

Public Review

BC Building Code 2023

Proposed changes to harmonize with the National Building Code 2020 and provide additional B.C. requirements

Topic: Accessibility

Code change number: BCBC2023-PR-01.1-AC

Code reference: BC Building Code 2018 – Section 3.8. and 9.5. of Div B

Description of the proposed change

It is proposed to mainly adopt the National Building Code 2020 Section 3.8. along with some amendments for clarity as well as enhance existing B.C. variations to refresh and increase the application of adaptable dwelling unit provisions.

Key accessibility changes to be adopted from the National Building Code 2020 for commercial and public buildings and in large new multi-unit residential buildings, like condos and apartments include:

- Requirement that all building entrances and entrances to accessible washrooms be equipped with a power-operated door
- Functional paths of travel, turning space, doorways, ramps, seating based on recent anthropometric research
- Inclusive washrooms equipped with a full-sized change table and space for care givers, universal dressing and shower facilities and emergency lighting
- Improved signage and prompts like receiving information through hearing or touch to guide people throughout buildings

Proposed B.C. variations to update the adaptable dwelling unit provisions include:

- Requiring 100 per cent of dwelling units to be adaptable in new, large apartments and condos, and requiring the first floor dwelling units to be adaptable in new, small apartments and condos:
 - Accessible clearances through doorways and along paths of travel to living spaces, based on recent anthropometric research
 - Space in a bedroom, bathroom and kitchen
 - Switches and other controls at an accessible height
 - Reinforcement of bathroom walls to allow future installation of grab bars
- Modest increases for smaller residential housing, such as single-detached homes, townhomes, and row homes, to require:
 - An accessible clearance at the entry door
 - Reinforcement of bathroom walls to allow future installation of grab bars
- An elevator is required by the NBC 2020 in large two and three storey apartment buildings. This helps support:
 - Accessible design features for the rest of the building
 - More accessible housing that people need and can afford

Background

The *Canadian Human Rights Act*, and Canada's commitment to the UN Convention on the Rights of Persons with Disabilities endeavor to create a society that promotes mutual respect that is equal in dignity and rights.

In 2019, the *Accessible Canada Act* came into effect with the objective to ensure a barrier-free Canada by 2040. Afterwards, the *Accessible British Columbia Act* came into effect in 2021, providing a provincial framework to identify, remove, and prevent accessibility barriers.

The BC Building Code is substantively based on the National Building Code. About every five years the National Building Code is updated, and B.C. adopts many of the requirements into the next edition of the BC Building Code.

In 2009, the BC Building Code was updated to include voluntary rules for adaptable dwellings in multi-unit residential buildings in response to multiple requests from local governments to implement adaptable housing requirements through their bylaws. Adaptable dwellings are designed and built with features that can be changed to meet occupants' needs, allowing them to stay in their homes through illness, injury, and/or aging.

In 2015, the *Building Act* came into effect with the objective to enable greater consistency for provincial technical building requirements.

For nearly four decades, the BC Building Code provided accessibility rules that went beyond the national and other provincial building codes. In 2015, the National Building Code included many updates to increase accessibility in buildings that aligned more closely with the BC Building Code.

In June 2021, the *Accessible British Columbia Act* was adopted to provide a legal framework to work alongside people with disabilities and the broader community to identify, remove and prevent barriers that people with disabilities face and support a culture of inclusion throughout B.C.

While, B.C. has committed to harmonization with the National Codes, the Construction Codes Reconciliation Agreement, allows for instances when provincial variations specific to B.C.'s geography, climate, local needs, industry practices, and/or provincial priorities, such as accessibility, are required.

Through engagement with the public, including people living with disabilities, accessibility and industry experts, and local governments, we received valuable input on what accessibility changes should be actioned. An executive summary and a detailed report of feedback received, that helped to inform these code change proposals, are available on the accessibility [website](#).

Justification

As B.C.'s population continues to grow and age, it is anticipated that the number of people requiring an accessible home will increase. Current housing inventory was built to either the BC Building Code 2018 or an earlier edition, that did not provide internal accessible requirements for suites. Housing is a persistent stock, that may last a century. The current, coupled with the anticipated, demand for more accessible homes signals an opportunity to increase B.C.'s code requirements for accessible and adaptable homes.

These code change proposals represent a measured approach to balance accessibility and housing supply priorities.

Through the engagement, 61 per cent of survey respondents said that all new homes should be designed and built adaptable. Adaptable housing features support occupants to update specific features based on personal needs and avoid a one-size-fits-all approach, which may create barriers.

Requiring 100 per cent adaptable features for large multi-unit residential buildings, eliminates the risk of adaptable units being sold at a premium price point and helps to ensure more equity and availability of these units for all people.

Requiring more modest increases for smaller housing types acknowledges the landscape challenges many of these buildings face in respect to accessible paths of travel and entrances. This approach aims to prevent impacts to square footage allotments, preventing financial challenges for developers, builders, and homebuyers. Introducing incremental updates provides industry with time to adapt practices and prepare for greater requirements in the future.

In discussions with industry, we learned that more time is needed to better support inter-storey travel for more building types as well as level thresholds due to water penetration issues.

The National Building Code 2020 provides a requirement that all building entrances be accessible with a power-operated door. Fifty-five per cent of public survey selected automatic doors as a priority feature to increase accessibility. Ensuring safe and equitable building access for all users is important.

Combining the National Building Code 2020 requirements with some unique to B.C. requirements will help:

- provide more homes for people, especially those living with disabilities, and save people expensive retrofitting costs
- enable seniors to age in place and reduce expensive renovation or relocation costs
- help tenants to secure housing and eliminate cost premiums for accessible units

The B.C. Government will continue to work with national and provincial partners to further develop accessibility requirements for adoption in future codes.

Building Act

The *Building Act* provides the Minister with sole authority to establish building codes. A key *Building Act* objective is to enable greater consistency to provincial technical building requirements.

Under the *Building Act*, local governments may maintain existing bylaw requirements, adopted prior to December 15, 2017, for accessibility of buildings and adaptable dwelling units, as unrestricted matters. However, local governments are unable to amend existing or add new requirements. This policy approach was intended to be a temporary measure while the Province updated the BC Building Code accessibility provisions.

Given the proposals to update accessibility and adaptability requirements, the Building Act General Regulation is being reviewed. Further engagement with local governments is planned.

Impact analysis

Focusing on making buildings more accessible and adaptable aims to minimize future retrofitting costs and helps people to stay in their homes through illness, injury, and/or aging.

Modest changes to small homes and greater changes to larger buildings aim to safeguard housing affordability, housing availability, and respect industry capacity while increasing the supply of accessible housing

Providing more inclusive building access supports economic viability by including all people to access buildings facilities and services.

Proposed National Building Code content and B.C. specific content

As part of B.C.'s ongoing harmonization efforts, the BC Building Code 2023 will be substantially based on the NBC 2020, which includes a number of updates for accessibility.

This consolidation is the proposed code language on accessibility that, if approved by the Minister, will appear in the BC Building Code 2023.

To support readability, the Notes have been excluded from this document. If you would like to receive the proposed BC Building Code 2023 Notes, please email BSSB.Public.Review@gov.bc.ca.

The proposed content related to accessibility for the next edition of the BC Building Code is displayed. The NBC 2020 forms the basis on which B.C.'s unique provisions are applied. Comments should focus on the changes to accessibility requirements from those of the BC Building Code 2018 edition.

Legend

Some historical and unique to B.C. variations are proposed to be carried over into the BC Building Code 2023, and new unique to B.C. variations are proposed to make new buildings more accessible for all people. These will appear in green text. NBC 2020 language not proposed for adoption in B.C. appears as stricken out in ~~red text~~. Comments appearing in boxes are for information only and do not form part of the proposed Code language.

The model National Building Code of Canada 2020 (NBC) includes changes for audible signal devices and separate signal circuits in Article 3.2.4.18. which are proposed for adoption but not shown in this reproduction.

The NBC includes changes for visible signals in Article 3.2.4.19. which are proposed for adoption but not shown in this reproduction. British Columbia's unique and additional application and requirements for visible signals is proposed to be continued with some amendments. British Columbia amendments include reorganization of content, the redaction of words displayed on lenses of visible alarms, and the requirement for special outlet boxes is linked to adaptable dwelling unit provisions.

The NBC includes changes for smoke alarms in Article 3.2.4.20. which are proposed for adoption but not shown in this reproduction. British Columbia's unique provision for visible signal devices in care occupancies with a single-stage fire alarm is continued and moved to Article 3.2.4.20.

The NBC includes changes for minimum lighting requirements in Article 3.2.7.1. which are proposed for adoption but not shown in this reproduction. British Columbia's application for illumination of accessible paths of travel is continued and moved to Article 3.2.7.1.

The NBC includes changes for emergency lighting requirements in Article 3.2.7.3. which are proposed for adoption but not shown in this reproduction.

The NBC includes requirements for tactile walking surface indicators in Article 3.3.1.19. which are proposed for adoption but not shown in this reproduction.

The NBC includes requirements for tactile information on exit signs in Article 3.4.5.2. which are proposed for adoption but not shown in this reproduction.

The NBC includes changes for ramp slope in Article 3.4.6.7. which are proposed for adoption but not shown in this reproduction. British Columbia's unique provision for curb ramps are continued and moved to Article 3.4.6.7.

Section 3.8. Accessibility

(See Note A-3.8.)

3.8.1. Scope

3.8.1.1. Scope

- 1) This Section is concerned with the ~~barrier-free~~ design and construction of *buildings* and occupancies to make them accessible.
- 2) *Buildings* and facilities required to be ~~barrier-free~~ accessible in accordance with Subsection 3.8.2. shall be designed in accordance with Subsection 3.8.3.
- 3) Alterations and additions to existing buildings shall conform to Subsection 3.8.4.
- 4) Dwelling units required to be adaptable dwelling units shall be designed in accordance with Subsection 3.8.5.

The scope as established in the British Columbia Building Code 2018 (BCBC) is carried over with an update to Sentence (4) to coordinate with the Code proposal to require some dwelling units to be adaptable dwelling units.

3.8.2. Application

3.8.2.1. Exceptions

(See Note A-3.8.2.1.)

- 1) Except as required by Sentence (2),~~The~~ the requirements of this Section apply to all *buildings*, except
 - a) detached houses, semi-detached houses, houses with a *secondary suite*, duplexes, triplexes, townhouses, row houses and boarding houses (see Note A-1.4.1.2.(1) of Division A, Secondary Suite),
 - b) *buildings* of Group F, Division 1 *major occupancy*, and
 - c) *buildings* that are not intended to be occupied on a daily or full-time basis, including automatic telephone exchanges, pumphouses and substations.
- 2) Buildings described in Clause (1)(a) shall comply with Sentence 3.8.5.1.(2).

NBC 2020 Article 3.8.2.1. is proposed for adoption with some B.C. amendments for clarity, and also to establish requirements for the housing types listed in Clause (1)(a). Some BC Building Code 2018 provisions are relocated elsewhere, following the format of the NBC 2020, such as an exemption for floor levels with duplicated features now proposed in Article 3.8.2.3.

3.8.2.2. Entrances

(See Note A-3.8.2.2.)

- 1) Except for service entrances and entrances to *suites* described in Clause 3.8.2.3.(2)(l), all pedestrian entrances to an ~~barrier-free~~ accessible storey of a *building* referred to in Sentence 3.8.2.1.(1) shall be ~~barrier-free~~ accessible and shall connect to an ~~barrier-free~~ accessible exterior path of travel complying with Sentence 3.8.2.5.(1).
- 2) An ~~barrier-free~~ accessible entrance required by Sentence (1) shall be designed in accordance with Subsection 3.8.3.
- 3) At an ~~barrier-free~~ accessible entrance that includes more than one doorway, only one of the doorways is required to be designed in accordance with Subsection 3.8.3.
- 4) If a *walkway* or pedestrian bridge connects two ~~barrier-free~~ accessible storeys in different *buildings*, the path of travel from one storey to the other storey by means of the *walkway* or bridge shall be ~~barrier-free~~ accessible.

NBC 2020 Article 3.8.2.2. is proposed for adoption including the new requirement for all pedestrian building entrances to be accessible.

3.8.2.3. Areas Requiring a ~~Barrier-Free Path of Travel~~ Access

(See Note A-3.8.2.3.)

- 1) Except as permitted by Sentence (2), an ~~barrier-free~~ accessible path of travel from the entrances required by Sentence 3.8.2.2.(1) to be ~~barrier-free~~ accessible shall be provided throughout ~~the all~~ entrance *storeys* and within all other normally occupied ~~floor areas~~ areas of buildings. (See Article 3.3.1.7. for additional requirements regarding *floor areas above or below the first storey* to which an ~~barrier-free~~ accessible path of travel is required.)
- 2) ~~A barrier-free~~ An accessible path of travel for ~~persons in wheelchairs~~ is not required
 - a) to service rooms,
 - b) to elevator machine rooms,

- c) to janitors' rooms,
- d) to *service spaces*,
- e) to crawl spaces,
- f) to *attic or roof spaces*,
- g) to the floor level above or below the entrance level in ~~*buildings no more than 2 storeys in building height or in 2-storey suites*~~ with more than one level, ~~unless provided~~ the floor level above or below (see Note A-3.8.2.3.(2)(g))
 - i) is not served by a ramp, a passenger elevator, a platform-equipped passenger-elevating device, an escalator or an inclined moving walk,
 - ii) is less than 600 m² ~~or more~~ in *floor area*,
 - iii) contains only facilities that are ~~not also~~ contained on the entrance level, ~~but that are integral to the principal function of the entrance level, or and~~
 - iv) does not contains an *assembly occupancy* more than 100 m² in *floor area*,
- h) within a parking level with no ~~*barrier-free*~~ *accessible* parking spaces,
 - i) within *high-hazard industrial occupancies*,
 - j) within portions of a *floor area* with fixed seats in an *assembly occupancy* where those portions are not part of the ~~*barrier-free*~~ *accessible* path of travel to spaces designated for wheelchair use,
 - k) within floor levels of a *suite of residential occupancy* that are not at the same level as the entry level to the *suite*,~~or~~
 - l) within a *suite of residential occupancy* that has not been designated by this Code or an *authority having jurisdiction* to be *accessible or designed and constructed as an adaptable dwelling unit* ~~*accessible for use by persons with physical disabilities, or*~~
 - m) *in a building of residential occupancy that is not more than two storeys that contains multiple dwelling units and common interior space served by a common building entrance, on a floor level that*
 - i) is not served by a ramp, passenger elevator, a platform-equipped passenger-elevating device, an escalator or an inclined moving walk,
 - ii) Is less than 600 m² in floor area,
 - iii) is not a building entrance level, and
 - iv) does not contain common facilities that are not also provided on an accessible level.

The exemptions in NBC 2020 Sentence (2) are proposed for adoption with some amendments for clarity. The BCBC2018 located some of these exemptions outside Article 3.8.2.3.

Clause (g) is revised to exempt only certain circumstances of adjacent floor levels from the requirements for access.

Clause (m) is to clarify how Clause (g) would apply specifically to multi-unit residential buildings. Multi-unit residential buildings that share a common building entrance and common interior spaces must provide access on any common building entrance level and on any level with spaces or facilities intended for the common use by residents. Second storeys less than 600 m² with only private dwelling units may be exempt. (Clause (l) establishes whether or not any of Section 3.8. applies inside dwelling units.)

3) In an *assembly occupancy*, the number of spaces designated for wheelchair use within rooms or areas with fixed seats shall conform to Table 3.8.2.3. (See also Article 3.8.3.22. for additional requirements.)

4) The number of spaces designated for wheelchair use within waiting rooms or areas with fixed seats shall conform to Table 3.8.2.3. (See Note A-3.8.2.3.(4).) (See also Article 3.8.3.22. for additional requirements.)

5) Except as provided in Sentence (6), in an *assembly occupancy* with more than 25 fixed seats, each row of seats served by two aisles shall have one adaptable seat conforming to Subsection 3.8.3. located adjacent to one of the aisles. (See Note A-3.8.2.3.(5) and (6) and 3.8.3.22.(1) and (4).)

6) At least 5% of the adaptable seats required by Sentence (5) but no more than 20 adaptable seats shall adjoin an ~~barrier-free~~ accessible path of travel. (See Note A-3.8.2.3.(5) and (6) and 3.8.3.22.(1) and (4).)

Table 3.8.2.3.
Designated Wheelchair Spaces
Forming Part of Sentences 3.8.2.3.(3) and (4)

Number of Fixed Seats in Seating Area	Number of Spaces Required for Wheelchairs
2 - 99	2
100 - 499	3, plus 1 for each additional increment of 70 seats in excess of 100

500 - 1 999	9, plus 1 for each additional increment of 80 seats in excess of 500
2 000 - 7 999	28, plus 1 for each additional increment of 95 seats in excess of 2 000
Over 7 999	91, plus 1 for each additional increment of 100 seats in excess of 8 000

The numbers of spaces for wheelchairs in seating areas with fixed seats in the NBC 2020 are different from the numbers in the BCBC 2018, however the NBC 2020 also includes required adaptable seats which are proposed for adoption.

3.8.2.4. Access to Storeys Served by Escalators and Moving Walks

- 1) In a *building* in which a ~~an~~ ramp, escalator or inclined moving walk provides access to any floor level, an interior ~~barrier-free~~ accessible path of travel shall also be provided to that floor level. (See Note A-3.8.2.4.(1).)
- 2) The route from the ramp, escalator or inclined moving walk to the ~~barrier-free~~ accessible path of travel that leads from floor to floor as required by Sentence (1) shall be clearly indicated by appropriate signs.

3.8.2.5. ~~Exterior Barrier-Free~~ Paths of Travel to Building Entrances and Exterior Passenger-Loading Zones

(See Note A-3.8.2.5.)

- 1) A direct exterior ~~barrier-free~~ accessible path of travel that complies with Subsection 3.8.3. shall be provided between an ~~barrier-free~~ accessible entrance referred to in Article 3.8.2.2. and
 - a) a designated ~~barrier-free~~ accessible parking area, where provided,
 - b) an exterior passenger-loading zone, where provided, ~~and~~
 - c) common ancillary buildings on the lot, and
 - d) a public thoroughfare.

(See Note A-3.8.2.5.(1) and (2).)

The NBC 2020 requires an accessible path of travel connecting an accessible building entrance with a public thoroughfare.

- 2) In storage garages, an ~~barrier-free~~ accessible path of travel that complies with Subsection 3.8.3. shall be provided between each parking level with ~~barrier-free~~ parking spaces designated for persons with disabilities and all other parts of the *building* required to be provided with ~~barrier-free~~ access in accordance with Subsection 3.8.2. that are served by that *storage garage*. (See Note A-3.8.2.5.(1) and (2).)
- 3) Exterior passenger-loading zones shall comply with Subsection 3.8.3.

3.8.2.6. Controls and Outlets

- 1) Except as provided in Sentence 3.5.2.1.(3), controls for the operation of *building* services or safety devices, including electrical switches, thermostats, faucets, door and window hardware and intercom systems and switches, that are intended to be operated generally by the occupant shall comply with Subsection 3.8.3. (See Note A-3.8.2.6.(1).)

2) Electrical outlets that are intended for general occupant use shall be located in conformance with Subsection 3.8.3. (See Note A-3.8.2.6.(2).)

The BCBC 2018 discussed intercom systems at doors. This is proposed for continuation by clarifying in Sentence (1) that the communication functions of intercom systems shall be accessible in addition to the door unlocking control.

The BCBC 2018 expanded the application of Article 3.8.2.6. to electrical outlets which is carried over.

In recognition that not all building controls and outlets are intended for general occupant use, B.C.'s specific exemptions for clarification are revised and carried over.

3.8.2.7. Power Door Operators

- 1) Except as provided in Sentences (2) and (3), and except for doors provided with hold-open devices, doors equipped with a self-closing device shall be equipped with power door operators complying with Subsection 3.8.3. that allow persons to activate the opening of the doors in the intended direction of travel, where the doors are located

- a) in an entrance referred to in Article 3.8.2.2., including the interior doors of a vestibule where provided,
 - b) in an ~~an~~ barrier-free accessible path of travel, between the entrance referred to in Clause (a) and the entrance doors to *suites* or rooms served by a *public corridor* or a corridor used by the public (see Note A-3.8.2.7.(1)(b)), and
 - c) in an entrance to an accessible washroom ~~with a barrier-free water closet~~.
- 2) Only the active leaf in a multiple leaf door in an ~~an~~ barrier-free accessible path of travel need conform to the requirements of this Article.
- 3) Where more than one doorway is provided at an ~~an~~ barrier-free accessible entrance, only one of them is required to comply with this Article. (See Note A-3.8.2.7.(3).)

The NBC 2020 requires doors equipped with a self-closing device to also be equipped with power door operators at all building entrances, at all doorways in common paths of travel from building entrances to interior suite entrances, and at doorways to accessible washrooms.

3.8.2.8. Plumbing Facilities

- 1) Except as permitted by Sentence (3) and (16), at each location where washrooms are provided in a *storey* to which an ~~an~~ barrier-free accessible path of travel is required in accordance with Article 3.8.2.3., at least one universal washroom complying with Subsection 3.8.3. shall be provided. (See Note A-3.8.2.8.(1) to (4).)
- 2) Except as permitted by Sentence (3), where more than two water closets or a combination of more than one water closet and one urinal are provided in a washroom located in a *storey* to which an ~~an~~ barrier-free accessible path of travel is required in accordance with Article 3.8.2.3., at least one water-closet stall shall be ~~barrier-free~~ accessible in accordance with Subsection 3.8.3. (See Note A-3.8.2.8.(1) to (4).)
- 3) Except as required by Article 3.8.2.13., washrooms ~~Washrooms~~ located within a *suite* of *residential occupancy* or a *suite* of *care occupancy* need not conform to the requirements of Sentence (1) or (2). (See Note A-3.8.2.8.(1) to (4).)
- 4) In a *building* in which water closets are required in accordance with Subsection 3.7.2., at least one ~~barrier-free~~ universal washroom ~~water-closet~~ shall be provided in the entrance *storey*, unless
- a) an ~~an~~ barrier-free accessible path of travel is provided to ~~barrier-free~~ a universal washroom ~~water-closets~~ elsewhere in the *building*, or
 - b) the water closets required by Subsection 3.7.2. are for *dwelling units* only.
- (See Note A-3.8.2.8.(1) to (4).)

This proposal relocates the BCBC 2018 requirement for universal washrooms to Sentence (4). The water closet in the universal washroom counts as one of the water closets required and does not reduce the number of water closets required.

- 5) At least one water-closet stall or enclosure in a washroom required to be ~~barrier-free~~ accessible shall comply with Subsection 3.8.3.
- 6) Where urinals are provided in an ~~barrier-free~~ accessible washroom, at least one urinal for persons with limited mobility conforming to Subsection 3.8.3. shall be provided for every 10 urinals.
- 7) Where water-closet stalls are provided in an ~~barrier-free~~ accessible washroom, at least one stall for persons with limited mobility conforming to Subsection 3.8.3. shall be provided for every 10 stalls.

The NBC 2020 contains new requirements for urinals and water closets for persons with limited mobility.

- 8) An ~~barrier-free~~ accessible washroom shall be provided with a lavatory that complies with Subsection 3.8.3.
- 9) Where mirrors are provided in an ~~barrier-free~~ accessible washroom, at least one mirror shall comply with Subsection 3.8.3.
- 10) At each location where one or more drinking fountains are provided, at least one of them shall comply with Subsection 3.8.3.
- 11) At each location where one or more water-bottle filling stations are provided, at least one of them shall comply with Subsection 3.8.3.
- 12) Except within a *suite 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.
- 13) At each location where a showering facility is provided for use by the general public or customers, or as part of a common-use area for employees, at least one universal dressing and shower room conforming to Subsection 3.8.3. shall be provided. (See Note A-3.8.2.8.(13).)

The NBC 2020 requires universal dressing and shower rooms when showering facilities are provided.

14) Where a bathtub is installed in a *suite of residential occupancy* required to be ~~barrier-free~~ accessible, it shall comply with Subsection 3.8.3.

15) In *buildings* containing Group A, Group B, Division 2 or Group E *major occupancies* where at least one of these *major occupancies* has an *occupant load* of more than 500, at least one universal washroom on the *storey* on which the main ~~barrier-free~~ accessible entrance to the *building* is located shall incorporate an ~~accessible~~ accessible change space conforming to Subsection 3.8.3. (See Note A-3.8.2.8.(15).)

The NBC 2020 requires large suites of certain occupancies to locate universal washrooms on the entrance level and to include an accessible change space.

16) In occupancies or parts of occupancies designed to be accessible and used predominantly by children, in patient areas in treatment occupancies, and in resident areas in care occupancies, it is permissible to design and locate plumbing fixtures and grab bars differently than described in Subsection 3.8.3. to accommodate the special needs of children, patients, residents, and care providers.

3.8.2.9. Assistive Listening Systems

1) In a *building of assembly occupancy*, all classrooms, auditoria, meeting rooms and *theatres* with an area of more than 100 m², including courtrooms of any size, shall be equipped with an assistive listening system complying with Subsection 3.8.3.

2) In each location where information, goods or services are provided to the public at service counters in *buildings of assembly occupancy*, at least one of the service counters shall be equipped with

- a) an assistive listening system or adaptive technology conforming to Subsection 3.8.3., and
- b) an amplification system, where there is a barrier to communication, such as a glass screen.

(See Note A-3.8.2.9.(2).)

The NBC 2020 requires one of every service counter at each location to provide an assistive listening system or adaptive technology and, where communication may be hindered, an amplification system.

3.8.2.10. Signs and Indicators

- 1) Signs Unless the degree of access provided is such as to make these signs unnecessary, signs providing visual information in accordance with Subsection 3.8.3. shall be installed in an accessible floor area to indicate the location of
 - a) accessible ~~barrier-free~~ entrances,
 - b) alternate access routes,
 - c) accessible spaces in seating areas,
 - d) accessible refreshment facilities,
 - e) accessible checkout lanes,
 - f) accessible public telephones,
 - g) accessible ~~barrier-free~~ washrooms,
 - h) accessible ~~barrier-free~~ showers,
 - i) accessible ~~barrier-free~~ passenger-elevating devices,
 - j) accessible ~~barrier-free~~ parking spaces,
 - k) accessible passenger-loading zones, and
 - l) assistive listening systems or adaptive technologies.
- 2) Where a washroom is not designed to accommodate persons with physical disabilities in a storey to which an accessible ~~barrier-free~~ path of travel is required, signs providing visual and tactile information in accordance with Subsection 3.8.3. shall be installed to indicate the location of ~~barrier-free~~ accessible facilities washrooms.
- 3) Except for doors that serve *service spaces* or are located within a *suite*, signs installed at or near doors shall provide the same information in both visual and tactile forms in accordance with Subsection 3.8.3.
- 4) Directional signs shall provide visual information in accordance with Subsection 3.8.3. (See Note A-3.8.2.10.(4).)

B.C.'s specific features and facilities requiring signage are carried over.
The NBC 2020 requires tactile information on signs near doors.

Requirements for tactile walking surface indicators are located in Article 3.3.1.19. of the NBC 2020.

3.8.2.11. Counters

- 1) Where a service counter is provided, at least one section of it shall comply with Subsection 3.8.3. (See Note A-3.8.2.11.(1).) (See also Note A-3.8.2.3.)

The NBC 2020 requires a portion of every service counter to be accessible.

3.8.2.12. Telephones

- 1) In each location where one or more public telephones are installed, at least one telephone shall comply with Subsection 3.8.3.

3.8.2.13. Sleeping Rooms and Bed Spaces

- 1) At least one for every 20 or part thereof of sleeping rooms or bed spaces shall conform to Subsection 3.8.3. where provided in
 - a) hotels and motels (see also Clause 3.2.4.19.(1)(g) and Sentences 3.2.4.20.(7) and (8)), and
 - b) not including apartments and condominiums and the buildings described in 3.8.2.1.(1)(a), other buildings or parts of buildings used for residential major occupancies (see also Sentence 3.2.4.20.(17)).

One for every 20 sleeping rooms or bed spaces in hotels, motels, and residential occupancies other than dwelling units, such as dormitories, is proposed to be accessible.

3.8.3. Design

3.8.3.1. Design Standards

- 1) *Buildings* or parts thereof and facilities that are required to be ~~barrier-free~~ accessible shall be designed in accordance with
 - a) this Subsection, or

- b) for each accessible application listed independent of other accessible applications,
the applicable provisions of CSA B651, “Accessible design for the built environment,”
listed in Table 3.8.3.1.,~~in their entirety.~~

(See Note A-3.8.3.1.(1).)

The NBC 2020 references the 2018 edition of CSA B651, “Accessible design for the built environment.”

Table 3.8.3.1.

~~Barrier-free~~ Accessible Design Provisions

Forming Part of Sentences 3.8.3.1.(1) and (2)

Barrier-free Accessible Application (Code References)	Applicable CSA B651 Provisions
Interior accessible routes (3.8.3.2.)	4.3 and 5.1
Exterior accessible routes (3.8.3.3.)	8.2.1 to 8.2.5 and 8.2.7
Passenger pickup areas (3.8.3.4.)	9.3
<i>Ramps</i> (3.8.3.5.)	5.3 and 5.5
Doors and doorways (3.8.3.6.)	5.2
Passenger-elevating devices (3.8.3.7.)	5.6.2
Operating controls (3.8.3.8.)	4.2
Signage (3.8.3.9.)	4.5 and 9.4
Drinking fountains (3.8.3.10.)	6.1
Washroom facilities (3.8.3.12. to 3.8.3.16.)	6.2 and 6.3
Bathing facilities (3.8.3.17. and 3.8.3.18.)	6.5
Communication (3.8.3.19. and 3.8.3.21.)	6.6
Counters (3.8.3.20. and 3.8.3.21.)	6.7.1
Spaces in seating areas (3.8.3.22.)	6.7.3

2) The design of each accessible application listed in Table 3.8.3.1. shall comply entirely with Clause (1)(a) or Clause (1)(b).

3.8.3.2. ~~Barrier-Free~~ Accessible Path of Travel

- 1) Except as required elsewhere in this Part or as permitted by Sentence (2) and Article 3.8.3.6. pertaining to doorways, the clear width of an ~~an barrier-free~~ accessible path of travel shall be not less than 1 000 mm.

The NBC 2020, which is based on recent anthropometric research, requires a 1 000 mm wide path of travel with spaces for turning and passing at specific intervals.

- 2) The clear width of an ~~an barrier-free~~ accessible path of travel is permitted to be reduced to not less than 850 mm for a length of not more than 600 mm, provided the clear floor space at either end of the reduced-clear width section is level within a rectangular area
- a) ~~whose~~ with a dimension parallel to each end of the reduced-clear width section not less than 1 000 mm, and
 - b) ~~whose~~ with a dimension perpendicular to each end of the reduced-clear width section not less than 1 500 mm.

(See Note A-3.8.3.2.(2).)

- 3) Interior and exterior walking surfaces that are within an ~~an barrier-free~~ accessible path of travel shall
- a) have no opening that will permit the passage of a sphere more than 13 mm in diameter,
 - b) have any elongated openings oriented approximately perpendicular to the direction of travel,
 - c) be stable, firm and slip-resistant,
 - d) have a cross slope no steeper than 1 in 50,
 - e) be beveled at a maximum slope of 1 in 2 at changes in level between 6 mm and 13 mm, ~~and~~
 - f) be provided with sloped floors or *ramps* at changes in level more than 13 mm, and
 - g) be designed as a ramp complying with this Section where the path of travel has a slope steeper than 1 in 20.

(See Note A-3.8.3.2.(3).)

- 4) An ~~an barrier-free~~ accessible path of travel is permitted to include *ramps*, passenger elevators or other platform-equipped passenger-elevating devices to overcome a difference in level.

- 5) The width of an ~~an barrier-free~~ accessible path of travel that is more than 24 m long shall be increased to not less than 1 700 mm for a length of 1 700 mm at intervals not exceeding 24 m.
- 6) Where a section of an ~~an barrier-free~~ accessible path of travel is less than 1 500 mm wide for a distance of more than 12 m, it shall end in a clear floor space that is
- a) not less than 1 700 mm in diameter,
 - b) not less than 1 700 mm by 1 500 mm, or
 - c) T-shaped with overall dimensions measuring 1 700 mm wide by 1 500 mm long, where the two arms of the “T” are not less than 1 000 mm wide and extend not less than 300 mm from each side of the base of the “T” and the base is not less than 1 000 mm wide and extends not less than 500 mm from each arm.

(See Note A-3.8.3.2.(6).)

7) An accessible path of travel shall be equipped to provide illumination in accordance with Sentences 3.2.7.1.(1) and (2). (See also Sentences 3.2.7.1.(3) and Article 9.34.2.7.)

3.8.3.3. Exterior Walks

- 1) Exterior walks that form part of an ~~an barrier-free~~ accessible path of travel shall
- a) have a slip-resistant, continuous and even surface,
 - b) be not less than 1 600 mm wide,
 - c) have a level area conforming to Clause 3.8.3.5.(1)(c) adjacent to an entrance doorway, and
 - d) be designed in accordance with Clause 8.2.1 of CSA B651, “Accessible design for the built environment.”

Clause 8.2.1 of CSA B651 directs vehicular areas to Clause 8.3 which includes provisions for curb ramps.

3.8.3.4. ~~Exterior~~ Passenger-Loading Zones

- 1) If an ~~exterior~~ passenger-loading zone is provided, it shall have
- a) an access aisle not less than 1 500 mm wide and 6 000 mm long adjacent and parallel to the vehicle pull-up space,
 - b) a curb ramp, designed in accordance with Clause 8.3.3. of CSA B651, “Accessible design for the built environment,” where there are curbs between the access aisle and the vehicle pull-up space, and

- c) a clear height of not less than 2 750 mm at the pull-up space and along the vehicle access and egress routes.

3.8.3.5. Ramps

- 1) Except when designed as a curb ramp in accordance with Clause 3.8.3.4.(1)(b), a ~~A~~ ramp located in an ~~barrier-free~~ accessible path of travel shall
 - a) have a clear width not less than 1 000 mm (see Note A-3.4.3.4.),
 - b) have a uniform slope along its length not more than 1 in 12 (see Note A-3.8.3.5.(1)(b)),
 - c) have a level area not less than 1 700 mm by 1 700 mm at the top and bottom and at intermediate levels of a *ramp* leading to a door, so that on the latch side the level area extends not less than
 - i) 600 mm beyond the edge of the door opening where the door opens towards the *ramp*, or
 - ii) 300 mm beyond the edge of the door opening where the door opens away from the *ramp*,(see Note A-3.8.3.5.(1)(c)),
 - d) have a level area not less than 1 350 mm long and at least the same width as the ramp
 - i) at intervals not more than 9 m along its length, and
 - ii) where there is an abrupt change in the direction of the ramp, and
 - e) except as provided in Sentences (2) and (3), be equipped with handrails conforming to Article 3.4.6.5., except that they shall be not less than 865 mm and not more than 965 mm high, and
 - f) be equipped with *guards* conforming to Article 3.4.6.6.
- 2) Handrails installed in addition to required handrails need not comply with the height requirements stated in Clause (1)(e).
- 3) The requirement for handrails in Clause (1)(e) need not apply to a *ramp* serving as an aisle for fixed seating.
- 4) The surfaces of *ramps* and landings shall
 - a) be hard or resilient where the *ramp* is steeper than 1 in 15 (see Note A-3.8.3.5.(4)(a)),
 - b) have a cross slope no steeper than 1 in 50, and
 - c) where exposed to water, be designed to drain.

5) *Ramps* and landings not at ground level ~~grade~~ or adjacent to a wall shall have edge protection consisting of

- a) a curb not less than 75 mm high, or
- b) a raised barrier or rail located not more than 100 mm from the *ramp* or landing surface.

3.8.3.6. Doorways and Doors

1) Except where stated otherwise, this Article applies to swinging and sliding doors.

2) Every doorway that is located in an ~~barrier-free~~ accessible path of travel shall have a clear width not less than 850 mm

a) for swinging doors, when measured from the face of the active leaf, ~~when the door is~~ in the open position of 90° to the doorway, to the outside edge of the stop on the door frame, and

b) for sliding doors, when measured from the edge of the door, in the open position, to the outside of the stop on the door frame.

(See Note A-3.8.3.6.(2).)

3) Doorways in a path of travel to at least one bathroom within a *suite of residential occupancy* shall have a clear width not less than 850 mm when measured in accordance with Sentence (2) ~~the doors are open~~. (See Note A-3.8.3.6.(3).)

4) Door-operating devices shall

- a) comply with Clause 3.8.3.8.(1)(b), and
- b) be operable at a height between 900 mm and 1 100 mm above the floor.

(See also Sentence 3.3.1.13.(4) regarding additional devices.)

(See Note A-3.8.3.6.(4).)

5) A threshold for a doorway referred to in Sentences (2) and (3) shall be not more than 13 mm higher than the finished floor surface and shall be beveled to facilitate the passage of wheelchairs.

6) Power door operators required by Sentence 3.8.2.7.(1) shall

- a) activate automatically or through the use of controls that
 - i) are located in an ~~barrier-free~~ accessible path of travel,
 - ii) are marked with the International Symbol of Access,
 - iii) are located clear of the door swing and not less than 600 mm and no more than 1 500 mm from that door swing,

- iv) comply with Subclause 3.8.3.8.(1)(a)(iii),
 - v) are operable from a height between 150 mm and 300 mm as well as between 900 mm and 1 100 mm above the floor, and
 - vi) are operable by touching or approaching any part of their surface with a fist, arm or foot, and
- b) unless equipped with safety sensors,
- i) fully open the door in not less than 3 s, and
 - ii) require a force not more than 65 N to stop movement of the door.
- (See Note A-3.8.3.6.(6) and (7).)
- 7) A cane-detectable *guard* shall be installed on the hinged side of power-assisted doors that swing open into the path of travel. (See Note A-3.8.3.6.(6) and (7).)
- 8) Except as provided in Sentence (9) and except for a door with a power door operator complying with Sentence (6), when unlatched, a door in an an ~~barrier-free~~ accessible path of travel shall open when the force applied to the handle, push plate or latch-releasing device is not more than
- a) 38 N in the case of an exterior swinging door,
 - b) 22 N in the case of an interior swinging door, or
 - c) 22 N in the case of a sliding door.
- 9) Sentence (8) does not apply to a door at the entrance to a *dwelling unit*, or where greater forces are required in order to close and latch the door against the prevailing difference in air pressure on opposite sides of the door. (See Note A-3.8.3.6.(9).)
- 10) Except for a door at the entrance to a *dwelling unit*, a closer for an interior door in an an ~~barrier-free~~ accessible path of travel shall have a closing period of not less than 3 s measured from when the door is in an open position of 70° to the doorway, to when the door reaches a point 75 mm from the closed position, measured from the leading edge of the latch side of the door. (See Note A-3.8.3.6.(10).)
- 11) Unless equipped with a power door operator complying with Sentence (6), a swinging door in an an ~~barrier-free~~ accessible path of travel shall have a clear space on the latch side extending the height of the doorway and not less than
- a) 600 mm beyond the edge of the door opening if the door swings toward the approach side, and
 - b) 300 mm beyond the edge of the door opening if the door swings away from the approach side.

(See Note A-3.8.3.6.(11).)

12) A vestibule located in an an barrier-free accessible path of travel shall be arranged to allow the movement of wheelchairs between doors and shall provide a distance between 2 doors in series of not less than 1 350 mm plus the width of any door that swings into the space in the path of travel from one door to another.

13) Only the active leaf in a multiple-leaf door in an an barrier-free accessible path of travel need conform to the requirements of this Article.

14) Except as provided in Clause 3.8.3.5.(1)(c) and Sentence (16), the clear floor space on the pull side of a swinging door in an an barrier-free accessible path of travel shall be level within a rectangular area of not less than 1 700 mm by 1 500 mm measured from the hinged side of the door. (See Note A-3.8.3.6.(14) to (16).)

15) Except as provided in Clause 3.8.3.5.(1)(c) and Sentence (16), the clear floor space on the push side of a swinging door and on each side of a sliding door in an an barrier-free accessible path of travel shall be level within a rectangular area

- a) whose dimension parallel to the closed door is not less than 1 200 mm, and
- b) whose dimension perpendicular to the closed door is not less than 1 500 mm.

(See Note A-3.8.3.6.(14) to (16).)

16) Where a door referred to in Sentences (14) and (15) is equipped with a power door operator complying with Sentence (6), the width of the clear floor space parallel to the closed door is permitted to be reduced to not less than 1 000 mm. (See Note A-3.8.3.6.(14) to (16).)

17) Except for facilities for persons with cognitive disabilities such as dementia, doorways leading from a *public corridor* or a corridor used by the public that provide access to a public area or an *exit* shall be provided with a door or door frame that has a readily apparent visual contrast with adjacent wall surfaces. (See Note A-3.8.3.6.(17).) (See also Note A-3.4.6.11.(4).)

The NBC 2020 requires doors to public areas and exits to have a visual contrast to their adjacent surfaces.

3.8.3.7. Passenger-Elevating Devices

1) A passenger-elevating device referred to in Article 3.8.2.3. located in an an barrier-free accessible path of travel shall

- a) conform to
 - i) Appendix E of ASME A17.1/CSA B44, “Safety Code for Elevators and Escalators,” or
 - ii) CSA B355, “Platform lifts and stair lifts for barrier-free access,”
- b) have a clear floor space not less than 1 500 mm long by 1 000 mm wide, and

- c) have entry doors or gates
 - i) providing a clear width not less than 850 mm in the open position if located on the short side of the passenger-elevating device, or
 - ii) providing a clear width not less than 1 000 mm in the open position if located at either end of the long side of the passenger-elevating device.

3.8.3.8. Controls and Outlets

- 1) Controls described in this Section shall
 - a) where located in a *storey* where an ~~an barrier-free~~ accessible path of travel is required and unless otherwise stated,
 - i) be in or adjacent to the ~~barrier-free~~ accessible path of travel,
 - ii) be mounted 400 mm to 1 200 mm above the floor, and
 - iii) be adjacent to and centred on either the length or the width of a clear floor space of 1 350 mm by 800 mm,
 - b) be operable
 - i) with one hand in a closed fist position, without requiring tight grasping, pinching with fingers, or twisting of the wrist, and
 - ii) unless otherwise stated, with a force not more than 22 N, and
 - c) where controls provide a feedback signal to the user, it shall be both audible and visible (see Note A-3.8.3.8.(1)(c)).

2) Electrical outlets described in this Section shall be located in conformance with Subclause (1)(a)(ii).

(See Note A-3.8.2.6.(2).)

3.8.3.9. Accessible Signs

- 1) Visual information signs required by Subsections 3.4.5. and 3.4.6. and Article 3.8.2.10. shall comply with Clauses 4.5.1., 4.5.2, 4.5.3 and 4.5.4 of CSA B651, “Accessible design for the built environment.” (See Note A-3.8.3.9.(1) and (2).)
- 2) Tactile information signs required by Subsections 3.4.5. and 3.4.6. and Article 3.8.2.10. shall
 - a) have Braille and tactile characters in accordance with Clauses 4.5.6.2 and 4.5.6.3 of CSA B651, “Accessible design for the built environment,”

- b) be installed on the wall closest to the latch side of the door or on the nearest wall on the right side of the door, where there is no wall at the latch side, and
- c) be centred 1 500 mm above the finished floor with the edge of the sign located not more than 300 mm from the door.

(See Note A-3.8.3.9.(1) and (2).)

3) Signs required by Article 3.8.2.10. shall incorporate the International Symbol of Access, Modified International Symbol of Access, or the International Symbol of Access for Hearing Loss, and appropriate graphical or textual information that clearly indicates the type of facilities available. (See Note A-3.8.3.9.(3).)

3.8.3.10. Drinking Fountains

- 1) Drinking fountains required by Sentence 3.8.2.8.(10) shall be equipped with controls that
 - a) activate automatically, or
 - b) comply with Clause 3.8.3.8.(1)(b) and are located on the front or on both sides of the fountain.
- 2) Where drinking fountains referred to in Sentence (1) are located in a *storey* where an an ~~barrier-free~~ accessible path of travel is required, they shall
 - a) be located along the ~~barrier-free~~ accessible path of travel,
 - b) have a minimum clear floor space of 800 mm by 1 350 mm in front of them,
 - c) where they have frontal access, provide a knee clearance in accordance with Clause 3.8.3.16.(1)(e), and
 - d) have a spout that
 - i) is located near the front of the unit, at a height between 750 mm and 915 mm above the floor, and
 - ii) directs water flow in a trajectory that is nearly parallel to the front of the unit, at a height not less than 100 mm.

(See Sentences 3.3.1.8.(2) and (3) on horizontal projections.)

3.8.3.11. Water-Bottle Filling Stations

- 1) Water-bottle filling stations required by Sentence 3.8.2.8.(11) shall be equipped with controls that
 - a) activate automatically, or
 - b) comply with Clause 3.8.3.8.(1)(b).

2) Water-bottle filling stations required by Sentence 3.8.2.8.(11) that are located in a storey where an ~~barrier-free~~ accessible path of travel is required shall

- a) be located along the ~~barrier-free~~ accessible path of travel,
- b) have a clear floor space of 800 mm by 1 350 mm in front of them (see Note A-3.8.3.11.(2)(b) and (d)),
- c) where they have frontal access, provide a knee clearance in accordance with Clause 3.8.3.16.(1)(e),
- d) be operable at a height of not more than 1 200 mm above the floor (see Note A-3.8.3.11.(2)(b) and (d)), and
- e) be equipped with controls that
 - i) activate automatically, or
 - ii) comply with Sentence 3.8.3.8.(1).

(See Sentences 3.3.1.8.(2) and (3) on horizontal projections.)

3.8.3.12. Accessible Water-Closet Stalls

- 1) Water-closet stalls and enclosures required by Sentence 3.8.2.8.(5) shall
 - a) be not less than 1 500 mm wide by 1 500 mm deep,
 - b) have a clear lateral transfer space adjacent to the water closet that
 - i) is at least 1 500 mm long, measured from the wall behind the water closet, and
 - ii) is at least 900 mm wide, measured from the closest edge of the water closet seat, (see Note A-3.8.3.12.(1)(b))
 - c) have a clear floor space of 1 700 mm by 1 700 mm in front of the accessible stall,
 - d) be equipped with a door that
 - i) can be latched from the inside with a mechanism located 900 mm to 1 100 mm above the floor that conforms to Clause 3.8.3.8.(1)(b),
 - ii) is aligned with either the transfer space adjacent to the water closet or with a clear floor space not less than 1 700 mm by 1 700 mm within the stall,
 - iii) provides a clear opening not less than 850 mm wide when it is open, measured in accordance with Sentence 3.8.3.6.(2),
 - iv) is self-closing so that, when at rest, the door is ajar by not more than 50 mm beyond the jamb,

- v) swings outward, unless there is sufficient floor space within the stall for the door to swing inward in addition to a clear floor space of at least 800 mm by 1 350 mm (see Note A-3.8.3.12.(1)(d)(v)),
 - vi) where the door swings outward, is provided with a horizontal, D-shaped, visually contrasting door pull not less than 140 mm long located on the inside such that its midpoint is 200 mm to 300 mm from the hinged side of the door and ~~800~~ 900 mm to ~~1 000~~ 1 100 mm above the floor (see Note A-3.8.3.12.(1)(d)(vi)), and
 - vii) is provided with a horizontal, D-shaped, visually contrasting door pull not less than 140 mm long located on the outside such that its midpoint is 120 mm to 220 mm from the latch side and ~~800~~ 900 mm to ~~1 000~~ 1 100 mm above the floor,
- e) have a water closet located so that the distance between the centre line of the fixture and the wall on one side is 460 mm to 480 mm,
- f) be equipped with an L-shaped grab bar that
- i) is mounted on the side wall closest to the water closet,
 - ii) has horizontal and vertical components not less than 760 mm long mounted with the horizontal component 750 mm to 850 mm above the floor and the vertical component 150 mm in front of the water closet (see Note A-3.8.3.12.(1)(f)(ii)), and
 - iii) complies with Article 3.7.2.7.,
- g) be equipped with either one grab bar at least 600 mm long and centred over the water closet, or two grab bars at least 300 mm long and located either side of the flush valve, that
- i) conform to Article 3.7.2.7.,
 - ii) are mounted on the rear wall, and
 - iii) are mounted at the same height as the grab bar on the side wall or 100 mm above the top of the attached water tank, if applicable,
- h) be equipped with a coat hook mounted not more than 1 200 mm above the floor on a side wall and projecting not more than 50 mm from the wall, and
- i) be equipped with a toilet paper dispenser mounted on the side wall closest to the water closet such that
- i) the bottom of the dispenser is 600 mm to 800 mm above the floor, and
 - ii) the closest edge of the dispenser is not more than 300 mm from the front of the water closet.

3.8.3.13. Universal Washrooms

(See Note A-3.8.3.13.)

- 1) A universal washroom shall
 - a) be served by an ~~barrier free~~ accessible path of travel,
 - b) have a door complying with Article 3.8.3.6. that
 - i) has a latch-operating mechanism located 900 mm to 1 100 mm above the floor that complies with Clause 3.8.3.8.(1)(b) and is capable of being locked from the inside, and released from the outside in case of emergency, and
 - ii) if it is an outward swinging door that is not self-closing, has a horizontal, D-shaped, visually contrasting door pull not less than 140 mm long located on the inside so that its midpoint is not less than 200 mm and not more than 300 mm from the hinged side of the door and not less than 900 mm and not more than 1 100 mm above the floor (see Note A-3.8.3.12.(1)(d)(vi)),
 - c) have one lavatory conforming to Article 3.8.3.16.,
 - d) have one water closet conforming to Article 3.8.3.14. and Clause 3.8.3.12.(1)(e),
 - e) have a clear lateral transfer space adjacent to the water closet that conforms to Clause 3.8.3.12.(1)(b),
 - f) have grab bars conforming to Clauses 3.8.3.12.(1)(f) and (g),
 - g) have a coat hook conforming to Clause 3.8.3.12.(1)(h),
 - h) have a toilet paper dispenser conforming to Clause 3.8.3.12.(1)(i),
 - i) unless a counter space of not less than 200 mm by 400 mm is provided, have a shelf located not more than 1 200 mm above the floor with a useable surface of not less than 200 mm by 400 mm, and
 - j) be designed to permit a wheelchair to turn in an open space not less than 1 700 mm in diameter, and
 - k) provide emergency lighting conforming to Article 3.2.7.3.
- 2) A universal washroom required to have an accessible change space as stipulated in Sentence 3.8.2.8.(15) shall
 - a) be equipped with an adult-sized change table that is
 - i) designed to carry a minimum load of 1.3 kN,
 - ii) impervious to water, and
 - iii) designed to be easily cleaned,

- b) have a clear floor space to accommodate the adult-sized change table that is 810 mm wide by 1 830 mm long and does not overlap with the clear spaces required by Clauses (1)(e), (1)(j) and (c), and
- c) have a clear transfer space of 900 mm by 1 350 mm adjacent to the long side of the clear floor space for the adult-sized change table.

The NBC 2020 requires a change table in universal washrooms serving large occupancies.

3.8.3.14. Water Closets

- 1) A water closet for a person with physical disabilities shall
 - a) be equipped with a seat located 430 mm to ~~460~~ 480 mm above the floor,
 - b) flush automatically or be equipped with a flushing control that
 - i) is located 500 mm to 900 mm above the floor,
 - ii) is located no more than 350 mm from the transfer side, and
 - iii) complies with Clause 3.8.3.8.(1)(b),
 - c) be equipped with a seat lid or other back support, and
 - d) where it has a tank, have a securely attached tank top.(See Note A-3.8.3.14.(1).)

3.8.3.15. Water-Closet Stalls and Urinals for Persons with Limited Mobility

- 1) Water-closet stalls for persons with limited mobility required by Sentence 3.8.2.8.(7) shall
 - a) be at least 1 500 mm deep and 890 mm to 940 mm wide,
 - b) be equipped with a door that
 - i) has a latch-operating mechanism conforming to Clause 3.8.3.8.(1)(b) that can be locked from the inside and released from the outside in the event of an emergency,
 - ii) provides a clear opening not less than 850 mm wide when it is open, measured in accordance with Sentence 3.8.3.6.(2),
 - iii) swings outward, unless the minimum dimensions required by Clause (a) do not overlap with the area of the door swing,
 - iv) is self-closing so that, when at rest, the door is ajar by not more than 50 mm beyond the jamb, and

- v) has a horizontal, D-shaped, visually contrasting door pull on both sides of the door, near the latch side, located 900 mm to 1 100 mm above the finished floor,
 - c) have one water closet conforming to Article 3.8.3.14. centred within the stall,
 - d) have a horizontal grab bar conforming to Article 3.7.2.7. on each side of the water closet that
 - i) is located 750 mm to 850 mm above the floor,
 - ii) begins not more than 300 mm from the wall behind the water closet, and
 - iii) extends at least 450 mm in front of the toilet seat, and
 - e) be equipped with a coat hook mounted not more than 1 200 mm above the floor on a side wall and projecting not more than 50 mm from the wall.
- 2) Urinals described in Sentence 3.8.2.8.(6) shall
- a) be wall-mounted, with the rim located not more than 430 mm above the floor,
 - b) be adjacent to an ~~accessible~~ accessible route,
 - c) have a clear width of approach that is at least 800 mm wide by 1 350 mm long centred on the urinal and unobstructed by privacy screens,
 - d) have no step in front of it,
 - e) have a flush control that
 - i) is automatic, or
 - ii) complies with Clause 3.8.3.8.(1)(b) and is located 900 mm to 1 100 mm above the floor, and
 - f) have a vertically mounted grab bar installed on each side that
 - i) complies with Article 3.7.2.7.,
 - ii) is not less than 600 mm long, with its centre line 1 000 mm above the floor, and
 - iii) is located not more than 380 mm from the centre line of the urinal.

3.8.3.16. Lavatories and Mirrors

- 1) Lavatories required by Sentence 3.8.2.8.(8) shall
- a) be equipped with faucets complying with Sentence 3.7.2.3.(4),
 - b) be located so that the distance between the centre line of the lavatory and any side wall is not less than 460 mm,
 - c) have a clear floor space in front of the lavatory that is at least
 - i) 800 mm wide, centred on the lavatory, and

- ii) 1 350 mm long, of which no more than 430 mm is beneath the lavatory,
 - d) have a rim height not more than 865 mm above the floor,
 - e) have a clearance beneath the lavatory not less than
 - i) 800 mm wide, centred on the lavatory,
 - ii) 735 mm high at the front edge,
 - iii) 685 mm high at a point 200 mm back from the front edge, and
 - iv) 230 mm high over the distance from a point 280 mm to a point 430 mm back from the front edge,(see Note A-3.8.3.16.(1)(e))
 - f) have insulated water supply and drain pipes where these pipes are exposed (see Note A-3.8.3.16.(1)(f)),
 - g) have a soap dispenser that
 - i) is automatic, or
 - ii) complies with Clause 3.8.3.8.(1)(b) and is located not more than 1 100 mm above the floor, within 500 mm from the front of the lavatory (see Note A-3.8.3.16.(1)(g)), and
 - h) have a towel dispenser or other hand-drying equipment located close to the lavatory, with operating controls not more than 1 200 mm above the floor in an area that is ~~accessible~~-accessible to persons ~~in~~ using wheelchairs.
- 2) Mirrors required by Sentence 3.8.2.8.(9) shall be
- a) mounted with their bottom edge not more than 1 000 mm above the floor, or
 - b) fixed in an inclined position so as to be usable by a person ~~in~~ using a wheelchair.

3.8.3.17. Showers

- 1) Showers required by Sentence 3.8.2.8.(12) shall
- a) be not less than 1 500 mm wide and 900 mm deep,
 - b) have a clear floor space at the entrance to the shower that is not less than 900 mm deep and the same width as the shower, except that fixtures are permitted to project into that space provided they do not restrict access to the shower (see Note A-3.8.3.17.(1)(b)),
 - c) have no doors or curtains that obstruct the controls or the clear floor space at the entrance to the shower,
 - d) have a slip-resistant floor surface,

e) have a threshold not more than 13 mm higher than the finished floor, and where it is higher than 6 mm, beveled to a slope no steeper than 1 in 2 ~~(50%)~~,

f) have 2 grab bars

i) that conform to Sentence 3.7.2.7.(1),

ii) one of which is not less than 1 000 mm long and located vertically on the side wall 50 mm to 80 mm from the adjacent clear floor space, with its lower end 600 mm to 650 mm above the floor, and,

iii) one of which is L-shaped and located on the wall opposite the entrance to the shower, with a horizontal member not less than 1 000 mm long mounted 750 mm to 870 mm above the floor and a vertical member not less than 750 mm long mounted 400 mm to 500 mm from the side wall on which the other vertical grab bar is mounted,

(see Note A-3.8.3.17.(1)(f)),

g) have a hinged seat that is not spring-loaded or a fixed seat with a smooth, slip-resistant surface and no rough edges, the seat being

i) not less than 450 mm wide and 400 mm deep,

ii) mounted on the same side wall as the vertical grab bar, at 460 mm to 480 mm above the floor,

iii) designed to carry a minimum load of 1.3 kN,

iv) impervious to water, and

v) designed to be easily cleaned,

h) have a pressure-equalizing or thermostatic-mixing valve and other controls that

i) comply with Clause 3.8.3.8.(1)(b), and

ii) are mounted on the wall opposite the entrance to the shower at not more than 1 200 mm above the floor and within reach of the seat,

i) have a hand-held shower head with not less than 1 800 mm of flexible hose located so that it

i) can be reached from a seated position,

ii) can be used in a fixed position at a height of 1 200 mm and 2 030 mm, and

iii) does not obstruct the use of the grab bars, and

j) have recessed soap holders that can be reached from the seated position.

2) A universal dressing and shower room required by Sentence 3.8.2.8.(13) shall

a) be located in an ~~an barrier-free~~ accessible path of travel,

- b) have a door capable of being locked from the inside and released from the outside in the event of an emergency,
- c) have a lavatory and a mirror conforming to Article 3.8.3.16.,
- d) have a shower conforming to Sentence (1),
- e) have a bench that is
 - i) at least 1 830 mm long by 760 mm wide and 480 mm to 520 mm high,
 - ii) designed to carry a minimum load of 1.3 kN,
 - iii) impervious to water, and
 - iv) designed to be easily cleaned,
- f) have a clear transfer space adjacent to the long side of the bench that is 900 mm wide and as long as the bench (see Note A-3.8.3.17.(2)(f)), ~~and~~
- g) have a coat hook conforming to Clause 3.8.3.12.(1)(h), and
- h) provide emergency lighting conforming to Article 3.2.7.3.

3.8.3.18. Accessible Bathtubs

- 1) A bathtub required by Sentence 3.8.2.8.(14) shall
 - a) be located in a room with a clear floor space not less than 1 700 mm in diameter,
 - b) be not less than 1 500 mm long,
 - c) have a clear floor space at the entrance to the bathtub that is not less than 900 mm ~~wide adjacent to its entire~~ deep and at least the same length as the bathtub, except that fixtures are permitted to project into that space provided they do not restrict access to the shower,
 - d) be capable of being accessed along its full length with no tracks mounted on its rim,
 - e) have ~~faucets~~ a pressure-equalizing or thermostatic mixing valve and other controls that
 - i) conform to Clause 3.8.3.8.(1)(b), and
 - ii) are located on the centre line or between the centre line of the bathtub and the exterior edge of the bathtub rim, at a maximum height of 450 mm above the rim,
 - f) have three grab bars
 - i) that conform to Sentence 3.7.2.7.(1),
 - ii) that are not less than 1 200 mm long,

- iii) two of which are located vertically at each end of the bathtub, set 80 mm to 120 mm in from the outside edge of the bathtub, with their lower end 180 mm to 280 mm above the bathtub rim, and
- iv) one of which is located horizontally along the length of the bathtub at 180 mm to 280 mm above the bathtub rim,
- g) have a slip-resistant bottom surface, and
- h) be equipped with a hand-held shower head with not less than 1 800 mm of flexible hose that can be used in a fixed position at a height of 1 200 mm and 2 030 mm.

3.8.3.19. Assistive Listening Systems

(See Note A-3.8.3.19.)

- 1) Assistive listening systems required by Sentence 3.8.2.9.(1) shall encompass the entire seating area.
- 2) Assistive listening systems or adaptive technologies required by Sentence 3.8.2.9.(2) shall provide for the clear communication required for the exchange of information, goods and services.

3.8.3.20. Counters

- 1) A section of a service counter required to be ~~barrier-free~~ accessible in accordance with Sentence 3.8.2.11.(1) shall
 - a) be not less than 800 mm long centred over a knee space conforming to Clause (c),
 - b) have a surface not more than 865 mm above the floor, and
 - c) where forward-facing interaction with a person or a device is required, have a knee space underneath it that is (see Note A-3.8.3.20.(1)(c))
 - i) not less than 800 mm wide,
 - ii) not less than 685 mm high, and
 - iii) not less than 485 mm deep.

3.8.3.21. Telephones

- 1) A telephone required to be ~~barrier-free~~ accessible in accordance with Article 3.8.2.12. shall
 - a) be adjacent to and centred on either the length or the width of a clear floor space not less than 1 350 mm by 800 mm,

- b) where a forward approach is provided, have a knee space underneath it conforming to Clause 3.8.3.20.(1)(c), and
 - c) be located so that its receiver and operable parts are not more than 1 200 mm above the floor.
- 2) Where provided, shelves or counters for public telephones shall
- a) be level,
 - b) be not less than 305 mm deep,
 - c) have, for each telephone provided, a clear space not less than 250 mm wide having no obstruction within 250 mm above the surface, and
 - d) have a section with a surface not more than 865 mm above the floor serving at least one telephone.

(See Note A-3.8.3.21.(2).)

3.8.3.22. Spaces in Seating Area

- 1) Spaces designated for wheelchair use in *assembly occupancies* as required by Sentence 3.8.2.3.(3) shall conform to the following:
- a) at least one designated space shall be clear and level for each increment of 200 seats and the remaining designated spaces shall be level and have removable seats,
 - b) they shall be not less than 900 mm wide and 1 700 mm long to permit a wheelchair to enter from a side approach and 1 350 mm long where the wheelchair enters from the front or rear of the space,
 - c) they shall be arranged so that
 - i) at least two designated spaces are located side by side, and
 - ii) at least one fixed seat is located beside each designated space,
 - d) they shall be located adjoining an ~~an barrier-free~~ accessible path of travel without infringing on egress from any row of seating or any aisle requirements, and
 - e) they shall be situated, as part of the designated seating plan, to provide a choice of viewing location and a clear view of the event taking place.

(See Note A-3.8.2.3.(5) and (6) and 3.8.3.22.(1) and (4).)

- 2) Spaces designated for wheelchair use in waiting rooms or areas as required by Sentence 3.8.2.3.(4) shall
- a) be clear and level, and
 - b) comply with Clauses (1)(b) and (d).

- 3) Adaptable seats required by Sentence 3.8.2.3.(5) shall
 - a) be located adjoining an aisle without infringing on egress from any row of seating or any aisle requirements,
 - b) be equipped with a movable or removable armrest on the side of the seat adjoining the aisle, and
 - c) be situated, as part of the designated seating plan, to provide a choice of viewing location and a clear view of the event taking place.
 - 4) Storage spaces for mobility aids shall be provided in a location
 - a) that is on the same level as and in proximity to the adaptable seats required by Sentence 3.8.2.3.(5),
 - b) that is within the room side of the *fire separation* required by Article 3.3.2.2., and
 - c) where they will not infringe on egress.
- (See Notes A-3.8.3.22.(4) and A-3.8.2.3.(5) and (6) and 3.8.3.22.(1) and (4).)

3.8.3.23. Sleeping Rooms and Bed Spaces

- 1) Sleeping rooms and bed spaces required by Sentence 3.8.2.13.(1) to be *accessible* shall have:
 - a) a clear floor space that permits a turning area of not less than 1 700 mm in diameter, or not less than 1 700 mm by 1 500 mm, that could be adjacent a bed,
 - b) a pathway clearance of not less than 1 000 mm wide, that could be unobstructed by a bed, to allow functional use of the bedroom,
 - c) at least one closet that provides
 - i) a clear opening width of not less than 900 mm,
 - ii) a clear floor space, that need not be separate from the turning areas required in Clause (a), of not less than 1 700 mm by 1 500 mm on at least one side of the closet (see Note A-3.8.5.6.(1))
 - iii) clothes hanger rods capable of being lowered to a height of not more than 1 200 mm, and
 - iv) at least one shelf capable of being lowered to a height of not more than 1 200 mm,
 - d) when a balcony is provided, an *accessible* path of travel to an *accessible* balcony conforming to Sentence 3.3.1.7.(4),

e) except for dedicated electrical outlets for equipment and appliances, where controls, switches and outlets are intended for frequent operation, they shall conform to Subsection 3.8.3., and

f) a bathroom, where provided as part of the sleeping room or bed space, or *access* to a bathroom, where not provided as part of the sleeping room or bed space

i) conforming to Clauses 3.8.3.12.(1)(a), (b), (e), (f), (g), (h) and (i) with a water closet conforming to Article 3.8.3.14.,

ii) provided with a lavatory and mirror conforming to Article 3.8.3.16., and

iv) provided with a shower conforming to Article 3.8.3.17. or a bathtub conforming to Article 3.8.3.17., only to the extent of providing the same type of facilities provided in sleeping rooms and bed spaces where *access* is not required.

3.8.4. Alterations and Additions to Existing Buildings

3.8.4.1. Application

1) Except as provided in Sentence (2), *access* as described in Articles 3.8.4.2. to 3.8.4.8. shall be provided

a) to additions to existing *buildings* where such additions have internal path of travel connections with the existing *buildings*,

b) to existing parts of *buildings* to which additions described in Clause (a) are made, and

c) to the extent required by Article 3.8.4.5., to existing *buildings*

i) where the *occupancy* is changed, or

ii) that are altered or renovated.

2) This Subsection does not apply to

a) *buildings* of new construction,

b) vertical additions of one *storey* not more than 600 m² in *floor area* regardless of *occupancy*, or

c) horizontal or vertical additions to *occupancies* described in Clauses 3.8.2.1.(1)(a) to (c).

3.8.4.2. Specific Requirements

1) Exterior *access* shall be provided to an addition except where *access* to the addition is provided by way of the existing *building*.

2) Walks and ramps for an addition shall conform to Subsection 3.8.3.

- 3) An entrance to an addition shall be *accessible* except where
- a) the addition is *accessible* by an *accessible* path of travel from an *accessible* entrance serving the existing *building*, and
 - b) not less than 50% of the pedestrian entrances to the *building* are *accessible*.

3.8.4.3. Vertical Additions

- 1) Where there is a vertical addition of one *storey* and of more than 600 m² in *floor area*, or of two or more *storeys* regardless of *floor area*,
- a) *access* shall be provided to all additional *storeys*, and
 - b) the additional *storeys* shall conform to Subsections 3.8.2. and 3.8.3.

3.8.4.4. Horizontal Additions

- 1) Where an existing *building* is extended horizontally, the requirements of Subsections 3.8.2. and 3.8.3. shall be applied to the addition except as described in Articles 3.8.4.2. and 3.8.4.6., and Sentence 3.8.4.8.(2).

3.8.4.5. Alterations and Occupancy Change

- 1) Where an existing *building* is altered or renovated, or where the *occupancy* is changed, *access* shall be provided in conformance with Subsections 3.8.2. and 3.8.3. where providing such *access* would be practical.

3.8.4.6. Sleeping Rooms and Bed Spaces

- 1) Where sleeping rooms or bed spaces are provided in an addition, the percentage of *accessible* sleeping rooms or bed spaces required by Subsection 3.8.2. to conform to Article 3.8.3.23. shall be based on the sum of sleeping rooms or bed spaces in the addition and in the existing *building*.
- 2) The *accessible* sleeping rooms or bed spaces required by Sentence (1) may be distributed between the addition and the existing *building*.

3.8.4.7. Existing Facilities

- 1) Where an addition is required to be *accessible*, facilities located in the existing *building* that are necessary to the operation of the addition shall be *accessible*.

2) Where *alterations* are made to an existing *building*, universal washrooms complying with Subsection 3.8.3. are permitted to be provided in lieu of facilities for *persons with disabilities* in washrooms. (See Note A-3.8.2.8.(1) to (3).)

3.8.4.8. Egress from Floor Areas

1) The egress requirements of Article 3.3.1.7. shall apply to the vertical additions described in Sentence 3.8.4.3.(1).

2) Where an existing *storey* is extended horizontally and the *building* is not *sprinklered* throughout, the protection requirements of Article 3.3.1.7. shall apply to

- a) the extended portion of the *storey*, or
- b) the combined area of the existing *storey* and the extension.

3.8.5. Adaptable Dwelling Units

Adaptable dwelling units are designed and constructed with some basic accessibility features like more space in doorways, kitchens and bathrooms and also some features that can be modified to meet individual occupants' evolving needs. Adaptable dwelling units allow more people to stay in their homes through illness, injury, and/or aging, and limit expensive retrofitting costs.

3.8.5.1. Application

1) Except as provided in Sentence (2), this Subsection applies to

a) one *storey dwelling units* served by an *accessible interior public corridor* and an *accessible common building entrance*, as required to be *accessible* by Articles 3.8.2.2. and 3.8.2.3., and

b) common spaces and facilities intended for use by the residents of the *dwelling units* described in Clause (a) including common rooftop *occupancies*.

2) *Buildings* described in Clause 3.8.2.1.(1)(a) including *secondary suites* and all other *dwelling units* to which this Section applies shall

- a) comply with Sentence 3.8.5.4.(1), and
- b) as required by Sections 3.7. and 9.31., provide at least one bathroom with walls reinforced in accordance with Clause 3.8.5.7.(1)(e).

Single-storey dwelling units in multi-unit residential buildings that share an accessible building entrance and accessible common interior spaces are required to be designed and constructed as adaptable dwelling units.

Common spaces and facilities such as garbage and recycling rooms shall be accessible and connected via an accessible path of travel to and from the adaptable dwelling units. If a common corridor serves only a floor with no adaptable dwelling units and no common facilities, it is not required to be accessible.

3.8.5.2. Construction Requirements

- 1) The construction of *adaptable dwelling units* and the *building* in which they are located shall conform to the requirements of this Subsection and, as required by this Subsection, to access requirements for *buildings of residential occupancy* elsewhere in this Code.
- 2) Unless otherwise required, clear areas and spaces required in this Subsection are permitted to overlap with other clear area and space requirements.
- 3) This Subsection does not require an *adaptable dwelling unit* be provided with a living space, a bedroom, a bathroom or a kitchen, but when provided, those spaces and the paths connecting them shall conform to the applicable requirements of this Subsection.

3.8.5.3. Building Access Requirements

- 1) Common areas, spaces and facilities and all common exterior and interior paths of travel serving *adaptable dwelling units* shall be *accessible* in accordance with Subsection 3.8.2. with *floor areas* protected in conformance with Article 3.3.1.7.
- 2) Common corridors and passageways serving *adaptable dwelling units* shall be equipped to provide illumination, measured at floor or tread level, of not less than 50 lx.
- 3) Each *adaptable dwelling unit* shall be provided with special outlet boxes and cover plates as described in Sentences 3.2.4.19.(7).
- 4) Unless otherwise required by this Section, common spaces and paths of travel that are not intended to serve the residents of *adaptable dwelling units* need not be *accessible*.

3.8.5.4. Adaptable Dwelling Unit Doorways

- 1) The principal entrance door to *adaptable dwelling units* shall have a clear width of not less than 850 mm when the door is in the open position.

2) Except as provided in Sentence (5), there shall be a clear floor space in accordance with Sentences 3.8.3.6.(14) and (15) adjacent to and on both sides of the *adaptable dwelling unit* entrance door described in Sentence (1).

3) Within an *adaptable dwelling unit*, every doorway along a path of travel connecting the entrance door described in Sentence (1) with a living space, adaptable bedroom, adaptable bathroom, and adaptable kitchen shall have a clear width of not less than 850 mm when the door is in the open position.

4) Except as provided in Sentence (5), there shall be a clear floor space in accordance with Sentences 3.8.3.6.(14) and (15) adjacent to and on both sides of the doorways described in Sentence (3).

5) Doorways provided with power door operators, or provided with a special outlet box and cover plates that are designed, located and wired specifically to accommodate the future installation of a power door operator, may provide the clear floor space described in Sentence 3.8.3.6.(16).

Suite entry doorways and doorways within paths of travel to the adaptable spaces of adaptable dwelling units must have an accessible clear width and maneuvering space. The electrical rough-in for a power door operator provides the designer with additional choice for clear floor space configurations.

3.8.5.5. Adaptable Dwelling Unit Hallways and Corridors

1) Hallways and corridors in *adaptable dwelling units* forming a path of travel connecting the entrance door described in Sentence 3.8.5.4.(1) with a living space, adaptable bedroom, adaptable bathroom and adaptable kitchen shall have a clear width conforming to Sentences 3.8.3.2.(1) and (2).

3.8.5.6. Adaptable Dwelling Unit Bedrooms

1) At least one bedroom or sleeping space in an *adaptable dwelling unit* shall have

a) a floor area that permits a turning area of not less than 1 700 mm in diameter, or not less than 1 700 mm by 1 500 mm, that could be adjacent a bed,

b) a pathway clearance of not less than 850 mm wide, that could be unobstructed by a bed, to allow functional use of the bedroom, and

c) at least one closet that provides

i) a clear opening width of not less than 900 mm, and

ii) a clear floor space, that need not be separate from the turning areas required in Clause (a), of not less than 1 700 mm in diameter or 1 700 mm by 1 500 mm on at least one side of the closet. (See Note A-3.8.5.6.(1).)

The BCBC does not regulate furniture. It is the designer's prerogative to consider functional use of the furnished space.

3.8.5.7. Adaptable Dwelling Unit Bathrooms

1) At least one bathroom in an *adaptable dwelling unit* shall be designed to be adaptable for use by persons with disabilities by providing

- a) a clear lateral transfer space adjacent a water closet conforming to Clause 3.8.3.12.(1)(b),
- b) a distance between the centre line of the water closet and the wall on one side of 460 mm to 480 mm,
- c) a *plumbing system* that accommodates the future installation of a lavatory with a clear space in accordance with Clauses 3.8.3.16.(1)(a) to (f) that does not impede the space for or use of other fixtures described in this Article (see Note A-3.8.5.7.(1)(c) and (d)),
- d) a *plumbing system* that accommodates the future installation of a
 - i) shower described in Sentence 3.8.3.17.(1) that does not impede the space for or use of other fixtures described in this Article, or
 - ii) bathtub described in Sentence 3.8.3.18.(1) that does not impede the space for or use of other fixtures described in this Article (see Note A-3.8.5.7.(1)(c) and (d)), and
- e) walls adjacent the water closet and shower or bathtub location reinforced to accommodate the future installation of grab bars conforming to
 - i) Clauses 3.8.3.11.(1)(e) and (f) for water closets, and
 - ii) Clause 3.8.3.16.(1)(f) for showers or Clauses 3.8.3.17.(1)(f) for bathtubs (See Note A-3.8.5.7.(1)(e).

Adaptable bathrooms have reinforced walls around the water closet and bathtub or shower so that users have options for location of grab bars to suit their needs. The plumbing systems are located to facilitate modification or replacement of fixtures that would meet the fixture requirements in Subsection 3.8.3. for access. To allow design choice, it is

not required that fixtures meet Subsection 3.8.3. at the time of initial construction.

3.8.5.8. Adaptable Dwelling Unit Kitchens

- 1) The kitchen in an *adaptable dwelling unit* shall be designed so that the *cooktop* and sink are adjacent or can have a continuous counter between them.
- 2) A clear floor space shall be provided in the kitchen area that is not less than 1 700 mm in diameter or 1 700 mm by 1 500 mm.
- 3) The *plumbing system* service the kitchen shall accommodate the future installation of a kitchen sink that could be installed in accordance with the requirements for the installation of a lavatory as described in Clauses 3.8.3.16.(1)(b) to (f). (See Note A-3.8.5.7.(1)(c) and (d).)

Adaptable kitchens have plumbing systems located to facilitate modification or replacement of sink location and clearances that would meet the requirements for an accessible lavatory. To allow design choice, it is not required that kitchen sinks be located or provided with accessible lavatory clearances at the time of initial construction.

3.8.5.9. Controls, Switches and Outlets

- 1) Except as provided in Sentence (2), controls and switches for *building* systems and outlets in *adaptable dwelling units*, that are intended for frequent operation by occupants, shall not require activities for operation below 400 mm from the floor or above 1 200 mm from the floor.
- 2) Sentence (1) does not apply to controls, switches and dedicated outlets for equipment or appliances.

Part 9

Housing and Small Buildings

9.5.2. ~~Barrier-Free~~ Accessible Design

9.5.2.1. General

- 1) Except as provided in Articles 9.5.2.3. and 3.8.2.1., every *building* shall be designed in conformance with Section 3.8.

9.5.2.2. Protection on Floor Areas with an ~~Barrier-Free~~ Accessible Path of Travel

- 1) Where an ~~an barrier-free~~ accessible path of travel required in Article 9.5.2.1. is provided to any storey above the *first storey*, the requirements in Article 3.3.1.7. shall apply.

9.5.2.3. ~~Exception for Apartment Buildings~~

- 1) Except as provided in Sentence (2), ~~if the building is not equipped with an elevator, the barrier-free path of travel in a building of residential occupancy that contains multiple dwelling units and common interior space served by a common building entrance, access described in Section 3.8. need only shall be provided from the entrances, required by Sentence 3.2.1.1.(1) to be accessible, throughout all common spaces of entrance storeys and withing all other common spaces including rooftop occupancies serving adaptable dwelling units, on the entrance level of an apartment building.~~
- 2) ~~The barrier-free path of travel on the entrance level described in~~ Access required by Sentence (1) need not be provided where the difference in floor elevation between the entrance level and every dwelling unit exceeds 600 mm. on a floor level that
 - a) is not served by a ramp, passenger elevator, a platform-equipped passenger-elevating device, an escalator or an inclined moving walk,
 - b) is not a *building* entrance level, and
 - c) does not contain common facilities that are not also provided on an *accessible* level.

9.5.2.4. Visible Signal Devices

- 1) Visible signal devices shall be installed in conformance with Articles 3.2.4.19. and 3.2.4.20.

9.5.2.5. Lighting

- 1) Notwithstanding the requirements of Subsection 9.34.2., illumination shall be provided in accordance with Article 3.2.7.1.

The BCBC 2018 sends Part 9 designers to Section 3.8. which addresses visible signal devices and illumination. The NBC 2020 locates provisions for visible signal devices and illumination in Section 3.2. These pointers in Part 9 are a result of the relocation of provisions. These are not new requirements in the BCBC, but they are proposed in a new location.

9.8.1.5. Tactile Walking Surface Indicators

- 1) Tactile attention indicators shall be installed in conformance with Article 3.3.1.19.

The BCBC 2018 sends Part 9 designers to Section 3.8. which addresses tactile walking surface indicators. The NBC 2020 locates provisions for tactile walking surface indicators in Section 3.3. This pointer in Part 9 is not a new requirement but as a result of the relocation of provisions.

9.9.11.3. Exit Signs

- 1) Every *exit* door shall have an *exit* sign providing visual information placed over it or adjacent to it if the *exit* serves
 - a) a *building* that is 3 storeys in *building height*,
 - b) a *building* having an *occupant load* of more than 150, or
 - c) a room or *floor area* that has a fire escape as part of a required *means of egress*.
- 2) Every *exit* sign providing visual information shall
 - a) be visible on approach to the *exit*,
 - b) consist of a green and white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO 3864-1, “Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs and safety markings,” and
 - c) conform to ISO 7010, “Graphical symbols – Safety colours and safety signs – Registered safety signs,” for the following symbols (see Note A-3.4.5.1.(2)(c)):
 - i) E001 emergency exit left,
 - ii) E002 emergency exit right,
 - iii) E005 90-degree directional arrow, and
 - iv) E006 45-degree directional arrow.
- 3) Internally illuminated *exit* signs shall be continuously illuminated and
 - a) where illumination of the sign is powered by an electrical circuit, be constructed in conformance with CSA C22.2 No. 141, “Emergency lighting equipment,” or
 - b) where illumination of the sign is not powered by an electrical circuit, be constructed in conformance with CAN/ULC-S572, “Standard for Photoluminescent and Self-Luminous Exit Signs and Path Marking Systems.”
- 4) Externally illuminated *exit* signs shall be continuously illuminated and be constructed in conformance with CAN/ULC-S572, “Standard for Photoluminescent and Self-Luminous Exit Signs and Path Marking Systems.” (See Note A-3.4.5.1.(4).)

- 5) The circuitry serving lighting for externally and internally illuminated *exit* signs shall
- a) serve no equipment other than emergency equipment, and
 - b) be connected to an emergency power supply as described in Sentences 9.9.12.3.(2), (3) and (7).
- 6) Where no *exit* is visible from a *public corridor*, from a corridor used by the public, or from principal routes serving an open *floor area* having an *occupant load* of more than 150, an *exit* sign conforming to Clauses (2)(b) and (c) with an arrow or pointer indicating the direction of egress shall be provided.
- 7) *Exit signs with tactile information shall be provided in accordance with Article 3.4.5.2.*

Additions to Sentences (1) and (2) and Sentence (7) align Part 9 with Part 3 of the NBC 2020 for visual and tactile information on signs.

9.9.12.3. Emergency Lighting

- 1) Emergency lighting shall be provided in
- a) *exits*,
 - b) principal routes providing *access to exit* in an open *floor area*,
 - c) corridors used by the public,
 - d) underground *walkways*,~~and~~
 - e) *public corridors*,
 - f) *public washrooms that are equipped to serve more than one person at a time*,
 - g) *locations where doors are equipped with an electromagnetic lock as described in Clauses 3.4.6.16.(5)(k) and (6)(g), and*
 - h) *universal washrooms, universal shower rooms and accessible change spaces required by Article 3.8.2.8.*

Clauses (f), (g) and (h) align Part 9 with proposed changes to Part 3 for emergency lighting.

- 2) Emergency lighting required in Sentence (1) shall be provided from a source of energy separate from the electrical supply for the *building*.

- 3) Lighting required in Sentence (1) shall be designed to be automatically actuated for a period of at least 30 min when the electric lighting in the affected area is interrupted.
- 4) Illumination from lighting required in Sentence (1) shall be provided to average levels of not less than 10 lx at floor or tread level.
- 5) The minimum value of the illumination required by Sentence (4) shall be not less than 1 lx.
- 6) Where incandescent lighting is provided, lighting equal to 1 W/m² of *floor area* shall be considered to meet the requirement in Sentence (4).
- 7) Where self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, "Emergency lighting equipment."

Division A

Part 1

Compliance

Section 1.4. Terms and Abbreviations

1.4.1. Definitions of Words and Phrases

1.4.1.2. Defined Terms

- 1) The words and terms in italics in this Code shall have the following meanings:

Access or accessible means an area and its facilities, or both, as required by this Code, which is easy to approach, enter, exit, operate, participate in, pass to and from, and use safely and independently by persons with disabilities.

Adaptable dwelling unit means a dwelling unit designed and constructed with some accessible features and which accommodates the future modification to provide more accessible features.

~~*Barrier free* means that a building and its facilities can be approached, entered, and used by persons with physical or sensory disabilities.~~

Persons with disabilities means persons who have a permanent or temporary physical, mental, intellectual or sensory impairment which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.