



BOABC – 2024 BCBC Lunch and Learn Accessibility (part 01)

June 20, 2024

Hosted by: Ken Kunka, BCQ

Special Guest – Lucas Genereux, AScT – GHL Consultants Ltd

Promoting Building Safety and Professionalism



Overview

Information presented today does not directly represent the opinions of the Building Officials Association of BC or GHJ Consulting.

This presentation is conceptual and for informal educational purposes only. The presenters and association takes no responsibility for application of any concepts or interpretations in this presentation to specific projects.

(it may ask more questions than provide answers)

The slides must not be considered complete or exhaustive. Code provisions have been generally represented and may not reflect all exceptions.

Presenting from Summerland, on the ancestral and unceded territory of the Syilx People in the Okanagan Nation.



Rules of the Room



- Registration will be tracked
- Presentation is not recorded but PowerPoint will be posted
- Please use raise hand icon if you have a question or comment
- PUT IT in the CHAT
- Please mute your microphone
- You may need to turn off your camera
- Please follow up by email if you have specific question or example to share with the membership.
 - kkunka@boabc.org



Poll Questions

Poll Question #1

What is your level of BOABC Qualification?

- Level 01 Building – 19%
- Level 02 Building – 11%
- Level 03 Building – 38%
- Level 01 Plumbing – 22%
- Level 02 Plumbing – 8%
- Other – 2%

Poll Question #2

What region are you from?

- Lower Mainland – 54%
- South Central Interior – 15%
- Kootenay – 14%
- Northwest – 1%
- Central North Interior
- Vancouver Island North – 6%
- Vancouver Island South – 10%



June 20 – Accessibility

Today's Session

- What's New Update and Training
- Appeals and Technical Bulletins
- Accessibility
 - Webinar Guest – Lucas G.
 - Accessible Act & Background
 - Major changes – Code and Guide
 - Plan Reviews/Inspections/Alt Solutions
 - Renovation Case Example
- Q&A

Lunch and Learns

CPD Eligibility: 1 point automatically uploaded (Category A4).

Previous Lunch and Learns can be found:

<https://boabc.org/cpd-opportunity-lunch-learn-webinars/>



Upcoming Events-Calendar

« Prev June 2024 Next »						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
					1	2
3	4	5	6	7	8	9
10	11	12 * High Performance Fenestration	13	14	15	16
17	18 * National Code Development	19 * National Code Development	20 * National Code Development * Canadian Building Science * Lunch & Learn	21 * National Code Development	22	23
24	25 * BOABC Online AGM * BOABC Executive Meeting * National Code Development	26 * Low Carbon Step Code	27 * Passive House Windows	28	29	30

Category Key
 General

« Prev July 2024 Next »						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	2	3	4	5	6	7
8	9 * CASA Seminar Series * National Code Development	10	11 * Exterior Wall Performance * Canadian Building Science * Lunch & Learn	12	13	14
15	16	17 * Combustible Windows & Facade	18 * Lunch & Learn	19	20	21
22	23	24	25	26	27	28
29	30 * CASA Seminar Series	31 * Passive House Windows				

Category Key
 General



BOABC 2024 AGM

[Home](#) / [News](#) / Annual General Meeting of the BOABC – June 25, 2024

Annual General Meeting of the BOABC – June 25, 2024

The BOABC Annual General Meeting, will be held **ONLINE** from 9:00 am – 11:00 am on Tuesday, June 25, 2024.

Formal notice of this meeting has been provided to all members by email pursuant to section 7(4) of the bylaws.

The notice includes the registration link for the AGM. Registration closes on Friday, June 21, 2024, and late registrations **cannot** be accepted.

Prior to the AGM, all registrants will receive an email with a Zoom meeting link. Voting credentials will be sent to all registrants who are eligible to vote. This email will be sent by the third-party vendor, Data On The Spot (DOTS), that is providing the online meeting and voting software.

To view all AGM Documents, please sign into the [Member Forum](#).



What's New at the Association



What's New

National Model Codes
Public Review



[Learn More ▶](#)

CPD Opportunity –
Canadian Building
Science Series



[Learn More ▶](#)

CPD Opportunity –
Zero Carbon Step Code
201



[Learn More ▶](#)

Lunch & Learn – June
20, 2024



[Learn More ▶](#)



National Codes Public Review!

[Home](#) / [News](#) / National Model Codes Public Review

National Model Codes Public Review

The Canadian Board for Harmonized Construction Codes (CBHCC) is continuing the consultation on the proposed changes for inclusion in the 2025 National Model Codes and is inviting the public to take part.

The public review will run from **May 27 to July 29, 2024**. Those interested in participating in the review can access the proposed changes on the [CBHCC's website](#) and provide feedback.

The public review is an opportunity for all Canadians to participate in the code development process. We strongly encourage our industry partners and stakeholders to participate in the 2025 National Model Codes consultation series.

Following the public review, all comments will be considered by the relevant code development committees, and recommendations on the proposed changes will be made to the CBHCC. If approved, the changes will be included in the 2025 editions of the National Model Codes.

As we work towards increased harmonization of the construction codes, these consultations are also an opportunity for the Province to receive your feedback on proposed changes that we intend to adopt in future editions of BC Codes.

For more information, please contact the CBHCC at CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca.

<https://boabc.org/national-model-codes-public-review/>



2024 BC Code Appeals - Interpretations

BC Code Appeals - binding

Interpretations – not binding

- [Appeal 1931](#) Means of Egress in an Alteration to an Existing Building, April 18, 2024
- [Appeal 1930](#) Alternative Solution to Address Combustible Construction and High Building Measures, May 2, 2024
- [Appeal 1929](#) Concealment of Combustible Water Piping in a Building of Noncombustible Construction, April 18, 2024
- [Appeal 1928](#) Applicability of the Building Code to an Accessory Building, April 18, 2024
- Appeal 1927 Cancelled
- [Appeal 1926](#) Accessible Location for Shut-off Valves, Residential Suites, February 15, 2024
- [Appeal 1925](#) Configuration of Required Egress and Exits, Two-Storey Suites, February 15, 2024



2024 BC Code – Technical Bulletins

BRITISH COLUMBIA

Search Menu

< [Farming, natural resources and industry](#) / [Construction industry](#) / [Building Codes & Standards](#) / [BC Codes](#) / [Technical Bulletins](#)

MORE TOPICS

BC Codes

- BC Codes 2024
- BC Codes 2018
- Errata & Revisions
- Technical Bulletins**
- Code Interpretations
- Other Code Resources
- Letters of Assurance
- BC Public Review
- National Model Codes

Technical Bulletins

Last updated on April 19, 2024

The technical bulletins provide more detail and help clarify code provisions for builders and building professionals.

Technical bulletins

- BC Building Code 2024
- BC Plumbing Code 2024
- BC Building Code 2018
- BC Fire Code 2018

Technical bulletins

BC Building Code 2024

- B24-01 [Adaptable Dwellings Transition \(PDF\)](#)
- B24-02 [Seismic Design Delay Period \(PDF\)](#)
- B24-03 [Radon \(PDF\)](#)
- B24-04 [Windows, Doors, and Skylights \(PDF\)](#)
- B24-05 [2024 Edition of the BC Codes \(PDF\)](#)
- B24-06 [Self-Service Storage Buildings \(PDF\)](#)
- B24-07 [Relocated Buildings \(PDF\)](#)
- B24-08 [Overheating \(PDF\)](#)
- B24-09-R [Adaptable Dwelling Unity Frequently Asked Questions \(PDF\)](#)

June 25

BC Plumbing Code 2024

- P24-01 2024 [Edition of the BC Plumbing Code \(PDF\)](#)



BOABC Members Question – Poll Question

Spatial Calculations – rounding factors

My question is regarding the convention of rounding of values. Here is the specific circumstance:

- *BCBC has specific requirements for separation between buildings. Once this distance is “less than 1.2 m”, no unprotected openings (windows/doors) are permitted.*
 - *Project has two buildings which are 4.78 m apart as determined by a BCLS Certificate. Consistent with Code the initial limiting distance is 2.39 m for each building.*
 - *As our community is outside the 10 minute fire response time, and by code requirements this distance is to be reduced by 50% = 1.195 m*

3. POLL QUESTION

The BCBC requirements are expressed in a tenth of a meter (1.2 m), with calculations to the hundredth of a meter (1.195 m). In this circumstance, rounding of values gives:

- *Hypothetical 1.199 (or 1.19999999) = non-compliant – 6%*
- *1.195 m = non-compliant – 12%*
- *1.20 m = compliant – 45%*
- *1.2 m = compliant – 38%*

Would 1.20m work in this case-compliant?

- *Yes – 95%*
- *No – 5%*

Poll question



Accessibility





Guest Presenter

Lucas Genereux is a graduate with Honours of the Architectural Technologist program at SAIT (South Alberta Institute of Technology) and is registered with ASTTBC as an Applied Science Technologist. Lucas has been with GHl Consultant for just over 3.5 years and assists with everything from drawing and shop drawing reviews, developing of code compliance and alternative solution reports, and conducting field reviews.



Lucas Genereux

AScT



* Open to input - lg@ghl.ca

[BCBC 2024 Illustrated Guide on Accessibility \(ghl.ca\)](https://ghl.ca/BCBC-2024-Illustrated-Guide-on-Accessibility)



What is Accessibility-Barriers?

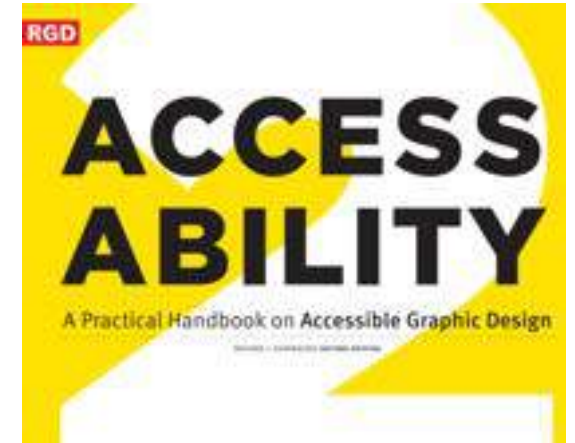
- Much like “sustainability”, accessibility can be used for several different scenarios depending on the area of interest or needs.
- In a broader sense accessibility is the overall inclusion of all persons in society. This is outlined both Federally and Provincially.
- Accessibility should not be considered an add-on or feature. It works best and is the most cost effective when it is a core consideration from the beginning of project planning.



What is Accessibility-Barriers?

Example of Barriers

- Attitudes
 - When people think and act based upon false ideas
- Physical
 - When obstacles make access difficult (built-environment)
- Information or communication
 - When communication methods do not reach people with disabilities
- Systemic
 - When an organization's policies or procedures aren't inclusive
- Technology
 - When technology can't be accessed by people with disabilities
- Sensory
 - When lights, sounds or smells prevent participation in the environment



Has your website been updated lately?



What is Accessibility - Federal

The Government of Canada consulted with Canadians from July 2016 to February 2017 to find out what an accessible Canada means to them. On June 20, 2018, the Government introduced Bill C-81, An Act to ensure a barrier-free Canada (the Accessible Canada Act) in Parliament. The Accessible Canada Act received Royal Assent on June 21, 2019, and came into force on July 11, 2019.

The purpose of the Accessible Canada Act is to make **Canada barrier-free by January 1, 2040**. This involves identifying, removing and preventing barriers in federal jurisdiction in the following priority areas:

- employment
- **the built environment (buildings and public spaces)**
- information and communication technologies
- communication, other than information and communication technologies
- the procurement of goods, services and facilities
- the design and delivery of programs and services, and
- transportation (airlines, as well as rail, road and marine transportation providers that cross provincial or international borders)



What is Accessibility - Federal

Accessibility in Buildings

With an aging population and an increase in Canadians reporting limitations to their daily activities due to disabilities, accessibility is becoming an increasingly important topic. The federal government, as well as provinces, territories and municipalities, are developing initiatives to improve current levels of accessibility in the built environment. However, different policy goals among regions are leading to disharmony, creating inconsistency and confusion across Canada amongst industry, regulators and the general public.

One of the objectives in the National Building Code of Canada (NBC) is to **"limit the probability that, as a result of the design or construction of the building, a person with a physical or sensory limitation will be unacceptably impeded from accessing or using the building or its facilities"**.



Accessible British Columbia

Accessibility regulation

Effective September 1, 2022, over 750 public sector organizations will be required to establish an accessibility committee, an accessibility plan and a build tool to receive feedback on their accessibility.

The Government of British Columbia is working towards being an inclusive province. There are over 926,000 people with disability in B.C. In June 2021, the Accessible B.C. Act became law. It provides a framework to identify, remove, and prevent barriers to accessibility. The new law is an important step to make B.C. a more accessible province.



<https://youtu.be/HaHu2RLF19E?si=2cZzzKXXAuvwDMuS>

[AccessibleBC: B.C.'s Accessibility Plan for 2022/23 to 2024/25 - Province of British Columbia \(gov.bc.ca\)](https://www2.gov.bc.ca/gov/content/accessiblebc)



Accessible British Columbia Built Environment

B.C. Accessibility Engagement



Initial Round of public engagement

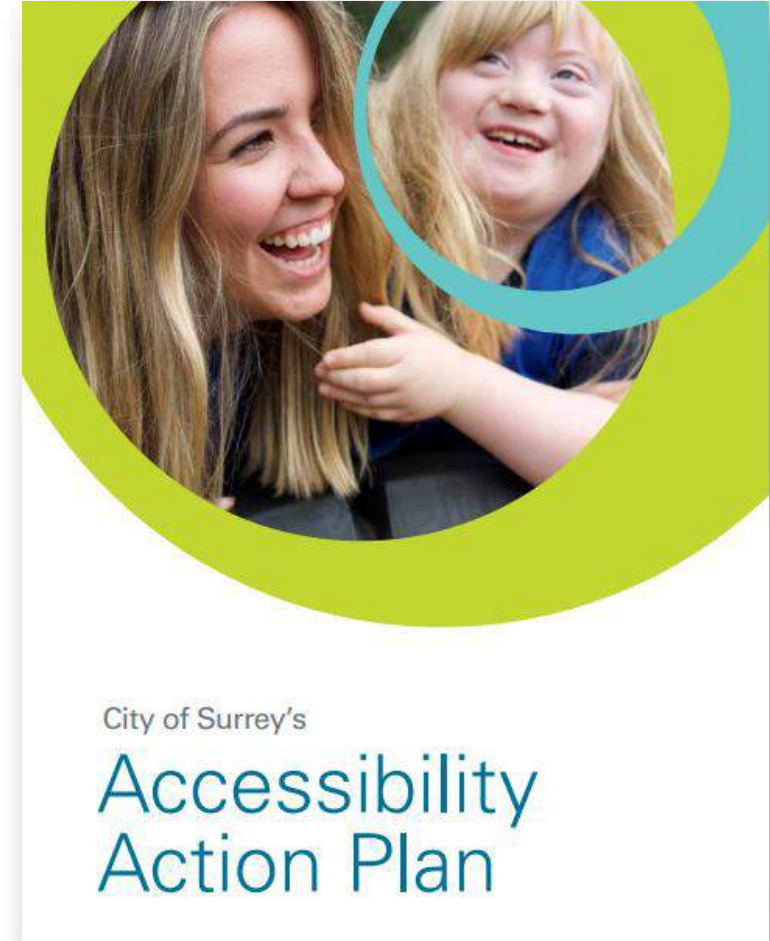
- 55% - requested more automatic door openers for public buildings
- 53% - better access between floors - elevators
- 61% - All homes should be designed to make it easier to age in place – adaptable.

Refer to BOABC Code Update – Module 01



What is Accessibility – Local Government

At the local government level, your community may be going thru reviews or have established committees to improve accessibility to government services such as improvements your facilities, infrastructure & transportation and you communication services and your website.





Poll Question



4. Does your local government/organization have an accessibility policy or plan?

Yes - 26%
No - 35%
Unknown - 40%



5. If yes, did your building department play a role in its development?

Yes - 12%
No - 41%
Unknown - 47%



Accessibility – Level of Importance Built-Environment

Building Bylaw – Community Charter – Division 08

General authority in relation to buildings and other structures

53 (1) In this section, "greenhouse gas" has the same meaning as in the Climate Change Accountability Act.

(2) A council may only exercise its authority under section 8

(3) (1) [spheres of authority — buildings and other structures] or this Division for the following:

(a) **the provision of access to a building or other structure, or to part of a building or other structure, for a person with disabilities;**

(b) the conservation of energy or water;

(c) the reduction of greenhouse gas emissions;

(d) the health, **safety** or protection of persons or property.

BOABC

Mission - The BOABC is dedicated to serving the best interests of the public in building **safety** by moving forward with the highest standards in professionalism, competency and consistent practice in the Building Community.

The Association's motto is; "Promoting **Building Safety** and Professionalism"

Does **safety** also include Accessibility, or should that be stand-alone standard?



Poll Question

Do you feel that **accessibility** has ranked at the same level of importance as Fire, Health, Structural?

6. New construction

- Yes – 29%
- Somewhat – 38%
- No – 33%

7. Renovations

- Yes – 9%
- Somewhat – 40%
- No – 52%

For example – why does access rank so low for Heritage Bldgs?

Table 1.1.1.1.(5)
Alternate Compliance Methods for Heritage Buildings
Forming Part of Sentence 1.1.1.1.(5)

No.	Code Requirement in Division B	Alternate Compliance Method
1	<i>Fire Separations</i> Sentence 3.1.3.1.(1), Table 3.1.3.1., Subsection 9.10.9. 2 h <i>fire separation</i> required between some <i>major occupancies</i> .	Except for F1 <i>occupancies</i> , 1 h <i>fire separation</i> is acceptable, provided the <i>building</i> is <i>sprinklered</i> .
35	<i>Access for Persons with Disabilities</i> Section 3.8. of Division B	Article 3.8.4.5. shall apply to existing <i>buildings</i> .



History of Accessibility – Built Environment

National level – accessibility

The first accessibility requirements were introduced into the NBC in 1965 as enabling requirements (**See Appendix 3**), although they were limited in nature and scope, particularly as applied to residential buildings. Today's requirements — located in Section 3.8, Accessibility, and Subsection 9.5.2., Barrier-Free Design, of Division B of the NBC, address primarily public areas, such as areas where services are provided and workplaces.

Between 1995 and 2005, the CCBFC performed a "bottom-up" and a "top-down" analysis that **created the rationale to include accessibility as an objective in the NBC alongside safety, health and protection of buildings.**

- [Policy Paper: Accessibility in Buildings - National Research Council Canada](#)



History of Accessibility – Built Environment

National level – accessibility

Appendix 3 – History of building accessibility in the NBC

NBC Edition and Approach	Illustrations of Accessible Floor areas
<p>Prior to 1965</p> <ul style="list-style-type: none"> • How: no requirement • Where: no requirement <p>NBC 1965</p> <ul style="list-style-type: none"> •How: Supplement design standard •Where: optional 	

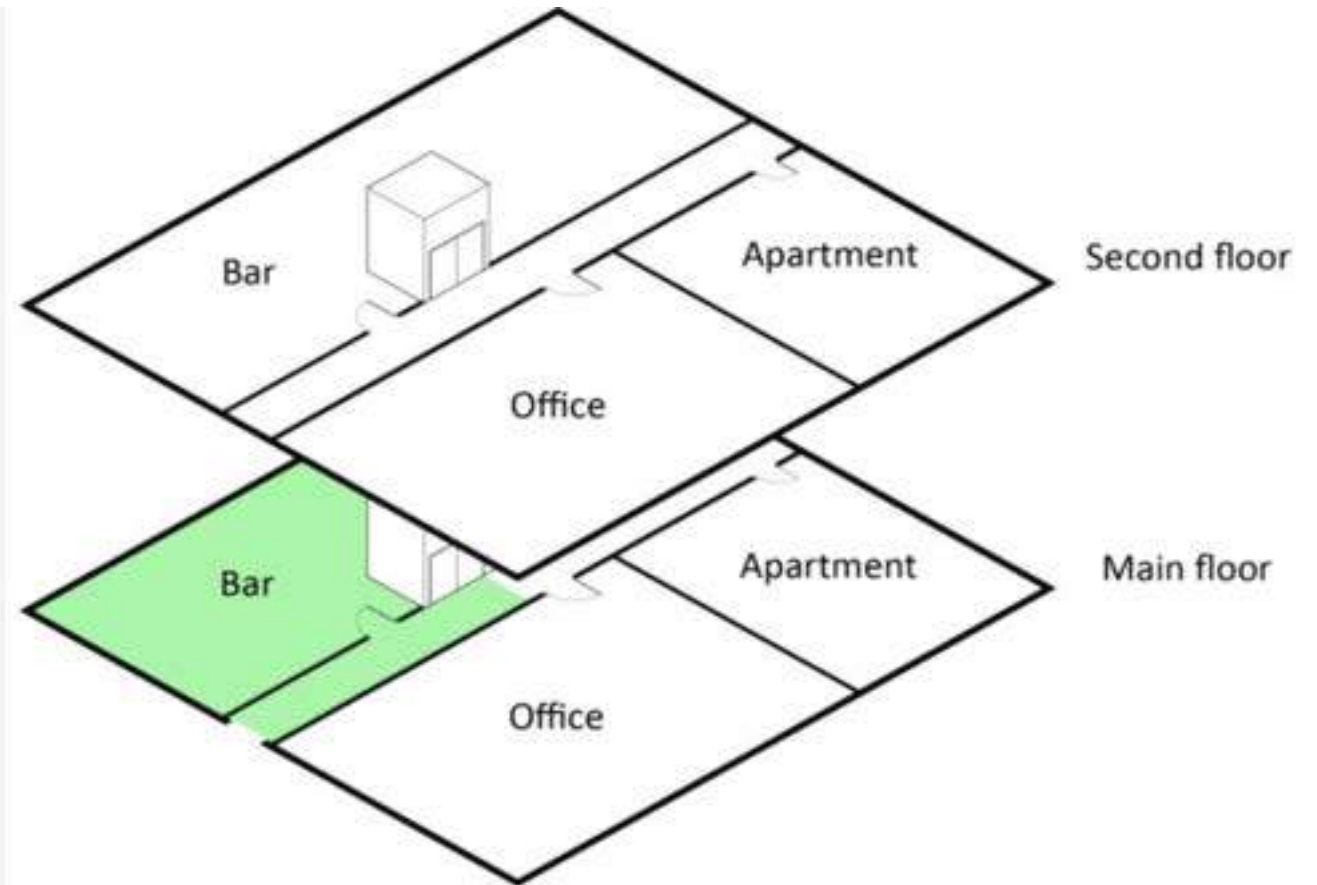


History of Accessibility – Built Environment

National level – accessibility

NBC 1975 and 1977

- How: Supplement design standard
- Where: public areas on the main floor up to one elevator (exclude apartment and office buildings)



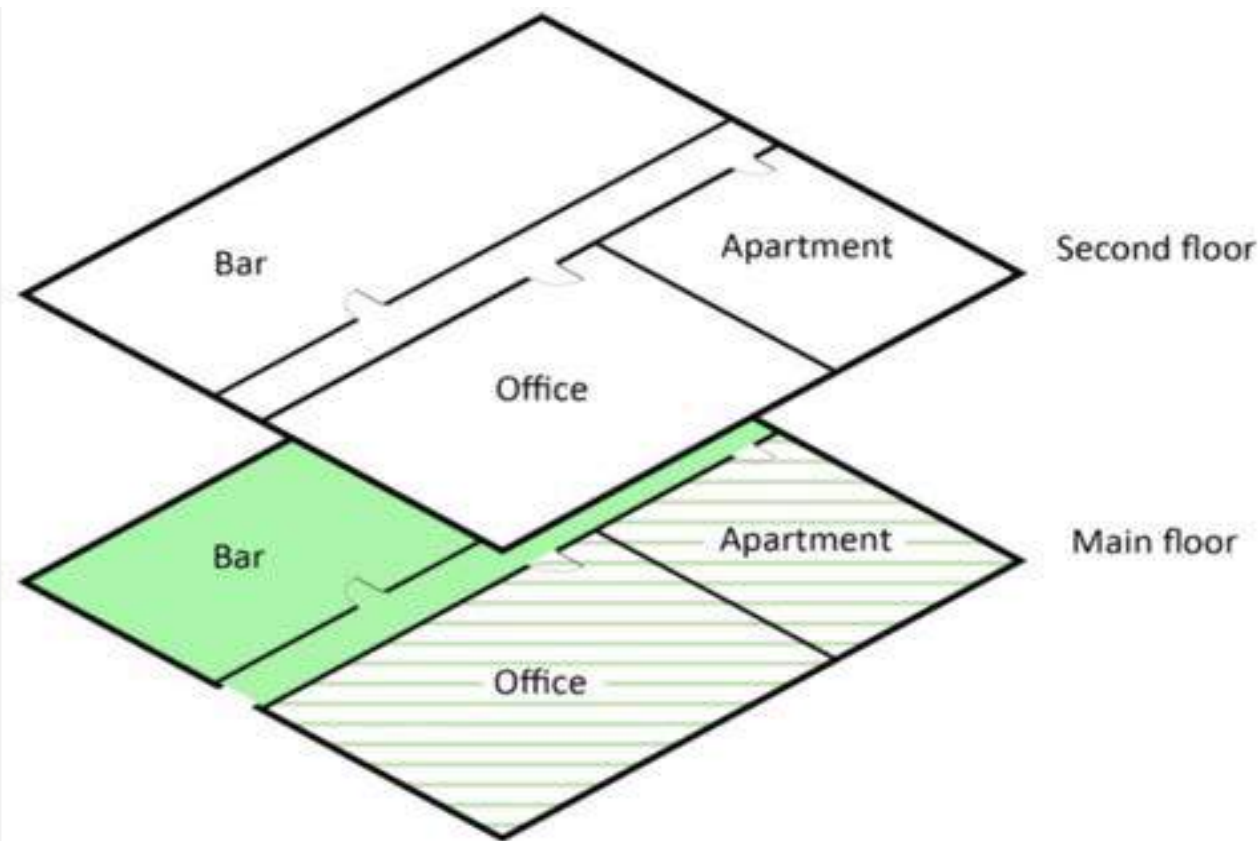


History of Accessibility – Built Environment

National level – accessibility

NBC 1985 and 1990

- How: design standard in the NBC
- Where: main floor and on floors served by elevators (the application within suites is vague)



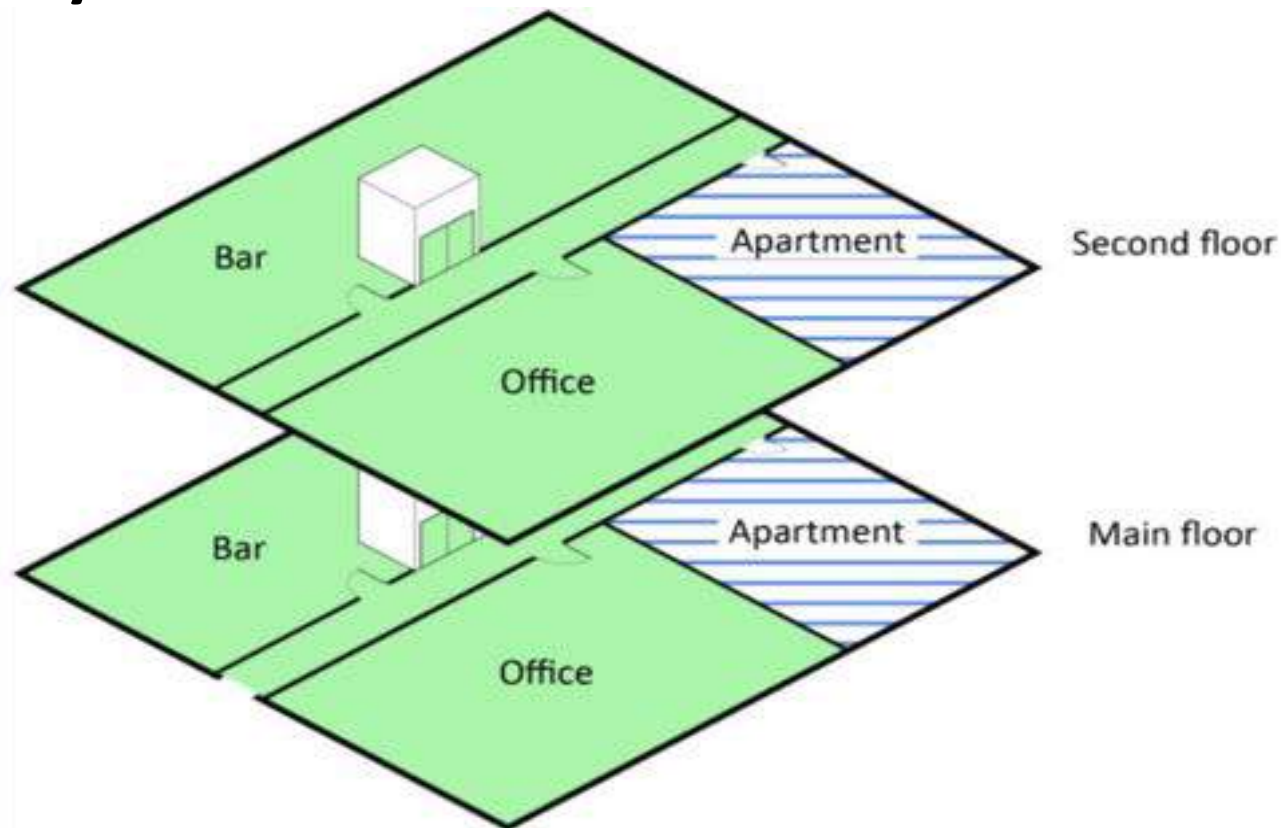


History of Accessibility – Built Environment

National level – accessibility

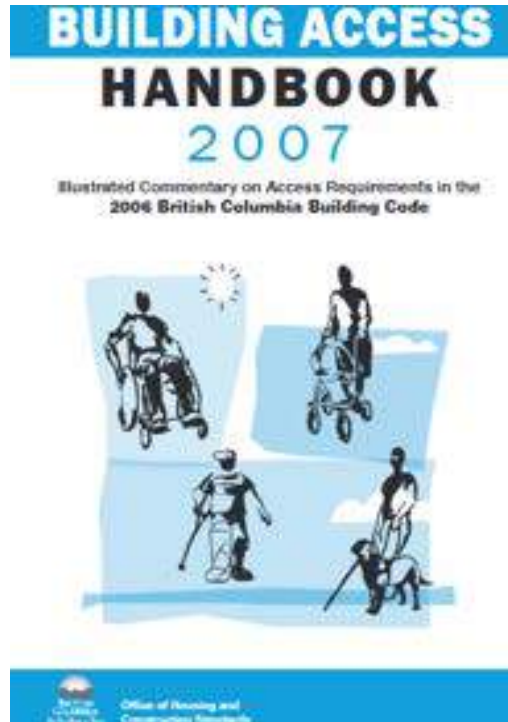
NBC 1995 to 2010

- How: design standard in the NBC
- Where: main floor and on floors served by elevators (except within hotel suites and apartments not designated by the AHJs)





History of Accessibility – BC Built Environment



The 1985 BC Building Code incorporated accessible requirements

192/87	Adopt BC Building Code 1985 (amended '85 NBC)	28 Sep 87
339/87	Reinstate Mobile Home Standard, CSA Z240	15 Sep 87
362/88	First revisions and errata	16 Nov 88
231/89	Second revisions Sept. 89	01 Oct 89

[history of the codes 2015 update.pdf \(gov.bc.ca\)](#)

How much will Renovations to existing building will be impacted with new accessibility standards?



Existing buildings renewal strategy

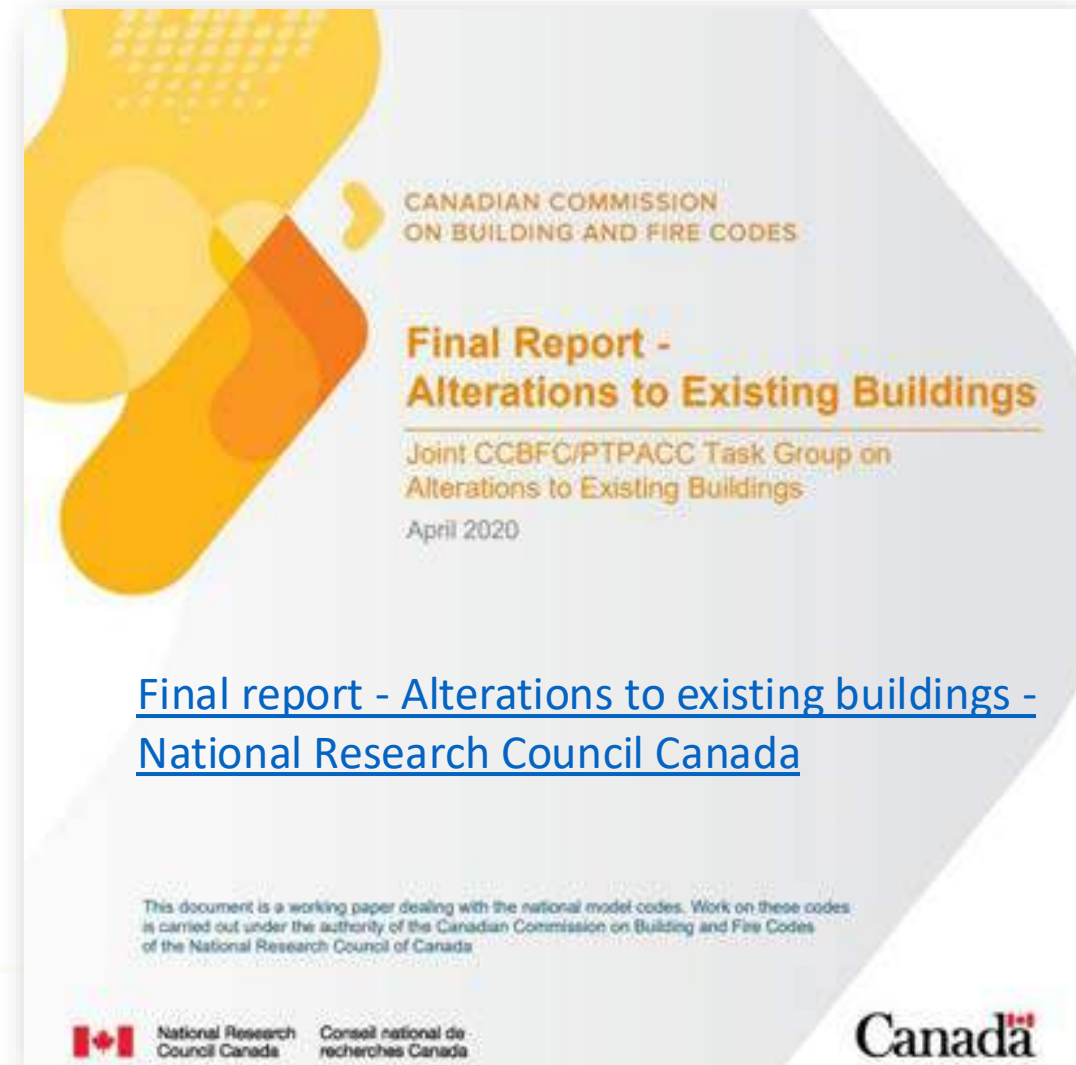
BC - What is the Strategy?

The Existing Buildings Renewal Strategy will develop a path for today's buildings to become more energy and water efficient, cleaner, and **safer** for British Columbians during events like earthquakes, wildfires and wildfire smoke, heat waves, drought, and floods.

Federal – Alterations to existing buildings

Today's National Codes address the objectives of fire and structural safety, health, **accessibility**, fire and structural protection of buildings and facilities, as well as the environment (water-use and energy-use efficiency).

For the purpose of this report, all proposed triggers are based on a voluntary action by the building owner to alter a building, unless required by an authority (e.g. unsafe conditions). The idea is that when an owner has decided to alter, upgrade or change the function of a building, there could be additional requirements to improve the **energy efficiency**, **accessibility**, **seismic resilience**, **structural integrity** or **fire safety/protection** of that building to meet the current code. The extent of the technical requirements will depend on the extent of the alteration or change of occupancy.



[Final report - Alterations to existing buildings - National Research Council Canada](#)



2024 BCBC - Accessibility

The 2024 BCBC has significant changes related to accessibility in both harmonization with the NBC as well as BC Specific Changes

Amendments to the Preface

The 2024 BCBC indicates changes and additions using vertical lines beside the text in the margin:

- A bold vertical line indicates a B.C. variation from the model National Building Code (NBC). New B.C. variations to the NBC aren't specifically identified.
- A thin vertical line indicates new or changed content since the 2015 NBC.
- No indications provided for renumbered or deleted provisions.
- Certain deleted Codes Canada model content not yet adopted are marked with "Reserved". This term is generally used so that the numbering structure matches the NBC making it easier to compare and harmonize.

Adaptable changes not in effect until March 2025 for within a residential unit. All areas outside of a residential until to comply with 2024 Accessibility requirements.



Harmonized Changes Effective March 2024

- ✓ All building entrances and entrances to accessible washrooms must provide a power-operated door
- ✓ An elevator is required in large two and three-storey buildings
- ✓ Full-sized changing space in universal washrooms of large occupancies

BC-Specific Changes Effective March 2025

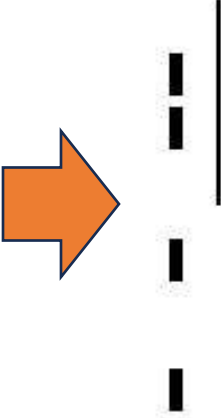
- ✓ Accessible clearances through doorways and along paths of travel to living space
- ✓ Space in a bedroom, bathroom and kitchen
- ✓ Switches and other controls at accessible heights
- ✓ Reinforcement of bathroom walls to allow future installation of grab bars



2024 BCBC - Accessibility

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)(1), all pedestrian entrances to an *accessible storey* of a *building* referred to in Sentence 3.8.2.1.(1) shall be *accessible* and shall connect to an *accessible* exterior path of travel complying with Sentence 3.8.2.5.(1).
 - 2)** An *accessible* entrance required by Sentence (1) shall be designed in accordance with Subsection 3.8.3.
 - 3)** At an *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.



Defined Terms

Defined Terms - 2024BCBC (revised)

- **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.
- **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.



When does Accessible mean Accessible?

9.5.2. 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 Accessible Path of Travel

1) Where an *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.

3.4.6.1. Slip Resistance of Ramps and Stairs

- 1) The surfaces of *ramps*, and landings and treads
 - a) shall have a finish that is slip resistant, and
 - b) if *accessible* to the public, shall have either a colour contrast or a distinctive pattern readily visible from both directions of travel, to demarcate the leading edge of the tread and the leading edge of the landing, as well as the beginning and end of a *ramp*.

9.4.2.3. Platforms Subject to Snow and Occupancy Loads

1) Balconies, decks and other *accessible* exterior platforms intended for an *occupancy* and subject to snow loads shall be designed to carry the specified roof snow load or 1.9 kPa, whichever is greater, where the platform, or each segregated area of the platform, serves a single *dwelling unit*. (See Note A-9.4.2.3.(1).)

3.3.2.13. Libraries

- 1) Except as permitted by Sentence (2), a library book storage room that is not normally *accessible* to the public shall be separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 2 h if it
 - a) is more than 250 m² in area, or



Defined Terms

Non-Defined Terms - 2024BCBC

- **Barrier Free**

Accessible (BC) = Barrier Free (NBC)

Barrier-free/accessibility

NBC [5]

A barrier-free building means that the building and its facilities can be approached, entered, and used by persons with physical or sensory disabilities.

- **Universal**

Universal design

The Center for Universal Design, College of Design, North Carolina State University [2]

Universal design is the design of products and environments to be usable by all people to the greatest extent possible without the need for adaptation or specialized design. The intent of universal design is to simplify life for everyone by making products, communications and the built environment more usable by as many people as possible at little or no extra cost. Universal design benefits people of all ages and abilities.



Objective and Functional Statements

Objective Statements

OA Accessibility

An objective of this Code is to limit the probability that, as a result of the design or construction of the *building*, *persons with disabilities* will be unacceptably impeded from accessing or using the *building* or its facilities (see Sentence 2.1.1.2.(5) for application limitations).

OA1 Accessible Path of Travel

An objective of this Code is to limit the probability that, as a result of the design or construction of the *building*, *persons with disabilities* will be unacceptably impeded from accessing the *building* or circulating within it (see Sentence 2.1.1.2.(5) for application limitations).

OA2 Accessible Facilities

An objective of this Code is to limit the probability that, as a result of the design or construction of the *building*, *persons with disabilities* will be unacceptably impeded from using the *building's* facilities (see Sentence 2.1.1.2.(5) for application limitations).

Functional Statements

F73 To facilitate *access* to and circulation in the *building* and its facilities by *persons with disabilities* (see Sentence 3.1.1.2.(3) for application limitation).

F74 To facilitate the use of the *building's* facilities by *persons with disabilities* (see Sentence 3.1.1.2.(3) for application limitation).

Application of Functional Statements

3) Functional Statements F73 and F74 do not apply to 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), 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.



Referenced Standards

B355:19 - 3.8.3.7.(1) – Passenger-Elevating devices

CSA	B355:19	Platform lifts and stair lifts for barrier-free access	3.8.3.7(1)
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B651-18
National Standard of
Canada



B651-18

3.3.1.19 (1) - Tactile Walking Surface Indicators

3.8.3.1.(1) – Design Standards

Table 3.8.3.1. - Accessible Design Provisions

3.8.3.3.(1) – Exterior Walks

3.8.3.9.(1) – Accessible Signs

Accessible design for the built environment



REVISED MARCH 2020

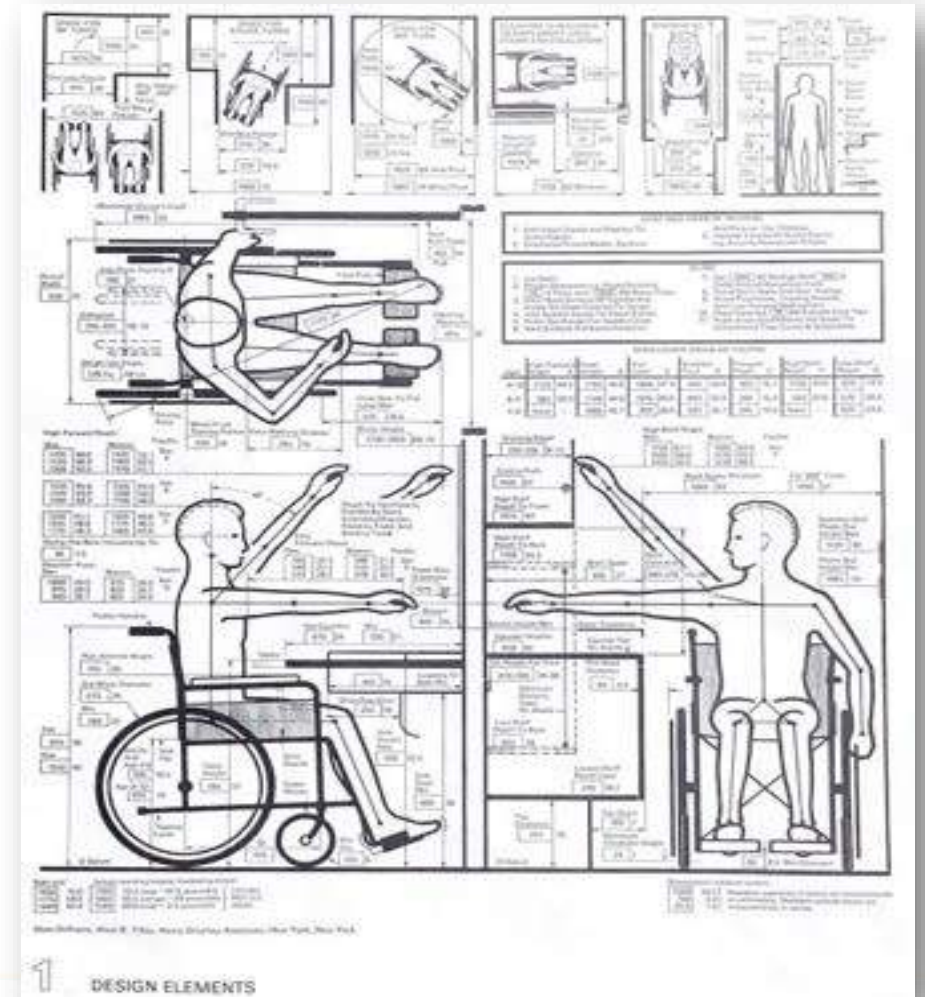
CSA	B651-18	Accessible design for the built environment	3.3.1.19.(1) 3.8.3.1.(1) Table 3.8.3.1. 3.8.3.3.(1) 3.8.3.9.(1)
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The Building Science of Accessibility?

Understanding basic building science principles is important when considering Code requirements such as Fire Protection or Building/Thermal Assemblies – but what about Accessibility, especially when faced with an Alternative Solution proposal?

When dealing with renovations and change of use projects with existing limitations - **what is considered practical and to whom?**





The Building Science of Accessibility?

The CSA B651-18 is an excellent guide and noted in the Code

CSA	B651-18	Accessible design for the built environment	3.3.1.19.(1) 3.8.3.1.(1) Table 3.8.3.1. 3.8.3.3.(1) 3.8.3.9.(1)
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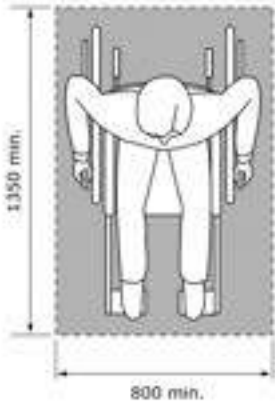


B651-18
National Standard of
Canada



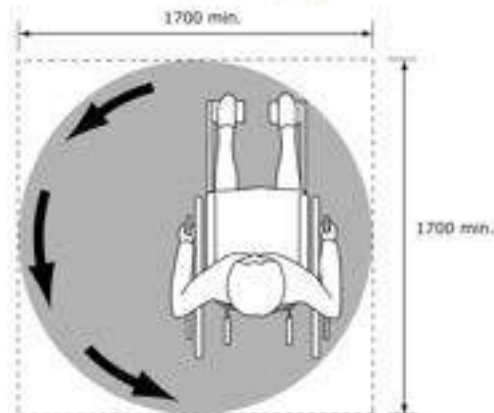
Accessible design for the built environment

Figure 1
Minimum floor area for a person using a wheeled mobility device (manual wheelchair, powered wheelchair, or scooter)
(See Clause 4.1.)



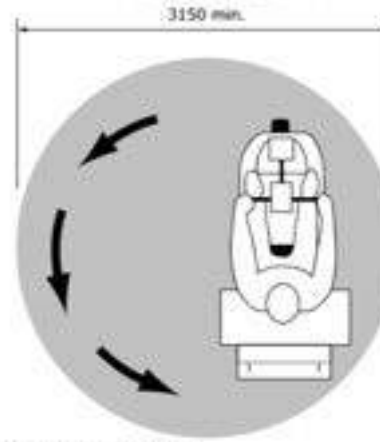
Note: All dimensions are in mm.

Figure 2
Minimum area at the toe level for a person using a wheeled mobility device (manual wheelchair, powered wheelchair, or scooter) to make a U-turn
(See Clause 4.1.)



Note: All dimensions are in mm.

Figure A.14
Turning area for a person using a large scooter (continuous turn)
(See Clause A.9.)



Note: All dimensions are in mm.





The Building Science of Accessibility?

Design elements incorporate all types of disabilities and limitations

Figure A.7
Walkway width for a person with a service animal
(See Clause A.5.)



Figure A.8
Floor area for a person using a walker
(See Clause A.6.)

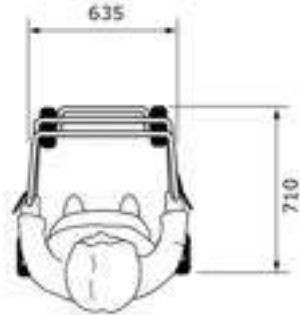
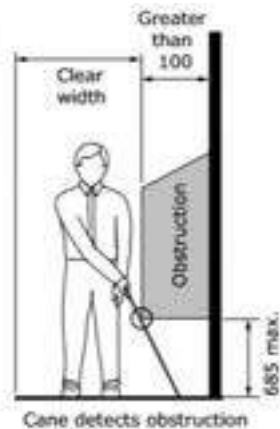
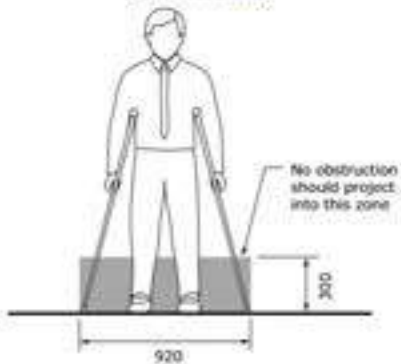
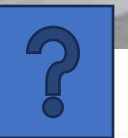
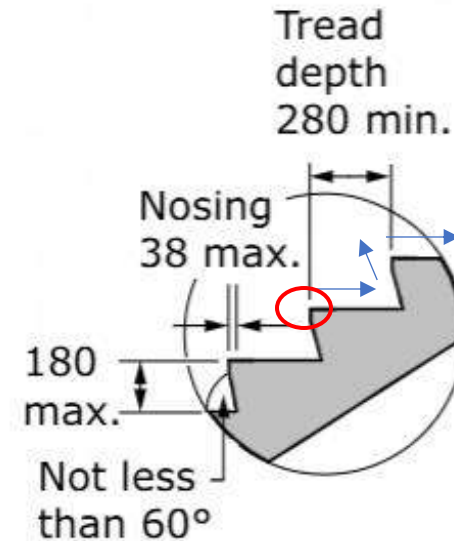


Figure A.5
Walkway width for persons using crutches
(See Clause A.3.)



Nosings - Have you ever considered what “rake back” nosing’s refer to?

Persons with visual impairments or elderly people use their foot to rake (to move) across the stair surface. Some tactile on nosing strips can create a tripping hazard – so rake your foot along it at inspection.





TOP 10 Space Impact Changes

- When an accessible stall, limited mobility stalls/urinals, and universal washrooms are required per 3.8.2.8.
- **Bump-Outs & Turn Around areas at end of corridors per 3.8.3.2.(5) & (6)**
- When an accessible shower with a 1830mm X 760mm bench where showers are required per 3.8.2.8.(13), this will most often come up on every project that has an end of trip facility. - p
- **New clear turning area in universal washroom & new clear floor area in and in front of accessible stall – 3.8.3.13**
- Bunch of new tactile/visual signage requirements (Check Section 4 of GHl's Illustrated Guide on Accessibility)





TOP 10 Space Impact Changes

- Automatic door openers on self closing doors per 3.8.2.7.
- Clear space at doors per 3.8.3.6.
- Adult size change table in universal washroom per 3.8.2.8.(1) (only will come up in you have larger occupancies like assembly/retail buildings)
- Sleeping room required more frequently and minimum sizes have changed
- Accessible paths of travel are smaller
- Ramps smaller but bigger at top and bottom & at doors.





Accessible Paths of Travel – 3.8.3.2.(5)

3.8.3.2. Accessible Path of Travel

5) The width of an *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.

1

ACCESSIBLE ROUTES & CIRCULATION

- 5) **Bump-Outs:**
The width of an 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.

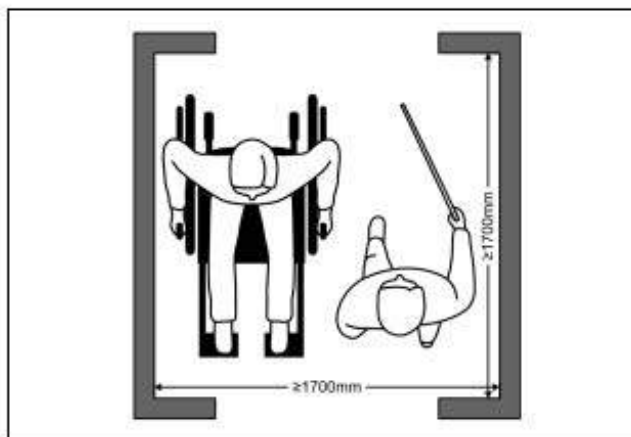


Figure E - Bump-Out Size

Question – will single egress stairs impact accessibility?

[Province seeks input on single egress stairway designs | BC Gov News](#)

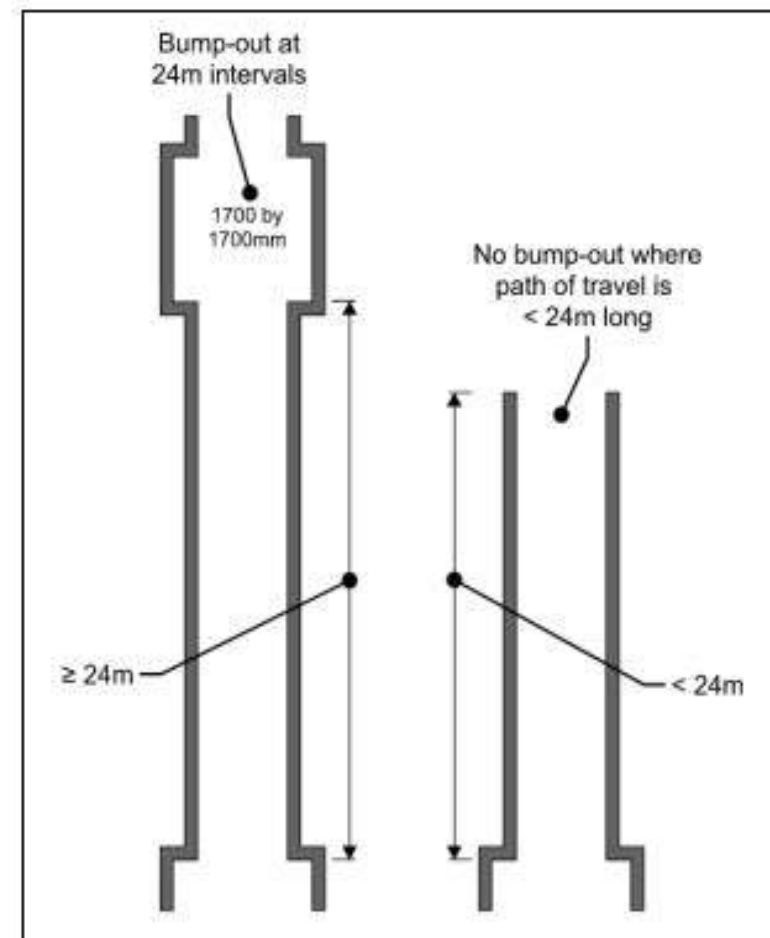


Figure F - Bump Out Locations

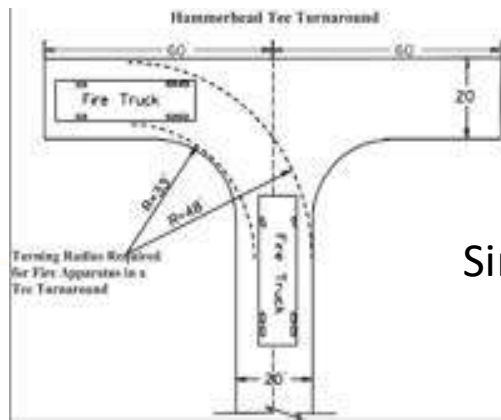


Accessible Paths of Travel – 3.8.3.2. (6)

3.8.3.2. Accessible Path of Travel

- 6) Where a section of an *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).)



Similar to FD access

1

ACCESSIBLE ROUTES & CIRCULATION

- 6) **Turn Around Space:**
Where a section of an 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 1700 mm in diameter,
 - b) not less than 1700 mm by 1500 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.

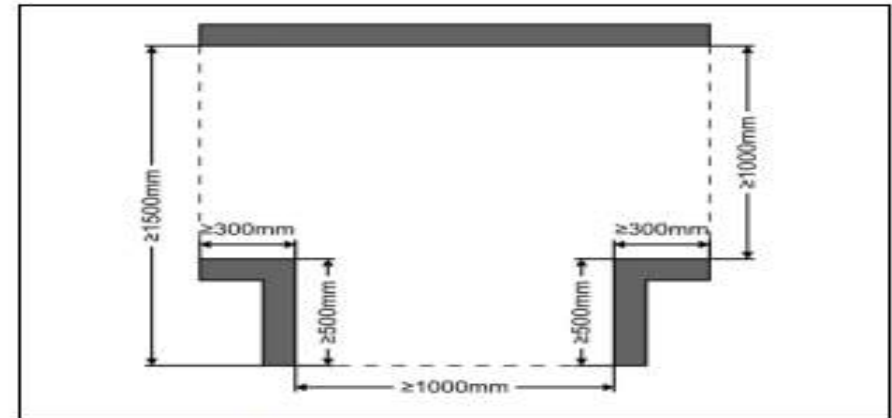


Figure G - 3.8.3.2.(6)(c) Turn Around Space



3.8.3.2. Accessible Path of Travel

3.8.3.2. Accessible Path of Travel	
(6)	[F73 - OA1]

F73 To facilitate *access* to and circulation in the *building* and its facilities by *persons with disabilities* (see Sentence 3.1.1.2.(3) for application limitation).

OA1 Accessible Path of Travel

An objective of this Code is to limit the probability that, as a result of the design or construction of the *building*, *persons with disabilities* will be unacceptably impeded from accessing the *building* or circulating within it (see Sentence 2.1.1.2.(5) for application limitations).

3.8.3.2.(6)

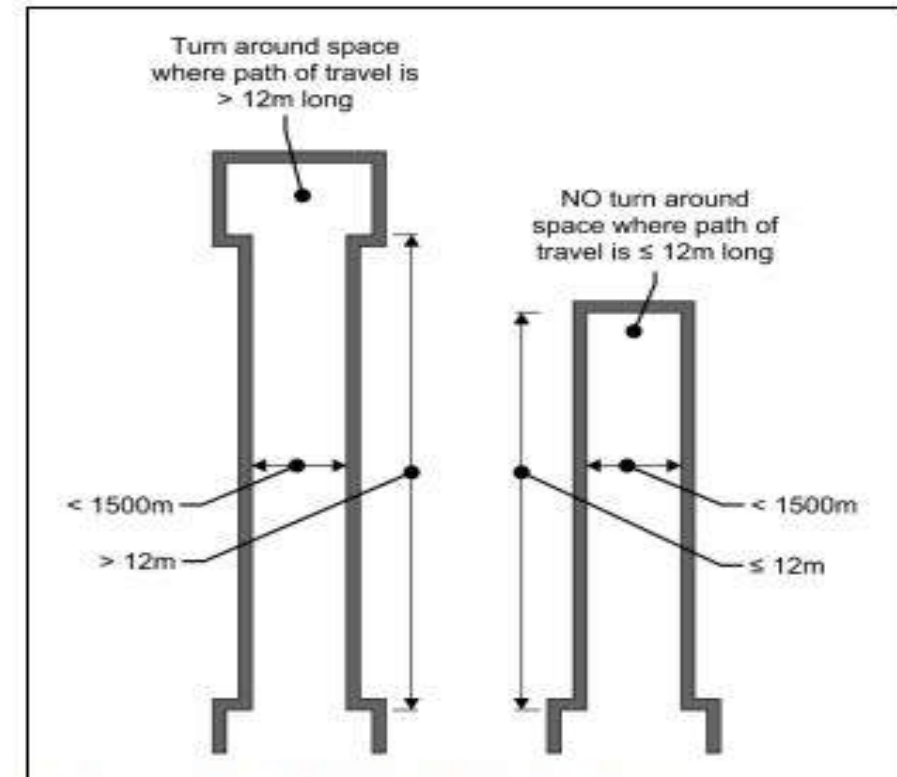


Figure H - Turn Around Space Locations

Why 12 meters (40ft)?

What would be an Alternative Solution if not met?



Universal Washrooms– 3.8.3.13.

2

PLUMBING FACILITIES

With Adult Change table
Sentence 3.8.2.8.(15)

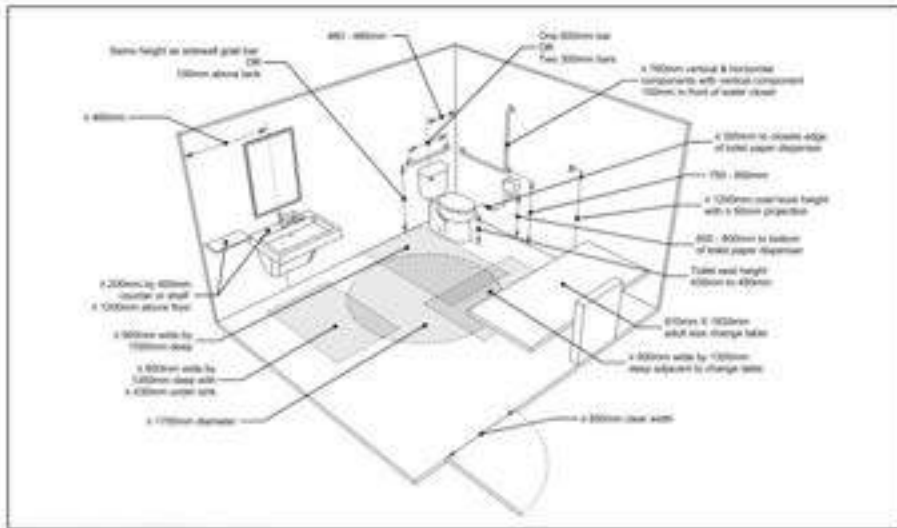


Figure D - Universal Washroom & Change Table Requirements

Universal Washroom, 3.8.3.13.
Wheelchair turning space, universal washrooms, 3.8.3.13

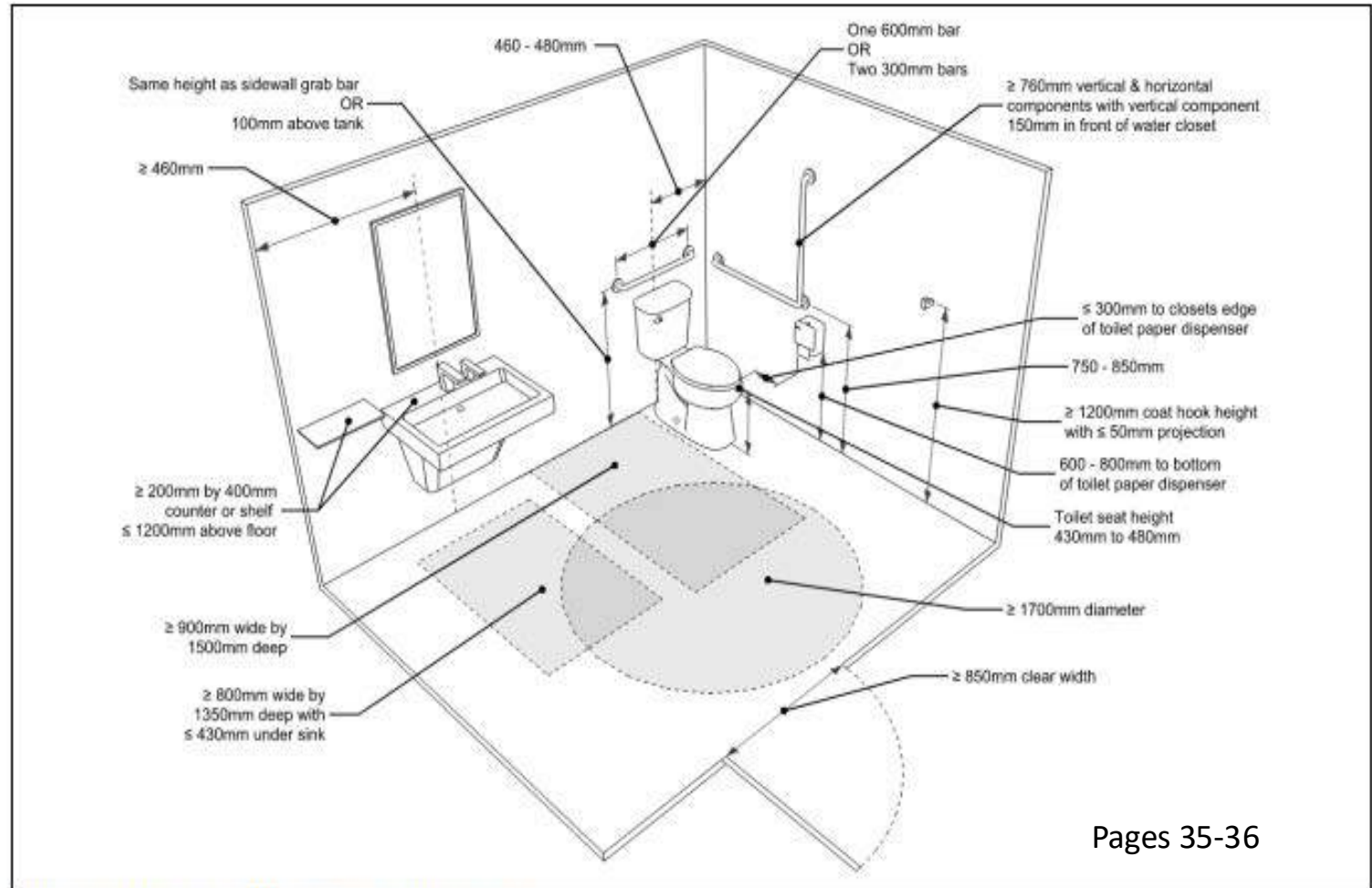


Figure C - Universal Washroom Requirements



Door Openers – 3.8.2.7.

1

ACCESSIBLE ROUTES & CIRCULATION

1

ACCESSIBLE ROUTES & CIRCULATION

(3.8.2.7) Application Requirements for Power Door Operators

1) Doors Requiring Power Door Operators:

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

- in an entrance referred to in Article 3.8.2.2, including the interior doors of a vestibule where provided,
- in an 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
- in an entrance to an accessible washroom.

Note A-3.8.2.7.(1)(b)

Power Door Operators for Interior Doors. It is not intended that all doors located in an accessible path of travel be equipped with a power door operator, but rather those that are located within public areas of the building, such as public corridors or corridors used by the public. Doors of suites served by a public area do not need to be equipped with a power door operator.

2) Power Door Operators at Multi Leaf Doors:

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

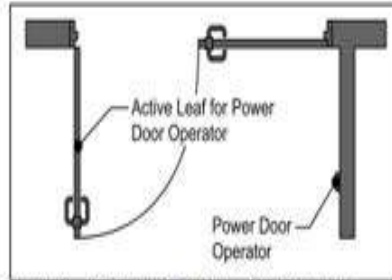


Figure A - Active Leaf for Power Door Operator

3) Power Door Operator at Multiple Doors:

Where more than one doorway is provided at an accessible entrance, only one of them is required to comply with this Article.

Note A-3.8.2.7.(3)

Accessible Entrances with Multiple Doorways. In selecting which doorway to equip with a power door operator as required by Sentence 3.8.2.7.(3), consideration should be given to the location of accessible paths of travel, to the ease of access, and to minimizing congestion.

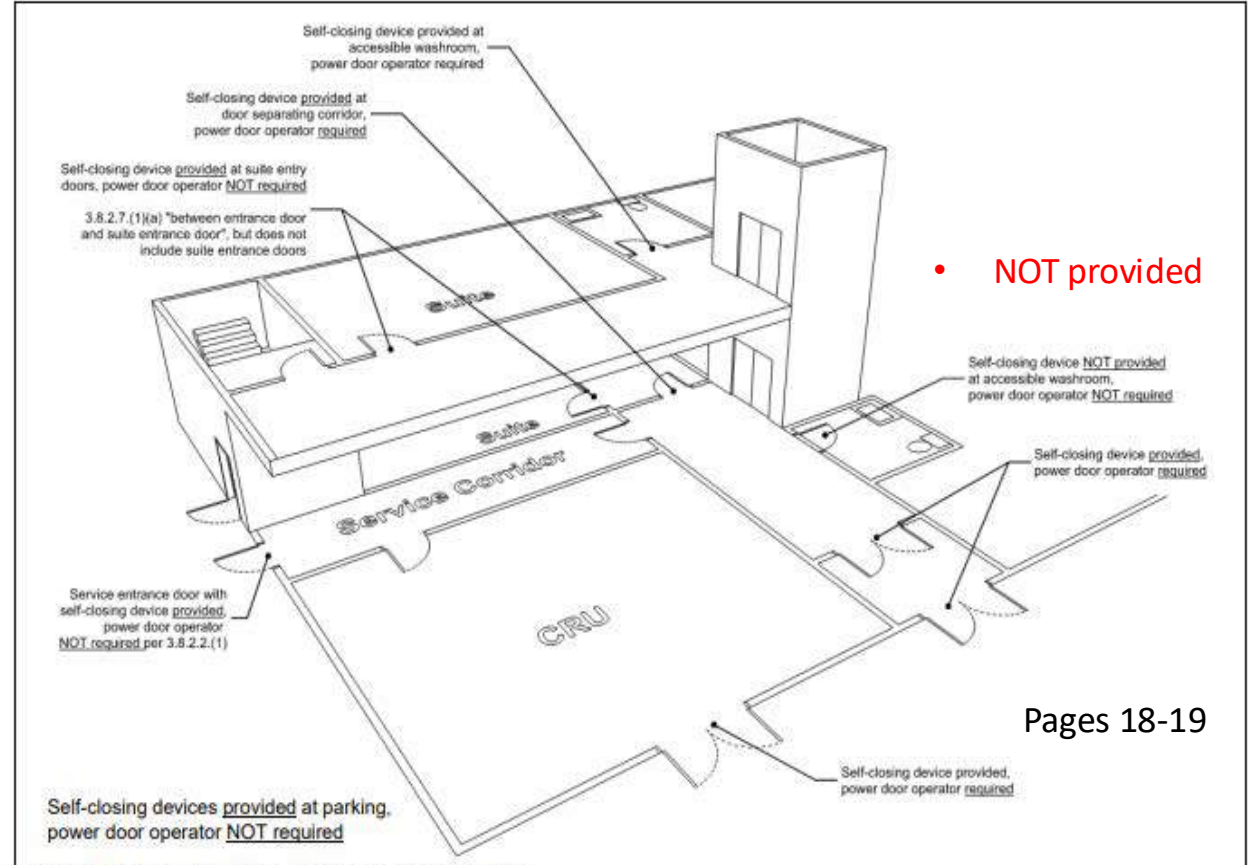


Figure B - Doors Requiring Power Door Operators

Pages 18-19



Question – What type of backing?

There is currently no specific prescriptive requirement for backing and fastener requirement grab bars and fixtures. **Does your department have a preference – is it on your inspection/monitoring checklist?**

A-3.8.5.7.(1)(e) Reinforced Grab Bar Location. This provision is intended to ensure there is adequate **backing** for the installation of grab bars by the occupant in the future. For example, plywood or solid lumber behind the wall finish and encompassing the location of future grab bars located as described in Clauses 3.8.3.12.(1)(f) and (g) and Clause 3.8.3.17.(1)(f) or 3.8.3.18.(1)(f) would provide suitable **backing** for grab bar fasteners.

This will become a bigger issue once we get into Adaptable requirements in 2025. (

No	Code Requirement in Division B
1	Reinforcement for Grab Bars Sentence 3.8.5.1.(2) One bathroom in a <i>secondary suite</i> shall have walls adjacent the water closer and shower or bathtub location reinforced to accommodate the future installation of grab bars.

How do you test grab bars?

3.7.2.7.(1)

c) be able to resist a load of not less than 1.3 kN applied vertically or horizontally,

1.3kN = 292lbs

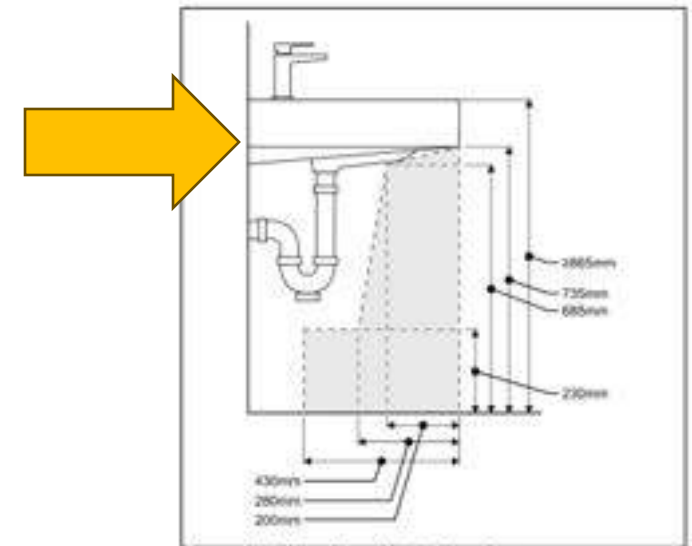


Figure A - Clear Area Under Lavatory



Question – What is backing?

Canadian Board for Harmonized Construction Codes (Proposed Change 2030)

Note A-3.8.4.2. and 3.8.4.3. Reinforcing Walls in Washrooms.

Reinforcing larger portions of washroom walls than required by Articles 3.8.4.2. and 3.8.4.3.-2025 (PCF 1882) will provide occupants with more flexibility to install grab bars to meet their evolving needs. However, reinforcement on its own does not address accessibility or safety without the installation of grab bars.

Note A-3.8.4.2.(2) Reinforcement of Walls around Water Closets.

Where two side walls are within 600 mm of the centre line of the water closet, both side walls are intended to be reinforced for the present or future installation of grab bars.

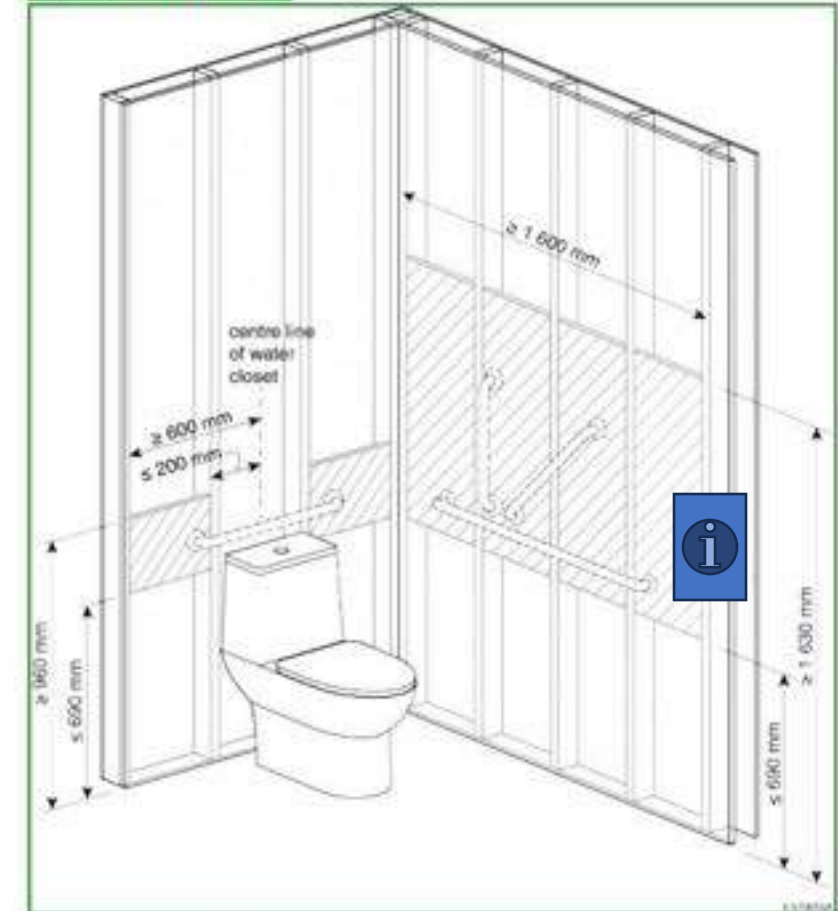
Figure A-3.8.4.2.(2) illustrates an example of an acceptable configuration for the reinforcement of stud walls around a water closet. Possible grab bar configurations are also shown.



Maybe difficult to install plywood between studs

Figure [A-3.8.4.2.(2)]

Example of an acceptable configuration for the reinforcement of stud walls around a water closet, where the horizontal length of the side wall is equal to or greater than 1 600 mm



Note A-3.8.4.2.(2)(b) Reinforcement of Wall Behind Water Closets.

The reinforcement described in Clause 3.8.4.2.(2)(b) is not designed to support fold-down grab bars.



Question – Where is the backing?

Field Install - pre final





Plan Reviews – Poll Question

Has your department incorporated the new 2024 BCBC requirements into your plan review checklists?

8. Typically, how long does it take to review a Part 3 mixed use project for accessibility items?

- Under one hour – 16%
- Over one hour – 52%
- Don't know – 32%

9. Is this a typical area requiring corrections/revisions?

- Yes – 88%
- No – 12%

Poll question

Accessibility Review Checklist - Site Plan Reset Form
Accessibility Advisory Committee & Development Services
London The Corporation of the City of London

The following checklist is designed for use by applicants in preparation of Site Plans and by City Staff when reviewing accessibility issues related to Site Plan Applications.
The following checklist is recognized by members of the Accessibility Advisory Committee in accordance with their advisory responsibilities.

Project Information

Submission Date	Project Name or Reference Number	Application Number
Date Reviewed	Street Address	
Type of Application: <input type="radio"/> New Construction <input type="radio"/> Renovation		

Applicant Contact Information

Applicant(s)	Email Address
Telephone Number	Street Address

Site Plan Designer Contact Information

Site Plan Designer(s)	Email Address
Telephone Number	Street Address

Site Plan Designer Statement

I, _____ (name), of _____ (firm name), am the author of the Site Plan for _____ (address) and am responsible for its design.
I hereby declare that the statements made by me in this questionnaire are, to the best of my knowledge and belief, a true and complete representation of the proposed works.
Designer's Stamp:



Next Lunch and Learn – July

July 18, 2024 – Accessible (part 02) - BC Adaptable Dwelling Units

August 22, 2024 – On-Site Storm Water Management Systems – hillside & missing middle impacts

Survey to be forwarded to members for webinar improvements and future discussion topics.

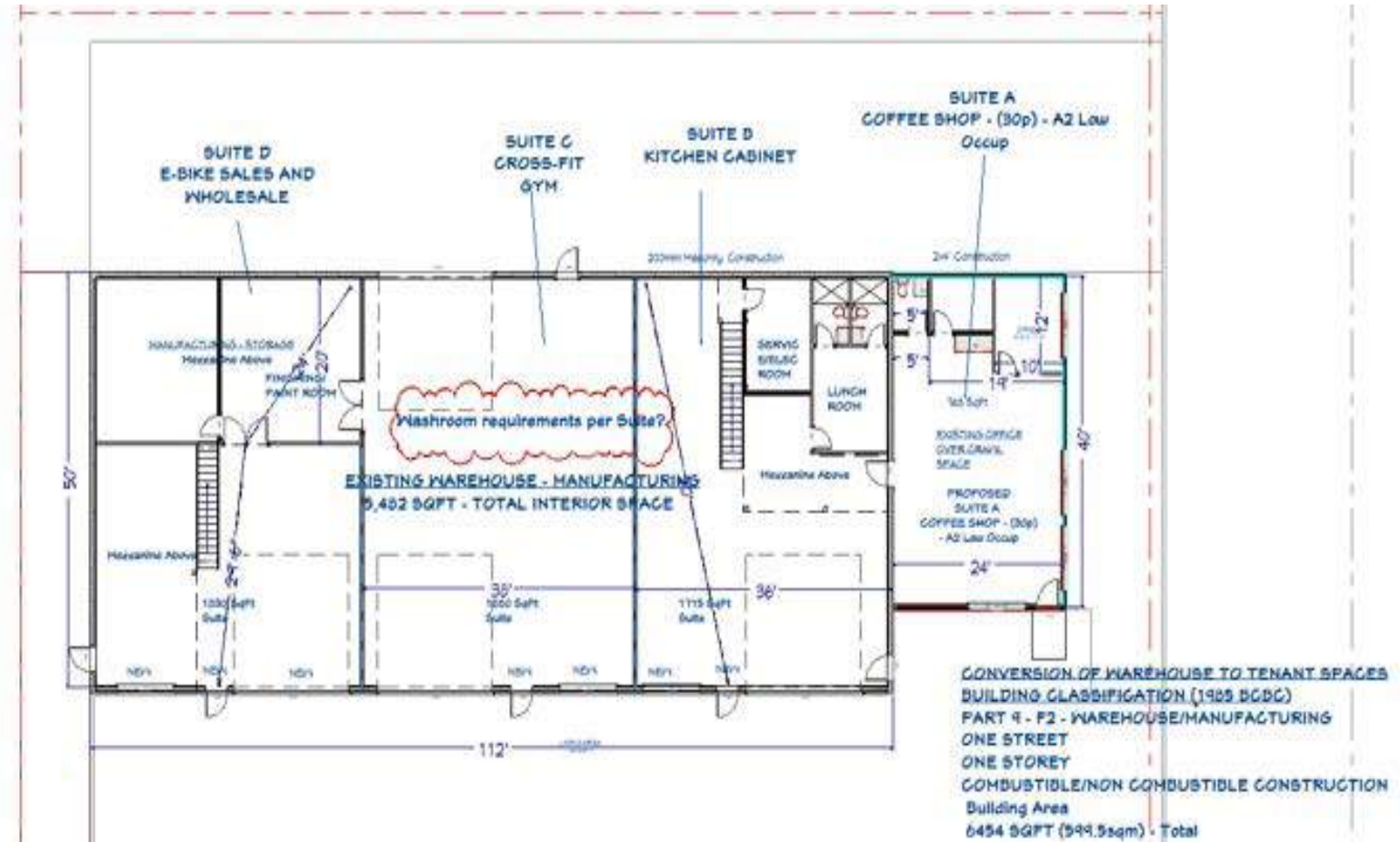
Please forward questions, updated policies, or education bulletins to Ken Kunka at kkunka@boabc.org.



Case Example – Change of Use

Existing large single tenant Part 9 F2 building is being converted to create 4 tenant spaces, including the former front office area to a coffee shop/deli.

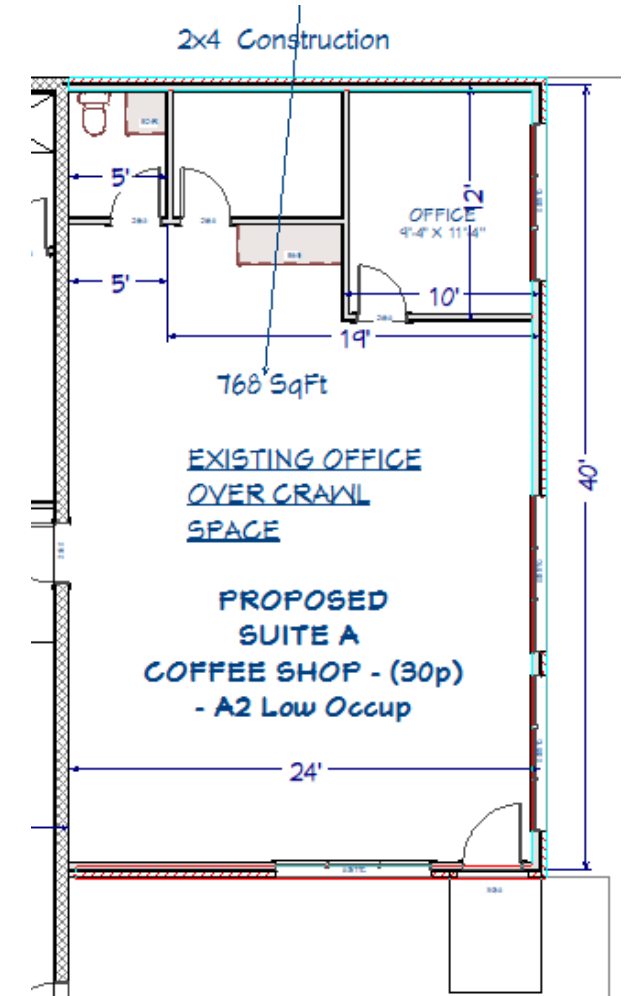
What minimum improvements are required for accessibility.





Case Example – Change of Use

Existing Industrial Building



Homework – kkunka@boabc.org



Case Example – Change of Use

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).



Case Example – Change of Use

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.

3.8.4.7. 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).)

...access shall be provided in conformance with Subsections 3.8.2. and 3.8.3. **where providing such access would be practical.**

Is practical the same as common sense? Who is it practical for?



Questions - Contact Us



Session feedback &
future topics
kkunka@boabc.org



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info@boabc.org

Departments

Membership Services (Qualification, Certification, Exams etc.)
604-270-9516 - Jennifer Schwartzel

Webinar survey to follow.



Question Follow-ups

Sarah T

Need to consider the swing of auto doors to not cause a hazard for people with vision impairments. Auto sliding doors work best on commercial buildings with higher traffic.

Lucas (GHL)

True, Sentence 3.8.3.6.(7) does consider that paths of travel may need a barrier/guard so there is not a hazard for a person with vision impairment, however, to note this requirement is particularly intended for say when a power operated door is on a motion sensor where a person with vision impairment may not be aware of the activation of the door unlike with a control/button there is an intentional activation and awareness.

Luka M

Can you go over the accessible smaller wc stalls, the code mentions you need 1 in 10 to be these stalls. However the GHL guide seems to imply that you only need one of these stalls only after you have 10 stalls. if you have 9 or less you do not need any, Can you clarify?

Lucas (GHL)

It is a tricky bit of wording, ultimately if the code was intending to include stalls/urinals from 1 to 9 it would have said "every 10 stalls or part thereof". A similar sentence where this occurs is Article 3.8.2.13 "for sleeping rooms required one for every 20 or part there of". This also on the idea that the code gives consideration that there is also an accessible stall provided that a person with limited mobility could use.



Question Follow-ups

Bob

Hi Ken, is there any requirement for visual contrast in buildings in the new BCBC accessibility requirements?

Lucas (GHL)

There is a mix of visual contrasting requirements in the Code -

Doors/Frames per 3.8.3.6.(17)

- Stair Nosing per 3.4.6.1.
- At beginning and end of ramp per 3.4.6.1.
- Tactile at top of unenclosed stair per 3.3.1.19.
- Visual & tactile signage