , the <i>smoke alarm</i> shall be located in the hallway,   |
|           | (iv) in each corridor, and   |
|           | (v) in each rest or common activity area.";  |
|           | Strike out "or <i>suite</i> of <i>care occupancy</i> " at the end of Sentence (3);   |
|           |  |

Replace Sentence (5) by the following:

- "(5) Smoke alarms in a single-family type private seniors' residence shall be
- (a) photoelectric,
- (b) interconnected and connected to visual signal devices that allow personnel assigned to the sleeping rooms to see where the *smoke alarm* is triggered, and
- (c) connected to the fire department in accordance with CAN/ULC-S561, "Installation and Services for Fire Signal Receiving Centres and Systems".";

Replace Sentence (9) by the following:

- "(9) Smoke detectors permitted to be installed in lieu of smoke alarms as stated in Sentence (8)
- (a) are permitted to sound localized alarms within individual *suites*, and need not sound an alarm throughout the rest of the *building*, and
- (b) shall sound localized alarms within *dwelling units* or *suites* with cooking equipment, and need not sound an alarm throughout the rest of the *building* and shall not sound an *alert signal*.".

Replace the Article by the following:

## "3.2.4.21. Residential Fire Alarm Systems

- (1) A residential fire alarm system
- (a) shall be installed in a *single-family type care occupancy sprinklered* in accordance with NFPA 13D.
- (b) may be installed in a *single-family type private seniors' residence* not *sprinklered* in accordance with NFPA 13D, and
- 3.2.4.21.
- (c) may be installed in a *dwelling unit* provided the *building* is not equipped with a fire alarm system, whether or not it is required.
- **(2)** In a *single-family type care occupancy sprinklered* in accordance with NFPA 13D, the residential fire alarm system shall
- (a) be equipped with smoke detectors
- (i) on each *storey* of the *building*,
- (ii) in sleeping rooms, the *smoke detectors* shall be connected to visual alarms that allow personnel assigned to the rooms to see where the *smoke detector* has been actuated, and

- (iii) in corridors,
- (b) be single stage and, upon the operation of any manual station, waterflow detecting device, or *fire detector*, cause an *alarm signal* to sound on all audible signal devices in the system,
- (c) be designed so that when an *alarm signal* is actuated, it cannot be silenced automatically before a period of time has elapsed that is not less than 20 min,
- (d) be designed to notify the fire department, in conformance with Sentence 3.2.4.7.(4), that an *alarm signal* has been initiated,
- (e) be equipped with a display that shall
- (i) be installed near the main exit door, and
- (ii) indicate the sprinklers and smoke detectors,
- (f) be equipped with a control centre,
- (g) be electrically supervised, as well as the sprinkler system,
- (h) be equipped with a manual station at the main entrance,
- (i) be conform to Article 3.2.4.18. for audibility of signals,
- (j) be equipped with visual signal devices conform to Sentence 3.2.4.19.(3), and
- (k) be connected to an emergency power supply,
- (i) capable of providing supervisory power for not less than 24 h and, immediately following that period, emergency power under full load for not less than 5 min, and
- (ii) designed so that, in the event of a failure of the normal power source, there is an immediate automatic transfer to emergency power.
- (3) In a single-family type private seniors' residence not sprinklered, the residential fire alarm system shall
- (a) be equipped with photoelectric *smoke detectors*
- (i) on each storey of the building,
- (ii) in sleeping rooms, the *smoke detectors* shall be connected to visual alarms that allow personnel assigned to the rooms to see where the *smoke detector* has been actuated,
- (iii) in each rest or common activity area, and
- (iv) in corridors,
- (b) be single-stage and, upon the operation of any manual station or *fire detector*, cause an *alarm signal* to sound on all audible signal devices in the system,

- (c) be designed so that when an *alarm signal* is actuated, it cannot be silenced automatically before a period of time has elapsed that is not less than 20 min,
- (d) be designed to notify the fire department, in conformance with Sentence 3.2.4.7.(4), that an *alarm signal* has been initiated,
- (e)be equipped with a display that shall
- (i) be installed near the main exit door, and
- (ii) indicate the *smoke detectors*,
- (f) be equipped with a control centre,
- (g) be electrically supervised,
- (h) be equipped with a manual station at the main entrance,
- (i) be conform to Article 3.2.4.18. for audibility of signals,
- (j) be equipped with visual signal devices conform to Sentence 3.2.4.19(3), and
- (k) be connected to an emergency power supply
- (i) capable of providing supervisory power for not less than 24 h and, immediately following that period, emergency power under full load for not less than 30 min, and
- (ii) designed so that, in the event of a failure of the normal power source, there is an immediate automatic transfer to emergency power.
- **(4)** In a *dwelling unit*, *smoke alarms* required by Article 3.2.4.20. are permitted to be replaced by a residential fire alarm system that shall
- (a) be equipped with *smoke detectors*
- (i) on each *storey* of the *dwelling unit*,
- (ii) in sleeping rooms, and
- (iii) in a location between the sleeping rooms and the remainder of the *storey* and if the sleeping rooms are served by a hallway within the *storey*, the *smoke alarm* shall be located in the hallway,
- (b) be single-stage and, upon the operation of any manual station or *fire detector*, cause an *alarm signal* to sound on all audible signal devices in the system,
- (c) be equipped with a manual station at the main entrance,
- (d) be conform to Article 3.2.4.18. for audibility of signals,
- (e) be equipped with visual signal devices conform to Sentence 3.2.4.19.(3),

|           | (f) be designed so that when an <i>alarm signal</i> is actuated, it cannot be silenced automatically before a period of time has elapsed that is not less than 20 min, and |
|-----------|--|
|           | (g) be connected to an emergency power supply  |
|           | (i) capable of providing supervisory power for not less than 24 h and, immediately following that period, emergency power under full load for not less than 5 min, and     |
|           | (ii) designed so that, in the event of a failure of the normal power source, there is an immediate automatic transfer to emergency power.".                                |
|           | Insert "Two-way" before "Voice Communication" in the title of the Article;   |
| 3.2.4.22. | Insert "ou de monte-charge" after "cabines d'ascenseur" in Clause (1)(b) of the French text.   |
|           | Replace "unilatérale" wherever it appears in the Article and its title in the French text by "unidirectionnelle";  |
|           | Replace "and whose occupant load exceeds 1 000" in Sentence (1) by "and  |
| 3.2.4.23. | (a) whose <i>occupant load</i> exceeds 1000, or  |
|           | (b) where are <i>fire resistant compartments</i> are provided for the partial egress of the <i>building</i> in a <i>care occupancy</i> ";                                  |
|           | Insert "ou de monte-charge" after "cabines d'ascenseur" in Clause (2)(b) of the French text.   |
|           | Replace "On" at the beginning of Sentence (1) by "Except as permitted by Sentence (2), on";  |
| 3.2.5.3.  | Add the following Sentence:  "(2) The roof of a <i>building</i> conforming to Article 3.2.2.50. or 3.2.2.58 shall  |
|           | be provided with access by a stairway (see note A-3.2.5.3.(2)).".  |

| 3.2.5.6.  | Replace "uppermost floor level" at the end of Sentence (2) by "the highest floor level".  |
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| 3.2.5.9.  | Add the following Sentence:  "(7) The connection of a standpipe system to the potable water system shall be protected against back-siphonage or back pressure backflow in conformance with the NPC.".   |
| 3.2.5.12. | Replace Sentences (2) and (3) by the following:  "(2) Despite Sentence (1), NFPA-13R, "Installation of Sprinkler Systems in Low-Rise Residential Occupancies", is permitted to be used for the design, construction and installation of an automatic sprinkler system installed in a residential occupancy not more than 4 storeys in building height conforming to Article 3.2.2.47., 3.2.2.48., 3.2.2.51. or 3.2.2.54.  (See Note A-3.2.5.12.(2).)  (3) Despite Sentence (1), NFPA-13D, "Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", is permitted to be used for the design, construction and installation of an automatic sprinkler system installed in  (a) in a building of residential occupancy throughout containing not more than 2 dwelling units, or  (b) a single-family type care occupancy whose water supply capacity for the sprinkler system is not less than 30 min.";  Replace "referenced in Sentences (1) and (2)" in Sentence (7) by "referenced in Sentence (1)";  Insert ", where they are of combustible construction," after "balconies and decks" in Sentence (7);  Insert "ou de monte-charge" after "machinerie d'ascenseur" in Sentence (8) of the French text; |

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|           | Add the following Sentences:  |
|           | "(9) Despite Sentence (1) and subject to Sentence (6), sprinklers are not required in a toilet room or a washroom of a suite of a residential occupancy or a dwelling unit of a care occupancy  |
|           | (a) having an area of not more than 5.1 m <sup>2</sup> , and  |
|           | (b) that does not contain equipment such as washers, dryers, a heating or ventilation equipment or service water heaters.   |
|           | (10) Despite Sentence (1) and subject to Sentence (6), sprinklers are not required in a closet or a clothes closet of a <i>suite</i> of a <i>residential occupancy</i> or a <i>dwelling unit</i> of a <i>care occupancy</i>   |
|           | (a) having an area of not more than 2.2 m <sup>2</sup> , and  |
|           | (b) that does not contain equipment such as washers, dryers, a heating or ventilation equipment or service water heaters.   |
|           | (11) The connection of a sprinkler system to the potable water system shall be protected against back-siphonage or back-pressure backflow in accordance with the NPC.".   |
| 3.2.5.13. | Replace "sprinkler systems" in Sentence (1) by "wet pipe system".   |
|           | Replace Sentence (6) by the following:  |
| 3.2.6.2.  | "(6) Except as provided in Article 3.2.4.12., air-handling systems used to provide make-up air to <i>public corridors</i> serving <i>suites</i> in a Group C <i>major occupancy</i> shall not shut down automatically upon activation of the fire alarm so as to maintain corridor pressurization (see Note A-3.2.6.2.(6)).". |
|           | Replace the title of the Article by the following:  |
| 3.2.6.4.  | "3.2.6.4. Emergency Operation of Passenger Elevators";  |
|           | Insert "passenger" before "elevator" wherever that word appears in the Article.   |
|           | Replace the title of the Article by the following:  |
| 3.2.6.5.  | "3.2.6.5. Passenger Elevator for Use by Firefighters";  |
|           |   |

|          | Insert "passenger" before "elevator" wherever that word appears in the Article;  |
|----------|--|
|          | Replace Clause (6)(b) by the following:  |
|          | "(b) conform to CAN/ULC-S139, "Standard Method of Fire Test for Evaluation of Integrity of Electrical Power, Data and Optical Fibre Cables" including the hose stream application, to provide a circuit integrity level of at least 1h, from the service entrance of the emergency power supply, or the normal service entrance of the normal power supply, to the equipment served."; |
|          | Add the following Sentences:   |
|          | "(7) Where a sump pump is installed to drain the elevator pit provided for firefighters, it shall operate using cables conforming to Clauses (6)(a) and (b).   |
|          | (8) The pictogram of a firefighter's helmet required by Chapter IV "Elevators and Other Elevating Devices" of the Construction Code (chapter B-1.1, r. 2) shall be installed beside the elevator hoistway doorway of each elevator for firefighters.".   |
| 3.2.6.6. | Insert "ou de monte-charge" after "gaines d'ascenseur" in Sentence (4) of the French text.   |
|          | Insert "passenger" before "elevator" in Clause (2)(c);   |
|          | Replace Clause (2)(j) by the following:  |
| 3.2.6.7. | "(j) means to communicate with telephones in passenger elevator cars, separate from connections to firefighters' telephones, if passenger elevator cars are required by ASME AI7.I/CSA B44, "Safety Code for Elevators and Escalators," to be equipped with a telephone,".   |
| 3.2.7.1. | Insert "or residents" after "patients" in Sentence (1).  |
|          | Replace Clause (1)(e) by the following:  |
| 3.2.7.3. | "(e) corridors serving sleeping rooms in a care occupancy, except corridors located inside a dwelling unit,";  |
|          |  |

|           | Replace Clauses (1)(k) and (1)(l) by the following:   |
|-----------|---|
|           | "(k) food preparation areas in commercial kitchens,   |
|           | (I) public washrooms that are equipped to serve more than one person at a time, and   |
|           | (m) means of egress in a single-family type care occupancy.".   |
|           | Insert "passenger" before "elevator" wherever it appears in the Article;  |
| 3.2.7.9.  | Add the following Sentence:   |
| 3.2.7.9.  | "(4) Where a sump pump is installed to drain the elevator pit provided for firefighters, an emergency power supply capable of providing not less than 1 h of power to the sump pump shall be installed and shall comply with the requirements in Clauses 3.2.6.5. (6)(a) and (b).". |
|           | Replace "Clauses (a) to (c)" in Sentence (1) by "Clauses (a) to (d)";   |
|           | Replace Clauses (1)(b) and (1)(c) by the following:   |
|           | "(b) emergency conductors serving fire pumps required to be installed under Article 3.2.5.18.,  |
| 3.2.7.10. | (c) electrical conductors serving mechanical systems serving  |
| 3.2.7.10. | (i) areas of refuge identified in Clause 3.3.3.6.(1)(b), or   |
|           | (ii) contained use areas identified in Clauses 3.3.3.7.(4)(a) and (b), and  |
|           | (d) electrical cables located in a <i>building</i> conform to Article 3.2.2.50. or 3.2.2.58. and serving  |
|           | (i) fire alarm systems, or  |
|           | (ii) emergency lighting systems.".  |
| 3.2.8.1.  | Insert "and 3" after "Division 2" in Sentence (3);  |
|           | Add the following Sentence:   |
|           | "(4) In a building of Group C major occupancy, the public corridor shall not be in an interconnected floor space and shall not penetrate an interconnected floor space to reach an exit.".  |
|           |   |

| 3.2.8.2. | Insert "stairways that do not serve as <i>exit</i> ," after "openings for" in Sentence (5);  |
|----------|--|
|          | Replace Clause (5)(c) by the following:  "(c) if the <i>major occupancy</i> of the <i>building</i> is a Group A, Division 1, 2 or 3, Group D or Group E (see Note A-3.2.8.2.(6)(c)).  (See Note A-3.2.8.2.(5).)";  Insert ", where the <i>building area</i> is not more than one half of the area permitted by Subsection 3.2.2. (see Note A-3.2.8.2.(6)(b));" before "the openings through" in Clause (6)(b); |
|          | Add "(See Note A-3.2.8.2.(5).)" at the end of Sentence (6).  |
|          | Add the following Sentence:  |
| 3.2.8.3. | "(2) Buildings constructed in accordance with Articles 3.2.8.4. to 3.2.8.9. shall be of noncombustible construction; a heavy timber construction shall be permitted if a combustible construction is by Subsection 3.2.2.".  |
| 3.2.8.4. | Insert "ou monte-charges" after "des ascenseurs" at the beginning of Sentence (3) of the French text;  |
|          | Insert "ou monte-charges" after "les portes d'ascenseur" in Sentence (3) of the French text.   |
|          | Replace Sentence (1) by the following:   |
|          | "(1) Except as permitted by Sentences (2) to (4),  |
| 3.3.1.1. | (a) each <i>suite</i> in other than <i>business and personal services occupancies</i> shall be separated from adjoining <i>suites</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> not less than 1 h, and  |
|          | (b) a treatment area, which includes operating, treatment or recovery rooms, in an <i>ambulatory clinic occupancy</i> referred to in Article 3.1.2.7. shall be separated from the remainder of the <i>floor area</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> not less than 1 h.   |

|          | (See also Subsection 3.3.3. for care or detention occupancies, Article 3.3.4.2. for residential occupancies and Article 3.1.8.7. for fire dampers.)";  |
|----------|--|
|          | Add the following Sentence:  |
|          | "(4) Except as permitted by Division 3.9., in a <i>building</i> used as a self-service warehouse, classified as a <i>medium-hazard industrial occupancy</i> (Group F, Division 2) and entirely <i>sprinklered</i> , each storage room need not be separated from the remainder of the <i>building</i> by a <i>fire separation</i> ." |
|          | Add the following Sentences:   |
|          | "(4) Cooking appliances shall not be installed in a corridor serving as an access to exit.   |
| 3.3.1.2. | (5) Ranges, cooktops and residential type ovens shall be   |
|          | (a) installed in accordance with Subsection 9.10.22., and  |
|          | (b) equipped with a hood in accordance with Sentence 6.3.1.7.(2).".  |
|          | Add the following Sentence:  |
|          | "(10) Just one end of a <i>public corridor</i> in a <i>care</i> or <i>residential occupancy</i> is permitted to lead through a lobby provided the lobby  |
| 3.3.1.3. | (a) conforms to Clauses 3.4.4.2.(2)(a) to (d) and 3.4.4.2.(2)(f) and Subclauses 3.4.4.2(2)(e)(i), (ii) and (iv),   |
|          | (b) is separated from the <i>public corridor</i> by a <i>fire separation</i> having the <i>fire-resistance rating</i> required for the most restrictive between the lobby, the <i>public corridor</i> and adjacent rooms.  |
|          | (See Notes A-3.3.1.3(10) and A-3.4.4.2.(2).)".   |
|          | Replace Sentence (1) by the following:   |
| 3.3.1.4. | "(1) Except as otherwise required by this Part or as permitted by Sentence (4), a <i>public corridor</i> shall   |
|          | (a) be separated from the remainder of the <i>storey</i> by a <i>fire separation</i> , and   |
|          | (b) not contain an occupancy.";  |
|          | Replace "No" in Sentence (4) by "Except for the purposes of Clause 3.4.2.3.(1)(a), no";  |
|          |  |

|          | Add the following Sentences:   |
|----------|--|
|          | "(5) Except as required in Sentence (6), residential type cooking equipment, such as ranges, cooking tops or ovens, is permitted to be installed in a room that opens on a public corridor if the floor area does not contain a Group C or Group B, Division 2 or 3, occupancy.  |
|          | (6) Where the <i>floor area</i> contains a Group C or Group B, Division 2 or 3, occupancy, the cooking equipment permitted in Sentence (5) shall be installed in a room separated from the remainder of the <i>floor area</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> not less than 45 min.". |
| 3.3.1.5. | Replace the term "suites" wherever it appears under Group B, Division 3, in the column "Occupancy of Room or Suite" in Table 3.3.1.5.B. by "dwelling units".   |
| 3.3.1.7. | Replace "a barrier-free path of travel" in Sentence (1) by "a required barrier-free path of travel";   |
|          | Replace "served by an elevator" in Clause (1)(a) by "served by a passenger elevator".  |
| 3.3.1.9. | Replace Sentence (1) by the following:   |
|          | "(1) Subject to Sentence 3.3.3.3.(2), the minimum width of a <i>public</i> corridor shall be 1100 mm.";  |
|          | Insert "or residents" after "patients" in Sentences (2) and (3);   |
|          | Replace Sentence (5) by the following:   |
|          | "(5) Where a corridor contains an <i>occupancy</i> authorized under the NBC, the <i>occupancy</i> is permitted to reduce the total width of the corridor, but not to less than the required minimum unobstructed width.";  |
|          | Strike out "de passage" in Clause (6)(a) of the French text after "largeur libre";   |
|          | Add the following Sentence:  |
|          | "(8) A dead-end corridor up to 9 m long is permitted provided  |
|          | (a) it serves an elevator hall or <i>service rooms</i> ,   |
| L        | f.   |

|           | (b) the <i>building</i> is of <i>noncombustible construction</i> , and  |
|-----------|---|
|           | (c) the building is sprinklered.".  |
| 3.3.1.14. | Replace "Sentence (2)" at the beginning of Sentence (1) by "Sentences (2) and (3)";   |
|           | Add the following Sentence:   |
|           | "(3) An interior stairway of less than 3 risers is permitted provided   |
|           | (a) the stair is not less than 900 mm wide,   |
|           | (b) the stair has a covering that contrasts with the landing covering or is permanently lit when the lighting is filtered and occupants are on the premises, and        |
|           | (c) a handrail is installed on each side.".   |
| 3.3.1.20. | Replace "Except as provided in Sentence (2)" at the beginning of Sentence (1) by "Except as provided in Sentences (2), 3.1.8.8.(7) and 3.6.3.1.(6)".                    |
| 3.3.2.4.  | Replace "Sentence (4)" in Sentence (3) by "Sentences (4) and (5)";  |
|           | Add the following Sentence:   |
|           | "(5) The requirements of Sentence (3) for fixed seats with backs do not apply if  |
|           | (a) each row has an unobstructed passage with the minimum width of 400 mm required by Clause (1)(c) plus 6.1 mm for each additional seat above 16 seats in the row, and |
|           | (b) the travel distance is not more than 45 m measured along the path of travel from any seat to an <i>exit</i> or to an egress doorway.".                              |
| 3.3.2.5.  | Replace "bleacher seats" in Sentence (3) by "bleachers".  |

| 3.3.2.9.  | Replace Sentence (1) by the following:  "(1) Except as required by Sentences (2) to (4) for bleachers, <i>guards</i> shall be installed in outdoor and indoor places of assembly with fixed seats so  |
|-----------|---|
|           | that  (a) at the fascia of every box, balcony or gallery where seating spaces extend to the edge, the height of <i>guards</i> is not less than  |
|           | (i) 760 mm in front of the spaces, and  |
|           | (ii) 920 mm if located at the end of aisles or at the foot of steps,  |
|           | (b) the height of <i>guards</i> along every cross aisle other than those adjacent to the fascia of every box, balcony or gallery is not less than 660 mm, except that <i>guards</i> need not be provided if the backs of the seats are not less than 600 mm above the floor of the aisle, and |
|           | (c) where the seating spaces are arranged in successive tiers and the height of rise between platforms is more than 450 mm, the height of <i>guards</i> is not less than 660 mm along these spaces at the edge of the platform.";   |
|           | Replace "bleacher seats" in Sentence (2) by "bleachers";  |
|           | Replace "bleacher seats" in Sentence (3) by "bleachers".  |
| 3.3.2.15. | Strike out the Article.   |
| 3.3.3.1.  | Replace Sentence (1) by the following:  |
|           | "(1) This Subsection applies to care, treatment, ambulatory clinic occupancies referred to in Article 3.1.2.7. and detention occupancies. (See Note A-3.3.3.1.(1))".  |
| 3.3.3.3.  | Replace Sentences (2), (3) and (4) by the following:  |
|           | "(2) Public corridors are permitted to have dead-end portions where   |
|           | (a) the area served by the dead-end portion has a second and separate means of egress,  |
|           | (b) the dead-end portion of a <i>public corridor</i> serving <i>dwelling units</i> does not exceed 6 m,   |
|           | (c) the dead-end portion of a corridor used by the public or a corridor serving patients' or residents' sleeping rooms does not exceed 1 m, or  |

|          | (d) the corridor meets the requirements in Sentence 3.3.1.9.(8).   |
|----------|--|
|          | (See Note A-3.3.3.(2).)  |
|          | (3) Public corridors shall be not less than  |
|          | (a) 2400 mm wide in <i>buildings</i> of <i>care</i> or <i>treatment occupancy</i> where the corridors may be used to move patients or residents in beds,   |
|          | (b) 1650 mm wide in <i>buildings</i> of <i>care</i> or <i>treatment occupancy</i> where the corridors will not be used to move patients or residents in beds, or   |
|          | (c) 1100 mm wide in <i>buildings</i> of <i>care occupancy</i> constructed in accordance with Article 3.2.2.45.   |
|          | (4) Paired doors in a corridor referred to in Clauses (3)(a) and (3)(b) shall  |
|          | (a) swing in opposite directions, the right-hand door swinging in the direction of travel, and   |
|          | (b) be not less than 1100 mm wide where the required width of the corridor is 2400 mm.".   |
| 3.3.3.4. | Strike out "and within individual <i>suites</i> of <i>care occupancy</i> " in Sentence (1).  |
|          | Replace Sentence (1) by the following:   |
|          | "(1) Except in the case of <i>care occupancies</i> constructed in accordance with Article 3.2.2.46., <i>floor areas</i> containing patients' or residents' sleeping rooms in a <i>care</i> or <i>treatment occupancy</i> shall conform to Sentences (2) to (13).";                                 |
|          | Replace Sentence (10) by the following:  |
| 3.3.3.5. | "(10) Residential type electric cooking equipment is permitted to be installed in a <i>fire compartment</i> provided it is installed in a room separated from the remainder of the <i>floor area</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> of not less than 45 min."; |
|          | Replace "suites" in Sentences (14) and (15) by "dwelling units";   |
|          | Replace "suite" in Sentence 17 by "dwelling unit".   |

| 3.3.3.6. | Add "(See Note A-3.3.3.6.(1).)" at the end of Sentence (1).   |
|----------|---|
|          | Add the following Articles:  "3.3.3.8. Means of egress from care occupancies  |
|          | (1) Subject to Sentence (2), a floor area in a single-family type care occupancy referred to in Clause 3.2.2.46.(1)(c) shall  |
|          | (a) if it is located on the second <i>storey</i> , be served by an exterior exit door that is accessible to all the persons lodged and opens to an exterior stairway leading to ground level, the lower surface of the upper landing of which is protected by a <i>noncombustible</i> material, and   |
|          | (b) if it is located in a <i>basement</i> , be served by an exterior exit door accessible to all the persons lodged.  |
|          | (2) The requirements of Clause (1)(a) are permitted to be waived, for a single-family type private seniors' residence, where the building is protected by a sprinkler system designed, constructed, installed and tested in accordance with NFPA 13D, "Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes".  |
|          | 3.3.3.9. Dwelling Units   |
|          | (1) A dwelling unit in a care occupancy   |
|          | (a) shall conform to Article 3.3.4.3,   |
|          | (b) if it contains more than one <i>storey</i> shall have an <i>exit</i> door or an egress door opening directly into a public <i>access to exit</i> from the uppermost <i>storey</i> and from the lowest <i>storey</i> of the <i>dwelling unit</i> so that each of these <i>storeys</i> is served by an <i>exit</i> or egress door located not more than 1.5 m above or below its floor level, and |
|          | (c) shall conform to Articles 3.3.4.5. to 3.3.4.9.".  |
| 3.3.4.2. | Replace "6 m" in Clause (3)(a) by "7 m".  |
| 3.3.4.8. | Replace "1070 mm" in Sentence (2) by "900 mm".  |
|          | Add the following Articles:  "3.3.4.9. Doorway Sizes  |
|          | (1) Doorways in a <i>dwelling unit</i> shall conform to Article 9.5.5.1.  |

| 3.4.10. Hallways   |
|--|
| The unobstructed width of a hallway within a <i>dwelling unit</i> shall be onform to Article 9.5.4.1.                      |
| 3.4.11. Entrance Doors   |
| The entrance door of a <i>dwelling unit</i> shall conform to Article 9.7.2.1.  |
| 3.4.12. Resistance to Forced Entry for Doors   |
| Entrance doors of a <i>dwelling unit</i> shall conform to Article 9.7.5.2.   |
| 3.4.13. Resistance to Forced Entry for Windows   |
| ) In dwelling units, windows shall conform to Article 9.7.5.3.".   |
| eplace "ou à un ascenseur" in Sentence (1) of the French text by ", à un scenseur ou à un monte-charge".                   |
| dd "(See Note A-3.3.5.6.(1).)" at the end of Sentence (1).   |
| dd the following Article:  |
| .3.5.11. Flat Roofs for Heliports  |
| A flat roof used for landing a helicopter shall comply with the quirements in Articles 2.13.1.1. to 2.13.2.1. of the NFC". |
| eplace Clauses (2)(c) and (2)(d) by the following:   |
| c) that can be entered from the exterior,  |
| ) whose <i>closures</i> leading to the interior of the <i>building</i> are   |
| equipped with self-closing devices that keep the <i>closures</i> closed when ot in use,                                    |
| constructed so as to prevent the migration of gases from the room into her parts of the <i>building</i> , and              |
| ) vented to the outside.".   |
|  |

|           | Add the following Subdivision:   |
|-----------|--|
|           | "3.3.7. Business occupancies   |
|           | 3.3.7.1.Application  |
|           | (1) This Subsection applies to <i>buildings</i> constructed in accordance with Article 3.2.2.50. or 3.2.2.58.  |
|           | 3.3.7.2. Floor area with a Group D occupancy   |
|           | (1) A floor area consisting of a sole suite that is over 2000 m² and serving a Group D occupancy shall be divided by a fire separation with no fire-resistance rating into two fire compartments served by a separate exit such that the travel distance from any point in one compartment to a door leading to the other compartment is not more than the travel distance permitted by Sentence 3.4.2.5.(1)." |
|           | Replace the title by "Clear Height";   |
|           | Replace Sentences (1), (2) and (3) in the French text by the following:  |
| 3.4.3.4.  | <b>"1)</b> Sous réserve des paragraphes 4) et 5), toutes les <i>issues</i> doivent avoir une hauteur libre, au-dessus de la largeur libre de l' <i>issue</i> , d'au moins 2050 mm.   |
|           | 2) La hauteur libre d'un escalier doit être mesurée à la verticale, audessus de la largeur libre de l'escalier, à partir de la tangente au nez des marches et des paliers jusqu'à l'élément le plus bas situé au-dessus (voir la note A-9.8.7.4.).   |
|           | 3) La hauteur libre des paliers doit être mesurée verticalement à l'intérieur de la largeur libre du palier jusqu'à l'élément le plus bas situé au-dessus.";   |
|           | Replace "headroom clearance" in Sentences (4) and (5) by "clear height".   |
| 3.4.4.2.  | Add "(See Note A-3.4.4.2.(2).)" at the end of Sentence (2).  |
| 3.4.6.2.  | Replace "3.3.2.15.(1)" in Sentence (1) by "3.3.1.14.(3)".  |
| 3.4.6.11. | Replace Sentence (2) by the following:   |
|           | "(2) Except as provided in Sentence (3) and where doorways are used to confine the spillage of <i>flammable liquids</i> within a <i>service room</i> or within a room in an <i>industrial occupancy</i> , a threshold for a doorway in an <i>exit</i> shall be not more than 13 mm higher than the surrounding finished floor surface."  |
|           |  |

Insert "and Sentence (6)" after "Clause (k)" in Clause (4)(e);

Replace "avertisseur" in Subclause (4)(k)(i) of the French text by "déclencheur" ";

Insert "located in the parts of the *floor area* arranged according to Sentences 3.3.3.5.(2) to (13)" after "similar devices to keep the door in the closed position" in Sentence (5);

Replace "de l'avertisseur" in Subclause (5)(b)(iv) of the French text by "du déclencheur";

Replace "EMERGENCY EXIT UNLOCKED BY FIRE ALARM" in Clause (5)(d) by "IN CASE OF FIRE, THIS DOOR MAY BE OPENED BY ACTIVATING THE MANUAL PULL STATION LOCATED (on the left or the right depending on the location of the station)";

#### 3.4.6.16.

Replace Sentence (6) by the following:

- **(6)** The actuation of the unlocking device provided for in Clause 3.4.6.16.(4)(e) may be delayed not more than 3 s, within the maximum time of 15 s to open only one door of a *means of egress*, provided a visual sign informs occupants that they must press on the opening hardware for at least 3 s.
- (7) The lock installed on the door of the main entry of a *residential building* with a number of *suites* shall be equipped with a mechanism
- (a) allowing its automatic unlocking at the actuation of the *alarm signal*,
- (b) designed such as the door remains unlocked throughout the time the *alarm signal* sounds in the *building*.
- (8) Locking devices permitted under Sentences (4) and (5) shall conform to the test requirements prescribed in CAN/ULC-S533, "Egress Door Securing and Releasing Devices".
- **(9)** Door hardware for the operation of the doors referred to in this Section shall be installed at a height not more than 1200 mm above the finished floor.".

#### 3.4.6.18.

Strike out "de passage" in the title of the Article in the French text.

| 3.5.1.1. | Replace "and dumbwaiters" in Sentence (1) by ", dumbwaiters and window cleaning".   |
|----------|---|
|          | Add the following Articles:  "3.5.1.2. Storeys Served   |
|          | (1) Where a <i>building</i> has an elevator, it shall serve all <i>storeys</i> , including the roof containing a common terrace.  |
|          | 3.5.1.3. Elevator   |
|          | (1) Buildings having more than 4 storeys in building height shall be equipped with an elevator.".   |
|          | Strike out Sentence (2);  |
|          | Add the following Sentence:   |
| 3.5.2.1. | "(4) Notwithstanding the provisions of Chapter IV, Elevators and other elevating devices, of the Construction Code (chapter B-1.1, r. 2), every passenger elevator shall          |
|          | (a) have a voice synthesizer announcing the <i>storeys</i> served and installed in conformance with Appendix E of ASME A17.1/CSA B44, "Safety Code for Elevators and Escalators", |
|          | (b) conform to Subsection 3.5.4, and  |
|          | (c) if it is a destination-oriented elevator system, be equipped with a keypad  |
|          | (i) to enter the information on the destination using a tactile writing system with raised characters (braille), and  |
|          | (ii) located near the elevators so that it is easy to see the signal and hear the audible signal of the elevators.".  |
| 3.5.3.1. | Replace "Elevator Hoistways" in the title of the Article by "Hoistways of Elevators and Lift for Persons with Physical Disabilities";   |
|          | Replace "an elevator hoistway" in Sentence (1) by "a hoistway of an elevator or a lift for persons with physical disabilities";   |
|          |   |

| [        |   |
|----------|---|
|          | Replace "Elevator Hoistway" in the title of the second column of Table 3.5.3.1. by "Hoistway of Elevator and Lift for Persons with Physical Disabilities";  |
|          | Strike out the third column of Table 3.5.3.1.;  |
|          | Replace Sentence (2) by the following:  |
|          | "(2) Passenger elevators, other than those provided for firefighters in accordance with Article 3.2.6.5., or lifts for persons with physical disabilities are permitted to be located within <i>interconnected floor space</i> without being enclosed in a hoistway separated from the remainder of the <i>building</i> , provided the elevator or device machinery is located in a room separated from the remainder of the <i>building</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> not less than that required for hoistways by Sentence (1)." |
| 3.5.3.3. | Replace "Elevator Machine Rooms" in the title of the Article by "Machine Rooms of Elevators or Lifts for Persons with Physical Disabilities";   |
| 3.3.3.3. | Replace "elevator machinery" in Sentences (1) and (2) by "machinery of an elevator or a lift for persons with physical disabilities".   |
|          | Strike out "ou de monte-charge" in the French text of the title of the Article;   |
|          | Replace Sentence (1) by the following:  "(1) Except as permitted in Sentence (3), if one or more elevators are  |
| 3.5.4.1. | provided in a <i>building</i> , all <i>storeys</i> shall be served by at least one elevator which has inside dimensions that will accommodate and provide adequate access for a patient stretcher 2010 mm long and 610 mm wide in the prone position (see note A-3.5.4.1.(1)).";  |
| 3.3.4.1. | Add the following Sentence:   |
|          | "(3) An elevator serving a <i>building</i> not more than 3 <i>storeys</i> and not more than 600 m <sup>2</sup> is permitted to have dimensions that are less than the dimensions in Sentence (1) but not less than the dimensions required in Appendix E of ASME A17.1/CSA-B44, "Safety Code for Elevators and Escalators", provided it   |
|          | (a) serves an <i>occupancy</i> other than a Group B, Division 2 <i>occupancy</i> , and  |
|          | (b) is not referred to in Article 3.3.1.7.".  |

|          | Add the following Subsection:   |
|----------|---|
|          | "3.5.5. Window Cleaning Systems   |
|          | 3.5.5.1. Referenced Standards   |
|          | (1) Every window cleaning system shall conform to   |
|          | (a) CAN/CSA-Z91, "Health and Safety Code for Suspended Equipment Operations", and   |
|          | (b) CAN/CSA-Z271, "Safety Code for Suspended Elevating Platforms".".  |
| 3.6.2.8. | Add the following Sentence:  "(2) Outdoor installation of a generator is permitted provided  (a) the installation conforms to Article 3.6.1.5.,  (b) the generator is protected from inclement weather and can operate during extreme temperature events,  (c) a minimum clearance of not less than 1 m is provided to enable maintenance of the generator, and  (d) where the generator is installed on the roof of a building,  (i) the portion of the roof and its structural members supporting the installation have a fire-resistance rating not less than 1 h, and  (ii) under the generator and the adjoining tank, the roof membrane is covered with a noncombustible material that extends 300 mm beyond the edges.". |
| 3.6.3.1. | Insert "Sentence (6)," after "Except as provided in" in Sentence (1);  Replace "A" at the beginning of Sentences (2) and (3) by "Except as provided in Sentence (6), a";  |

Add the following Sentence:

- "(6) Only one *vertical service space* is permitted to open into a *service room* located at either the top or bottom of the *vertical service space* provided
- (a) the *vertical service space* is separated from *floor areas* by a *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly it passes through,
- (b) the *service room* is separated from the remainder of the *building* by *fire separations* with a *fire-resistance rating* not less than that required for the *vertical service space* opening into the *service room*,
- (c) the *service room* houses only equipment whose pipes, tubes, ducts and cables pass through the *vertical service space* opening into the *service room*, and
- (d) the *service room* does not house combustion or refrigeration appliances for which a *fire separation* is required under CSA B52, "Mechanical Refrigeration Code"."

Replace "Intake" at the beginning of Sentence (5) by "Except as provided in Sentence (6), intake";

Replace Sentences (6) to (11) by the following:

- "(6) In care occupancies and treatment occupancies, intake openings for a linen chute or a refuse chute are permitted to be located in rooms used exclusively to store materials used to collect refuse or laundry from the floor area provided the room
- (a) has a surface area not more than 35 m<sup>2</sup>,
- (b) is separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 1 h,
- (c) does not open into an exit, and
- (d) has a *smoke detector* connected to the *building*'s fire alarm system.
- (7) Sprinklers shall be installed at the top of each linen chute or refuse chute, at alternate floor levels and in the room or bin into which the chute discharges.
- (8) The room into which a linen chute discharges shall be separated from the remainder of the *building* by a *fire separation* with a *fire resistance* rating not less than 1 h.
- **(9)** A refuse chute shall be equipped, at the top, with spray equipment for washing-down purposes.

### 3.6.3.3.

|          | <ul><li>(10) A refuse chute shall discharge only into a room or bin separated from the remainder of the <i>building</i> by a <i>fire separation</i> with a <i>fire-resistance rating</i> not less than 2 h.</li><li>(11) The room or bin into which a refuse chute discharges shall be of</li></ul> |
|----------|---|
|          | sufficient size to contain the refuse between normal intervals of emptying, be impervious to moisture and be equipped with a water connection and floor drain for washing-down purposes.  |
|          | (12) A room into which a refuse chute discharges shall contain no service equipment that is not related to refuse handling and disposal.".  |
|          | Replace Clause (1)(b) by the following:   |
| 3.6.3.4. | "(b) the <i>individual fire compartments</i> shall not have individual fans that exhaust directly into the <i>exhaust duct</i> , unless the fans have a connection that extends upward at least 500 mm into the <i>exhaust duct</i> ."  |
| 3.6.3.5. | Strike out the Article.   |
| 3.6.4.3. | Replace "du système" in Clause (2)(d) of the French text by "dans le plénum de reprise d'air".  |
| 3.6.5.4. | Insert "and Sentence 3.1.5.7.(4)" after "Sentence (6)" in Sentence (5);   |
|          | Add "or Sentence 3.1.5.7.(4)" after "Article 3.1.5.14." in Sentence (6).  |
|          | Add the following Sentence:   |
| 3.7.2.1. | "(3) A compost toilet operating without water and effluent, drain, overflow or other types of discharge is permitted to be installed in an existing single-family home in accordance with Sentence 9.31.4.1.(2).".  |
|          | Replace Sentences (3) and (4) by the following:   |
| 3.7.2.2. | "(3) If only one universal toilet room is provided in accordance with Section 3.8., the water closet in this room may be considered in determining the number of water closets required by this Article.  |
|          |   |

- (4) Both sexes may be served by a single water closet if
- (a) the *occupant load* determined for one of the *occupancies* referred to in Sentence (6), (10), (12), (13), (14) or (16) is not more than 10,
- (b) the total area used for an art gallery or a Group E *occupancy*, not including storage areas, is not more than 250 m<sup>2</sup>,
- (c) the *occupant load* in a facility where courses are given or in a restaurant is not more than 25, or
- (d) the number of children in a daycare centre is not more than 15.";

Strike out Sentence (15);

Replace "500" in Sentence (16) by "600";

Add the following Sentence:

- "(17) Except as permitted by Section 3.8. and Sentence (4), a water closet shall be installed
- (a) in each suite, or
- (b) elsewhere in the building if
- (i) the total number of water closets is determined in accordance with this Subsection and the water closets are located at not more than one *storey* above or below the *storey* containing the persons who require the fixtures, and
- (ii) the water closets are located at such a distance that no person is required to walk more than 90 m from the door of the *suite* in order to reach the facilities or room where the *floor area* does not contain a *suite*.".

Replace Sentence (2) by the following:

"(2) Wash fountains in circular or linear form are permitted to be provided in lieu of lavatories required by Sentence (1) provided each 500 mm of circumference or each faucet is considered the equivalent of one lavatory.";

### 3.7.2.3.

Replace Sentence (4) by the following:

- "(4) Lavatories required by Sentence (1) shall be equipped with faucets that
- (a) comply with Clause 3.8.3.8.(1)(b),

|          | (b) do not require the application of continuous force to maintain water flow, and   |
|----------|--|
|          | (c) provide at least 10 s of continuous water flow.".  |
|          | Replace Sentence (1) by the following:   |
|          | "(1) A floor drain shall be installed in   |
|          | (a) rooms with more than 2 water closets, more than 2 urinals, or a combination of over 2 of these fixtures,   |
|          | (b) refuse storage rooms, and  |
| 3.7.2.7. | (c) in a <i>service room</i> containing pumping, heating or air conditioning equipment or a compressor.  |
|          | (2) A cemented or paved floor or part of such floor that is below ground level shall have a floor drain in its lower part.                             |
|          | (3) A paved garage attached or adjacent to a <i>building</i> shall be equipped with a sump or retention pit used as a floor drain.                     |
|          | (4) A floor drain, a sump or a retention pit used as a floor drain shall be located in the room near a service water heater (see Note A-3.7.2.7.(4).". |
| 3.7.2.9. | Replace "faucets" in Clause (1)(b) by "a faucet";  |
| 3.7.2.9. | Replace "be capable of being accessed" in Clause (1)(e) by "be clear".   |
|          | Add the following Subsection:  |
|          | "3.7.4. Windows  |
|          | 3.7.4.1. Dwelling Units  |
|          | (1) The area of glazing in a <i>dwelling unit</i> shall conform to Article 9.7.2.3.".  |
| 3.8.1.1. | Replace "Subsection 3.8.3." in Sentence (2) by "Subsections 3.8.3. and 3.8.6. and any of subsections 3.8.4. or 3.8.5.".                                |
| 3.8.2.1. | Replace "boarding houses" in Clause (1)(a) by "rooming houses having less than 10 rooms".  |

| 3.8.2.2. | Insert ", including the main entrance, except service entrances," after "pedestrian entrances" in Sentence (1).   |
|----------|---|
|          | Insert "or common terraces" after "floor areas" in Sentence (1);  |
|          | Replace "platform-equipped passenger-elevating device" in Sentence (1) by "lift for persons with physical disabilities or a ramp that conforms to Clause 3.4.6.7.(1)a)";  |
|          | Replace Sentence (2) by the following:  |
|          | "(2) A barrier-free path of travel for persons in wheelchairs is not required   |
|          | (a) to service rooms,   |
|          | (b) to elevator machine rooms,  |
|          | (c) to janitor's rooms,   |
|          | (d) to service spaces,  |
|          | (e) to crawl spaces,  |
|          | (f) to attic or roof spaces,  |
| 3.8.2.3. | (g) to floor levels not served by a passenger elevator, a lift for persons with physical disabilities, an escalator, or an inclined moving walk, or a ramp that is required to conform to Clause 3.4.6.7.(1)a),   |
|          | (h) to high-hazard industrial occupancies,  |
|          | (i) within portions of a <i>floor area</i> with fixed seats in an <i>assembly occupancy</i> where those portions are not part of the <i>barrier-free</i> path of travel to spaces designated for wheelchair use,  |
|          | (j) within floor levels of a <i>suite</i> of <i>residential occupancy</i> that are not at the same level as the entry level to the <i>suite</i> , except in a <i>dwelling unit</i> of a <i>residential occupancy</i> referred to in Article 3.8.2.13., where spaces referred to in Subsection 3.8.4. or 3.8.5. of the <i>dwelling unit</i> are located at a level other than the entry level to the <i>dwelling unit</i> (see Note A-3.8.2.3.(2)(j)), |
|          | (k) within a dwelling unit of a care occupancy,   |
|          | (I) within those parts of a <i>floor area</i> that are not at the same level as the entry level, provided amenities and uses provided on any raised or sunken level are accessible on the entry level by means of a <i>barrier-free</i> path of travel,   |
|          |   |

|          | (m) within a hotel or motel <i>suite</i> of a <i>residential occupancy</i> not referred to in Article 3.8.2.12., and   |
|----------|--|
|          | (n) for spaces not referred to in Subsection 3.8.4. or 3.8.5. of a <i>dwelling</i> unit of a residential occupancy referred to in Article 3.8.2.13.".  |
| 3.8.2.4. | Insert "and be located not more than 45 m from the escalator or the inclined moving walk" after "be provided to that floor level" at the end of Sentence (1).  |
|          | Strike out "(See Note A-3.8.2.5.)" in the title;   |
|          | Replace Sentence (2) by the following:   |
| 3.8.2.5. | "(2) Where a passenger elevator serves a <i>building</i> , <i>barrier-free</i> path of travel shall be provided between at least one parking level and all other parts of the <i>building</i> required to be provided with <i>barrier-free</i> access in accordance with Subsection 3.8.3.";                                 |
| 3.0.2.3. | Add the following Sentence:  |
|          | "(4) Where a barrier-free path of travel is required, at least 1% of the parking spaces and at least one space for a parking area of at least 25 places serving a building with a barrier-free access shall  |
|          | (a) conform to Subsection 3.8.3.,  |
|          | (b) be located, in the parking area as close as possible to the nearest barrier-free entrance of the building.".   |
|          | Replace Sentence (1) by the following:   |
| 3.8.2.6. | "(1) Except as provided in Sentence 3.5.2.1.(3), controls for the operation of <i>building</i> services or safety devices, including electrical switches, thermostats, faucets, door hardware and intercom switches, that are located adjacent to a <i>barrier-free</i> path of travel shall comply with Subsection 3.8.3.". |
|          | Replace Sentence (1) by the following:   |
| 3.8.2.7. | "(1) Except as provided in Sentences (2) and (3), every door that provides a <i>barrier-free</i> path of travel through an entrance referred to in Article 3.8.2.2., including the interior doors of a vestibule and a door leading from a <i>barrier-free</i> interior parking area to an elevator or a lift for            |

persons with physical disabilities where provided, shall be equipped with a power door operator that complies with Subsection 3.8.3. and allows persons to activate the opening of the door from either side, where the entrance serves

- (a) a hotel,
- (b) a building of Group B, Division 2 or 3 major occupancy, or
- (c) building of Group A, D or E major occupancy more than 600 m<sup>2</sup> in building area.".

### Replace Sentence (2) by the following:

- "(2) A washroom need not conform to Sentence (1) provided
- (a) it is located within a suite of residential occupancy or a dwelling unit of care occupancy,
- (b) it is located in a *suite* not more than 250 m<sup>2</sup> and other *barrier-free* washrooms are provided on the same floor area within 45 m, or
- (c) is located in an individual suite that is
- (i) used for a business and personal services occupancy, a mercantile occupancy or an industrial occupancy,
- (ii) less than 250 m<sup>2</sup> in area, and
- (iii) completely separated from, and without access to, the remainder of the building.

# (See Note A-3.8.2.8.(1) to (4).)";

### Replace Sentence (4) by the following:

"(4) A universal toilet room conforming to Subsection 3.8.3. is permitted to be provided in lieu of facilities for persons with physical disabilities in washrooms used by the general public conforming to Subsection 3.8.3.";

#### Replace Sentence (10) by the following:

"(10) Except within a dwelling unit of care occupancy or a suite of residential occupancy, where showers are provided in a building, at least one shower stall in each group of showers shall comply with Subsection 3.8.3.";

Insert "required by Article 3.8.2.12." after "barrier-free" in Sentence (11).

#### 3.8.2.8.

| 3.8.2.10. | Replace Clause (1)(d) by the following:  "(d) elevators or lifts for persons with disabilities,".  |
|-----------|--|
|           | Add the following Articles:  "3.8.2.12. Hotels and Motels  (1) At least 10% of the suites of a hotel or motel shall have a barrier-free path of travel and be distributed evenly between the storeys containing a barrier-free path of travel.  (2) Barrier-free suites of a hotel or motel required in Sentence (1) shall comply with Subsection 3.8.6.  3.8.2.13. Dwelling Unit of Residential Occupancy  (1) A dwelling unit of residential occupancy shall be minimally accessible or adaptable (see Note A-3.8.2.13. 1).  (2) The minimally accessible dwelling unit shall conform to Subsection 3.8.4.  (3) The adaptable dwelling unit shall conform to Subsection 3.8.5.". |
| 3.8.3.1.  | Replace the line "Passenger pickup areas (3.8.3.4.)" in the left-hand column of Table 3.8.3.1. by the line "Parking areas and exterior passenger-loading zones(3.8.3.4.)";  Replace the line "Passenger-elevating devices (3.8.3.7.)" in the left-hand column of Table 3.8.3.1. by the line "Lifts for persons with physical disabilities (3.8.3.7.)";  Add ", 9.4 and 9.5 and 3.8.3.4.(2)(c) of the NBC" after "9.3" in line "Parking areas and exterior passenger-loading zones(3.8.3.4.)" in the right-hand column of Table 3.8.3.1.;  Add "and 3.8.3.9.(2) of the NBC" after "4.5 and 9.4" in line "Signage" in the right-hand column of Table 3.8.3.1.                        |

| 3.8.3.2. | Replace Sentence (1) by the following:  "(1) Except as required elsewhere in this Part or as permitted in Subsection 3.8.4., 3.8.5. or 3.8.6. or Article 3.8.3.6. pertaining to doorways, a <i>barrier-free</i> path of travel shall  (a) have an unobstructed width not less than 920 mm, and  (b) have a manoeuvring area not less than 1500 mm in diameter on each side of any door opening onto a <i>suite</i> referred to in Article 3.8.2.12.";  Replace "passenger elevators or other platform-equipped passenger- |
|----------|---|
|          | elevating devices" in Sentence (3) by "elevators or lifts for persons with physical disabilities".  |
|          |   |
|          | Add the following Sentence:   |
| 3.8.3.3. | "(2) The width of a <i>barrier-free</i> path of travel that is more than 30 m long shall be increased to not less than 1500 mm for a length of 2000 mm at intervals not exceeding 30 m.".   |
|          | Replace the title of the Article by the following:  |
|          | "Parking Areas and Exterior Passenger-Loading Zones";   |
|          | Add the following Sentence:   |
|          | "(2) Each <i>barrier-free</i> parking space shall   |
| 3.8.3.4. | (a) have a width not less than 2400 mm,   |
|          | (b) have a side aisle not less than 1500 mm, parallel to the entire length of the space, indicated by contrasting marking; the aisle is permitted to be shared by 2 parking spaces, and   |
|          | (c) have a clear height of not less than 2300 mm at the pull-up space and along the vehicle access and egress routes in the case of an indoor parking area.".   |
| 3.8.3.5. | Replace "supérieure à" in Clause (4)(a) of the French text by "plus abrupte que".   |

| 3.8.3.6. | Replace Sentence (5) by the following:  "(5) A threshold for a doorway referred to in Sentences (2) and (3) shall  (a) except as permitted by Clause (b), be not more than 13 mm higher than the finished flooring and be bevelled,  (b) in the case of a threshold for a doorway giving access to a balcony, be not more than 75 mm higher than the finished flooring.";  Strike out "150 mm and 300 mm as well as between" in Subclause (6)(a)(v)  |
|----------|--|
|          | Replace Sentence (7) by the following:  "(7) A power-assisted door shall not swing open into the path of travel or a corridor, whatever its width (see Note A-3.8.3.6.(6) and (7)).";  Replace "Except as provided in Clause 3.8.3.5.(1)(c)" in Sentence (14) by "Except as provided in Clauses 3.8.3.2.(1)(b) and 3.8.3.5.(1)(c) and Subsections 3.8.4. and 3.8.5.".  |
| 3.8.3.7. | Replace the Article by the following:  "3.8.3.7. Lifts for Persons with Physical Disabilities  (1) Except as provided in Sentence (3), lifts for persons with physical disabilities, referred to in Article 3.8.2.3., shall conform to CSA B355, "Lifts for Persons with Physical Disabilities".  (See Note A-3.8.3.7.(1).)  (2) Every lift for persons with physical disabilities shall conform to the following requirements:  (a) a staircase with protected sheath for wheelchairs is permitted to be installed in a staircase provided  (i) the stairs are not used for exit,  (ii) the stairs have a clear width conforming to Sections 3.3. and 3.4. in addition to the width required for the deployed device, |
|          | (iii) no obstacle located less than 1980 mm from the floor encroaches on the clear width of the stairs, and  |

|           | (iv) the clear space of the stairs is separated from the space required for<br>the device and conforms to Sections 3.3. and 3.4. with respect to required<br>handrails,   |
|-----------|---|
|           | (b) a device with a vertical path shall have a platform not less than 800 mm by 1500 mm allowing the presence of an accompanying person; in the case of a right angle exit model, the dimension of the platform shall be sufficient for a wheelchair to turn; and   |
|           | (c) the landing door of a device with a vertical path with closed sheath shall be motorized and designed in accordance with CSA B355, "Lifts for Persons with Physical Disabilities", when an entrance door to the <i>building</i> must be equipped with a power door operator that complies with Subsection 3.8.2. |
|           | (3) A stair chair lift conforming to CSA B355, "Lifts for Persons with Physical Disabilities", is permitted to be installed inside a <i>dwelling unit</i> when the stairway has a clear width not less than 860 mm in addition to the width required for the deployed device (see Note A-3.8.2.3.(2)(j)).".         |
| 3.8.3.8.  | Strike out "in or" in Clause (1)(a).  |
| 3.8.3.9.  | Add the following Sentence:  "(2) Parking designed to be <i>barrier-free</i> shall be designated by a P-150-5 conforming to the specifications prescribed by the Minister of Transport in accordance with section 308 of the Highway Safety Code (chapter C-24.2) (see Note A-3.8.3.9.(2))."                        |
| 3.8.3.11. | Replace Subclause (1)(c)(v) by the following:  "(v) swings outward, unless an unobstructed area not less than 1200 mm in diameter is provided within the stall (see Note A-3.8.3.11.(1)(c)(v));".   |
| 3.8.3.15. | Replace "à au plus 500 mm en face du lavabo" in Subclause (1)(f)(ii) of the French text by "à moins de 500 mm de l'avant du lavabo".  |
| 3.8.3.16. | Replace "au-dessus de l'espace dégagé adjacent" in Subclause (1)(f)(ii) of the French text by "à partir de l'espace dégagé adjacent";   |
|           | Replace "have a pressure-equalizing or thermostatic-mixing valve" in Clause (1)(h) by "be equipped with faucets".   |

|           | Replace Clause (1)(d) by the following:  "(d) be capable of being accessed along its full length with no tracks or accessories mounted on its rim and have a rim located between 400 mm and 460 mm above the floor, except in the case of a walk-in bathtub equipped with a closing mechanism ensuring tightness;"; |
|-----------|---|
|           | Replace Clauses (1)(g) and (1)(h) by the following:   |
| 3.8.3.17. | "(g) have a slip-resistant surface on the bottom,   |
| 3.0.3.17. | (h) be equipped with a hand-held shower head with   |
|           | (i) a diverter valve that can be operated with a closed fist by a seated person,  |
|           | (ii) a flexible hose not less than 1800 mm long, and  |
|           | (iii) a bracket enabling a seated person to use the hand-held shower head as a fixed shower head, and   |
|           | (i) have a soap holder easy to reach by a seated person.".  |
| 3.8.3.19. | Strike out "and where the counter is intended to be used as a work surface" in Clause (1)(c);   |
|           | Replace "whereat movement takes place" in Sentence (2) by "where movement may take place".  |
|           | Add the following Subsections:  |
|           | "3.8.4. Minimally Accessible Dwelling Unit of Residential Occupancy   |
|           | 3.8.4.1. Application  |
|           | (1) This Subsection shall apply to minimally accessible dwelling units of residential occupancy.  |
|           | (2) In addition, in the minimally accessible <i>dwelling unit</i> of <i>residential occupancy</i> , the requirements in Articles 3.8.3.2., 3.8.3.5., 3.8.3.6. and 3.8.3.7. apply, except as provided for in this Subsection.  |
|           | 3.8.4.2. Barrier-free path of travel  |
|           | (1) In the dwelling unit, the barrier-free path of travel shall extend from the door at the entrance to the dwelling unit to the inside of each of the following:   |

- (a) a washroom (see Note A-3.8.4.2.(1)(a)),
- (b) a living room, and
- (c) a dining room.
- **(2)** Where the *barrier-free* path of travel giving access to the spaces has a corridor, a level floor surface shall be provided for changes of direction in the corridor
- (a) not less than 1500 mm in diameter, or
- (b) not less than 1500 mm by 1050 mm.

# 3.8.4.3. Doors and Doorways

(See Note A-3.8.4.3.)

- (1) A sliding door shall have a clear space on the latch side extending the height of the doorway and not less than
- (a) 50 mm beyond the edge of the door opening if the approach is perpendicular, or
- (b) 540 mm beyond the edge of the door opening if the approach is lateral.
- **(2)** Except for the entrance door to a *dwelling unit*, notwithstanding the provisions of Sentence 3.8.3.6.(14), the floor surface on each side of a door shall be level within a rectangular area
- (a) as wide as the door plus the clearance required on the latch side by Sentence (1) or Sentence 3.8.3.6.(11), and
- (b) whose dimension perpendicular to the closed door is
- (i) not less than 1050 mm if the door swings away from the approach side,
- (ii) not less than 1050 mm for a sliding door if the approach is lateral, or
- (iii) not less than 1200 mm in other cases.

#### 3.8.4.4. Controls

- (1) Controls for the operation of *building* services or safety devices, including electrical switches, thermostats, door hardware, electrical outlets and intercom switches, that are intended to be operated by the occupant and are located in or adjacent to a *barrier-free* path of travel shall
- (a) be installed 400 to 1200 mm above the floor, and
- (b) be located at a distance not less than 300 mm from the inside corner of a wall.

#### 3.8.4.5 Washroom

- (1) The washroom shall be provided with a water closet
- (a) having a rear wall clearance over a length not less than 1000 mm, that is, 500 mm on each side of the centre of the water closet or the floor flange, or
- (b) having a rear wall clearance over a length not less than 850 mm, measured from the side wall if
- (i) the water closet is installed at a distance not less than 460 mm and not more than 480 mm from a side wall, measured from the centre of the device or the centre of the floor flange, and
- (ii) the side wall has a length not less than 1250 mm.
- (2) The washroom shall be provided with a lavatory
- (a) placed so that there is not less than 460 mm between its axis and a side wall, and
- (b) the edge of which is not more than 865 mm from the floor.
- (3) The washroom shall be provided with a clear space that is
- (a) round and 1500 mm in diameter to access the lavatory and the water closet, or
- (b) rectangular to access
- (i) the lavatory, 750 mm wide by 1200 mm long centered on the lavatory and located in front of the lavatory, and
- (ii) the water closet, 1400 mm long from the rear wall of the water closet by 1200 mm wide, regardless of the lavatory.
- (4) A continuous wood nailing element shall be installed for the water closet
- (a) where the water closet is installed in accordance with Clause (1)(a), in the wall behind the water closet, over a surface not less than 1000 mm wide centered in the centre of the water closet and over a height not less than 1100 mm, measured from the floor, or
- (b) where the water closet is installed in accordance with Clause (1)(b)
- (i) in the side wall, over a length not less than 1250 mm, measured from the rear wall of the water closet and over a height not less than 1500 mm, measured from the floor, and
- (ii) in the wall behind the water closet over a surface not less than 800 mm wide centered on the centre of the water closet and over a height not less than 900 mm.

(See Note A-3.8.4.5.(4).)

**(5)** A continuous wood nailing element shall be installed, if applicable, in the walls surrounding the bathtub and the shower, over a height not less than 1800 mm, measured from the floor.

### 3.8.5. Adaptable Dwelling Unit of Residential Occupancy

# 3.8.5.1. Application

- (1) This Subsection shall apply to adaptable *dwelling units* of *residential occupancy*.
- (2) In addition, in the adaptable *dwelling unit* of *residential occupancy*, the requirements in Articles 3.8.3.2., 3.8.3.5., 3.8.3.6. and 3.8.3.7. shall apply, subject to the requirements of this Subsection.

#### 3.8.5.2. Barrier-Free Path of Travel

- (1) In the *dwelling unit*, the *barrier-free* path of travel shall extend from the door at the entrance to the *dwelling unit* to the inside of each of the following spaces:
- (a) a bathroom (see Note A-3.8.5.2.(1)(a)),
- (b) a living room,
- (c) a dining room,
- (d) a kitchen,
- (e) at least one bedroom, and
- (f) a balcony, where provided.
- **(2)** Where the *barrier-free* path of travel giving access to the spaces has a corridor, a level floor surface shall be provided for changes of direction in the corridor of
- (a) not less than 1500 mm in diameter, or
- (b) not less than 1500 mm by 1050 mm.

## 3.8.5.3. Doorways and Doors

- (1) A sliding door shall have a clear space on the latch side extending the height of the doorway and not less than
- (a) 50 mm beyond the edge of the door opening if the approach is perpendicular, or
- (b) 540 mm beyond the edge of the door opening if the approach is lateral.
- **(2)** Notwithstanding the provisions of Sentence 3.8.3.6.(14), the floor surface, on each side of a door, shall be level within
- (a) a round area and have a diameter not less than 1500 mm, or
- (b) a rectangular area

- (i) as wide as the door plus the clearance required on the latch side by Sentence (1) or Sentence 3.8.3.6.(11), and
- (ii) whose dimension perpendicular to the closed door is not less than 1050 mm where the door swings away from the approach side or for a sliding door where the approach is lateral, or is not less than 1200 mm in other cases.

#### 3.8.5.4. Controls

- (1) Controls of the operation of *building* services or safety devices, including electrical switches, thermostats, door hardware, electrical outlets and intercom switches, that are intended to be operated by the occupant and that are located in or adjacent to a *barrier-free* path of travel shall
- (a) be installed 400 to 1200 mm above the floor, and
- (b) be located at a distance not less than 300 mm from the inside corner of a wall.

#### 3.8.5.5. Bathroom

- (1) The bathroom shall be provided with a water closet
- (a) whose centre of the floor flange is placed not less than 1400 mm from the centre of the lavatory trap, or
- (b) that is located not less than 1100 mm from an adjacent wall or from equipment, measured from the centre of the floor flange.

(See Note A-3.8.5.5.(1).)

- (2) The bathroom shall be provided with a lavatory
- (a) whose trap is placed so that there is not less than 460 mm between its axis and a side wall.
- (b) whose trap bottom is located not less than 230 mm and not more than 300 mm from the floor, and
- (c) whose trap entrance is located not more than 330 mm from the wall behind the lavatory.

(See Note A-3.8.5.5.(2).)

- (3) The bathroom shall have not less than one bathtub or one shower and, if the bathroom has only one shower, the shower shall have a floor surface of not less than 900 mm by 900 mm.
- (4) The bathroom shall have a clear space to access
- (a) the lavatory and the water closet, that is round and 1500 mm in diameter,

- (b) the shower, where provided, that is rectangular, not less than 750 mm by 1200 mm in front of the shower, and
- (c) the bathtub, where provided, that is rectangular, not less than 1200 mm measured from the faucets by 750 mm measured perpendicularly to the bathtub.
- (5) A continuous wood nailing element shall be installed
- (a) in the walls around the bathtub or the shower, over a height of not less than 1800 mm, measured from the floor, and
- (b) in the wall behind the water closet, over an area not less than 1000 mm wide centred in the middle of the floor flange and over a height of not less than 1100 mm. measured from the floor.

#### 3.8.5.6. Bedroom

- (1) The adaptable bedroom shall have an area not less than 11 m<sup>2</sup> having a length and a width not less than 3 m.
- **(2)** Except where the bedroom is located in the *basement*, the window sill, if applicable, shall be installed at a maximum height of 1000 mm from the floor.

### 3.8.5.7. Kitchen

- (1) A round clear space not less than 1500 mm in diameter shall be provided in the kitchen for access to the sink and range, regardless of the counters (see Note A-3.8.5.7.(1)).
- (2) The bottom of the sink trap shall be located 230 mm from the floor (see Note A-3.8.5.7.(2) and (3)).
- (3) The entrance of the sink trap shall be located not more than 330 mm from the wall behind the sink or not less than 280 mm from the front of the sink (see Note A-3.8.5.7.(2) and (3)).

### 3.8.5.8. Living Room and Dining Room

(1) Except where the spaces are located in the *basement*, the window sill of the living room and the dining room, where provided, shall be installed at a maximum height of 1000 mm from the floor.

#### 3.8.5.9. Balcony

(1) Notwithstanding the requirements of Sentence 3.8.3.6.(14), a balcony, where provided, shall have a round clear area not less than 1500 mm in diameter.

#### 3.8.6. Hotels and motels

# 3.8.6.1. Application

**(1)** This Subsection applies to the *suites* of a *barrier-free* hotel or motel referred to in Article 3.8.2.12.

## 3.8.6.2. Barrier-free path of travel

- (1) Suites of a barrier-free hotel or motel shall have a barrier-free path of travel that conform to the requirements in Subsection 3.8.3. extending to the inside of each room and to the balcony, where applicable.
- (2) A suite of a barrier-free hotel or motel shall have a bathroom that
- (a) conforms to Article 3.8.3.12.,
- (b) has a bathtub conforming to Article 3.8.3.17. or a shower conforming to Article 3.8.3.16., and
- (c) has a towel rod located not higher than 1200 mm from the floor so as to be easily accessible by a person in a wheelchair.
- (3) Every closet in such a suite shall
- (a) have an open space not less than 1500 mm in diameter in front of the closet, and
- (b) have a rod located not more than 1300 mm from the floor.".

Replace the relevant attributions in Table 3.10.1.1. by the following attributions:

"3.1.11.5. Fire Blocks in Horizontal Concealed Spaces

(1) [F03,F04-OS1.2]

[F03,F04-OP1.2]

(2) [F03,F04-OS1.2]

[F03,F04-OP1.2]

3.10.1.1.

(3) [F03, F04-OS1.2]

[F03, F04-OP1.2]";

"3.2.2.44. Group B, Division 3, up to 2 Storeys

(1) [F02, F04-OS1.2,OS1.3]

[F02, F04-OP1.2,OP1.3]

[F03-OS1.2] [F04-OS1.2,OS1.3]

[F03-OP1.2] [F04-OP1.2,OP1.3]

[F04-OS1.3]

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(2) (b) [F04-OP1.3]";
"3.2.2.45. Group B, Division 3, 1 Storey
(1) [F02, F04-OS1.2,OS1.3]
[F02, F04-OP1.2,OP1.3]
[F03-OS1.2] [F04-OS1.2,OS1.3]
[F03-OP1.2] [F04-OP1.2,OP1.3]
[F04-OS1.3]
(2) (b),(c) [F04-OP1.3]";
"3.2.2.46. Group B, Division 3, up to 2 Storeys
(1) [F02, F04-OS1.2,OS1.3]
[F02, F04-OP1.2,OP1.3]
[F03-OS1.2] [F04-OS1.2,OS1.3]
[F03-OP1.2] [F04-OP1.2,OP1.3]
[F04-OS1.3]
(2) [F04-OP1.3]";
"3.2.2.50. Group C, up to 6 Storeys, Sprinklered
(1) (a) [F02,F04-OS1.2,OS1.3]
(a) [F02,F04-OP1.2,OP1.3]
[F03-OS1.2] [F04-OS1.2,OS1.3] Applies to portion of Code text: "a) ...
floor assemblies shall be fire separations with a fire-resistance rating not
less than 1 h, ..." and to Clause (e).
[F03-OP1.2] [F04-OP1.2,OP1.3] Applies to portion of Code text: "... a) ...
floor assemblies shall be fire separations with a fire-resistance rating not
less than 1 h, ..." and to Clause (e).
(b),(d),(e) [F04-OS1.3]
(b),(d),(e) [F04-OP1.3]
[F03-OS1.2] [F04-OS1.2,OS1.3] Applies to portion of Code text: "a) ...
floor assemblies shall be fire separations with a fire-resistance rating not
less than 1 h, ..." and to Clause (e).
[F03-OP1.2] [F04-OP1.2,OP1.3] Applies to portion of Code text: "a) ...
floor assemblies shall be fire separations with a fire-resistance rating not
less than 1 h, ..." and to Clause (e).
(b),(d),(e) [F04-OS1.3]
(b),(d),(e) [F04-OP1.3]";
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(1) (a) [F02,F04-OS1.2,OS1.3]
(a) [F02,F04-OP1.2,OP1.3]
(a),(e) [F03-OS1.2] [F04-OS1.3,OS1.2]
(2) (a),(e) [F03-OP1.2] [F04-OP1.2,OP1.3]
(b),(d),(e) [F04-OS1.3]
(b),(d),(e) [F04-OP1.3]";
"3.6.3.3. Linen and Refuse Chutes
(6)(a) [F81, F03-OS1.2]
[F81, F41-OH2.4, OH2.5]
[F81, F03-OP1.2]
(b) [F03-OS1.2]
[F03-OP1.2]
(c) [F05-OS1.5] [F06-OS1.5, OS1.2]
[F06-OP1.2]
(d) [F11-OS1.5]
(e) [F01-OS1.1]
[F01-OP1.1]
(7) [F02–OS1.2]
[F02-OP1.2]
(8) [F03–OS1.2]
[F03-OP1.2]
(9) [F02–OS1.2]
[F41-OH2.4,OH2.5]
(10) [F03-OS1.2]
[F03-OP1.2]
(11) [F81, F03–OS1.2] Applies to portion of Code text: "The room or bin
into which a refuse chute discharges shall be of sufficient size to contain
the refuse between normal intervals of emptying ..."
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"3.2.2.58. Group D, up to 6 Storeys, Sprinklered

[F81, F41–OH2.4, OH2.5] Applies to portion of Code text: "The room or bin into which a refuse chute discharges shall be of sufficient size to contain the refuse between normal intervals of emptying ..."

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[F41-OH2.4, OH2.5] Applies to portion of Code text: "The room or bin
into which a refuse chute discharges shall be ... impervious to moisture
and be equipped with a water connection and floor drain for washing-
down purposes."";
"3.8.2.5. Access to Parking Areas and Exterior Passenger-Loading Zones
(4) (b) [F73-OA1]";
"3.8.3.5. Lifts for persons with physical disabilities
(1) [F30-OS3.1] [F10-OS3.7]
(2) [F74-OA2]
[F73-OA1]";
Add the following attributions in alphabetical order in Table 3.9.1.1.:
"3.1.2.7. Ambulatory Clinic Occupancy
(2) [F03-OS1.2]
[F02-OS1.1]
(3) [F03-OS1.2]
[F02-OS1.1]
(4) [F03-OS1.2]
(5) [F10-OS1.5]
(6) [F03-OS1.2] ";
"3.1.4.1. Authorized Combustible Materials
(3) [F02-OS1.2]
[F02-OP1.2]";
"3.1.6.2. Restrictions
(4) [F11-OS3.7]";
"3.1.6.8. Fire Alarm and Detection Systems
(1) [F11-OS1.5]";
"3.1.6.11. Access for Firefighting
(1) [F12-OS1.2]
[F12-OP1.2]";
"3.1.6.12. Heat-Producing Equipment
(1) [F31-OS3.2]
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(2) [F02-OS1.2]";
"3.1.6.13. Structural Soundness
(1) [F20-OS2.1]";
"3.1.7.6. Sprinkler-Protected Fixed Glass Walls
(2) (a)(b)(c)[F03-OS1.2]
(d) [F05-OS1.5]
(3) [F03-OS1.2]";
"3.2.3.6. Combustible Projections
(7) [F02-OS1.2]
[F02-OP1.2]";
"3.2.4.7. Signals to Fire Department
(7) [F13-OS1.5, OS1.2]
[F13-OP1.2]
(8) [F13-OS1.5, OS1.2]
[F13-OP1.2]";
"3.2.4.19. Visual Signals
(3) [F11-OS1.5]
(4) [F11-OS1.5]";
"3.2.5.3. Roof Access
(2) [F12-OS1.2]
[F12-OP1.2]";
"3.2.5.9. Standpipe System Design
(7) [F46-OH2.2]";
"3.2.5.12. Automatic Sprinkler Systems
(11) [F46-OH2.2]";
"3.2.6.5. Elevator for Use by Firefighters
(7) [F06-OS1.2,OS1.5]
[F06-OP1.2]
(8) [F12-OS3.7]";
"3.2.7.9. Emergency Power for Building Services
(4) [F81-OS2.3]";
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"3.2.8.1. Application
(4) [F10, F12-OS1.5]";
"3.3.1.1. Separation of Suites
(4) [F03-OS1.2]
[F03-OP1.2]";
"3.3.1.3. Means of Egress
(10) [F10, F12-OS3.7]";
"3.3.1.14. Ramps and Stairs
(3) [F30-OS3.1]";
"3.3.3.8. Care Occupancies
(1) [F36-OS1.5]";
"3.4.6.16. Door Release Hardware
(6) [F10-OS3.7)
(7) [F10-OS3.7]
(9) [F10-OS3.7]
[F73-OA1]";
"3.5.2.1. Elevators, Escalators and Dumbwaiters
(4) [F74-OA2]";
"3.5.5.1. Referenced Standards
(1) [F30, F81-OS3.1]
[F30-OS2.3]";
"3.6.3.1. Fire Separations for Vertical Service Spaces
(6) [F03-OS1.2]
[F03-OP1.2]";
"3.6.3.3. Linen and Refuse Chutes
(12) [F01, F02-OS1.2]";
"3.7.2.2. W.-C.
(17) [F72-OH2.1]";
"3.7.2.7. Avaloirs de sol
(2) [F40-OH2.4]
[F30-OS3.1]
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|                                  | (3) [F40-OH2.4]   |
|----------------------------------|---|
|                                  | [F30-OS3.1]";   |
|                                  | "3.8.3.4 Parking Areas  |
|                                  | (2) [F73-OA1]";   |
|                                  | "3.8.2.12. Hotels and motels  |
|                                  | (1) [F73-OA1]";   |
|                                  | "3.8.3.7. Passenger-Elevating Devices   |
|                                  | (2) [F73-OA1]   |
|                                  | [F74-OA2]";   |
|                                  | Strike out the following attributions in Table 3.9.1.1.:                            |
|                                  | "3.1.10.2.(4)";   |
|                                  | "3.2.4.20.(5)";   |
|                                  | "3.3.2.14.";  |
|                                  | "3.3.3.5.(16)";   |
|                                  | "3.5.2.1.(2)";  |
|                                  | "3.7.2.2.(15)".   |
| Division B<br>Notes in<br>Part 3 |   |
|                                  | Insert "or radio" after "Television" in Group A, Division 1;                        |
|                                  | Replace the examples of major occupancies in Group A, Division 2, by the following: |
|                                  | "Art galleries  |
| A-3.1.2.1.(1)                    | Auditoria   |
|                                  | Bowling alleys  |
|                                  | Churches and similar places of worship  |
|                                  | Clubs   |
|                                  | Community halls   |
|                                  | Courtrooms  |
|                                  |   |

Dance halls

Day care centres

Exhibition halls (other than classified in Group E)

Gymnasia

Lecture halls

Libraries

Licensed beverage establishments

Museums

Passenger stations and depots

Restaurants

Teaching establishments

Undertaking premises";

Insert "in which a person is detained for more than 24 hours" after "Police stations with detention quarters" in Group B, Division 1;

Replace the examples of major occupancies in Group B, Division 2, by the following:

"Ambulatory clinic occupancies

Convalescent /recovery/rehabilitation centres with treatment

Hospitals

Psychiatric hospitals without detention quarters

Residential and long-term care centres (CHSLDs)

Respite centres with treatment

Seniors homes";

Replace the examples of major occupancies in Group B, Division 3, by the following:

"Assisted/supportive living facilities

Children's custodial homes

Convalescent/recovery/rehabilitation centres without treatment

Group homes

|                         | Private seniors' residences   |
|-------------------------|---|
|                         | Reformatories without detention quarters  |
|                         | Respite centres without treatment   |
|                         | Single-family type care facilities  |
|                         | Single-family type private seniors' residences";  |
|                         | Replace the examples of major occupancies in Group C by the following:  |
|                         | "Apartments   |
|                         | Boarding houses   |
|                         | Convents  |
|                         | Dormitories   |
|                         | Hotels  |
|                         | Houses  |
|                         | Monasteries   |
|                         | Motels  |
|                         | Orphanages  |
|                         | Outfitters  |
|                         | Schools, residential  |
|                         | Shelters  |
|                         | Summer camps".  |
| A-3.1.3.2.(3)<br>to (5) | Strike out the Note.  |
| A-3.1.4.2.(1)           | Strike out the Note.  |
|                         | Add the following Note:   |
|                         | "A-3.1.6.2.(4) Clearance. A clear space of not less than 1 m is necessary above partitions to facilitate the detection of smoke inside tents and air-supported structures. Taking the roof slope into account, not more than 30% of the width of a partition may be less than 1 m from the ceiling.". |

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|--------------------|---|
|                    | Add the following Notes:  |
|                    | "A-3.1.6.12.(2) Deep fryer Basket. The 2 baskets mentioned in the Article may be in two separated devices or in only one. The objective is to limit the quantity of frying oil present in a tent.   |
|                    | <b>A-3.1.6.13.(1) Structure.</b> A tent or air-supported structure used only in summer is permitted to be designed without taking snow loads into account.  |
|                    | A tent or air-supported structure used in winter must be designed taking snow, ice and freezing rain loads into account.  |
|                    | Wind loads vary from one region to another. It is important that the structure be able to withstand local loads.  |
|                    | The anchorage system must be adapted to each structure.".   |
|                    | Add the following Note:   |
|                    | "A-3.1.7.6. Sprinkler-Protected Fixed Glass Walls. This protection method involves the coordination of several elements, including the location of sprinklers relative to fixed glass walls, number of sprinklers installed to protect the fixed glass wall system, sprinkler activation time, shape of the water spray, thickness and location of the mullions, dimensions of the fixed glass wall system and thickness of the glass.".  |
| A-<br>3.1.8.18.(1) | Add "ou de monte-charge" after "les gaines d'ascenseur" in the Note in the French text.   |
| A-<br>3.1.10.2.(4) | Strike out the Note.  |
| A-<br>3.1.11.5.(1) | Strike out the last sentence of the Note.   |
| A-<br>3.1.11.5.(3) | Replace the Note by the following:  "A-3.1.11.5.(3) Fire Blocks in Horizontal Concealed Spaces. A building conforming to Article 3.2.2.50. or 3.2.2.58 must be protected by sprinklers in accordance with NFPA 13, "Installation of Sprinkler Systems", which requires that concealed spaces be sprinklered. However, pursuant to the standard, sprinklers need not be installed in certain enclosed combustible spaces, including those filled with noncombustible insulation.  Due consideration must be given to attics in order to provide cross ventilation where required. According to NFPA 13, "Installation of Sprinkler Systems", sprinklers need not be installed if there is a space of |

| not more than 50 mm between the top of the noncombustible insulation and the bottom of the bridging. Such a space is not sufficient for adequate ventilation of the attic. If additional space is provided for ventilation purposes, the horizontal concealed space must be sprinklered.".   |
|--|
| Add the following Note:  "A-3.2.1.2.(1) Storage Garage Considered as a Separate Building. Where a storage garage is considered as a separate building for the  |
| purposes of Subsection 3.2.2., it is permitted to use the number of storeys, the building area and the occupancy of each construction located above the garage to determine if sprinklering is required, the type of construction, and the fire-resistance rating of the loadbearing floors, columns and arches. For all the other requirements in the NBC, all the constructions above the garage and the garage are only one building. The alarm and detection system must serve all parts of the building, including townhouses located above the storage garage. |
| Where one of the constructions located above the garage is a high building, that construction, the storage garage and all accesses to the other parts of the building must conform to Subsection 3.2.6.".  |
| Add the following Note:  |
| "A-3.2.2.10.(3) Distance between the Building Perimeter and Street. To be considered as facing a street, not less than 25% of the building perimeter must be within 15 m of the street. However, considering the available firefighting equipment, it is recommended to verify the municipality requirements regarding that distance since certain municipalities may require a shorter distance."   |
| Add the following Note:  |
| "A-3.2.2.50.(1)(c)(ii) Height of the Roof of a Combustible Building with 6 Storeys. All rooftop enclosures, including visual screens concealing mechanical equipment, parapet walls and terrace guards shall be taken into account in determining the highest point of the roof."  |
| Add the following Note:  |
| "A-3.2.4.2.(1) Continuity of Fire Alarm System. A building separated by a firewall to increase the building areas permitted in Subsection 3.2.2., but designed and operated as only one building, must have only one fire alarm system.".  |

|                    | Add the following Note:  "A-3.2.4.5.(1) Provision of CSA-C22.1 concerning Fire Alarm Systems. That requirement is not new. It has been required under CAN/ULC-S524, "Installation of Fire Alarm Systems", in several editions   |
|--------------------|---|
|                    | of the NBC. Despite the fact that Chapter V, Electricity, of the Construction Code (chapter B-1.1, r. 2) adopts the Canadian Electrical Code excluding Articles 32-100 to 32-110 of that Code, the NBC requires compliance with those Articles covering fire alarm systems.".   |
| A-3.2.4.8.(2)      | Insert "passenger" after "used in the building" in the Note.  |
|                    | Add the following Sentence at the end of the Note:  |
| A-<br>3.2.4.18.(1) | "The fire alarm signals must be clearly audible throughout the floor area. When designing and testing the system, all doors must be closed.".   |
| A-<br>3.2.4.18.(4) | Strike out the Note.  |
|                    | Add the following Note:   |
|                    | "A-3.2.5.3.(2). Roof Access. The stairway is permitted to provide access to the roof by a hatch of the size prescribed in Clause 3.2.5.3.(1)(b) or by a rooftop enclosure."   |
| A-<br>3.2.5.12.(2) | Strike out the last sentence of the Note.   |
| A-3.2.6.           | Insert the words "ou de monte-charge" after the words "gaines d'ascenseur" wherever they appear in the Note in the French text.   |
| A-3.2.6.2.(3)      | Add the following Sentence at the end of the Note:  "NFPA 92, "Standard for Smoke Control Systems", suggests mechanical smoke control methods. Those means may be used as alternatives to the venting proposed in this Article. Designers will, however, need to demonstrate that the method they propose under the standard complies with the objectives of the NBC.". |

| A-3.2.6.2.(4)        | Insert the words "ou de monte-charge" after the words "gaines d'ascenseur" wherever they appear in the Note in the French text.   |
|----------------------|---|
|                      | Add the following Note:  "A-3.2.6.2.(6) Smoke Propagation and Smoke Control Measures Implemented in the Building. The ventilation of corridors may be stopped if it interferes with the pressurizing of corridors, exits or central blocks to comply with part of the additional requirements for high buildings constructed before the coming into force of the NBC 1995 am. Québec.".   |
| A-<br>3.2.6.5.(6)(b) | Strike out the Note.  |
| A-3.2.6.9.(1)        | Insert the words "ou de monte-charge" after the words "gaines d'ascenseur" wherever they appear in the Note in the French text.   |
|                      | Add the following Note:  "A-3.2.8.2.(5) Opening in Floors. An opening of 10 m² permitted for stairways, escalators or moving walks may not be located in the same volume as an opening permitted, in Sentence (6), between the first storey and the storey immediately above or below. If those 2 waivers are used for the same volume, the actual resulting opening will have to conform to Articles 3.2.8.3. to 3.2.8.8.  To be able to provide an opening of 10 m² for a stairway on all the storeys of the building and another larger opening between the first and the second storeys, the openings must be separated from each other by a fire separation with the fire-resistance rating required for the floor or according to Article 3.1.3.1." |
| A-3.2.9.1.(1)        | Insert "passenger" after "door hold-open devices," in the Note;  Strike out the last sentence of the Note.  |
|                      | Add the following Note:  "A-3.3.1.3.(10) Public Corridor Leading Through a Lobby. For one end of a public corridor to lead through a lobby notwithstanding Sentence 3.3.1.3.(9), it must be possible, from a door having direct access to a public corridor, to go to the 2 exits located in opposite directions. The   |

|               | corridor must be separated from the lobby in order to maintain the integrity and fire resistance required for the lobby, the corridor or the adjacent occupancies.".  |
|---------------|---|
| A-3.3.1.7.(1) | Insert "passenger" before "elevator" wherever it appears in the Note.   |
|               | Add the following Note:  "A-3.3.3.3.(2) Dead-End Corridors. Corridors serving patients' or residents' sleeping rooms are permitted to have a dead-end portion not exceeding 1 m so that the wall can be set back at the location of the door. The dimension of 1 m corresponds roughly to the swing area of a sleeping room door."  |
|               | Add the following Note:  "A-3.3.3.6.(1) Ventilation Systems for Areas of Refuge. The ventilation systems supplying such areas must be able to withstand a fire for 2 h. The electrical supply for these systems must also be protected against fire for 2 h.".  |
|               | "A-3.3.5.6.(1) Storage Garage Separated from Other Occupancies. According to the definition of the NBC, a storage garage is a space intended for parking and storage of motor vehicles and containing no provision for the repair or servicing of such vehicles. A bicycle, even if it is not a motor vehicle, is a vehicle (device intended for the transportation of persons or goods). It may therefore be parked or stored in a storage garage, at the end of an individual parking space or using shared bicycle racks. It may also be separated from the remainder of the garage by a partition but only if the partition has a fire separation with the fire-resistance rating required between a storage garage and the other occupancies, that is, a fire-resistance rating not less than 90 minutes. Otherwise, bicycles must not be separated from the remainder of the garage by a wire mesh or any other construction, metal or wooden bars, openwork or not.  Motorized mobility aids whose size is greater than that of an electric wheelchair, such as 3-wheel scooters, 4-wheel scooters or other similar vehicles, should be parked in the storage garage.  The motorized mobility aids and the bicycles should not be included in the number of motor vehicles." |

| Replace the title of the Note in the French text by "Hauteur libre";  |
|---|
| Replace "la largeur de passage" in the first paragraph of the Note in the French text by "la largeur libre";  |
| Insert "libre" after "la largeur" in the second paragraph of the Note in the French text;   |
| Replace the title of Figure A-3.4.3.4. of the French text by "Mesure de la hauteur libre";  |
| Replace "échappée" by "hauteur libre" wherever it appears in Figure A-3.4.3.4. of the French text;  |
| Replace "largeur de passage" by "largeur libre" in Figure A-3.4.3.4. of the French text.  |
| Add the following Note:   |
| "A-3.4.4.2.(2) Lobbies. Since lobbies must conform to the requirements for exits, no occupancies are permitted in them, except those listed in Clause 3.4.4.2.(2)(e). Consequently, they are not permitted to be used as waiting or rest areas.".   |
| Add the following Sentence at the end of the Note:  |
| "It should be noted that limited use and limited application elevators must have a maximum elevation of 7.6 m (25 pi) according to the 2000 edition of ASME A17.1/CSA B44, "Safety Code for Elevators and Escalators"."   |
| Strike out "ou de monte-charge" in the title of the Note in the French text;  |
| Replace the Note by the following:  |
| "In some circumstances it is necessary to maintain a patient on a stretcher in the prone position during transit to a hospital or to treatment facilities. Inclining the stretcher to load it into an elevator could be fatal or at the very least detrimental to the patient's health. Many ambulance services use a mobile patient stretcher whose size is 2010 mm long and |
|   |

|            | 610 mm wide. As well as space for the stretcher in the elevator, there should be sufficient additional space for at least two attendants who may also be providing treatment during transit.".   |
|------------|--|
| A-3.6.3.5. | Strike out the Note.   |
|            | Add the following Note:  "A-3.7.2.7.(4) Floor Drain. Where a water heater is installed in a ceiling space and is equipped with a drip tray indirectly linked to the sanitary system, the tray replaces the floor drain.".  |
| A-3.8.2.2. | Add the following at the end of the Note:  "Service entrances such as those for delivery and receipt of goods, and those for access to Group F service rooms and workshops need not be made accessible.".  |
|            | Replace "passagers" in the seventh bullet of the Note in the French text by "personnes handicapées";   |
| A-3.8.2.3. | Replace ", elevating device" in the seventh bullet of the Note by "lift for persons with physical disabilities";   |
|            | Replace "The concept of wheelchair accessibility does not extend" in the Note by "Accessibility for a person in a wheelchair does not extend".   |
|            | Add the following Note:  |
|            | "A-3.8.2.3.(2)(j) Barrier-free Path of Travel. Where all the spaces referred to in Subsection 3.8.4. or 3.8.5. are located at the entry level of the dwelling unit, the barrier-free path of travel need not extend to the other levels of the dwelling unit.  |
|            | It is possible to provide the spaces referred to in Subsection 3.8.4. or 3.8.5. at a level other than the entry level of the dwelling unit. The barrier-free path of travel must then extend to that other level. The installation of a ramp or an elevator or a lift for persons with physical disabilities is then required. |
|            | There are several types of lifts for persons with physical disabilities and the lifting device chosen must conform to all the requirements of the Code, including the requirements in CAN/CSA B355, "Lifts for Persons   |

with Physical Disabilities". Even if the barrier-free path of travel requires a lift for persons with physical disabilities, the installation of a stair chair lift is permitted in a dwelling unit.

Where the lifting device chosen is a stair chair lift or a stair platform lift, the lifting device shall be installed when the building is constructed.

The stair must have a clear width of 860 mm in addition to the width required for the device deployed.

The width necessary for the installation and use of the device varies on the basis of the device chosen:

- for a stair chair lift, not less than 650 mm in addition to the 860 mm, that is, a stair width not less than 1510 mm, is to be provided;
- for a stair platform lift, not less than 1000 mm in addition to the 860 mm, that is, a stair width not less than 1860 mm, is to be provided.

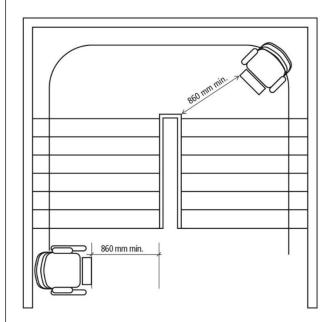


Figure A-3.8.2.3.(2)(j)
Stairway in a dwelling unit
Clear width".

# A-3.8.2.4.(1)

Replace "passagers" at the end of the Note in the French text by "personnes handicapées";

|                          | Replace "equipped passenger device" at the end of the Note by "lift for persons with physical disabilities".  |
|--------------------------|---|
| A-3.8.2.5.               | Strike out the Note.  |
| A-3.8.2.6.(1)            | Strike out the Note.  |
|                          | Replace "500" in the third paragraph of the Note by "250";  |
| A-3.8.2.8.(1)            | Replace the fourth paragraph of the Note by the following:  |
| to (4)                   | "Those washrooms are practical because they may be used by both men and women.".  |
|                          | Add the following Note:   |
|                          | "A-3.8.2.13.(1) Dwelling Unit of Residential Occupancy. A minimally accessible dwelling unit is a dwelling unit whose design integrates amenities in certain parts of the dwelling unit that make it possible to meet the needs of a person with one or more disabilities (visitability).   |
|                          | An adaptable dwelling unit is a dwelling unit whose design is such that it may be easily adapted to the specific needs of a person with one or more disabilities.".   |
|                          | Replace the Note by the following:  |
| A-3.8.3.6.(6)<br>and (7) | "A-3.8.3.6.(6) and (7) Doors with Power Operators. Doors equipped with a power operator actuated by a pressure plate identified with the international symbol for accessibility or, where security is required, by a key, card or radio transmitter, and that can otherwise be opened manually, meet the intent of the requirement. The location of these actuating devices should ensure that a wheelchair will not interfere with the operation of the door once it is actuated. Swinging doors equipped with power operators must not open into passing pedestrian traffic. The power door operator must prevent the door from closing when a person is in the swing area. Power operators conforming to ANSI/BHMA A156.10, "Power Operated Pedestrian Doors," include a device for stopping the door from closing to ensure the safety of users and reduce the risk of injury." |

Add the following Note:

"A-3.8.3.7.(1) Design of Lifts for Persons with Physical Disabilities. The reference to CSA B355, "Lifts for Persons with Physical Disabilities", implies conformance with all requirements in that standard, including restrictions on other services in these areas and detailed design criteria.

It should be noted that that standard limits the travel of a vertical platform. The travel is smaller for a closed sheath platform. According to the 2009 edition of the standard, some devices have a maximum permitted travel not more than 2500 mm."

Add the following Note:

"A-3.8.3.9.(2) Sign for Barrier-Free Parking. Sign P-150-5 is shown in section 29 of the Regulation respecting road signs (chapter C-24.2, r. 41).



Figure A-3.8.3.9.(2)

Sign for barrier-free parking".

Add the following Notes:

"A-3.8.4.2.(1)(a) Minimally Accessible Dwelling Unit. In a minimally accessible dwelling unit, if the washroom is inside another space (washroom inside a bedroom) and no other washroom is accessible in the dwelling unit, the barrier-free path of travel required must extend inside the bedroom or another space to reach the washroom even if no accessibility requirement is applicable to that room.

**A-3.8.4.3. Doorways and Doors.** Clear floor surfaces on each side of the door are necessary to allow persons in wheelchairs to approach the door on the latch side, open the door and enter the room while minimizing the number of manoeuvres. The width of the clear floor surfaces on each

side of the door is different depending on which side the door opens. Where the door swings toward the approach side, a dimension perpendicular to the closed door not less than 1200 mm is required. The requirements in Article 3.8.3.6. apply to the door at the entrance to the dwelling unit. However, the requirements in Sentence 3.8.4.3.(2) do not apply.

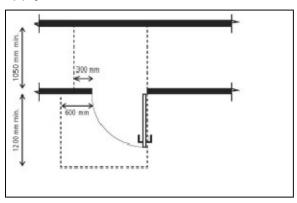


Figure A-3.8.4.3.-A
Clear floor surfaces
Door rotating on a vertical axis

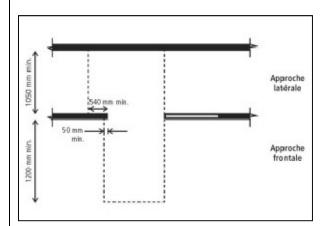


Figure A-3.8.4.3.-B
Clear floor surfaces
Sliding door

**A-3.8.4.5.(4) Washroom.** The installation of a wood nailing element of 1000 mm in width centred on the water closet is permitted where there is no wall adjacent to the water closet at a distance not more than 480 mm from the centre of the wall, allowing the installation of a lateral wood

nailing element over a length not less than 1250 mm. A wood nailing element not less than 1000 mm wide allows the installation of retractable grab bars on both sides of the water closet.

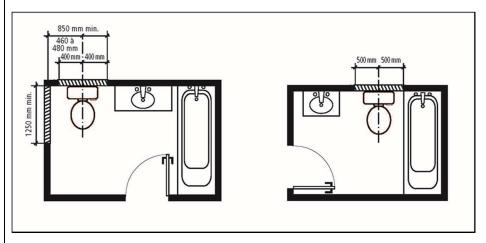


Figure A-3.8.4.5(4).

Wood nailing element for the installation of grab bars adjacent to the water closet

A-3.8.5.2.(1)(a) Adaptable Dwelling Unit. In an adaptable dwelling unit, the requirements concerning the extension of the barrier-free path of travel of the washroom as stated in Note A-3.8.4.2.(1)(a) apply to the bathroom.

**A-3.8.5.5.(1) Bathroom.** The lateral transfer of a person in a wheelchair to the seat of the water closet requires a clear width not less than 900 mm adjacent to the water closet and a length not less than 1500 mm from the rear wall of the water closet. The requirement related to that surface for an adaptable bathroom allows the encroachment of a vanity or furniture for dismantling work, to meet the potential need of a person with one or more disabilities occupying the dwelling unit. However, encroachment of that space by bathroom equipment such as the shower or the bathtub is not permissible

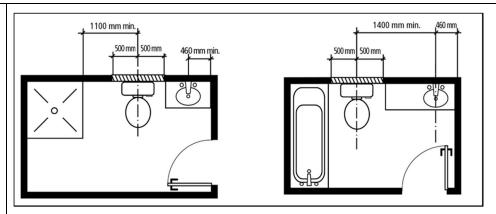


Figure A-3.8.5.5.(1)

Lateral transfer surface adjacent to the water closet

**A-3.8.5.5.(2) Bathroom.** To allow persons in wheelchairs front access to the lavatory, the clear height under the trap must be not less than 230 mm. In addition, to allow those persons to use the lavatory, the lavatory will have to be lowered to a height not more than 865 mm. For that purpose, the distance measured from the floor to the bottom of the trap must be not more than 300 mm

In an adaptable dwelling unit, the edge of the lavatory need not be installed at a height not more than 865 mm in relation to the floor or to allow front access to the lavatory of the bathroom. However, an appropriate installation of the plumbing is required to allow future adaptation.

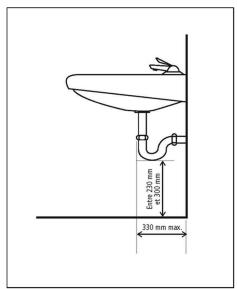


Figure A-3.8.5.5.(2)
Indications for the lavatory plumbing

A-3.8.5.7.(1) Manoeuvring Area in the Kitchen. A manoeuvring area not less than 1500 mm in diameter is required in the kitchen in front of the sink and the range, which does not require plumbing or electrical work for the purpose of moving the sink or the range to allow access to persons in wheelchairs. The travel of the appliance doors may encroach on the manoeuvring area.

A cooktop and a built-in oven may replace the range provided the 1500-mm manoeuvring area allows access to both.

**A-3.8.5.7.(2) and (3) Kitchen Sink Plumbing.** To allow front access to the sink by a person in a wheelchair and a sink height not more than 865 mm, the height measured from the floor to the bottom of the sink trap must be 230 mm.

In the case of a sink installed in a kitchen island, the longitudinal dimension to give persons in wheelchairs front access to the kitchen sink may be measured from the front edge of the counter of the island containing the sink and must be not less than 280 mm.

In an adaptable dwelling unit, counters need not be installed at not more than 865 mm and kitchen furniture is allowed under the sink. However, an appropriate installation of the plumbing is required to allow future adaptation.

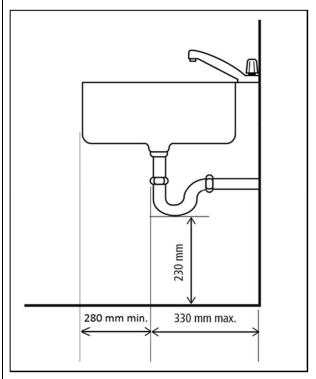


Figure A-3.8.5.7.(2) and (3) Indications for kitchen sink plumbing".

| Part 4                           |   |
|----------------------------------|---|
|                                  | Add the following Article: <b>"4.1.1.6. Certification (1)</b> All concrete shall be manufactured and delivered in accordance with the requirements in the NBC by a plant that holds a certificate of conformity issued by the BNQ in accordance with certification protocol NQ 2621-905, "Ready-Mix Concrete - Certification Program"." |
| 4.1.5.12.                        | Replace the title by the following:  "Bleachers";  Replace "bleacher seats" in Sentences (1), (2) and (3) by "bleachers".   |
| 4.1.5.14.                        | Replace "bleacher seats" in Clause (1)(a) by "bleachers".   |
| 4.1.7.1.                         | Insert "statique," after "au moyen de la méthode" in Sentence (1) of the French text.   |
| 4.1.8.18.                        | Add "ou du monte-charge" after "Rails de l'ascenseur" in line 22 of Table 4.1.8.18. of the French text.   |
| 4.2.5.8.                         | Add "(see Note A-4.2.5.8.(2))" at the end of Sentence (2).  |
| 4.5.1.1.                         | Replace the title of attribution 4.1.5.12. "Bleacher seats" in Table 4.5.1.1. by "Bleachers".   |
| Division B<br>Notes in<br>Part 4 |   |
| A-4.1.6.7.(1)                    | Replace "les gaines d'ascenseurs" in the Note in the French text by "les gaines d'ascenseurs ou de monte-charges,".   |

Replace the Note by the following:

"A-4.2.2.1.(1) Subsurface Investigation – Ochre Deposition. Ochre deposition is a little known phenomenon that is becoming increasingly widespread. It is not specific to certain regions but is associated with soil characteristics and groundwater conditions. Microorganisms, which are generally found in water-saturated soil, extract oxygen from elements such as iron, reducing it to ferrous ions. Once the iron has been reduced and solubilized, it migrates through the soil to foundation drains and can block them. The following document describes the factors to be taken into account in assessing the risk of ochre deposition in the drainage systems of new buildings: BNQ-3661-500, "Dépôts d'ocre dans les systèmes de drainage des bâtiments – Partie I: Évaluation du risque pour la construction de nouveaux bâtiments et diagnostic pour des bâtiments existants et Partie II: Méthodes d'installation proposées pour nouveaux bâtiments et bâtiments existants"."

#### A-4.2.2.1.(1)

## Add the following Note:

"A-4.2.5.8.(2) Backfilling. Certain granular material may swell under chemical reactions. A number of these reactions involve iron sulphide (pyrite, pyrrhotite, etc.) and carbonates present in the material and lead to the crystallization of sulfates and a subsequent increase in the volume of the granular backfill. The reactions are influenced by a number of factors, including the presence of clay minerals, which facilitate water absorption and the oxidation of iron sulphides, particle size distribution, water content of materials, the presence of bacteria and temperature.

The most prevalent characterization method for granular materials, the petrographic index for potential swelling, may be accepted for the purposes of meeting the requirement. The method is described in detail in the following documents:

- NQ 2560-500, "Granulats Détermination de l'indice pétrographique du potentiel de gonflement sulfatique des matériaux granulaires Méthode d'essai pour l'évaluation de l'IPPG":
- NQ 2560-510, "Granulats Guide d'application de la méthode d'essai pour la caractérisation du potentiel de gonflement sulfatique des matériaux granulaires".

The non-swelling rock accepted under the two standards is commonly called "DB certified rock" (DB for "dalle de béton".).

Other methods, such as the chemically or biologically accelerated swelling test, may determine swelling but are less used because of the time required.

|                                       | Other granular materials from industrial processes, such as blast furnace slag, may also swell under certain conditions. Verifications are recommended before using granular materials in works sensitive to volumetric changes.".   |
|---------------------------------------|--|
| Part 5                                |  |
| 5.6.1.2.                              | Strike out Sentence (2).   |
| 5.8.1.1.                              | Insert ", d'un monte-charge" after "gaine d'ascenseur" in Sentence (2) of the French text.   |
| Division B<br>Notes de la<br>partie 5 |  |
| A-5.6.1.2.(2)                         | Strike out the Note.   |
| A-5.7.1.2.(2)                         | Add the following Sentence:  "Ochre Deposition. Ochre deposition is associated with soil characteristics and groundwater conditions. Microorganisms, which are generally found in water saturated soil, extract oxygen from elements such as iron, reducing it to ferrous ions. Once the iron has been reduced and solubilized, it migrates through the soil to foundation drains and can block them. The following document describes drainage systems that reduce the risk of ochre deposition in the drainage systems of new buildings and how to install them: BNQ-3661-500, "Dépôts d'ocre dans les systèmes de drainage des bâtiments – Partie I: Évaluation du risque pour la construction de nouveaux bâtiments et diagnostic pour des bâtiments existants et Partie II: Méthodes d'installation proposées pour nouveaux bâtiments et bâtiments existants"." |
| Part 6                                |  |
| 6.2.1.1.                              | Replace Clause (1)(b) of the French text by the following:  "b) le HRAI Digest";   |
|                                       | Replace "equipment" in Sentence (1) by "system".   |

| Strike out Sentence (3).   |
|--|
| Replace "les installations mécaniques" in Sentence (1) of the French text by "les équipements mécaniques".   |
| Insert "et dans un équipement" after "installation" in Sentence (1) of the French text.  |
| Add the following Article:   |
| "6.2.1.8. Comfort cooling or drinking water cooling systems  |
| (1) It is not permitted to install comfort cooling or drinking water cooling systems without a recirculation loop.".   |
| Replace "Except as provided in Sentence (3), all" in Sentence (1) by "All";  |
| Replace Sentences (2) and (3) by the following:  |
| "(2) Except in <i>storage garages</i> covered by Article 6.3.1.4., <i>dwelling units</i> , corridors and stairwells covered by Article 6.3.1.8., the rates at which outdoor air is supplied to <i>buildings</i> by ventilation systems shall   |
| (a) be equal to or higher than the rates required by ANSI/ASHRAE 62.1, "Ventilation for Acceptable Indoor Air Quality", or   |
| (b) conform to one of the methods in that Standard.  |
| (3) The ventilation system must be verified and tested to ensure that the difference between the airflow rate measured and the rate prescribed by the <i>designer</i> does not exceed 10% and a report must be drawn up to record the airflow rate measured and the corresponding airflow rate for each grille, diffuser, outdoor air intake, exhaust air outlet and ventilation system indicated on the plans given to the owner.". |
| Strike out "Commercial" in the title of the Article;   |
| Add the following Sentence:  |
| "(2) A range, a <i>cooktop</i> and a residential-type oven shall be equipped with a hood conforming to Sentence 6.3.1.8.(16)."   |
|  |

Add the following Article:

#### "6.3.1.8. Dwelling Units

- (1) This Article applies to the ventilation of
- (a) dwelling units,
- (b) corridors serving dwelling units, and
- (c) a stairwell to which doors of dwelling units open directly.
- **(2)** Ventilation of all other *occupancies*, rooms and spaces of *residential occupancies* and *care occupancies* shall conform to Part 6.
- (3) Self-contained mechanical ventilation systems that serve only one dwelling unit and that conform to Subsection 9.32.3., except Clause 9.32.3.3.(2)(b) where the building is not covered by Part 11, are deemed to conform to this Article.
- (4) Except as permitted by Sentence (19), the *dwelling units*, corridors and stairwells covered by Sentence 3.3.4.4.(5) or clause 9.9.9.3.(1)(a) shall be mechanically ventilated.
- (5) Mechanical ventilation systems of *dwelling units* shall include
- (a) a principal ventilation system (see Note A-6.3.1.8.(5)(a)), and
- (b) at least one supplemental exhaust fan.
- **(6)** The principal ventilation system of *dwelling units* must ensure
- (a) the supply of makeup air for the main ventilation system and supplemental exhaust fans (see Note A-6.3.1.8.(6)(a)),
- (b) air circulation in all occupied rooms in the *dwelling unit* (see Note A-6.3.1.8.(6)(b)), and
- (c) for ventilation systems not used in conjunction with forced air heating systems, maintenance of a relative indoor humidity level of 25-50% corresponding to a temperature of 22 C in *dwelling units* during the heating season.
- (7) The principal ventilation system of dwelling units shall include
- (a) at least one exhaust air outlet located inside the dwelling unit,
- (b) air outlets that allow the introduction of outdoor air to the dwelling unit, and
- (c) elements or devices inside the *dwelling unit* to ensure conformity with this Article (see Note A-6.3.1.8.(7)(c)).

- (8) The principal ventilation fan of *buildings* having a *building area* not more than 600 m<sup>2</sup>, a *building height* not more than 3 *storeys*, and whose *major occupancy* is Group C housing *dwelling units* only, shall be a heat recovery ventilator (HRV)
- (a) having sensible heat recovery efficiency certified by AHRI, Intertek Testing Services NA Ltd. or Element Materials Technology Canada Inc. according to ANSI/AHRI 1060 or ANSI/AHRI 1061 "Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment", or by HVI or another certification body accredited by the Standards Council of Canada according to CAN/CSA-C439, "Standard laboratory methods of test for rating the performance of heat/energy-recovery ventilators",
- (b) 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 6000 and of 60% for a *building* located in another municipality,
- (c) having sensible heat recovery efficiency determined at a dry temperature of 1.7°C for *appliances* certified by the AHRI, Intertek Testing Services NA Ltd or Element Materials Technology Canada Inc., or -25°C for *appliances* certified by the HVI or another certification body accredited by the Standards Council of Canada (see Note A-6.3.1.8.(8)(c)), and
- (d) whose operating and de-icing cycles do not generate air circulation between the *dwelling units*.
- **(9)** Measures shall be taken to protect against depressurisation in *dwelling units* (see Note A-6.3.1.8.(9)).
- **(10)** The principal ventilation system of the *dwelling unit* shall have the exhaust capacity indicated in Table 9.32.3.3.
- (11) Fans installed in dwelling units shall conform to Article 9.32.3.10.
- (12) The outdoor air supply system of the *dwelling unit* shall be capable of operating at plus or minus 10% of the exhaust capacity indicated in Table 9.32.3.3. for that *dwelling unit*.
- (13) The exhaust air intakes and air supply outlets of the principal ventilation system of a *dwelling unit* not used in conjunction with forced air heating systems shall be designed and installed to promote air diffusion at the ceiling level.
- (14) For ventilation systems not used in conjunction with forced air heating systems, air shall flow to air supply outlets at a temperature of 12°C during the heating season.

(15) Air shall be supplied into dwelling units by a system of trunk and branch supply ducts that conform to the requirements of Sentences 9.32.3.5.(10) and (11). (16) A range hood with a rated capacity not less than 50 L/s shall be installed in the kitchen and be connected to an exhaust duct in conformance with Article 6.3.2.10. (17) Each bathroom and each washroom (a) shall be served by a manually controlled exhaust supplemental fan installed in the bathroom or washroom and having a rated capacity not less than 25 L/s, or (b) shall be equipped with an exhaust air intake of the principal ventilation system of the dwelling unit enabling an exhaust capacity not less than 25 L/s using a manual control located in the bathroom or washroom. (See Note A-6.3.1.8.(17).) (18) Except as permitted in Sentence (19), corridors and stairways covered by Sentence (4) shall (a) be ventilated mechanically with an outdoor air supply system at a minimal air exchange rate of 0.3 per hour so as to maintain pressure above that within dwelling units, and (b) not be used as an air supply *plenum* for *dwelling units*. (See Note A-6.3.1.8.(18).) (19) A stairwell may be ventilated naturally by not les than one window that is (a) accessible, (b) capable of being opened and whose clear space for ventilation is equal to not less than 5% of the area of the lowest floor of the stairwell multiplied by the number of storeys of the stairwell, and (c) located above the highest floor level.". Replace "Sentences 6.2.1.2.(2) and (3)" in Clause (2)(a) by 6.3.2.9. "Sentence 6.2.1.2.(2)". 6.3.2.14. Strike out Sentence (2).

| 6.3.2.15. | Strike out Sentence (3);  |
|-----------|---|
|           | Replace Sentence (5) by the following:  "(5) Drains, overflows and blow-downs shall be connected to the building's drainage system in accordance with the requirements in the NPC.".                    |
|           | Replace Sentence (2) by the following:  |
|           | "(2) Fans and associated air-handling equipment such as air washers, filters and heating or cooling units shall be  |
| 6.3.2.17. | (a) of a type of designed for outdoor use, when installed on the roof or elsewhere outside the <i>building</i> , and  |
|           | (b) equipped with a nameplate of a contrasting colour that is easily accessible and that indicates the features of the equipment.".   |
| 6.3.4.2.  | Strike out Sentence (3).  |
|           | Replace "NFPA 91, "Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids" in Clause (1)(a) by "NFPA 45, "Fire Protection for Laboratories Using Chemicals""; |
| 6.3.4.3.  | Add the following Sentence:   |
| 6.3.4.3.  | "(2) Where an accumulation of <i>combustible</i> or reactive deposits in the power-ventilated enclosures and its <i>exhaust duct</i> systems creates a fire or explosion hazard,                        |
|           | (a) measures shall be taken to remove the deposits, and   |
|           | (b) an automatic fire suppression system shall be installed.".  |
| 6.3.4.4.  | Strike out "and" at the end of Clause (1)(a);   |
|           | Replace Clause (1)(b) by the following:   |
|           | "(b) be provided with access doors to permit inspection and maintenance of the fan assembly and <i>exhaust ducts</i> ,  |

|          | (c) be delivered with the necessary directions for their use and operation of the ventilation system, and  |
|----------|--|
|          | (d) include the means to neutralize accidental spills.".   |
| 6.9.1.3. | Insert "6.3.1.7." after "visé par le paragraphe" in Sentence (1) of the French text.   |
|          | Replace "individual <i>suites</i> " in Sentence (1) by " <i>dwelling units</i> " and "a <i>suite</i> " by "a <i>dwelling unit</i> ";   |
|          | Replace Clauses (2)(c) and (2)(d) by the following:  |
|          | "(c) have no disconnect switch between the overcurrent device and the CO alarm, where the CO alarm is powered by the electrical system serving the <i>suite</i> (see Note A-6.9.3.1.(2)(c)), |
|          | (d) be mechanically fixed at a height above the floor as recommended by the manufacturer, and  |
| 6.9.3.1. | (e) in case the regular power supply is interrupted, be provided with a battery as an alternative power source.";  |
|          | Replace "in a suite of residential occupancy or in a suite of care occupancy" in Sentences (3) and (4) by "in a suite of residential occupancy or in a dwelling unit of care occupancy";     |
|          | Replace "in every suite of residential occupancy or suite of care occupancy" in Clause (4)(a) by "in every suite of residential occupancy or dwelling unit of care occupancy";               |
|          | Replace "For each suite of residential occupancy or suite of care occupancy" in Sentence (5) by "For each suite of residential occupancy or dwelling unit of care occupancy".                |
|          | Add the following Sentence:  |
| 6.9.4.2. | "(2) The installation of open fireplaces in care occupancies is not permitted.".   |

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Add the following attributions in numerical order in Table 6.10.1.1.:
               "6.3.2.1. Required Ventilation
               (3) [F82-OH1.1]";
               "6.3.1.8. Dwelling Units
               (4) [F40, F50, F52-OH1.1] [F51, F52-OH1.2]
               [F40, F50, F53-OS3.4]
               (5) [F40, F50, F52-OH1.1] [F51, F52-OH1.2]
               (6) [F40, F50, F52-OH1.1] [F51, F52-OH1.2]
               (7) [F40, F50, F52-OH1.1] [F51, F52-OH1.2]
               (8) [F98-OE1.1]
               (9) [F81-OH1.1]
               (10) [F40, F50, F52, F53-OH1.1] [F51, F52-OH1.2]
               [F43,F50, F53-OS3.4]
               (11) [F40, F50, F52, F53, F81-OH1.1] [F51, F52, F53, F81-OH1.2]
6.10.1.1.
               [F53,F63-OS2.3]
               [F53, F81-OS3.4]
               (12) [F53, F63-OS2.3]
               (13) [F40-OH1.1] [F51, F54-OH1.2]
               (14) [F51, F54-OH1.2]
               (15) [F40, F50, F52-OH1.1]
               (16) [F40, F52-OH1.1]
               (17) [F40, F52-OH1.1]
               (18) [F40, F50, F52-OH1.1] [F51, F52-OH1.2]
               [F40, F50, F53-OS3.4]";
               Strike out the following attributions in Table 6.10.1.1.:
               "6.2.1.2.(3)";
               "6.3.2.14.(2)";
               "6.3.2.15.(3)".
```

| Division B<br>Notes in<br>Part 6 |  |
|----------------------------------|--|
| A-6.2.1.2.(3)                    | Strike out the Note.   |
|                                  | Add the following Notes:  "A-6.3.1.8.(5)(a) Principal ventilation system. A principal ventilation system may include one or more principal fans.  A-6.3.1.8.(6)(a) Supply of Make-up Air. Refer to Sentences 9.32.3.8.(2) to (5).  Make-up air to a dwelling unit must always be outdoor air.  |
|                                  | The calculation of the supply of make-up air of supplemental exhaust fans of a dwelling unit may take into account  • a number of 2 supplemental exhaust fans of the dwelling unit, provided that their exhaust rate is the highest among the supplemental exhaust fans present in the dwelling unit (generally, the rate of the exhaust fan of the kitchen hood or the clothes dryer is higher than that of the exhaust fan in the bathroom or the washroom); |
|                                  | the low air infiltration rate from around a door installed in accordance with NFPA 80, "Fire Doors and Other Opening Protectives", opening on a corridor where all the requirements applying to the fire separation are met.   |
|                                  | At the same time, the calculation of the total supply of make-up air for supplemental exhaust fans present in all the dwelling units served by the principal ventilation may take into account an operation diversity factor based on the total number of supplemental exhaust fans present in the dwelling units. The good engineering practice (see Article 6.2.1.1.) may provide indications on the subject.  |
|                                  | <b>A-6.3.1.8.(6)(b) Air Circulation.</b> Measures must be taken to ensure free circulation of air from one room to another, in particular by providing spaces under doors or using doors with tilted louvers or grilles.   |
|                                  | A-6.3.1.8.(7)(c) Components of the principal ventilation system. Without limitation, moisture, pressure and differential pressure sensors and primary automatic or manual controls are considered elements or devices referred to in this Article.   |

A-6.3.1.8.(8)(c) Heat Recovery Ventilators. For the purposes of Part 11, sensible heat recovery efficiency from the heat recovery ventilators (HRVs) must be determined with a flow rate equal to or greater than the expected flow rate for the normal operation of the HRVs at low speed. **A-6.3.1.8.(9) Modulation.** It is permitted to modulate the air intake by using an individual mechanical pressure sensor in each dwelling unit or by offsetting the air intake in each dwelling unit with supplemental exhaust fans. A-6.3.1.8.(17) Exhaust in each Bathroom and Washroom. In Clause (a), the flow rate required by the exhaust fan in these rooms need not be taken into account in the exhaust flow rate calculation required by Sentence 6.3.1.8.(10). Clause (b) sets the conditions for a special design of the ventilation of the dwelling unit for drawing air from a bathroom or washroom by the principal ventilation system of the dwelling unit. Since it is the principal ventilation system of the dwelling unit, the exhaust rate must be taken into account in the exhaust calculation required in Sentence 6.3.1.8.(10). The design could omit the manual exhaust control of such a bathroom or washroom when the system complies with all the other requirements in the Article and the owner or operator of the building undertakes to authorize the operation of the system at a rate for maintaining the required minimum exhaust rate of 25 L/s in the bathroom or washroom. Maintaining that exhaust rate must not affect the air quality inside the dwelling unit, by drying the air for example, or increase the depressurization in the dwelling unit while limiting to a minimum an excessive use of energy. Considering the complexity, potential impact and undertakings required, application for an alternative solution should be submitted to the Régie du bâtiment for the evaluation of such design (see Note A-1.2.1.1.(1)(b) of Division A). A-6.3.1.8.(18) Mechanical Ventilation of Corridors and Stairwells. The value of the air change rate per hour is not related to the requirement for higher pressure. To ensure the positive pressure, the air change rate per hour will often be higher than that provided for in Clause (a).". Part 8 Strike out the Part. Part 9 Strike out Subsection 9.10.21; Table of Contents

|          | Strike out Section 9.36.  |
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| 9.3.1.1. | Add the following Sentence:  "(5) All concrete shall be manufactured and delivered in accordance with the requirements in the NBC by a plant that holds a certificate of conformity issued by the BNQ in accordance with certification protocol NQ 2621-905, "Ready-Mix Concrete - Certification Program"."   |
| 9.3.1.3. | Replace Sentence (1) by the following:  "(1) Concrete in contact with <i>soil</i> or with an aggregate backfill likely to produce sulfates deleterious to normal cement shall conform to Clause 4.1.1.6 of CAN/CSA-A23.1, "Concrete Materials and Methods of Concrete Construction", or be adequately protected against sulfatizing by another means of protection (see Note A-9.13.2.1.(2)).". |
| 9.5.2.3. | Insert "or lift for persons with physical disabilities" after "elevator" in Sentence (1).   |
| 9.5.3.1. | Replace the words "de passage" wherever they appear in the Article and in Table 9.5.3.1. of the French text by "libre";   |
|          | Replace "hauteur sous passage, des portes coulissantes in Sentence (4) of the French text by "hauteur libre".   |
| 9.5.5.1. | Insert ", sliding" after "swing-type" in Sentences (1) and (2).   |
| 9.7.2.2. | Strike out Sentence (10).   |
|          | Add the following Article:  "9.7.2.3. Minimum Aggregate Percentage of Glazing  (1) Except as permitted by Sentences (2) and (4), the minimum area of glazing in windows providing natural light in a dwelling unit shall, on each storey,  (a) be equal to not less than 5% of the area of the storey in the dwelling unit (see Note A-9.7.2.3.(1)(a)), and                                     |

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|          | (b) be distributed between all the sleeping rooms and living spaces.   |
|          | (2) Where a dwelling unit occupies the first storey and the basement of a building, the area of glazing providing natural light in the basement need not be equal to the values in Sentence (1) provided |
|          | (a) not more than 50% of the <i>dwelling unit</i> is located in the <i>basement</i> , and  |
|          | (b) each sleeping room in the <i>basement</i> has an area of glazing providing natural light equal to not less than 5% of the area of the <i>sleeping room</i> .   |
|          | (3) Each <i>suite</i> in a rooming house must have an area of glazing providing natural light equal to not less than 5% of the area of the <i>suite</i> .  |
|          | (4) Borrowed natural lighting is permitted in a room of a <i>dwelling unit</i> provided  |
|          | (a) the area illuminated by the borrowed light and the area containing the glazing that provides the natural light are considered combination rooms under Article 9.5.1.2.,                              |
|          | (b) the opening between the two areas is parallel to the glazing that provides the natural light and is located not more than 6 m from the glazing, and  |
|          | (c) the area of the glazing that provides the natural light is not less than 5% of the total area of the combination rooms.".  |
| 9.7.3.3. | Strike out Sentence (3) and Table 9.7.3.3.   |
| 1        | Replace "Where" in Sentence (1) by "Except as permitted by Sentence (2), where";   |
| 9.8.1.2. | Add the following Sentence:  |
|          | "(2) Stairs installed in garages that serve a single <i>dwelling unit</i> need not conform to Sentence (1) where they serve platforms used solely for storage purposes (see Note A-9.8.1.2.(2)).".       |
| 1        | Replace the title in the French text by " <b>Hauteur</b> ";  |
|          | Replace "L'échappée" in Sentences (1) and (4) of the French text by "La hauteur libre";  |
|          |  |

|          | Replace "l'échappée" in Sentences (2) and (3) of the French text by "la hauteur libre".   |
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|          | Replace "Except for stairs" in Sentence (1) by "Except as provided in Sentence (2) and except for stairs";  |
|          | Add the following Sentence:   |
| 9.8.3.2. | "(2) An interior stair may have less than 3 risers provided   |
| 0.0.0.2. | (a) the stair is not less than 900 mm wide,   |
|          | (b) the stair has a covering that contrasts with the landing's covering or is illuminated at all times when the lighting is filtered and occupants are on the premises, and |
|          | (c) a handrail is installed on each side.".   |
| 9.8.4.7. | Replace "largeur de passage" in Clause (1)(b) of the French text by "largeur libre";  |
|          | Replace "échappée" in Clause (1)(e) of the French text by "hauteur libre";  |
|          | Replace "3 persons" in Sentence (2) by "6 persons".   |
| 9.8.5.3. | Replace the title of the Article in the French text by "Hauteur libre";   |
|          | Replace the title of the Article by "Clear Height";   |
|          | Replace "l'échappée" in Sentence (1) of the French text by "la hauteur libre";  |
|          | Replace "L'échappée" in Sentence (2) of the French text by "La hauteur libre".  |
| 9.8.6.4. | Replace the title of the Article in the French text by "Hauteur libre";   |
|          |   |

|          | Replace the title by "Clear Height";   |
|----------|--|
|          | Replace "l'échappée" in Sentence (1) of the French text by "la hauteur libre";   |
|          | Replace "L'échappée" in Sentence (2) of the French text by "La hauteur libre".   |
|          | Replace Sentence (2) by the following:   |
|          | "(2) Guards are not required   |
|          | (a) at loading docks,  |
|          | (b) at floor pits in <i>repair garages</i> ,   |
|          | (c) where access is provided for maintenance purposes only, and  |
|          | (d) for the interior stairs of a <i>dwelling unit</i> serving a <i>basement</i> designed only for the installation of the mechanical or maintenance equipment for the <i>building</i> , if a handrail is installed on each open side of the stairs.";                    |
|          | Replace Sentences (4) and (5) by the following:  |
|          | "(4) Except as provided in Sentence (5), openable windows in <i>buildings</i> of <i>residential occupancy</i> shall be protected   |
| 9.8.8.1. | (a) where the window is not required as a <i>means of egress</i> in accordance with Sentence 9.9.10.1.(1), by  |
|          | (i) a <i>guard</i> , or  |
|          | (ii) mechanism capable of controlling the free swinging or sliding of the openable part of the window so as to limit any clear unobstructed opening to not more than 100 mm measured either vertically or horizontally where the other dimension is greater than 380 mm, |
|          | (b) where the window is required as a <i>means of egress</i> in accordance with Sentence 9.9.10.1.(1), by a mechanism  |
|          | (i) capable of controlling the free swinging or sliding of the openable part of the window so as to limit any clear unobstructed opening to not more than 100 mm measured either vertically or horizontally where the other dimension is greater than 380 mm,            |
|          | (ii) openable from inside the room without requiring keys, special devices or specialized knowledge, and   |

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|          | (iii) conforming to ASTM F2090, "Standard Specification for Window Fall Prevention Devices With Emergency Escape (Egress) Release Mechanisms".                                      |
|          | (See Note A-9.8.8.1.(4) and (5).).  |
|          | (5) Windows need not be protected in accordance with Sentence (4), where  |
|          | (a) struck out,   |
|          | (b) struck out,   |
|          | (c) the only opening greater than 100 mm by 380 mm is located more than 900 mm above the finished floor,  |
|          | (d) the window sill is located more than 900 mm above the finished floor on one side of the window, or  |
|          | (e) the lower edge of the openable portion of the window is located less than 1800 mm above the floor or ground on the other side of the window.                                    |
|          | (See Note A-9.8.8.1.(4) and (5).)".   |
| 9.9.2.3. | Insert ", monte-charges" after "Ascenseurs" in the title of the Article in the French text;   |
|          | Insert ", monte-charges" after "ascenseurs" in Sentence (1) of the French text.   |
| 9.9.2.4. | Replace "Except for doors" in Sentence (1) by "Except as provided for in Sentence (2) and except for doors";  |
|          | Add the following Sentence:   |
|          | "(2) Doors serving a garage or accessory <i>building</i> of not more than one <i>storey</i> in <i>building height</i> need not conform to the requirements of Sentence (1) provided |
|          | (a) the garage or accessory <i>building</i> serves only one <i>dwelling unit</i> and is located on the same property as that <i>dwelling unit</i> , and                             |
|          | (b) the garage or accessory <i>building</i> has a second swinging door providing access to the garage, other than a garage door.".  |
|          |   |

| 9.9.3.4. | Replace the title of the Article in the French text by "Hauteur libre";   |
|----------|---|
|          | Replace "de passage" in Sentences (1) and (2) of the French text by "libre".  |
|          | Replace Sentence (1) by the following:  |
| 9.9.4.4. | "(1) Unprotected openings in exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7., where                            |
|          | (a) an unenclosed exterior exit stair, ramp, balcony or exterior passageway leading to an exit provides the only means of egress from a suite and is exposed to fire from unprotected openings in the exterior walls of |
| 0.0.4.4. | (i) another <i>fire compartment</i> , or  |
|          | (ii) another <i>dwelling unit</i> , ancillary space or common space in a house with a <i>secondary dwelling unit</i> , and  |
|          | (b) <i>unprotected openings</i> are within 3 m horizontally and less than 10 m below or less than 5 m above the ramp, <i>exit</i> stair, balcony or exterior passageway.  |
|          | (See Note A-9.9.9.3.(1).)".   |
| 9.9.5.2. | Replace "Where" in Sentence (1) by "Where an <i>occupancy</i> is authorized under the NBC in a corridor,".  |
| 9.9.6.1. | Replace "de passage" in Sentence (3) of the French text by "du moyen d'évacuation".   |
|          | Replace Clauses (5)(b) and (5)(c) by the following:   |
| 9.9.6.4. | "(b) the doors serve <i>storage garages</i> or other accessory <i>buildings</i> serving not more than one <i>dwelling unit</i> ,  |
|          | (c) the doors   |
|          | (i) serve storage <i>suites</i> of not more than 20 m <sup>2</sup> in gross area that are in warehousing <i>buildings</i> of not more than one <i>storey</i> , and  |
|          | (ii) open directly to the exterior at ground level, or  |

|           | (d) the doors serve not more than one <i>dwelling unit</i> or a house with a secondary suite and lead directly outside.".   |
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| 9.9.7.2.  | Add the following Sentence:  "(3) Just one end of a <i>public corridor</i> referred to in Sentence (2) and serving a <i>dwelling</i> is permitted to lead through a lobby provided  (a) the lobby conforms to Clauses 3.4.4.2.(2)(a) to (d) and 3.4.4.2.(2)(f) and Subclauses 3.4.4.2.(2)(e)(i), (e)(ii) and (e)(iv) (see Note A-3.4.4.2.(2)), and  (b) the <i>public corridor</i> is separated from the lobby by a <i>fire separation</i> having a <i>fire-resistance rating</i> required by the most stringent of the <i>fire-resistance ratings</i> required for the lobby, the <i>public corridor</i> or the adjacent rooms. (See Notes A-3.3.1.3(10) and A-3.4.4.2.(2).)". |
| 9.9.7.4.  | Insert "and storage areas in the attic of a garage attached to a dwelling unit" after "dwelling units" in Sentence (1).   |
| 9.9.8.5.  | Add "(see Note A-3.4.4.2.(2))" after "lobby" at the end of Sentence (3);  Add the following Sentence:  "(6) If exit stairs open into a lobby, the stairs shall be isolated from the lobby by a fire separation that conforms to Sentence 9.9.4.2.(1).".   |
| 9.9.9.3.  | Add "(See Note A-9.9.9.3.(1).)" at the end of Sentence (1);  Replace "Where" in Sentence (2) by "Except as required by Article 9.10.8.8., where".   |
| 9.9.10.1. | Insert "or if the <i>floor area</i> is served by an <i>exit</i> or a <i>means of egress</i> that leads directly outside," after " <i>sprinklered</i> ," in Sentence (1).  |
| 9.9.11.1. | Replace Sentence (1) by the following:  "(1) This Subsection applies to all <i>exits</i> , except those serving  (a) not more than one <i>dwelling unit</i> or a house with a <i>secondary suite</i> , or   |

|           | (b) a building not more than 2 storeys in building height containing only dwelling units not served by a public corridor.".  |
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| 9.10.1.3. | Add the following Sentence:  "(12) Sprinkler systems for windows shall conform to Article 3.1.7.6.".   |
| 9.10.2.2. | Strike out the Article.  |
|           | Replace "Platforms" in Sentence (5) by " "Except as provided in Sentence (6), platforms ";   |
|           | Add the following Sentence:  |
| 9.10.4.1. | "(6) A storage area in the attic of a garage need not be considered as a floor assembly or a <i>mezzanine</i> for the purpose of calculating <i>building height</i> provided |
|           | (a) the storage area is used for storage purposes only, and  |
|           | (b) the garage serves not more than one dwelling unit.".   |
| 9.10.4.4. | Insert "ou de monte-charge" after "d'ascenseur" in Sentence (1) of the French text.  |
|           | Strike out "and Subsection 9.10.21. for construction camps" in Sentence (1);   |
|           | Add the following Sentence:  |
| 9.10.8.1. | "(2) Except the floor over a crawl space, the structure of light-frame floors for which there is no requirements for the <i>fire-resistance rating</i> shall be covered with |
|           | (a) a gypsum sheathing at least 12.7 mm thick; or  |
|           | (b) a finish material ensuring a <i>fire-resistance rating</i> of at least 20 min.   |
|           | (See Note A-9.10.8.1.(2).)".   |
| 9.10.8.8. | Insert "or balcony" after "passageway" in Sentences (1) and (2);   |

|            | Replace Sentence (3) by the following:  |
|------------|---|
|            | "(3) No <i>fire-resistance rating</i> is required for floors of exterior passageways or balconies serving   |
|            | (a) a house with a secondary suite, or  |
|            | (b) a single dwelling unit where no suite is located above or below the dwelling unit (see Sentence 9.9.9.3.(2)), or  |
|            | (c) a <i>building</i> with not more than 8 <i>dwelling units</i> provided   |
|            | (i) the <i>building</i> is not more than 2 <i>storeys</i> in <i>building height</i> , and   |
|            | (ii) the dwelling units are served by another means of egress.".  |
| 9.10.9.3.  | Insert "3.1.7.6.," after "Articles" in Sentence (1).  |
|            | Replace Sentence (6) by the following:  |
|            | "(6) Combustible drain, waste and vent piping is permitted on one side of a horizontal fire separation in buildings containing  |
|            | (a) 2 dwelling units only, or   |
|            | (b) not more than 3 <i>dwelling units</i> and having a <i>building height</i> not more than 2 storeys, where the drain, waste and vent piping serves one of the following:  |
| 9.10.9.7.  | (i) a central vacuum system, or   |
|            | (ii) a mechanical ventilation system with a rigid duct.";   |
|            | Add the following Sentence:   |
|            | "(7) Water distribution piping is permitted to be embedded in a concrete slab required to have a <i>fire-resistance rating</i> without being incorporated in the slab at the time of testing as required in Article 3.1.9.2., if the concrete thickness between the <i>combustible</i> piping and the bottom of the slab is not less than 50 mm." |
| 9.10.9.14. | Strike out "and Article 9.10.21.2." in Sentence (1);  |
|            | Insert "in a building with not more than 3 dwelling units and a building height not more than 2 storeys" after "that separate dwelling units" in Sentence (4).  |

| 9.10.9.18.  | Replace Sentence (2) by the following:  "(2) Individual <i>fire compartments</i> referred to in Sentence (1) shall not have individual fans that exhaust directly into the <i>exhaust duct</i> in the <i>vertical service space</i> , except if the fans have connections that extend upward at least 500 mm into the <i>exhaust duct</i> .". |
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|             | Replace "Sentence (2)" in Sentence (1) by "Sentences (2) and 3.6.3.1.(6)";  |
|             | Add the following Sentence:   |
| 9.10.10.3.  | "(3) It is permitted to have access through a <i>dwelling unit</i> to a <i>service room</i> into the interior of a <i>dwelling unit</i> without the wall that separates the <i>dwelling unit</i> from the <i>service room</i> being a <i>fire separation</i> with a <i>fire-resistance rating</i> provided                                    |
|             | (a) the wall that separates the <i>service room</i> from any other <i>suite</i> is a <i>fire separation</i> with a <i>fire-resistance rating</i> ,  |
|             | (b) the service room serves not more than two dwelling units, and   |
|             | (c) the service room is freely accessible from the dwelling unit.".   |
|             | Replace "Sentences (2) to (5)" in Sentence (1) by "Sentences (2) to (6)";   |
| 9.10.13.13. | Add the following Sentence:   |
|             | "(6) A duct that pierces a <i>fire separation</i> between 2 <i>dwelling units</i> need not be equipped with a <i>fire damper</i> in a <i>building</i> with a <i>building height</i> not more than 2 <i>storeys</i> and with not more than 3 <i>dwelling units</i> provided  |
|             | (a) the duct pierces a vertical fire separation, or   |
|             | (b) the duct pierces a horizontal <i>fire separation</i> and not more than 2 <i>dwelling units</i> are above another dwelling unit.".   |
| 9.10.14.4.  | Add the following Sentence:   |
|             | "(12) There are no limits on the area of glazed openings for the <i>exposing</i> building face of a detached garage or accessory building facing a dwelling unit, where   |
|             | (a) the detached garage or accessory <i>building</i> serves a <i>building</i> having not more than 3 <i>dwelling units</i> and a <i>building height</i> not more than 2 <i>storeys</i> ,  |

- (b) the detached garage or accessory *building* is located on the same property as those *dwelling units*,
- (c) the detached garage or accessory *building* is not more than 1 *storey* in *building height*,
- (d) the *exposing building face* of the detached garage or accessory *building* is not more than 30 m<sup>2</sup>,
- (e) the *exposing building face* of the detached garage or accessory *building* faces the *building* served, and
- (f) the *dwelling units* served by the detached garage or accessory *building* are the only *major occupancy* on the property.".

### Replace Sentence (6) by the following:

- **"(6)** Except as provided in Sentence (7), *combustible* projections on the exterior of a wall that are more than 1 m above ground level and that could expose an adjacent *building* to fire spread shall not be permitted within 1.2 m of
- (a) a property line,
- (b) the centreline of a *public way*, or
- (c) any imaginary line used to determine the *limiting distance* between 2 *buildings* located on the same property.

(See Note A-9.14.5.6).)";

### Add the following Sentences:

#### 9.10.14.5.

- "(15) The construction of exposing building faces and exterior walls located above an exposing building face that encloses an attic or roof space of a building with not more than 3 dwelling units and a building height not more than 2 storeys
- (a) need not conform to the requirements of Table 9.10.14.5.-A. where the *limiting distance* is 1.2 m or more,
- (b) need not conform to the type of construction required in Table 9.10.14.5.-A where the *limiting distance* is 0.6 m or more and the *exposing building face* has a *fire-resistance rating* not less than 45 min,
- (c) need not conform to the type of cladding required in Table 9.10.14.5.- A where the *limiting distance* is less than 1.2 m and the *exposing building face* has a *fire-resistance rating* of not less than 45 min, and
- (i) the cladding of the *exposing building face* is of *noncombustible* material, or

|            | (ii) the cladding of the <i>exposing building face</i> conforms to the requirements of Clause 9.10.15.5.(3)(c).   |
|------------|---|
|            | (16) The exposing building face of a detached garage or accessory building that serves not more than 3 dwelling units and conforms to the conditions listed in Sentence 9.10.14.4.(12) need not conform to the minimum required fire-resistance rating in Table 9.10.14.5A; however, if the limiting distance is less than 0.6 m, the fire-resistance rating shall be not less than 45 min. |
|            | (17) The exposing building face of a detached garage or accessory building that serves not more than 3 dwelling units need not conform to the type of cladding required by Table 9.10.14.5A, regardless of the limiting distance, if the conditions listed in Sentence 9.10.14.4.(12) are met.".  |
|            | Replace Sentence (5) by the following:  |
| 9.10.15.5. | "(5) Except as provided in Sentence (6), <i>combustible</i> projections on the exterior of a wall that are more than 1 m above ground level and that could expose an adjacent <i>building</i> to fire spread shall not be within 1.2 m of   |
|            | (a) a property line,  |
|            | (b) the centreline of a <i>public way</i> , or  |
|            | (c) any imaginary line used to determine the <i>limiting distance</i> between 2 buildings located on the same property.".   |
|            | Replace "10 (sleeping accommodation)" in Table 9.10.18.2. by "with sleeping accommodation for more than 10 persons";  |
| 9.10.18.2. | Replace Sentence (5) by the following:  |
|            | "(5) A fire alarm system is not required in a residential occupancy where   |
|            | (a) an exit or public corridor serves not more than 4 suites, or  |
|            | (b) each <i>suite</i> is served by an exterior <i>exit</i> leading to ground level.".   |
| 9.10.19.8. | Strike out "warning" in the title of the Article and in Sentence (1).   |
| 9.10.21.   | Strike out the Subsection.  |
|            |   |

| 9.11.1.1. | Insert ", d'un monte-charge" after "d'ascenseur" in Sentence (3) of the French text.  |
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| 9.12.2.2. | Strike out "(see Note A-9.12.2.2.(2))" in Sentence (2).   |
|           | Add "(see Note A-9.13.2.1.(2))" at the end of Sentence (2);   |
| 9.13.2.1. | Replace Sentence (3) by the following:  "(3) Dampproofing required in Sentence (2) need not be provided for  (a) floors in garages, or  (b) floors in unenclosed portions of <i>buildings</i> .".   |
| 9.13.2.6. | Insert "it shall control soil gas in accordance with Subsection 9.13.4. and" after "below the floor," in Sentence (1).  |
| 9.14.2.1. | Add "(see Note A-9.14.2.1.(1))." at the end of Sentence (1).  |
| 9.14.3.1. | Replace Clauses (1)(f) and (1)(g) by the following:  "(f) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings",  (g) CSA G401, "Corrugated Steel Pipe Products",  (h) BNQ 3624-120, "Polyethylene (PE) Pipe and Fittings - Smooth Inside Wall Open Profile Pipes for Storm Sewer and Soil Drainage - Characteristics and Test Methods",  (i) NQ 3624-130, "Unplasticized Poly(Vinyl Chloride) (PVC) Rigid Pipe and Fittings, 150 mm in Diameter or Smaller, for Underground Sewage Applications", or  (j) NQ 3624-135, "Unplasticized Poly(Vinyl Chloride) [PVC-U] Pipe and Fittings - Pipes of 200 mm to 600 mm in Diameter for Underground Sewage and Soil Drainage - Characteristics and Test Methods"." |

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|------------|---|
| 9.14.5.2.  | Add ", except for retention pits used only as floor drains" after "9.25.3.3.(7)" in Clause (2)(b).  |
| 9.14.6.3.  | Replace Sentence (1) by the following:  "(1) If a window well is drained to the <i>foundation</i> footing of a <i>building</i> , the drain shall be oriented towards the <i>foundation</i> drainage system.". |
| 9.16.2.2.  | Replace "the Note A-9.4.4.4.(1)" in Sentence (1) by "Notes A-4.2.5.8.(2) and A-9.4.4.4.(1)".  |
| 9.19.2.1.  | Strike out "(See Note A-9.19.2.1.(1).)" in Sentence (1).  |
| 9.20.11.4. | Replace "2,4 mm" in Clause (1)(a) of the French text by "2,4 m".  |
| 9.25.1.1.  | Strike out "and Section 9.36." in Subclauses (2)(a)(i) and (2)(a)(ii);  |
| y.25.1.1.  | Replace "9.32., 9.33. and 9.36." in Sentence (3) by "9.32. and 9.33.".  |
| 9.25.5.1.  | Strike out Sentence (4).  |
| 9.31.1.1.  | Strike out Sentence 4).   |
| 9.31.4.1.  | Replace "A" in Sentence (1) by "Except as permitted in Sentence (2), a";  |
|            | Add the following Sentence:   |
|            | "(2) A compost toilet operating without water and effluent, drain, overflow or other types of discharge is permitted to be installed in a single-family home provided   |
|            | (a) the home is an existing home,   |
|            | (b) the home is covered in the Regulation respecting waste water disposal systems for isolated dwellings (chapter Q-2, r. 22),  |
| <u> </u>   |   |

|           | <ul> <li>(c) the Regulation respecting waste water disposal systems for isolated dwellings (chapter Q-2, r. 22) requires or permits the installation of a compost toilet,</li> <li>(d) the toilet is mechanically ventilated and the ventilation duct is independent from any other ventilation duct and plumbing system, and</li> <li>(e) the toilet conforms to NSF/ANSI 41, "Non-Liquid Systems"."</li> </ul> |
|-----------|--|
| 9.31.4.3. | Replace Sentences (1) and (2) by the following:  "(1) A floor drain shall be provided in accordance with the requirements described in Article 3.7.2.7.".  |
| 9.31.6.1. | Replace "with Part 7" in Clause (1)(b) by "the NPC".   |
| 9.31.6.2. | Insert "Combustion storage" before "service water heaters" in Sentence (3).  |
| 9.32.1.1. | Strike out Sentence (4).   |
| 9.32.1.2. | Add the following Sentence:  "(5) Public corridors and exit stairways referred to in Clause 9.9.9.3.(1)(a) shall be ventilated in accordance with Article 6.3.1.8.".   |
| 9.32.2.3. | Replace ""HRAI Digest"" in Sentence (4) of the French text by "HRAI Digest".   |
| 9.32.3.1. | Insert "except as provided in Clause 9.32.3.3.(2)b)," at the beginning of Clause (1)(a).   |
| 9.32.3.2. | Replace ""HRAI Digest"" in Sentence (1) by "HRAI Digest".  |

|           | Replace 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 Note A-9.32.3.3.(2)), and   |
|           | (b) include, in <i>buildings</i> whose <i>major occupancy</i> is Group C and housing <i>dwelling units</i> only, a heat recovery ventilator (HRV)  |
| 9.32.3.3. | (i) having sensible heat recovery efficiency certified by the Home Ventilating Institute (HVI) or another certification body accredited by the Standards Council of Canada according to CSA Standard CAN/CSA-C439, "Standard laboratory methods of test for rating the performance of heat/energy-recovery ventilators" (see Note A-6.3.1.8.(8)(c)), and |
|           | (ii) having sensible heat recovery efficiency (SRE) of at least 54% for a <i>building</i> located in a municipality whose number of degree-days below 18°C is less than 6000 and of at least 60% for a <i>building</i> located in another municipality and determined at a dry temperature of -25°C.".   |
| 9.32.3.5. | Strike out "if there is no <i>storey</i> without a bedroom, to" in Clause (10)(c).   |
| 9.32.3.6. | Strike out the Article.  |
|           | Replace "Except as provided in Sentences (2) and (3), a" in Sentence (1) by "A";   |
|           | Strike out Sentences (2), (3) and (7);   |
|           | Replace Sentence (4) by the following:   |
| 9.32.3.7. | <b>"4)</b> Each bathrooms and each washroom  |
|           | (a) shall be served by a manually controlled exhaust supplemental fan installed in the room and with a rated capacity not less than 25 L/s, or   |
|           | (b) be equipped with a manual switch allowing supplemental exhaust of not less than 25L/s through the exhaust air intake of the principal ventilation system of the <i>dwelling unit</i> provided the exhaust air intake is located in that room.  |
|           | (See Note A-6.3.1.8.(17).)".   |

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|------------|---|---|
| 9.32.3.8.  | Replace Sentence (1) by the followi   | ng:   |
|            | (a) dwelling units that contain a fuel-   | fired space-heating appliance or fueler than direct-vented or mechanically  |
|            | not within a dwelling unit in a house house with a secondary suite              | exhaust device, where the space is with a secondary suite and where the contains a fuel-fired space-heating appliance of other than direct-vented |
|            | 1 ,   | ized regions where underground gas<br>e not equipped with an active system  |
|            | Insert "extérieur" after "un débit d'ai   | r" in Sentence (2) of the French text.  |
|            | Replace Clauses (2)(c) and (2)(d) b   | y the following:  |
| 9.32.3.9.  |   | ween the overcurrent device and the owered by the dwelling unit's electrical  |
|            | (d) be mechanically fixed at a heigh and  | t recommended by the manufacturer,  |
|            | (e) in case the regular power supp<br>provided with a battery as an alternation | ly to the CO <i>alarm</i> is interrupted, be ative power source.".  |
| 9.32.3.10. | Replace Table 9.32.3.10A. by the  | following:  |
|            | Fan Configuration or Application  | Minimum External Static Pressure Differential to be Used in Determining Rated Capacity  |
|            | Fans installed with ducts connected on both sides, any application              | 100 Pa (0.4 inch water column)  |
|            | Other required fans   | 25 Pa (0.1 inch water column)   |
|            | "·  |   |

| 9.32.3.11. | Replace "0.5" in Sentences (3) and (4) by "0.74".  |
|------------|--|
|            |  |
| 9.33.1.1.  | Strike out Sentence (4).   |
| 9.33.4.1.  | Replace ""HRAI Digest"" in Sentence (1) of the French text by "HRAI Digest".   |
| 9.33.5.2.  | Replace "installations" in Sentence (1) of the French text by "équipements".   |
| 9.33.6.2.  | Replace "Combustible" in Sentence (5) by "Except for exhaust ducts connected to laundry drying equipment, combustible".  |
| 9.35.2.2.  | Replace Sentence (1) by the following:  "(1) The floor of an attached or built-in garage shall conform to Article 3.7.2.7.".   |
| 9.36.      | Strike out the Section.  |
|            | Replace the title of attributions 9.8.2.2. and 9.8.5.3. in Table 9.37.1.1. by the following:  "Height";  |
| 9.37.1.1.  | Replace the title of attributions 9.8.6.4. and 9.9.3.4. in Table 9.37.1.1. by the following:  "Clear height";  |
| J.37.1.1.  | Add the following attributions in numerical order in Table 9.37.1.1.:  "9.9.7.2. Means of egress from Suites  (3) [F10-OS1.5] [F10-OS3.7]";  "9.9.8.5. Exiting through a Lobby  (6) [F05-OS1.5]";  "9.10.10.3. Separation of Service Rooms |

|                                  | (3) [F03-OS1.2]";   |
|----------------------------------|---|
|                                  | "9.10.14.5. Construction of Exposing Building Face and Walls above Exposing Building Face                     |
|                                  | (15) [F03-OP3.1]  |
|                                  | (16) [F03-OP3.1]  |
|                                  | (17) [F03-OP3.1]";  |
|                                  | Strike out the following attributions in Table 9.37.1.1.:   |
|                                  | "9.10.21.2";  |
|                                  | "9.10.21.3";  |
|                                  | "9.10.21.4";  |
|                                  | "9.10.21.5";  |
|                                  | "9.10.21.6";  |
|                                  | "9.10.21.7";  |
|                                  | "9.10.21.8";  |
|                                  | "9.10.21.9";  |
|                                  | "9.31.4.3.(1)";   |
|                                  | "9.31.4.3.(2)";   |
|                                  | "9.32.3.6.(1)";   |
|                                  | "9.32.3.6.(2)";   |
|                                  | "9.32.3.6.(3)";   |
|                                  | "9.32.3.7.(3)";   |
|                                  | "9.32.3.7.(7)";   |
|                                  | "9.35.2.2.(1)".   |
| Division B<br>Notes in<br>Part 9 |   |
| A-9.4.2.2.                       | Insert "ou de monte-charge" after "locaux d'ascenseur" in the third paragraph of the Note in the French text. |

|               | Add the following Note:  "A-9.7.2.3.(1)(a) Glass Area. The percentage of natural light may vary from one room to another, but the total area must comply with the percentage required for the area of the dwelling unit. For the purposes of this Article, the unobstructed glass area of a door or a skylight is considered equal to that of a window."   |
|---------------|--|
|               | Add the following Note:  "A-9.8.1.2.(2) Storage in Garages. Attics in garages serving a single dwelling unit are sometimes used for storage purposes. Attics used for that purpose are not considered to be floor areas and need not conform to the requirements for floor areas, including the requirements for exits.".  |
|               | Replace the Note by the following:   |
| A-9.8.8.1.(4) | "A-9.8.8.1.(4) and (5) Height of Window Sills above Floors or Ground. The primary intent of the requirement is to minimize the likelihood of small children falling significant heights from open windows.   |
|               | Free-swinging or free-sliding means that a window that has been cracked open can be opened further by simply pushing on the openable part of the window. Care must be taken in selecting windows, as some with special operating hardware can still be opened further by simply pushing on the window.   |
|               | Awning windows with scissor hardware, however, may not keep the window from swinging open once it is unlatched. Hopper windows would be affected only if an opening is created at the bottom as well as at the top of the window. The requirement will impact primarily on the use of sliding windows which do not incorporate devices in their construction that can be used to limit the openable area of the window.  |
|               | The 100 mm opening limit is consistent with widths of openings that small children can fall through. It is only invoked, however, where the other dimension of the opening is more than 380 mm. Again, care must be taken in selecting a window. At some position, scissor hardware on an awning window may break up the open area such that there is no unobstructed opening with dimensions greater than 380 mm and 100 mm. At another position, however, though the window is not open much more, the hardware may not adequately break up the opening. The 900 mm height off the floor recognizes that furniture is often placed under windows and small children are often good climbers.". |

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| Add the following Note:  |
| "A-9.9.3.(1) Projecting Constructions. A projecting construction is considered to be a balcony when the occupant of a suite or a fire compartment is not required to pass in front of an opening of another suite or fire compartment in order to access an exit stair. For example, a projecting construction serving two dwelling units is considered to be a balcony if the exit stair is built between the two dwelling units and none of the openings of either dwelling unit opens directly onto the exit stair (a solid wall must face the exit stair). |
| A projecting construction is considered to be an exterior passageway when the occupant of a suite or a fire compartment is required to pass in front of an opening of another suite or fire compartment in order to access an exit stair. In that case, the exterior passageway must conform to Articles 9.9.4.2., 9.9.4.4., 9.9.9.2., 9.9.9.3., 9.10.8.8. and 9.10.17.4.".  |
| Add the following Note:  |
| "A-9.10.8.1.(2) Light-frame Floor. For the purposes of Sentence 9.10.8.1.(2), light-frame means a structure consisting of wood elements of a size less than 38 mm × 184 mm (2 in × 8 in)."   |
| Add the following Note:  "A-9.10.14.5.(6) Combustible Projections. The requirements in this Sentence concern projections such as balconies, walkways, platforms, canopies, ornamentations, eave projections and stairs."   |
| Insert ", monte-charges" after "ascenseurs" in the last paragraph of the Note in the French text.  |
| Strike out the Note.   |
| Add the following Note:  "A-9.13.2.1.(2) Required Dampproofing Protection. The use of a dampproofing membrane under floors-on-ground protects against moisture, protects concrete against sulphate soil or underlying granular materials and protects the occupants against the effects of soil gas such as radon.   |
|  |

|                    | Certain granular materials, including hornfels, may produce a significant quantity of sulphates likely to migrate by capillarity towards the underside of floors-on-ground and cause sulfatization of concrete. The following methods are recommended to protect concrete against sulphate-laden moisture:   |
|--------------------|--|
|                    | (a) the use of sulphate-resistant concrete (see Article 9.3.1.3.),   |
|                    | (b) the use of a vapour barrier (see Sentence 9.25.3.2.(2)),   |
|                    | (c) the use of clean coarse granular materials limiting capillarity effects and preventing migration of sulphates (see Article 9.16.2.1.).".   |
|                    | Add the following Note:  |
|                    | "A-9.14.2.1.(1) Foundation Drainage – Ochre Deposition. Ochre deposition is associated with soil characteristics and groundwater conditions. Microorganisms, which are generally found in water-saturated soil, extract oxygen from elements such as iron, reducing it to ferrous ions. Once the iron has been reduced and solubilized, it migrates through the soil to foundation drains and can block them. The following document describes drainage systems that reduce the risk of ochre deposition in the drainage systems of new buildings and how to install them: BNQ 3661-500, "Dépôts d'ocre dans les systèmes de drainage des bâtiments – Partie I: Évaluation du risque pour la construction de nouveaux bâtiments et diagnostic pour des bâtiments existants et Partie II: Méthodes d'installation proposées pour nouveaux bâtiments et bâtiments existants"." |
| A-9.19.2.1.<br>1)  | Strike out the Note.   |
|                    | Strike out the first paragraph in the Note "Indoor Air Exhaust";   |
| A-9.32.3.3.        | Strike out "See also Note A-9.32.3.6." in the Note "Outdoor Air Supply";   |
|                    | Strike out "and A-9.32.3.6" in the last paragraph of the Note " <b>Distribution</b> of Air".   |
| A-<br>9.32.3.3.(3) | Strike out the last sentence in the last paragraph of the Note.  |
| A-9.32.3.6.        | Strike out the Note.   |
|                    |  |

| A-9.32.3.7.        | Replace the first paragraph of the Note by the following:  "CAN/CSA-F326-M, "Residential Mechanical Ventilation Systems", requires a certain amount of exhaust from kitchens to capture pollutants at the source. When the principal ventilation fan air intake is located in the kitchen but is connected to multiple inlets, there will not be enough exhaust from the kitchen. Therefore, a separate kitchen exhaust fan is required in this circumstance as well.". |
|--------------------|---|
| A-<br>9.35.2.2.(1) | Strike out the Note.  |
|                    | Add the following Part:  "Part 10  Existing Buildings under Alteration, Maintenance or Repair   |
|                    | 10.1. General 10.1.1. Application   |
|                    | <ul><li>10.2. Application Conditions</li><li>10.2.1. Calculation of Building Height</li><li>10.2.2. Provisions Applicable to Maintenance, Repair or Alteration Work</li></ul>   |
|                    | 10.3. Fire Protection, Occupant Safety and Accessibility  |
|                    | 10.3.1. General   |
|                    | 10.3.2. Fire Safety in Buildings 10.3.3. Safety within Floor Areas  |
|                    | 10.3.4. Exit Requirements   |
|                    | 10.3.5. Vertical Transportation   |
|                    | 10.3.6. Service Facilities  |
|                    | 10.3.7. Health Requirements   |
|                    | 10.3.8. Barrier-Free Design   |
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| 10.4. Structural Design   |
| 10.4.1. Structural Loads and Procedures   |
| 40.5.5  |
| 10.5. Environmental Separation  |
| 10.5.1. Exclusion   |
| 10.6. Heating, Ventilation and Air Conditioning                                     |
| 10.6.1. General   |
|   |
| 10.7. Plumbing  |
| 10.7.1. General   |
|   |
| 10.8. Reserved  |
|   |
| 10.9. Housing and Small Buildings   |
| 10.9.1. Structural Design Requirements and Barrier-Free Design                      |
| 10.9.2. Means of Egress   |
| 10.9.3. Fire Protection   |
| 10.10. Objectives and Functional Statements   |
| -   |
| 10.10.1. Objectives and Functional Statements                                       |
| Part 10   |
| Existing Buildings under Alteration, Maintenance or Repair                          |
|   |
| Section 10.1. General   |
| 10.1.1. Application   |
| 10.1.1.1. Application of Part 10  |
| (1) The scope of this Part shall be as described in Article 1.3.3.1. of Division A. |
|   |

| 10.1.1.2. Definitions  (4) Words that appear in italian are defined in Section 1.4. of Division A  |
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| (1) Words that appear in italics are defined in Section 1.4. of Division A.  |
| Section 10.2. Application Conditions   |
| 10.2.1. Calculation of Building Height   |
| 10.2.1.1. Determination of the First Storey  |
| (1) For the purposes of this Part, the reference level for determining the first storey used to establish the building height or to determine if a building is a high building, shall be   |
| (a) for any <i>building</i> built before 1 December 1976, the level of the ground adjacent to the existing principal entrance, unless an <i>alteration</i> modifies more than 50% of the <i>floor areas</i> of the <i>building</i> and the <i>alteration</i> involves the change of its structural elements when rebuilding,               |
| (b) for any <i>building</i> built from 1 December 1976, the <i>grade</i> as defined by the standard applicable during the construction of the <i>building</i> (see Note A-10.2.1.1.(1)(b)), or   |
| (c) for any <i>building</i> , regardless of the year of construction, the average finished ground levels around the <i>building</i> , excluding entrances.   |
| 10.2.2. Provisions Applicable to Maintenance, Repair or Alteration Work  |
| 10.2.2.1. Maintenance or Repair Work   |
| (1) Maintenance or repair work performed on a <i>building</i> , part of a <i>building</i> , or an element thereof, and on an appliance, equipment, system or facility covered by the NBC shall be performed so as to maintain or restore it in good condition without altering its characteristics or functions (see Note A-10.2.2.1.(1)). |
| 10.2.2.2. Alterations  |
| (1) The NBC applies  |
| (a) except as provided in Sentences (2) and (3) and the provisions of this Part, to every <i>alteration</i> of a <i>building</i> or part of a <i>building</i> , including the design and construction work (foundation, erection, renovation, modification or demolition work) performed for that purpose, and                             |

- (b) with respect to the provisions of this Part, to every element, appliance, system, facility, equipment or unaltered portion of a *building* or part of a *building*.
- **(2)** The NBC applies, except as provided in this Part, to a change in *occupancy* for which there is no alteration work.

(See Note A-10.2.2.2.(2).)

- (3) The NBC applies, excluding the relaxations of this Part, to any alteration in a building designed according to Article 3.2.2.50. or 3.2.2.58., or according to Sentence 3.2.2.50.(3) or 3.2.2.57.(3) of the NBC 2010 am. Québec, or according to "Construction d'Habitation en Bois de 5 ou 6 étages, Directives et guide explicatif Gouvernement du Québec 2013" or "Mass timber buildings of up to 12 storeys Directives and Explanatory Guide Gouvernement du Québec 2015".
- (a) for a change of occupancy to an occupancy prohibited in the building,
- (b) for a change of *occupancy* to an *occupancy* not permitted on the *storey* on which the *alteration* is carried out,
- (c) for the increase of the building height, and
- (d) for an addition to the building area or floor area.

(See Note A-10.2.2.2.(3).)

- (4) For the purposes of this Part,
- (a) the retrofitting of a *floor area* or part of a *floor area* is considered a major *alteration* if it involves altering the majority of the elements and components of the walls, ceilings and floors, and
- (b) any other retrofitting of a *floor area* or part of a *floor area* is considered a minor *alteration*.

(See Note A-10.2.2.2.(4).)

## Section 10.3. Fire Protection, Occupant Safety and Accessibility

#### 10.3.1. General

## 10.3.1.1. Separation of Major Occupancies

- (1) Except as provided in Sentence (2), a *fire separation* that separates the altered part from another *occupancy* shall have a *fire-resistance rating* determined according to Subsection 3.1.7. and conform to Article 3.1.3.1.
- **(2)** Except for *combustible buildings* designed according to Article 3.2.2.50. or 3.2.2.58., or according to Sentence 3.2.2.50.(3) or 3.2.2.57.(3) of NBC 2010 am. Québec, or according to "Construction"

- d'Habitation en Bois de 5 ou 6 étages, Directives et guide explicatif Gouvernement du Québec 2013" or "Mass timber buildings of up to 12 storeys Directives and Explanatory Guide Gouvernement du Québec 2015", the *fire-resistance rating*, measured on the unaltered side, is permitted to be
- (a) less than the required *fire-resistance rating*, without being less than 45 min, if the *fire separation* between the two *occupancies* must have a *fire-resistance rating* more than 1 h, or
- (b) less than the required *fire-resistance rating*, without being less than the more stringent provisions of the Safety Code (chapter B-1.1, r. 3), Chapter VIII, Buildings, if the *fire separation* must have a *fire-resistance rating* not more than 1 h or in the case of a minor *alteration*.

#### 10.3.1.2. Combustible and Noncombustible Construction

**(1)** The provisions of Subsections 3.1.4. and 3.1.5. for the protection of foamed plastic insulation apply to the unaltered elements of a *building* or part of a *building* under *alteration* and to the unaltered elements of any *means of egress* of the *building*.

#### 10.3.1.3. Interior Finish

- (1) Except in the case of a minor *alteration*, the provisions of Subsection 3.1.13. for the *flame-spread rating* apply to the unaltered interior finish of ceilings and the upper half of the walls of every *access to exit* corridor from the *access to exit* door serving a part of the *building* under *alteration* to the nearest *exit* provided
- (a) the flame-spread rating of interior finishes exceeds 75, and
- (b) the *alteration* involves an increase in the *occupant load*, as determined in conformance with Subsection 3.1.17.

# 10.3.2. Fire Safety in Buildings

# 10.3.2.1. Noncombustibility of Buildings

(1) Except as provided in Sentence (2), the provisions of the NBC requiring a noncombustible construction for a building having a building height equal to that of the uppermost storey where the alteration is being carried out, apply, in the altered part, to the unaltered combustible elements of a building required to be of noncombustible construction, except in the case of a minor alteration or provided

- (a) the *floor area* where the altered part is located and the *storeys* located below it are equipped with a sprinkler system conforming to Articles 3.2.5.12. to 3.2.5.14., and
- (b) the *building* is equipped with a fire alarm and detection system conforming to Subsection 3.2.4.
- (2) The provisions of the NBC requiring a *noncombustible construction* also apply to the unaltered *combustible* elements of a *building* required to be of *noncombustible construction* provided
- (a) the *floor area* is increased during an *alteration* by more than 10% of the *floor area* or 150 m<sup>2</sup>, except if
- (i) the altered *floor area* and the *storeys* located below are equipped with a sprinkler system conforming to Articles 3.2.5.12. to 3.2.5.14.,
- (ii) the *building* is equipped with a fire alarm and detection system conforming to Subsection 3.2.4,
- (b) the building height is increased, except if the building is equipped with
- (i) a sprinkler system conforming to Articles 3.2.5.12. to 3.2.5.14., and
- (ii) a fire alarm and detection system conforming to Subsection 3.2.4.
- (3) If the NBC requires both *noncombustible construction* and a sprinkler system, the design and installation of the sprinkler system shall conform to NFPA 13, "Installation of Sprinkler Systems", for a level of risk higher than the level established in that standard for the intended *occupancy*.

### 10.3.2.2. Construction and Protection of Buildings

- (1) Except as provided in Sentences (2) and (3), where an *alteration* increases the level of the requirements in Subsection 3.2.2. following a change of *occupancy* or an increase in the *building height* or *floor area*, the requirements in Subsection 3.2.2. concerning the construction and protection of *buildings* in relation to their *occupancies* and dimensions that apply to the part under *alteration* also apply to
- (a) any other adjacent part that is not separated from the altered part by a *fire separation* having a *fire-resistance rating* at least equal to the *fire-resistance rating* required for the floors under Subsection 3.2.2., and
- (b) the *storey* below the altered part when
- (i) the altered part must be *sprinklered*, and
- (ii) the *fire-resistance rating* of the *fire separation* between the altered part and the *floor area* below is less than the *fire-resistance rating* required in conformance with Articles 3.1.3.1. and 3.2.2.20. to 3.2.2.90., if the *building* need not be *sprinklered*; the *fire-resistance rating* is permitted to

be limited to the part of the floor and to the structural elements supporting the altered part, if the latter is separated from the remainder of the *floor area* in accordance with Clause (a).

- **(2)** During a major *alteration*, if the provisions concerning the installation of a sprinkler system in Subsection 3.2.2. apply to the *alteration*, the provisions also apply to any adjacent part of a *building* that is not separated from the altered part by a *fire separation* having a *fire-resistance rating* at least equal to the *fire-resistance rating* required for the floor assemblies under Subsection 3.2.2.
- **(3)** The provisions concerning the installation of a sprinkler system under Subsection 3.2.2. do not apply to the *alteration* of a *building* or part of a *building* not equipped with such a system, in the following cases:
- (a) the increase in *floor area* during an *alteration* is not more than 10% of the *building area* or 150  $m^2$ ,
- (b) the work carried out is a minor *alteration* within the meaning of Sentence 10.2.2.2.(3),
- (c) for a noncombustible building, except a building containing a Group B, Division 2 or Division 3, Group C or Group F, Division 1 occupancy, or an ambulatory clinic occupancy when the work carried out does not require the noncombustibility of the building or floor area under alteration,
- (d) for the *alteration* of a *noncombustible building* containing an *occupancy* other than a Group B, Division 2 or 3, Group C or Group F, Division 1 *occupancy*, by limiting the *building height* to that of the uppermost *storey* where the *alteration* is being carried out and for which a sprinkler system would not be required,
- (e) for the *alteration* of a *combustible building* containing an *occupancy* other than a Group B, Division 2 or 3, Group C or Group F, Division 1 *occupancy*, the *building height* is limited to that of the uppermost storey where the *alteration* is being carried out and for which a sprinkler system is not required if the *occupant load*, as determined in accordance with Subsection 3.1.17. for the intended *occupancy*, is not more than 60, or
- (f) for a major *alteration*, if the *fire-resistance rating* of the floors, walls, columns and support arches of the altered *floor area* conforms to the *fire-resistance rating* required under Articles 3.1.3.1 and 3.2.2.20. to 3.2.2.90, except in the case of a high *building* or a Group B, Division 2 or 3, Group C or a Group F, Division 1 *occupancy*.
- **(4)** During the installation of a partial sprinkler system in a *building*, a standpipe must be sized to serve all the *building*, even if the system currently installed serves only part of the *building*.

### 10.3.2.3. Spatial Separation and Exposure Protection

- (1) In the case of an *alteration*, the provisions of Subsection 3.2.3. for spatial separation and exposure protection apply to the modification of any existing part of an *exposing building face* if the modification results in
- (a) an increase in the surface of the openings beyond the limit referred to in Sentence 3.2.3.1.(1) for *unprotected openings*,
- (b) a reduction in the limiting distance, or
- (c) a reduction in the resistance to fire.
- **(2)** When a *building* or part of a *building* is under *alteration*, a *party wall* that is not built as a *firewall* shall
- (a) conform to the provisions of Subsection 3.1.10. for the construction of a *firewall* from the ground up, if the height of the *party wall* has been increased, and
- (b) have a *fire-resistance rating* not less than 2 h on the altered side and ensure smoke-tightness from the floor of the altered part to the underface of the floor or roof located above the *alteration*.

### 10.3.2.4. Fire Alarm and Detection Systems

- **(1)** Except as required by Sentence (2), for an *alteration*, Subsection 3.2.4. covering fire alarm and detection systems applies to a *building* that is not equipped with such a system and any part of a system that is not electrically supervised and equipped with separate zone indicators if the *alteration* results in
- (a) an increase in the *occupant load*, in the altered part, that exceeds the *occupant load* stated in Sentence 3.2.4.1.(4),
- (b) a new Group A, B, C, E, or F, Division 1 or 2 occupancy,
- (c) an increase in the *building area* by more than 10% or 150 m<sup>2</sup>,
- (d) an increase in the number of storeys, or
- (e) a modification that constitutes a major *alteration* within the meaning of Sentence 10.2.2.2.(4).
- (2) Except as required by Sentence (3), for an *alteration*, Subsection 3.2.4. applies to the altered part and the requirements of Subsection 3.2.4. covering fire alarm and detection systems apply to the unaltered part of the system to the extent that those requirements are necessary to ensure system operation in the altered part.

- (3) However, in the parts of the *building* not subject to a major *alteration* or enlargement, the fire detection and alarm system need not comply with the requirements of Sentence 3.2.4.19.(5) provided
- (a) in a *dwelling unit* and in a multi-room hotel or motel *suite*, except when the *suite* or *dwelling unit* is completely retrofitted, the fire *alarm signal* sound pressure level shall be not less than 85 dBA near the entrance door, in a closed position, and
- (b) in a bedroom in a *residential occupancy*, other than a bedroom located in a *dwelling unit*, the standard is 75 dBA.

## 10.3.2.5. Provisions for Firefighting

- (1) The provisions of Articles 3.2.5.7. to 3.2.5.18. apply to the unaltered part of a sprinkler system or standpipe system, where the *alteration* of a *building* or part of a *building* increases the *building height* or the *floor area* by more than 10% of the *building area* or more than 150 m<sup>2</sup>, except if the system
- (a) has a fire department connection,
- (b) is of the wet pipe type in the heated parts of the building, and
- (c) has an approved booster pump capable of providing the pressure required by NFPA 13, "Installation of Sprinkler Systems", or NFPA 14, "Installation of Standpipe and Hose Systems", where the water pressure in the system is lower than that pressure, except as provided in Sentence (2).
- (2) The residual water pressure at the topmost hose connection of a standpipe system of a *building* referred to in Clause (1)(c) is permitted to be less than the pressure required by NFPA 14, "Installation of Standpipe and Hose Systems", but not lower than 207 kPa if the requirement in Clause 3.2.5.9.(5)(c) is met.

## 10.3.2.6. Additional Requirements for High Buildings

- (1) Except as provided in Sentence (2), Subsection 3.2.6. covering additional requirements for high *buildings* applies to a high *building* in accordance with Part 3 that is under an *alteration* that results in
- (a) a change of occupancy so that it becomes a Group B or C building,
- (b) an increase in building height, or
- (c) a modification of more than 50% of the *floor areas* for a reconstruction.

- **(2)** This Subsection also applies to the entire *building* that becomes a high *building* following an *alteration* resulting in
- (a) a change of *occupancy* of the *building*, or
- (b) an increase in *building height*, except if the increase is not more than 4 m and its *floor area* is not more than 10% of the area of the *storey* located immediately below, without exceeding 150 m<sup>2</sup>.
- **(3)** The size of the usable platform referred to in Sentence 3.2.6.5.(2) does not apply to an elevator modified to become an elevator for use by firefighters.

## 10.3.2.7. Emergency Power for Firefighting

(1) The provisions of Clause 3.2.7.9.(1)(b) for emergency power for water supply apply to an existing fire pump if an *alteration* results in an increase in *building height* or a change of *occupancy* of the *building* to a Group B, Division 2 or Division 3 or Group F, Division 1 *occupancy* or an *ambulatory clinic occupancy*.

# 10.3.3. Safety within Floor Areas

#### 10.3.3.1. Access to Exit

- (1) Except in the case of a minor *alteration*, the provisions of Section 3.3. covering *access to exit* apply to every unaltered *access to exit* serving part of a *floor area* under *alteration* provided
- (a) the unobstructed height is not more than 1900 mm,
- (b) the unobstructed width is not more than
- (i) 1100 mm in the case of a corridor referred to in Sentence 3.3.1.9.(2) or serving *dwelling units* of a *care occupancy*,
- (ii) 900 mm in the case of a corridor serving *dwelling units* of a *residential occupancy*,
- (c) notwithstanding Clause (b), the access to exit serving the altered part shall comply with the minimum width provided for in Article 3.4.3.2., which is calculated according to the occupant load under Subsection 3.1.17.,
- (d) the length of dead-end corridors exceeds
- (i) 6 m for any *building* of *residential occupancy*, except as provided in Sentences (2) and (3), or
- (ii) 12 m for Groups A, D, E and F, Divisions 2 and 3 occupancies, and

- (e) the separation of the corridors from the remainder of the *building* is not smoke-tight.
- (2) A public corridor referred to in Subclause (1)(c)(i) that is located in a building of residential occupancy built before 1 December 1976 other than a hotel or motel is permitted, when the fire separation of the corridor has a fire-resistance rating not less than 45 min, to have a dead-end part not exceeding 12 m provided
- (a) the doors of the dwelling units
- (i) have a self-closing mechanism and they do not lock automatically, and
- (ii) are weatherstripped to prevent the passage of smoke,
- (b) the corridor has *smoke detectors* connected to a fire alarm system installed as required by Subsection 3.2.4.,
- (c) the *floor area* is *sprinklered* throughout as required by Articles 3.2.5.12. to 3.2.5.14., except if the *building* has a *building height* not more than 4 *storeys* and each *dwelling unit* has a balcony accessible to the fire department, and
- (d) the *floor area* has not changed *occupancy*.
- (3) A public corridor referred to in Subclause (1)(c)(i) that is located in a building of residential occupancy built before 1 December 1976 other than a hotel or motel is permitted, when the fire separation of the corridor has a fire-resistance rating not less than 1 h, to have a dead-end part not exceeding 15 m provided
- (a) the doors of the dwelling units
- (i) have a self-closing mechanism and they do not lock automatically, and
- (ii) are weatherstripped to prevent the passage of smoke,
- (b) the corridor has *smoke detectors* connected to a fire alarm system installed as required by Subsection 3.2.4., and
- (c) the *floor area* is *sprinklered* throughout as required by Articles 3.2.5.12. to 3.2.5.14., except if the *building* has a *building height* not more than 6 *storeys* and each *dwelling unit* has a balcony accessible to the fire department.
- **(4)** When change of *occupancy* occurs, the width of an unaltered corridor serving *dwelling units* in a *care occupancy* is permitted to be limited to 1100 mm.
- **(5)** An unaltered door to *access to exit*, *exit* door or washroom door serving part of the *building* under *alteration* shall be equipped with release hardware conforming to Sentence 3.3.1.13.(3).

## 10.3.3.2. Separation of suites

(1) In the case of the *alteration* of a *suite*, the *fire separation* separating the *suite* from any other unaltered *suite* or room shall have a *fire-resistance rating* determined according to Subsection 3.1.7. and comply with Article 3.3.1.1.; the *fire-resistance rating* on the unaltered side is permitted to be less than the required *fire-resistance rating* without, however, being less than the more restrictive provisions of Chapter VIII, Buildings, of the Safety Code (chapter B-1.1, r. 3).

#### 10.3.3.3. Barrier-Free Floor Areas

(1) Except in the case of a minor *alteration*, any part of an unaltered *floor* area on a storey under alteration shall comply with Article 3.3.1.7. if the room or part of the *floor* area accessible by elevator is required to be barrier-free under Article 10.3.8.1.

## 10.3.4. Exit Requirements

#### 10.3.4.1. Dimensions and Protection of Exits and Exit Stairs

- (1) Except in the case of a minor *alteration*, any unaltered *exit* required to serve a *floor area* or part of a *floor area* under *alteration* shall
- (a) have a minimum unobstructed width not less than
- (i) 760 mm for a *building* built before 1 December 1976,
- (ii) 900 mm for a *building* built as of 1 December 1976,
- (iii) 1100 mm for changes of *occupancy*, an increase of the *load occupancy* or an addition, when it serves a Group A, Group B, Division 2 or 3, or Group E *occupancy* or storage garages serving more than 150 persons,
- (b) notwithstanding Clause (a), an *exit* serving the altered part shall comply with the minimum width provided for in Article 3.4.3.2., which is calculated according to the *load occupancy* under Subsection 3.1.17. (see Note A-10.3.4.1.(1)(b),
- (c) except as permitted by Sentences (2) and (3), be separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating*
- (i) not less than 45 min for a *building* not more than 3 *storeys* in *building height* not containing a Group B, Division 2 or 3 *occupancy*,

- (ii) not less than 2 h for changes of *occupancy*, an increase of the *load occupancy* or an addition, for *buildings* more than 3 *storeys* containing a Group B, Division 2 or 3 *occupancy*,
- (iii) not less than 1 h for other buildings.
- (2) In a school built before 1 December 1976, an unaltered stairway required as an *exit* to serve a *floor area* or part of a *floor area* under *alteration* need not have the *fire separation* required in Clause (1)(c) provided
- (a) the *alteration* work will not increase the requirements for the *means of egress*,
- (b) the building is not more than 3 storeys in building height,
- (c) half of the required *exits* are separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* required by the NBC.
- (d) it is not necessary to pass through it to reach another *exit* required when the *occupant load* is more than 60,
- (e) any corridor or room opening onto it is separated from it by a *fire separation* having a *fire-resistance rating* not less than 45 min and any door opening onto it has a self-closing device, a latching mechanism and, if it is kept opened, an electromagnetic device connected to the alarm system,
- (f) any corridor or room opening onto it has *smoke detectors* that must be placed near the openings on the stairway, and
- (g) the building has not undergone a change of occupancy.
- (3) An unaltered stairway of a *building* built before 1 December 1976 and required as an *exit* to serve a *floor area* or a part of a *floor area* under *alteration* need not have the *fire separation* required in Clause (1)(c) provided
- (a) the *alteration* work will not increase the requirements for the *means of egress*,
- (b) it is used to connect the *first storey* with the *storey* above or below but not both.
- (c) the *floor areas* it connects serve any *occupancy* other than a Group A, B or C *occupancy*,
- (d) half of the *exits* required are separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* required by the NBC and they lead directly to the exterior,

- (e) the travel distance to the exterior *exit* door on the *first storey* is not more than 15 m,
- (f) the *building* has an alarm system that conforms to Subsection 3.2.4., and
- (g) a smoke detector is located above the uppermost flight of stairs.

### 10.3.4.2. Door Swing

- (1) The provisions of Article 3.4.6.12. covering the direction of an *exit* door swing apply to every unaltered exterior *exit* door serving a *floor area* or part of a *floor area* of an *occupancy* other than a Group F, Division 1 *occupancy* that is under *alteration*, except if
- (a) the *exit* door opens directly onto a *public way*, independently from any other *exit*, when it serves only one *floor area* or part of a *floor area* whose *occupant load* determined according to Subsection 3.1.17. is not more than
- (i) 40 persons when there is only one exit door, or
- (ii) 60 persons when there is one *exit* door and a second *means of egress*, or
- (b) the *exit* door serves not more than 30 persons in a *building* not more than 18 m in *building height*, and
- (i) it opens directly onto a step, a *public way* or an obstacle that reduces its required minimum width and it is located not more than 1.5 m above the *public way*, and
- (ii) the occupants have access to a second *means of egress*.

#### 10.3.4.3. Curved Exit Stairs

- (1) A curved or spiral *exit* stair that is not under *alteration* but that is used to serve a *floor area* or part of a *floor area* under *alteration* shall
- (a) comply with Article 10.3.4.1., and
- (b) not serve a day care centre or a Group B, Division 3 occupancy.

#### 10.3.4.4. Exit Signs

(1) During an *alteration*, the requirements in Sentence 3.4.5.1.(2) do not apply to the unaltered signs of *exits* in a *floor area*.

(See Note A- 10.3.4.4.(1).)

(2) Except as provided in Sentence (3), when the alteration involves the relocation, replacement or addition of an exit sign of a floor area, all the exit signs of the same floor areas shall conform to Sentence 3.4.5.1.(2). (3) Exit signs are permitted to conform to Article 3.4.5.1. of the NBC 2005 am. Québec (a) when only one sign must be relocated, added or replaced on the floor area, or (b) when no more than 5% of the signs must be relocated, added or replaced on the floor area. 10.3.5. Vertical Transportation 10.3.5.1. Exclusion (1) Article 3.5.4.1. covering the inside dimensions of elevator cars does not apply to a facility under alteration. 10.3.6. Service Facilities 10.3.6.1. Service Rooms and Vertical Service Spaces (1) The provisions of Subsections 3.6.2. and 3.6.3. apply during an alteration, other than a minor alteration, to an unaltered service room located in a floor area or part of a floor area and to an unaltered vertical service space passing through it, except if the room or space is separated from the remainder of the building by a fire separation having a fireresistance rating not less than (a) 2 h for any room containing fuel-fired appliances located in a Group B or F, Division 1 occupancy building that is more than 2 storeys in building height or that has a building area more than 400 m<sup>2</sup>, (b) 1 h for any other *service room* or a linen chute or refuse chute, or (c) 45 min for any other vertical service space.

| 10.3.7. Health Requirements   |
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| <ul><li>10.3.7.1. Plumbing Facilities</li><li>(1) An unaltered plumbing facility serving part of a building under alteration shall meet the requirements in Subsection 3.7.2. where the alteration involves an increase in occupant load by more than 25.</li></ul> |
| 10.3.8. Barrier-Free Design   |
| 10.3.8.1. General   |
| (1) When a <i>building</i> does not have <i>barrier-free</i> access, Section 3.8. covering <i>barrier-free design</i> does not apply to the <i>building</i> or part of the <i>building</i> under <i>alteration</i> provided   |
| (a) the work involves   |
| (i) a service facility other than a vertical transportation facility for which a barrier-free path of travel is required by Article 10.3.8.2., or   |
| (ii) a <i>floor area</i> or <i>suite</i> occupied by not more than 60 persons or whose area does not exceed 250 m <sup>2</sup> ;  |
| (b) the <i>floor area</i> served by a pedestrian entrance   |
| (i) cannot be accessed from the <i>public way</i> by an external ramp built in conformance with Article 10.3.8.4., without encroaching on that way,   |
| (ii) is located more than 900 mm from the <i>public way</i> level, or   |
| (iii) is located more than 600 mm from the entrance level, and  |
| (c) the difference in levels between the floor of the pedestrian entrance and the floor of the elevator is more than 600 mm, where the part of the <i>floor area</i> under <i>alteration</i> can be accessed by an elevator.  |
| 10.3.8.2. Areas Requiring a Barrier-Free Path of Travel   |
| (1) When the application of Section 3.8. is not excluded by Sentence 10.3.8.1.(1), Sentence 3.8.2.3.(1) applies, in the part of the <i>building</i> not under <i>alteration</i> , only to the path of travel required to connect                                    |
| (a) at least one pedestrian entrance to   |
| (i) the <i>floor area</i> or part of a <i>floor area</i> under <i>alteration</i> and to at least one existing elevator serving it where applicable, or  |
| (ii) an existing outdoor parking area serving the <i>building</i> , and   |

| (b) the <i>floor area</i> or part of a <i>floor area</i> under <i>alteration</i> to at least one accessible washroom, when there is no other accessible washroom in the altered part.   |
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| 10.3.8.3. Washroom  |
| (1) In the case referred to in Clause 10.3.8.2.(1)(b), where a washroom located in the unaltered part of a <i>floor area</i> must be made accessible, it must conform to Article 3.8.2.8.   |
| 10.3.8.4. Ramps   |
| (1) Any ramp in a <i>barrier-free</i> path of travel required by Article 10.3.8.2. is permitted, notwithstanding the requirement of Article 3.8.3.5., to have a slope that does not exceed  |
| (a) 1:8 if the length of the ramp is not more than 3 m, or  |
| (b) 1:10 in all other cases.  |
| 10.3.8.5. Dwelling Unit of Residential Occupancy  |
| (1) Article 3.8.2.13. and Subsections 3.8.4. and 3.8.5. concerning dwelling units of residential occupancy shall not apply to a minor or major alteration or to a change of occupancy.  |
| Section 10.4. Structural Design   |
| 10.4.1. Structural Loads and Procedures   |
| 10.4.1.1. General   |
| (1) Except as provided in Article 10.4.1.2., the provisions of Part 4 covering structural design apply to any <i>floor area</i> or part of a <i>floor area</i> , structural element, roof and <i>foundation</i> of a <i>building</i> not undergoing modification when an <i>alteration</i> requires modification to maintain stability, resistance or structural integrity. |
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#### 10.4.1.2. Live Loads

- (1) The *live load* required by Article 4.1.5.3. does not apply to an *alteration* to a *floor area* used as an office and located on the *first storey* of a *building*, or to such a *floor area* used for a wholesale and retail business provided
- (a) the *live loads* applied to the existing areas have a value of not less than 2.4 kPa, and
- (b) the *alteration* of the existing areas does not result in an increase in their *live load* or *dead load*.

### 10.4.1.3. Live Loads Due to Earthquakes

- **(1)** Where a *building* is under *alteration*, its capacity to resist seismic loads shall comply with the following conditions:
- (a) it must not be reduced by the alteration,
- (b) except for *buildings* having a structure designed in conformance with the seismic design requirements in the NBC 2005 am. Québec or the NBC 2010 am. Québec, it must be increased to not less than 60% of the seismic protection level that would be prescribed according to Part 4 if the *alteration* results in
- (i) more than 25% of all the *floor areas* undergoing gutting, in the case of a *post-disaster building*,
- (ii) the resistance system of lateral loads being modified by the alteration,
- (iii) an enlargement of the *building area* by more than 10% or more than 150 m<sup>2</sup>, except if the structure of the addition is separate from that of the existing part and the movement of each structure in the event of an earthquake does not affect the adjacent structure, or
- (iv) the *alteration* increases the permanent load by more than 5% of the *building* or increases the total of the live loads included in "W", as defined in Sentence 4.1.8.2.(1), by more than 5%.
- (2) In the case of *post-disaster buildings*, where Clause (1)(b) applies to *alteration* work, the anchorage of non-structural elements and components listed in Table 4.1.8.18. shall be verified and brought into conformance with the requirements of Article 4.1.8.18. in the case of elements and components that would likely interfere with the post-disaster function of the *building* in case of failure.

| Section 10.5. Environmental Separation  |
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| 10.5.1. Exclusion   |
| 10.5.1.1. Change of Occupancy   |
| (1) Notwithstanding Sentence 10.2.2.2.(2), Part 5, which covers environmental separation, does not apply to materials, components, assemblies and <i>air barrier systems</i> for any change in <i>occupancy</i> that does not involve modification work affecting the separation between the two different environments, except if the <i>alteration</i> includes the installation of equipment that creates different indoor environments inside the <i>building</i> . |
| (See Note A-10.5.1.1.(1).)  |
| Section 10.6. Heating, Ventilation and Air Conditioning   |
| 10.6.1. General   |
| 10.6.1.1. Natural Ventilation   |
| (1) Except in the case of a <i>storage garage</i> , rooms and spaces under <i>alteration</i> need not conform with the ventilation requirements in Articles 6.2.2.1. and 6.2.2.2. if they have openable windows with an unobstructed surface for ventilation equal to not less than 5% of the floor area of the rooms or spaces.  |
| Section 10.7. Plumbing Services   |
| 10.7.1. General   |
| <ul><li>10.7.1.1. Plumbing Systems</li><li>(1) Part 7, which covers plumbing services, applies to an unaltered plumbing system if an alteration requires modification to the system to ensure its conformance with health requirements or its operation.</li></ul>  |

| Section 10.8. Reserved   |
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| Section 10.9. Housing and Small Buildings  |
| 10.9.1. Structural Requirements and Barrier-Free Design  |
| 10.9.1.1. Application  |
| (1) Subsection 9.4.1., which covers the design of structural elements and their connections, applies only in the cases and to the extent referred to in Subsection 10.4.1.   |
| (2) Subsection 9.5.2., which covers <i>barrier-free</i> design, applies only in the cases and to the extent referred to in Subsection 10.3.8.  |
| 10.9.2. Means of Egress  |
| 10.9.2.1. Dimensions of Means of Egress and Direction of Door<br>Swing   |
| (1) The provisions of Article 9.9.1.1. covering the dimensions of stairs that are part of a <i>means of egress</i> and of Subsection 9.9.3. covering the dimensions of a <i>means of egress</i> apply to every unaltered <i>means of egress</i> that serves a part of a <i>building</i> under <i>alteration</i> , if the <i>exit</i> or <i>access to exit</i> has a minimal unobstructed width not less than 760 mm.   |
| (2) Sentence 9.9.6.5.(1) covering the direction of door swing of an <i>exit</i> applies to every unaltered exterior <i>exit</i> door that serves a <i>floor area</i> or part of a <i>floor area</i> under <i>alteration</i> , unless the door opens directly onto a <i>public way</i> , independently of any other <i>exit</i> , and serves only one <i>floor area</i> or part of a <i>floor area</i> that has an <i>occupant load</i> , as determined in conformance with Subsection 3.1.17., that is not more than |
| (a) 40, when there is only one <i>exit</i> door, or  |
| (b) 60, when there is one <i>exit</i> door and a second <i>means of egress</i> .   |
| 10.9.2.2. Fire Protection of Exits and Separation of Public Corridors  |
| (1) The provisions of Subsection 9.9.4. covering the fire protection of <i>exits</i> apply to every unaltered <i>exit</i> serving a <i>floor area</i> or part of a <i>floor area</i> under <i>alteration</i> that is not separated from the remainder of the <i>building</i> by a <i>fire separation</i> having a <i>fire-resistance rating</i> not less than 45 min.  |

- **(2)** Except as provided in Articles 10.9.2.3. and 10.9.3.2., the provisions of Sections 9.9. and 9.10. covering *public corridors* apply to every unaltered *public corridor* serving a *floor area* or part of a *floor area* under *alteration* if
- (a) its unobstructed height is not more than 1900 mm,
- (b) its unobstructed width is not more than 760 mm,
- (c) its dead-end length exceeds
- (i) 6 m in the case of a *building* of *residential occupancy*, except as provided in Sentence (3), or
- (ii) 12 m for Groups D, E and F, Division 2 and 3 occupancies, and
- (d) the separation of the corridor from the remainder of the *building* is not smoke-tight.
- (3) A public corridor referred to in Subclause (2)(c)(i) located in a building of residential occupancy built before 1 December 1976 other than a hotel or motel is permitted when the fire separation of the corridor has a fire-resistance rating not less than 45 min, to have a dead-end part not exceeding 12 m provided
- (a) the door of each *dwelling unit* has a self-closing device and does not lock automatically,
- (b) the corridor has *smoke detectors* connected to the fire alarm system, installed as required by Subsection 3.2.4.,
- (c) the *floor area* is *sprinklered* throughout, as required by Articles 3.2.5.12. to 3.2.5.14., except if each *dwelling unit* has a balcony accessible to the fire department, and
- (d) the floor area has not undergone a change of occupancy.

### 10.9.2.3. Flame-Spread Limits in Means of Egress

- (1) The provisions of Subsection 9.10.17. covering flame-spread limits apply to the unaltered interior finish of ceilings and the upper half of the walls of every *public corridor*, from the *access to exit* door of the part under *alteration* to the nearest *exit*, provided
- (a) the flame-spread rating exceeds 75, and
- (b) the *alteration* involves an increase in *occupant load*, as determined in Subsection 3.1.17.

### 10.9.2.4. Exit Signs

- (1) During an *alteration*, the requirements in Sentence 9.9.11.3.(2) do not apply to the unaltered signs of *exits* in a *floor area*.
- (2) Except as permitted in Sentence (3), when the *alteration* involves the relocation, replacement or addition of an *exit* sign of a *floor area*, all the *exit* signs of the same *floor area* shall conform to Sentence 9.9.11.3.(2).
- (3) Exit signs are permitted to conform to Article 3.4.5.1. of the NBC 2005 am. Québec
- (a) when only one sign must be relocated, added or replaced on the *floor* area, or
- (b) when no more than 5% of the signs must be relocated, added or replaced on the *floor area* (see Note A-10.3.4.4.(1)).

#### 10.9.3. Fire Protection

### 10.9.3.1. Spatial Separation and Exposure Protection

- (1) Except as provided in Sentence (2), the provisions of Subsections 9.10.14. and 9.10.15. covering spatial separation do not apply to an *alteration* to any existing part of an *exposing building* face, unless the alteration results in
- (a) an increase of the opening surfaces beyond the limit referred to in Sentences 9.10.14.4.(1) and 9.10.15.4.(1), for *unprotected openings*,
- (b) a reduction of the *limiting distance*, or
- (c) a reduction of resistance to fire.
- **(2)** When a *building* or part of a *building* is under *alteration* to increase the *building height* or *floor area*, the requirements in Table 9.10.14.5.-A do not apply to the *building* or the *alteration* if
- (a) the building is not more than 3 storeys in building height,
- (b) the building houses dwelling units only,
- (c) the *fire-resistance rating* of the *exposing building* face is not less than 1 h, and
- (d) the cladding is *noncombustible*.
- (3) When a *building* or part of a *building* is under *alteration*, any *party wall* that is not built as a *firewall* shall.

|   | (a) except as provided in Clause (b), have a <i>fire-resistance rating</i> not less than 2 h on the altered side and ensure smoke-tightness from the floor of the altered part to the underface of the floor or roof located above the <i>alteration</i> , and                                 |
|---|--|
|   | (b) for an increase in height, conform to Subsection 9.10.11. for the construction of a <i>firewall</i> from the ground up.  |
|   | 10.9.3.2. Fire Alarm and Detection Systems   |
|   | (1) Subsection 9.10.18. covering fire alarm and detection systems under <i>alteration</i> does not apply to a <i>building</i> not equipped with such a system, unless the <i>alteration</i> results in   |
|   | (a) an increase in the occupant load in the altered part,  |
|   | (b) a new Group C, E or F, Division 2 <i>occupancy</i> ,   |
|   | (c) an increase in the <i>building area</i> by more than 10%, or   |
|   | (d) an increase in the number of <i>storeys</i> .  |
|   | (2) This Subsection applies to any unaltered part of a fire alarm and detection system if the system is not electrically supervised and equipped with separate zone indicators.  |
|   | Section 10.10. Objectives and Functional Statements  |
|   | 10.10.1. Objectives and Functional Statements  |
|   | 10.10.1.1. Attribution to Acceptable Solutions   |
|   | (1) For the purposes of compliance with the NBC as required in Clause 1.2.1.1.(1)(b) of Division A, the objectives and functional statements attributed to the acceptable solutions in this Part must be the objectives and functional statements in Table 10.10.1.1 (see Note A-1.1.2.1.(1)). |
|   | Table 10.10.1.1. Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 10  |
|   | Forming part of Sentence 10.10.1.1.(1) of Division B   |
| 1 | İ  |
|   | Objectives and Functional Statements (1)   |
|   | Objectives and Functional Statements (1) 10.3.1.1. Separation of Major Occupancies   |

(1) See Sentences 3.1.7.1.(1) to 3.1.7.5.(3) in Table 3.9.1.1. See Article 3.1.3.1. of Table 3.9.9.1. 10.3.1.2. Combustible and Noncombustible Construction (1) See Sentence 3.1.4.2.(1) in Table 3.9.1.1. 10.3.1.3. Interior Finish (1) See Sentences 3.1.13.2.(1), 3.1.13.7.(1), 3.1.13.10.(1) and 3.1.13.11.(1) and Article 3.1.13.6. in Table 3.9.1.1. 10.3.2.1. Noncombustibility of Buildings [F02-OS1.2] [F02-OP1.2] 10.3.2.2. Construction and Protection of Buildings [F02-OS1.2] [F02, F04-OS1.2-OS1.3] [F02-OP1.2] [F02, F04-OP1.2-OP1.3] 10.3.2.3. Spatial Separation and Exposure Protection (1) [F03, F02-OP3.1] [F02, F04, F03-OS1.2] [F04-OS1.3] [F05-OS1.5] [F03-OP1.2] [F04-OP1.3] (2) [F03-OP3.1] 10.3.2.4. Fire Alarm and Detection Systems (1) [F11, F13, F12, F81, F82-OS1.5] [F13, F81, F82, F12-OS1.2] [F11-OS1.4] [F13, F81, F82- OP1.2.] [F12, F11-OS3.7]

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10.3.2.5. Provisions for Firefighting
(1) [F12, F05, F06, F11-OS1.5] [F12, F02, F03, F05, F06, F81, F82-
OS1.2]
[F12, F02, F03, F06, F81, F82-OP1.2]
[F02-OP3.1]
(2) [F02-OP1.2]
[F02-OS1.2]
10.3.2.6. Additional Requirements for High Buildings
(1) [F02, F06, F03, F12-OS1.2] [F02, F06, F03, F12, F05-OS1.5]
[F02, F06, F03, F12-OP1.2]
(2) [F02, F06, F03, F12-OS1.2] [F02, F06, F03, F12, F05-OS1.5]
[F02, F06, F03, F12-OP1.2]
(3) [F12-OS1.2, OS1.5]
[F12-OP1.2]
10.3.2.7. Emergency Power for Firefighting
(1) [F02-OP3.1]
10.3.3.1. Access to Exit
(1) [F10, F12, F05, F06-OS3.7] [F30-OS3.1]
[F05, F03, F06-OS1.5] [F03, F06-OS1.2] [F30-OS1.3]
[F03, F06-OP1.2]
10.3.3.2. Separation of Suites
(1) [F03, F02-OS1.2] [F04-OS1.3]
[F03, F02-OP1.2] [F04-OP1.3]
10.3.3.3. Barrier-Free Floor Areas
(1) [F10, F05, F06, F73-OS1.5] [F03-OS1.2]
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10.3.4.1. Dimensions and Protection of Exits and Exit Stairs
(1)(a) [F10, F12-OS3.7] [F30, F73-OS3.1]
[F05, F06-OS1.5] [F06-OS1.2]
(b) [F03-OS1.2]
10.3.4.2. Door Swing
(1) [F10-OS3.7]
10.3.4.3. Curved Exit Stairs
(1) [F10, F12-OS3.7] [F30, F73-OS3.1] [F05, F06-OS1.5]
[F06, F03-OS1.2]
10.3.4.4. Exit Signs
(1) [F10-OS3.7]
10.3.6.1. Service Rooms and Vertical Service Spaces
(1) [F03, F02, F06-OS1.2] [F03-OS1.4] [F01, F81, F44, F34-OS1.1] [F10,
F06-OS1.5]
[F01, F34-OP1.1] [F04, F06-OP1.2] [F03-OP1.4]
[F06, F05-OS3.7] [F30-OS3.1] [F34-OS3.3]
10.3.7.1. Plumbing Facilities
(1) [F72-OH2.1] [F71-OH2.3] [F40-OH2.4]
[F30, F20-OS3.1] [F31-OS3.2] [F43-OS3.4]
[F74-OA2]
10.3.8.2. Areas Requiring a Barrier-Free Path of Travel
(1) [F73-OA1]
10.3.8.3. Washrooms
(1) [F74-OA2]
[F72-OH2.1] [F71-OH2.3]
[F73-OA1]
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10.3.8.4. Ramps
(1) [F73-OA1]
10.4.1.3. Live Loads Due to Earthquakes
(1) [F20-OP2.1]
[F20, F22-OP2,4] [F20-OP2.3]
[F20-OS2.1] [F22-OS2.3, OS2.4]
10.7.1.1. Plumbing Systems
(1) [F30-OS3.1] [F31-OS3.2] [F43-OS3.4]
[F70-OH2.2] [F72-OH2.1]
10.9.2.1. Dimensions of Means of Egress and Direction of Door Swing
(1) [F10-OS3.7] [F30-OS3.1]
(2) [F10-OS3.7]
10.9.2.2. Fire Protection of Exits and Separation of Public Corridors
(1) [F05-OS1.5] [F03-OS1.2]
[F03-OP1.2]
(2) See Sentences 9.9.1.3.(1) to 9.10.22.3.(3) in Table 9.36.1.1.
10.9.2.3. Flame-Spread Limits in Means of Egress
(1) [F01, F02, F05-OS1.5] [F01, F02-OS1.2]
10.9.2.4. Exit Signs
(1) [F10-OS3.7]
10.9.3.1. Spatial Separation and Exposure Protection
(1) [F02, F03-OP3.1]
(2) [F02, F03-OP1.2]
[F02, F03-OP3.1]
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(3) [F03, F04-OP1.2] [F03, F04-OS1.2] [F03, F04-OP3.1]

10.9.3.2. Fire Alarm and Detection Systems (1) (2) [F11, F13-OS1.5] [F13, F03, F11-OS1.2] [F11-OP1.2].

(1) See Parts 2 and 3 of Division A.".

Add the following Notes:

"A-10.2.1.1.(1)(b) Standard Applicable during the Construction or Alteration of the Building. Section 344 of Division III, General, of Chapter VIII, Buildings, of the Safety Code (chapter B-1.1, r. 3) determines, for every building, the standard applicable during its construction.

**A-10.2.2.1.(1) Maintenance or Repair Work.** The restoration or repair of projections and stairs is considered maintenance work for the purposes of Part 10 where such work is performed to maintain or restore the projections and stairs in good condition without altering their characteristics or functions. However, the projections and stairs must conform to the regulations in force at the time of their original construction.

**A-10.2.2.2.(2)** Change of Occupancy. Change of occupancy also applies to a change of occupancy within a group of occupancy. For example, if a school is converted into a licensed beverage establishment, even though both occupancies are in the same group, the NBC applies to the building or part of the building in which the occupancy is changed, even if the change does not involve alteration work. This is because Part 10 includes provisions that could cover certain elements, such as fire separations and their fire-resistance rating, of the adjacent parts located around, under or above the part in which the occupancy is changed.

**A-10.2.2.2.(3) Combustible Building.** Buildings designed according to Article 3.2.2.50. or 3.2.2.58., or according to Sentence 3.2.2.50.(3) or 3.2.2.57.(3) of the NBC 2010 am. Québec, or according to one of the guides referred to in the Article, are essentially combustible buildings, Group C or D, in which several occupancies are not permitted because of the risks they represent.

During the alteration of such a building or one of its parts, the installation of a risky occupancy not permitted in the original design of the building results in a reduction of the level of safety of the occupants. This is contrary to the NBC, which aims to increase the level of safety. Consequently, the provisions of Part 10 do not apply during the alteration of such a combustible building, Group C or D or one of its parts.

In addition, the difference between a combustible building and a non-combustible building does not change only with a sprinkler system, even if the system is designed for a risk level higher than that required by the NBC for the occupancy covered. The design criteria of a combustible building are not limited to the performance level of the sprinkler system, and even more if the alteration of such a combustible building or one of its parts covers the increase of the building height or an addition to the building area or floor area.

A-10.2.2.2.(4) 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 use 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 addition or modification of a vertical transportation facility are not governed by this type of alteration since they are already governed by other requirements in Part 10.

The modification of most of the elements and components of walls, ceilings and floors of a dwelling unit not affecting an adjacent dwelling unit or adjacent corridor such as a minor alteration, so all the altered elements in the dwelling unit must conform to the NBC.

**A-10.3.4.1.(1)(b) Capacity of Exits Serving an Altered Part.** If the calculation of the capacity requires the exits to have a width larger than 900 or 1100 mm, they should be modified or another exit conform to Section 3.4. should be added.

**A-10.3.4.4.(1) Exit Sign.** The purpose of this Sentence is to permit the use of exit signs consisting of the letters "SORTIE" or "EXIT" in red or white on a contrasting red or white background in existing buildings even during alteration work. However, if during the course of the alteration work, the owner or his or her representative decides to use the green pictogram to identify an exit in a floor area, all of the exits signs in that floor area must be of the same type. Exit signs located inside individual suites in the floor area must also be replaced, along with those located in an interconnected floor space or a mezzanine leading to that floor area. It is thus permitted to have two different types of exit signs in the same building but not in the same floor area.

| Where the alteration work includes adding an exit in the building, all of the exit signs in the floor area(s) under alteration must conform to the requirements of Sentence 3.4.5.1.(2) for a building designed according to Part 3 of the NBC or conform to Sentence 9.9.11.3.(2) for a building designed according to Part 9 of the NBC because the alteration work involves the addition of an exit and not its replacement. |
|---|
| <b>A-10.5.1.1.(1) Change of Occupancy without Work.</b> The installation of equipment producing a lot of water steam inside a building, such as a lap pool, a spa or a steam sauna, may create different environments inside the building.".  |
| Add the following Part:   |
| "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   |
|   |
| 11.3. Objectives and Functional Statements  |
| 11.3.1. Objectives and Functional Statements  |
|   |

| Part 11 Energy Efficiency   |
|---|
| Section 11.1. General   |
| 11.1.1. Scope and Definitions   |
| 11.1.1.1. Scope  (1) The scope of this Part shall be as described in Subsection 1.3.3. of Division A.   |
| <ul><li>11.1.2. Defined Words</li><li>(1) Words that appear in italics are defined in Article 1.4.1.2. of Division A.</li></ul>   |
| Section 11.2. Thermal Insulation  |
| 11.2.1. General   |
| 11.2.1.1. Application  (1) This Section applies to all walls, floors, ceilings, windows, doors and skylights separating heated space from unheated space, exterior air or the ground of a <i>building</i> that is to be heated during winter (see Note A-11.2.1.1.(1)). |
| 11.2.1.2. General Requirements  |
| <ul><li>(1) Windows, doors and skylights shall conform to Section 9.7.</li><li>(2) Foamed plastic shall be protected in accordance with Article 9.10.17.10.</li></ul>   |
| (3) Walls, floors and roofs in contact with the ground shall conform to Subsections 9.13.2. and 9.13.3.   |
| (4) Crawl spaces shall be ventilated in conformance with Subsection 9.18.3.   |
| <b>(5)</b> Roof spaces shall be ventilated in conformance with Subsection 9.19.1.   |

- **(6)** Thermal insulation and measures to control heat transfer, air leakage and condensation shall conform to Section 9.25. (see Note A-11.2.1.2.(6)).
- (7) Cladding shall conform to Section 9.27.
- (8) Ventilation shall conform to Section 9.32.

#### 11.2.2. Thermal Resistance

#### 11.2.2.1. Thermal Resistance of Building Components

- (1) Except as permitted by Sentences (2) to (4), Articles 11.2.2.2. to 11.2.2.4. and Subsection 11.2.3., the *total thermal resistance* of a *building* component shall 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 6000, 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 6000.

(See Note A-11.2.2.1.(1).)

- **(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 *total thermal resistance* of the roof complied with 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 complies with the requirements of Part 11, and
- (b) the only components whose *total thermal resistance* may be upgraded are roofs, ceilings, walls above ground level, doors, windows and skylights.

(See Note A-11.2.2.1.(3).)

- **(4)** The *total thermal resistance* of heated garages shall have a value of not less than
- (a) 5.2 for the ceilings and floors adjacent to the dwelling unit,
- (b) 3.5 for the walls adjacent to the dwelling unit, or
- (c) the foundation wall
- (i) 2.99 between the garage and the *dwelling unit* over the entire vertical surface of the wall, or
- (ii) 1.76 for the other walls to a depth of 600 mm below ground level. (See Note A-11.2.2.1.(4).)

#### 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 6000

Forming part of Sentence 11.2.2.1.(1)

| Building Component  | Total Thermal Resistance (RSIT) |
|---|---------------------------------|
| 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                            |
| Foundation wall <sup>(1)</sup> 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 6000

Forming part of Sentence 11.2.2.1.(1)

| Building Component  | Total Thermal Resistance (RSIT) |
|---|---------------------------------|
| 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                            |
| Foundation wall <sup>(1)</sup> 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.

# 11.2.2.2. Thermal Resistance of Floors-on-Ground other than a Garage Floor

- (1) The thermal resistance of material insulating a floor-on-ground shall have a value of not less than
- (a) 1.32 for a floor-on-ground located above the ground or not more than 600 mm below the adjacent ground level,
- (b) for a floor-on-ground located more than 600 mm below the adjacent ground level,
- (i) 0.88, or
- (ii) 1.32 and installed around the floor-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 floor-onground and the insulating material is installed under the heating pipes, tubes, ducts or cables, or
- (ii) heating pipes, tubes, ducts or cables are embedded in the floor-on-ground and the insulating material is installed under the floor-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 other than a *foundation* wall.

## 11.2.2.4. Thermal Performance of Windows, Doors and Skylights

- (1) The thermal characteristics of windows, doors and skylights shall
- (a) be determined in accordance with CAN/CSA-A440.2/A440.3, "Fenestration energy performance/User guide to CSA A440.2-19, Fenestration energy performance", and
- (b) conform to the values in 11.2.2.4.

(See Note A-11.2.2.4.(1).)

- **(2)** Windows and skylights including glazed doors shall have a minimum airtightness rating of A2 in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS North American Fenestration Standard/Specification for Windows, Doors, and Skylights".
- (3) Except in the case of the enlargement of a *building* not more than 10 m<sup>2</sup>, the total area of the rough openings in the *building* components that are to receive windows, doors, skylights and other similar components shall not be greater than 30% of the area of walls above ground level, including above-ground foundation walls (see Note A-11.2.2.4.(3)).
- (4) The thermal performance required in Sentence (1) and the maximum area described in Sentence (3) may be different provided
- (a) the annual energy consumption of the proposed construction does not exceed that of the reference construction conforming to the requirements of Part 11, and

(b) the only components that may be altered with regard to *total thermal resistance* are roofs, ceilings, walls above ground level, doors, windows and skylights.

(See Note A-11.2.2.1.(3).)

Table 11.2.2.4.

Maximum Overall Thermal Transmittance (U) and Minimum Energy Rating (ER) of Windows, Doors and Skylights

Forming part of Sentence 11.2.2.4.(1)

| Building Component  | Building Located in<br>a Municipality<br>Whose Number of<br>Degree-days Below<br>18°C Is Less Than<br>6000 | Building Located in a<br>Municipality Whose<br>Number of Degree-<br>days Below 18°C Is Of<br>At Least 6000 |
|---|--|--|
| Maximum overall thermal transmittance (U-value) of doors without glazing  | 0.9  | 0.8  |
| Maximum overall thermal transmittance (U-value) / Minimum energy rating (ER) or maximum overall thermal transmittance (U-value) of glazed doors | 2.0 / 21<br>or<br>1.8  | 2.0 / 25<br>or<br>1.6  |
| Maximum overall thermal transmittance (U-value) / Minimum energy rating (ER) of windows   | 2.0 / 21<br>or<br>1.8 / 13   | 2.0 / 25<br>or<br>1.6 / 17   |
| Maximum overall thermal transmittance (U-value) of skylights  | 2.85   | 2.7  |

## 11.2.3. Thermal Bridges

#### 11.2.3.1. Thermal Bridges in Walls

(See Note A-11.2.3.(1).)

- **(1)** Building components constituting a thermal bridge shall be covered with insulating material having a thermal resistance of
- (a) for a wood frame, of
- (i) at least 0.7 if the frame members are spaced less than 600 mm o.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 o.c., or
- (ii) at least 1.32 in all other cases,
- (c) at least 0.88 for a concrete construction.
- (2) The insulating material shall 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* shall be covered with insulating material to obtain a 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.
- **(4)** Except as permitted by Sentence (5), the header shall be insulated so as to have a *total thermal resistance* value equivalent to that required for a wall above ground level other than a *foundation* wall.
- (5) In the case of a concrete construction where the header may only be insulated on the outside, the *total thermal resistance* value is permitted to be lower than that required in Sentence (4) provided 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 shall have a minimum value of 1.32 in 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 Floor-on-Ground other than a Garage Floor(1) The insulating material between the *foundation* wall and the floor-onground shall have a thermal resistance of(a) not less than 1.32 for a floor-on-ground located above ground level or

- (a) not less than 1.32 for a floor-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 floor-on-ground located more than 600 mm below ground level, not less than
- (i) 1.32 if heating pipes, tubes, ducts or cables are buried under or are embedded in the floor-on-ground, or
- (ii) 0.7 for other floors-on-ground.

## 11.3. Objectives and Functional Statements

## 11.3.1. Objectives and Functional Statements

#### 11.3.1.1. Attribution to Acceptable Solutions

(1) For the purposes of compliance with the NBC as required in Clause 1.2.1.1.(1)(b) of Division A, the objectives and functional statements attributed to the acceptable solutions in this Part must be the objectives and functional statements identified in Table 11.3.1.1.

(See Note A-1.1.2.1.(1).)

# Table 11.3.1.1. Objectives and Functional Statements Attributed to the Acceptable Solutions in Part 11

Forming part of Sentence 11.3.1.1.(1)

- 11.2.2.1. Thermal Resistance of Building Components
- (1) [F92-OE1.1.]
- (2) [F92-OE1.1.]
- (4) [F92-OE1.1.]
- 11.2.2.2. Thermal Resistance of Floors-on-Ground other than a Garage Floor
- (1) [F92-OE1.1.]
- 11.2.2.3. Thermal Resistance near Eaves
- (1) [F92-OE1.1.]

- 11.2.2.4. Thermal Performance of Windows, Doors and Skylights
- (1) [F92-OE1.1.]
- (2) [F92-OE1.1.]
- (3) [F92-OE1.1.]
- 11.2.3.1. Thermal Bridges in Walls
- (1) [F92-OE1.1.]
- (3) [F92-OE1.1.]
- (5) [F92-OE1.1.]
- 11.2.3.2. Thermal Bridges in Floors
- (1) [F92-OE1.1.]
- 11.2.3.3. Thermal Breaks in a Foundation Wall in Contact with a Floor-on-Ground other than a Garage Floor
- (1) [F92-OE1.1.]".

#### Add the following Notes:

- "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, rooms or areas 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-M, "Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method".
- **A-11.2.2.1.(1) Thermal Resistance of 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 the horizontal are considered to be wall assemblies.

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

The thermal resistance of a building component can be calculated by conducting tests at temperature conditions specific to the construction site using ASTM C 1363, "Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus".

**A-11.2.2.1.(3) Conformity Assessment by Comparison of Annual Energy Consumption.** The concept of measuring conformity by comparing the annual energy consumption of a reference construction to that of a proposed construction is one way to benchmark the conformity of a proposed construction to Part 11 requirements. The compliance requirements of this Code are consistent with an objective-based code of demonstrating for the proposed construction a level of performance similar to that of the reference construction.

"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.

"Construction energy target" means the annual energy consumption of the reference construction.

"Annual energy consumption" means the annual sum of heating 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 of the proposed construction and the construction energy target of 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 calculations, it shall be used for both the reference and proposed constructions, and may be tested according to AINSI/ASHRAE 140, "Test for the Evaluation of Building Energy Analysis Computer Programs", and variations in the computer program results from the different recommended values must be calculated.

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

The calculation procedure must account for the annual energy consumption of systems and equipment required for space heating and conditioning and for ventilation. The calculation procedure must account for heat transfer through wall assemblies, roof-ceiling assemblies and exposed floor assemblies due to the 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 in the calculations are above-ground assemblies (walls and roof-ceiling assemblies), assemblies in contact with the ground (floors and walls), and doors, windows and skylights.

Where the calculation procedure accounts for the effect of thermal mass, the contents of the construction shall be excluded.

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 openings and the opaque envelope assembly type, their thermal resistance and areas, and more specifically to

- (a) the area of the above-ground portion of basement walls,
- (b) the thermal resistance of walls, below-ground walls, ceilings below attics, roof assemblies and header joists,
- (c) the maximum overall thermal transmittance of openings,
- (d) the total thermal resistance of below-ground walls and floors-on ground,
- (e) exterior walls, roof-ceiling assemblies, exposed floors, doors, walls and floors in contact with the ground,
- (f) the configuration of insulation in assemblies in contact with the ground, and
- (g) the thermal resistance of foundation walls.

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

- (a) the thermal resistance values and respective areas of all opaque building envelope assemblies, including all above-ground and below-ground roof-ceiling, wall, and floor assemblies.
- (b) the overall thermal transmittance of all windows, doors and skylights and their respective areas,
- (c) the ratio of total opening area to exterior wall area,
- (d) the design basis for the ventilation rates, and

(e) 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 inclusion of which is suggested, the proposed construction energy performance compliance calculation report must include

- (a) a project information section containing
- a project description,
- the project address,
- the name and version of the calculation tool, and
- the geographic region in which the proposed construction is to be built,
- (b) a summary of the characteristics of the proposed construction envelope, HVAC system,
- (c) 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
- (d) where a software program is used for compliance calculations,
- the simulation report for the proposed construction and for the reference construction, and
- the name of the software program used.

**A-11.2.2.1.(4) Thermal Resistance of Garages.** This Sentence aims to alleviate discomfort in rooms adjacent to a garage. Even when a heating system is installed in the garage, the temperature in the garage may be kept low to save on heating costs in that space. 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 for windows.

Not more than  $1.85~\text{m}^2$  of glass block may be installed in the same construction where the glass block has a maximum overall thermal transmittance equivalent to that of skylights as indicated in Table 11.2.2.4.

The overall thermal transmittance of doors may be obtained using the door or door/storm door assembly.

A garage door giving access to vehicles must comply with the values in Table 11.2.2.4. To minimize surface condensation on the warm side of windows, doors or skylights, it is recommended that install those components inside the insulation or near the vertical axis of the centre of the RSI value of the insulating material. This 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. "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 are permitted to be excluded in calculating the total area of openings, even if those doors have windows. 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 orientation, it is recommended to take 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 need not be taken into account as members that may constitute a thermal bridge. Insulation of thermal bridges excludes the interior and exterior finishes of the building assembly and surface air films behind those finishes.". **Division C** Part 1 1.2.1.1. Replace "9" in Sentence (3) by "11". Part 2 Replace the title of Subsection 2.2.7. by the following: "2.2.7. Declaration of Construction Work": Table of contents Replace the titles of Section 2.3. and Subsection 2.3.1. by the following: "2.3. Approval of Alternative Solutions"; "2.3.1. Approval of Alternative Solutions".

| 2.2.4.2. | Strike out "submitted with the application to build" in Sentence (1).   |
|----------|---|
| 2.2.4.3. | Strike out "submitted with the application to build" in Sentence (1).   |
|          | Strike out "submitted with the application to build or excavate" in Sentence (1);   |
| 2.2.4.6. | Replace Sentence (2) by the following:  |
|          | "Evidence that justifies the information on the drawings shall be included in the documents accompanying them.".  |
|          |   |
| 2.2.7.   | Replace the title by the following:  "Declaration of Construction Work".  |
|          | Replace Sentence (1) by the following:  |
|          | "(1) The general contractor or, in the general contractor's absence, the specialized contractor or the owner-builder shall declare to the Régie du bâtiment du Québec all construction work performed on a <i>building</i> or facility intended for use by the public and to which Chapter I of the Construction Code (chapter B-1.1, r. 2) applies.";              |
| 2.2.7.1. | Add the following Sentence:   |
|          | "(2) Sentence (1) does not apply to construction work declared under subparagraph 1.1 of the first paragraph of section 120 of the Act respecting land use planning and development (chapter A-19.1) or under another chapter of the Construction Code (chapter B-1.1, r. 2) or to maintenance or repair work to which Chapter I of the Construction Code applies." |
|          | Replace the title by the following:   |
| 2.2.7.2. | "Submission of the Declaration";  |
|          |   |

|          | Replace Sentence (1) by the following:   |
|----------|--|
|          | "(1) The declaration required under Article 2.2.7.1. shall be submitted to the Régie du bâtiment du Québec not later than the twentieth day of the month following the date on which work starts.".            |
|          | Replace the title by the following:  "Form";   |
| 2.2.7.3. | Replace Sentence (1) by the following:   |
|          | "(1) The declaration of work is permitted to be made on the form provided by the Régie or on any other document clearly and legibly completed for that purpose.".  |
|          | Replace the title by the following:  "Content";  |
|          | Replace Sentence (1) by the following:   |
|          | "(1) The declaration shall contain   |
|          | (a) the address of the <i>building</i> or facility intended for use by the public, if applicable, and the lot number of the site where the work is performed,  |
| 2.2.7.4. | (b) the name, address and telephone number of the person for whom the work is performed,   |
|          | (c) the name, address, telephone number and licence number of the contractor or owner-builder,   |
|          | (d) the estimated start and end dates of the construction work,  |
|          | (e) the nature and type of the work,   |
|          | (f) the <i>occupancy</i> of the <i>building</i> or facility intended for use by the public, its classification under the NBC, the existing and planned number of <i>storeys</i> and <i>building area</i> , and |
|          | (g) the name, address and telephone number of the person who prepared the plans and specifications relating to the construction work.".  |
| 2.2.7.5. | Strike out the Article.  |
| 2.2.8.   | Strike out the Subsection.   |

| 2.3.                     | Replace the title by the following:  "Approval of Alternative Solutions".   |
|--------------------------|---|
| 2.3.1.                   | Replace the title by the following: "Approval of Alternative Solutions".  |
| 2.3.1.1.                 | Replace the title by the following: "Conditions of Approval";   |
|                          | Replace Sentences (1) to (6) by the following:  "(1) The proposed alternative solutions shall be approved by the Régie on the conditions it sets pursuant to section 127 of the Building Act (chapter B-1.1).". |
| Division C<br>Appendix A |   |
| A-2.2.8.1.(1)            | Strike out the Note.  |
| A-2.2.8.3.<br>(2)(c)(i)  | Strike out the Note.  |
| A-2.3.1.                 | Strike out the Note.  |