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3.8.1. Scope	3
3.8.1.1. Scope	3
3.8.2. Application	3
3.8.2.1. Exceptions	3
3.8.2.2. Entrances	4
3.8.2.3. Areas Requiring a Barrier-Free Path of Travel	5
3.8.2.4. Access to Storeys Served by Escalators and Moving Walks	7
3.8.2.5. Access to Parking Areas, Exterior Passenger-Loading Zones and Stall Design	8
3.8.2.6. Controls	9
3.8.2.7. Power Door Operators	9
3.8.2.8. Plumbing Facilities	10
3.8.2.9. Assistive Listening Devices	12
3.8.2.10. Signs and Indicators	12
3.8.2.11. Counters and Counters for Telephones	12
3.8.3. Design	12
3.8.3.1. General	12
3.8.3.2. Barrier-Free Path of Travel	13
3.8.3.3. Exterior Walks	15
3.8.3.4. Exterior Passenger-Loading Zones	16

3.8.3.5. Ramps	17
3.8.3.6. Doorways and Doors	20
3.8.3.7. Passenger-Elevating Devices	24
3.8.3.8. Controls	25
3.8.3.9. Accessibility Signs	25
3.8.3.10. Drinking Fountains	27
3.8.3.11. Water Closet Stalls	28
3.8.3.12. Universal Washrooms	31
3.8.3.13. Water Closets	33
3.8.3.14. Urinals	34
3.8.3.15. Lavatories and Mirrors	35
3.8.3.16. Showers	37
3.8.3.17. Bathtubs	39
3.8.3.18. Assistive Listening Devices	40
3.8.3.19. Counters	41
3.8.3.20. Shelves or Counters for Telephones	42
3.8.3.21. Spaces in Seating Area	42
3.8.3.22. Parking Stalls	43
3.8.4. Adaptable Dwelling Units	44
3.8.4.1. Application	44
3.8.4.2. General Accessibility	45
3.8.4.3. Bathrooms	47
3.8.4.4. Kitchens	48
3.8.5. Access to Physician Clinics and Offices	51
3.8.5.1. Application	51
3.8.5.2. Physician Clinics and Offices	51
3.8.5.3. Accessible Examination and Treatment Rooms (A-3.8.5.3.)	51

3.8.1. Scope

A-3.8. Barrier-Free Design Assumptions. Section 3.8 contains minimum provisions to accommodate a person using a typical manual wheelchair or other manual mobility assistance devices such as walking aids, including canes, crutches, braces and artificial limbs.

3.8.1.1. Scope

- 1) This Section is concerned with the *barrier-free* design of *buildings*.
- 2) *Buildings* and facilities required to be *barrier-free* in accordance with 3.8.2. shall be designed in accordance with 3.8.3.
- 3) Residential *projects* of 10 or more *dwelling units* funded in whole or in part by the Government of Alberta are required to provide adaptable *dwelling units* which could be made to meet *barrier-free* design principles and shall be provided as follows:
 - a) 1 per 10 *dwelling units*, based on the total number of *dwelling units* in a *project*, and
 - b) adaptable *dwelling units* shall be designed in accordance with 3.8.4.
- 4) In addition to the requirements of (2), physician clinics and offices shall conform to 3.8.5.

3.8.2. Application... new order of statement of requirements

3.8.3. Design... new statement and expansion of requirement design

3.8.4. Adaptable Dwellings... was a Standata prior to ABC 2014

3.8.5. Physician Clinics and Offices... new for NBC(AE)2019

3.8.2. Application

3.8.2.1. Exceptions

- 1) 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 that are not used in social programs such as group homes, halfway houses and shelters,
 - b) relocatable industrial accommodations,
 - c) *buildings* of Group F, Division 1 major occupancy, in which only the requirements dealing with hearing disabilities would apply, and
 - d) *buildings* that are not intended to be occupied on a daily or full-time basis, including automatic telephone exchanges, pumphouses and substations, in which only the requirements dealing with hearing disabilities would apply.

A-3.8.2.1. Application. Barrier-free design principles should be applied in all buildings and in all areas other than the exceptions mentioned... However, certain industrial buildings, by nature of their operation, may pose risks to their occupants due to the use of hazardous materials and/or processes. Some F2, F3 buildings, including special purpose buildings in heavy industries such as forestry or metallurgy, often require grade separations and other features essential to their functioning, **not compatible with the concept** of barrier-free accessibility. In such exceptional situations, **relaxation of barrier-free requirements may be granted when no practical alternative can be found**. However, even in such buildings, barrier-free accessibility complying with this Section must be provided to and within all areas with non-hazardous subsidiary occupancies.

Exceptions

3.8. applies to all *buildings* except

- houses: detached, semi-detached, row, all with/without a secondary suite; duplexes, triplexes, townhouses;
 - boarding/lodging houses not for social programs (e.g., a group home, halfway house, shelter)
- relocatable industrial accommodations (Part 10)
- F1 occupancy *buildings*, and other industrial-type *buildings* not intended to be occupied on a daily/full-time basis (e.g., an automatic telephone exchange, pumphouse, substation)--in which only requirements dealing with hearing disabilities apply

3.8.2.2. Entrances

- 1) In addition to the barrier-free entrances required by Sentence (2), not less than 50% of the pedestrian entrances, including the primary entrance, of a building referred to in Sentence 3.8.2.1.(1), including exterior walks leading to the entrances from a public thoroughfare and from on-site parking areas, shall be barrier-free.
- 2) A suite of assembly occupancy, business and personal services occupancy or mercantile occupancy that is located in the first storey of a building, or in a storey to which a barrier-free path of travel is provided, and that is completely separated from the remainder of the building so that there is no access to the remainder of the building, shall have at least one barrier-free entrance.
- 3) A barrier-free entrance required by Sentence (1) or (2) shall be designed in accordance with Subsection 3.8.3.
- 4) At a barrier-free entrance that includes more than one doorway, only the primary entrance shall be required to be designed in accordance with Subsection 3.8.3.
- 5) If a walkway or pedestrian bridge connects two barrier-free 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.

Entrances [was ABC 2014 3.8.1.2.]

At least ½ of all pedestrian entrances must be designed in conformance with 3.8.3.6. including

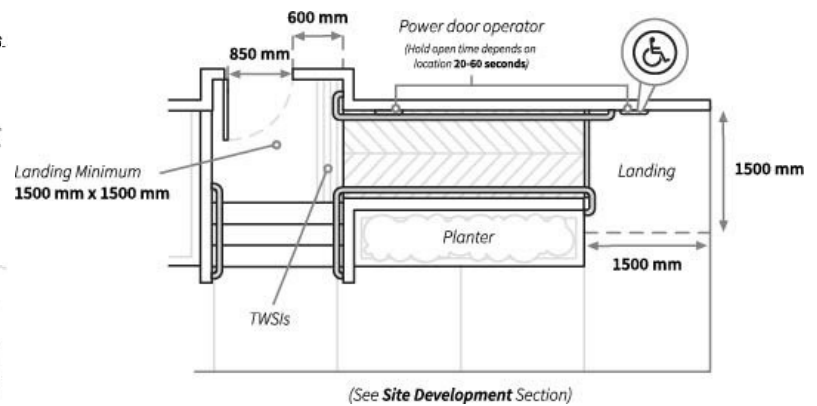
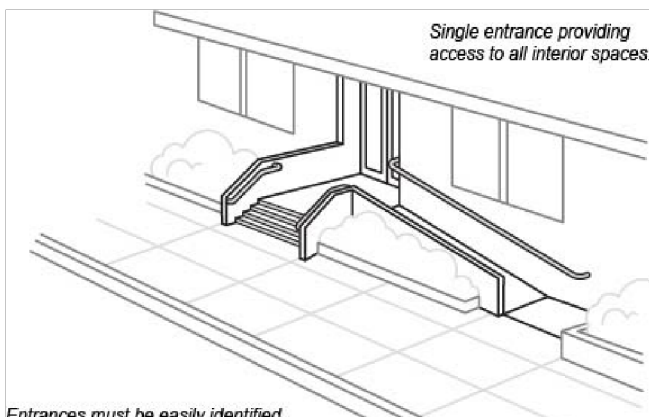
- the primary/principal entrance to buildings required to be barrier-free per 3.8.2.1.(1), and
- exterior walks leading to those entrances from a public thoroughfare/public way and from any on-site parking area(s). Include ≥ 1 barrier-free entrance for any suite of A, D or E located in the first storey or any storey on a barrier-free path of travel that is separated from the remainder of the building with no interior general-use access available to it. See 3.8.5.

Only the primary/principal entrance door, or a door immediately adjacent to a revolving primary/principal entrance door need be per 3.8.3.6. where a barrier-free entrance is a bank of doors.

Provide barrier-free path of travel in any walkway/pedestrian bridge connecting 2 barrier-free storeys in 2 different buildings.

A-3.8.2.2. Entrances. An accessible route should exist from the sidewalk or roadway and parking area to an accessible building entrance. This route should be located so that persons with physical disabilities do not have to pass behind parked cars.

To provide more general access to buildings, not less than 50% of the pedestrian entrances are required to be barrier-free, include a principal entrance. If the 50% calculation results in a fraction, the number of barrier-free entrances should be the next higher unit value. For the purpose of determining the number...a bank of doors (is) considered to be a single entrance.



3.8.2.3. Areas Requiring a Barrier-Free Path of Travel

- 1) Except as permitted by Sentences (2), (4) and (5), a barrier-free path of travel from the entrances required by Sentences 3.8.2.2.(1) and (2) shall be provided throughout all normally occupied floor areas.
(See Article 3.3.1.7. for additional requirements regarding floor areas above or below the first storey to which a barrier-free path of travel is required.)
- 2) A barrier-free path of travel for persons using 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 *mezzanines* not served by a passenger elevator, a platform-equipped passenger-elevating device, an escalator, or an inclined moving walk,
 - h) to *high-hazard industrial occupancies*,
 - i) within portions of a floor area with fixed seats in an assembly occupancy where those portions are not part of the barrier-free path of travel to spaces designated for use by persons using wheelchairs,
 - j) within floor levels of a suite of residential occupancy that are not at the same level as the entry level to the suite,
 - k) within a suite of residential occupancy that has not been required by other provisions of this Code to be barrier-free, or
 - l) within those parts of a floor area that are not at the same level as the entry level, provided amenities and uses provided on any raised or sunken level are accessible on the entry level by means of a barrier-free path of travel.
- 3) Unless a barrier-free path of travel is not required in an assembly occupancy by Clause (2)(i), the number of spaces designated for use by persons using wheelchairs within rooms or areas with fixed seats shall conform to Table 3.8.2.3. and be dispersed
 - a) in each floor level of seating,
 - b) in each price range of seating, and
 - c) in each viewing section of seating. (See Article 3.8.3.21. for the design requirements.)

Number of Fixed Seats in the Seating Area	Minimum Number of Spaces Required for Wheelchairs (see also 3.8.3.21.)
2-100	2
101-200	3
201-300	4
301-400	5
401-500	6
501-900	7
901-1300	8
1301-1700	9
each additional 400 seats or part thereof (1701-2100, etc.)	+1 additional designated wheelchair space

- 4) Except as provided in Sentence (5) and except for a storey containing a physician clinic or office within the scope of Subsection 3.8.5., Sentence (1) does not apply to any storey, not more than 600 m² in area, above or below the first storey of a *building* that does not exceed two storeys in *building* height.
- 5) Sentence (1) does not apply to any storey above or below the first storey in a *building* of residential occupancy that is
 - a) not more than 3 storeys in *building* height,
 - b) not more than 600 m² in *building* area, and
 - c) not served by a passenger-type elevator or other platform-equipped passenger-elevating device.

Areas Requiring a Barrier-Free Path of Travel [was ABC 2014 3.8.2.1.]

Provide a barrier-free path of travel from the barrier-free entrances required per **3.8.1.2.** throughout all normally occupied floor areas, **except** a barrier-free path of travel **for persons using wheelchairs is not required** to these areas:

- *service rooms, service spaces, attic or roof spaces, crawl spaces, elevator machine rooms, janitors' rooms*
- *F1 occupancies*
- *mezzanines without passenger elevator/platform-equipped passenger-elevating device/escalator/inclined moving walk*
- fixed seats of A occupancy not part of the barrier-free path other than to spaces within rooms or areas with fixed seats designated for use by persons using a wheelchair provided per **Table 3.8.2.3.** and **3.8.3.21.**, dispersed in each seating floor level, price range, and viewing section
- within a residential suite
 - not been required to be barrier-free by other provisions of this Code (See **3.8.3.6.(3)** for doors within dwelling)
 - to floor levels that are not at the same level as the entry level to the suite
- raised/sunken floors- relative to entry level, provided barrier-free path to all amenities/uses is available on the entry level
- **except** for **residential** occupancy listed below and except for a storey containing a physician clinic or office per 3.8.5.
 - any storey above or below the first storey in a building that is
 - ≤ 2 storeys in building height +
 - ≤ 600 sq. m of **area on the storey** above or below the first storey.
- **except** any storey above or below the first storey in a building of **residential** occupancy that is
 - ≤ 3 storeys in building height +
 - ≤ 600 m² in **building area** +
 - not served by a passenger elevator/ platform-equipped passenger-elevating device.

See **3.3.1.7.** for unsprinklered barrier-free-accessible floor area 'refuge' requirements.

Review the Note on equivalent facilities.

Barrier-free construction for persons other than persons using a wheelchair is required

A-3.8.2.3. Access to Rooms and Facilities. If barrier-free access is required into suites or rooms in Subsection 3.8.2., it is intended that access be provided, with some exceptions identified in Sentence 3.8.2.3.(2), throughout each room or suite.

Some **examples of where barrier-free access is required** are as follows:

- within each suite (subject to Clauses 3.8.2.3.(2)(j) to (l)),
- within rooms or areas that serve the public or are designated for use by visitors, including in assembly occupancies with fixed seats, display areas and merchandising departments,
- within rooms or areas for student use in assembly occupancies,
- within general work areas, including office areas,
- within general use or general service areas, including shared laundry areas in residential occupancies, recreational areas, cafeterias, lounge rooms, lunch rooms and infirmaries,
- within sleeping rooms in hospitals and nursing homes with treatment,
- (if installed), into at least one passenger elevator or elevating device conforming to Articles 3.5.2.1. and 3.8.3.7.,
- into washrooms described in Sentences 3.8.2.8.(1) to (4),
- to any facility required by this Section to be designed to accommodate persons with physical disabilities,
- onto every balcony provided per Clause 3.3.1.7.(1)(c), and
- to service counters used by the general public (examples include ticket counters, refreshment stands, drinking fountains, cafeteria counters, checkout counters and bank service counters).

The permission to waive a barrier-free path of travel for wheelchair access to certain specified areas of a building is not intended to waive accessibility requirements for persons whose physical disabilities do not require special provision for access to raised or sunken levels. Persons with visual or hearing disabilities that do not require the use of a wheelchair can be expected to move throughout a building.

The concept of providing similar amenities and facilities applies, among other things, to food, beverage, and entertainment facilities within restaurants, to smoking and non-smoking areas permitted in accordance with local regulations, and to window areas providing a view of an exterior attraction.

Availability of specific spaces depends on reservation policy and the sequence in which patrons arrive at a restaurant or other facility, and therefore is beyond the scope of this Code.

Accessibility “within” a floor area means that in general all normally occupied spaces are to be accessible, except those areas which are deemed not to require barrier-free access. Examples of excluded floor areas are small raised office areas in retail and industrial premises and storage platforms in industrial and other occupancies. The concept of wheelchair accessibility does not extend to building service facilities, nor to all floor levels within a storey, e.g., mezzanines not served by an elevator. Mezzanines that are accessible by an elevator are therefore not excluded.

3.8.2.4. Access to Storeys Served by Escalators and Moving Walks

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

Access to Storeys Served by Escalators and Moving Walks [was ABC 2014 3.8.1.4.]

Provide an interior barrier-free path of travel to any floor level where an escalator/inclined moving walk provides access to that floor level above **or** below the entrance floor level, and

Provide appropriate signs to show the route from the escalator/inclined moving walk to the barrier-free path of travel that leads from floor to floor as above where the elevator/ramp is not apparent on approach to the escalator/inclined moving walk. (see **3.8.2.10.**)

A-3.8.2.4.(1) Access to Storeys Served by Escalators and Moving Walks. In some buildings, escalators and inclined moving walks are installed to provide transportation from one floor level to another floor level so as to increase the capacity to move large numbers of persons. Some buildings located on a sloping site are accessible from street level on more than one storey and an escalator or inclined moving walk is provided for internal movement from floor to floor. In both these situations, a person with a physical disability must be provided with an equally convenient means of moving between the same floor levels within the building. This can be accomplished by providing elevators or a platform-equipped passenger-elevating device.

3.8.2.5. Access to Parking Areas, Exterior Passenger-Loading Zones and Stall Design

- 1) A barrier-free path of travel shall be provided from the entrance referred to in Article 3.8.2.2. to
 - a) an exterior parking area, if exterior parking is provided,
 - b) at least one parking level in a parking structure, and
 - c) every parking level in a parking structure served by a passenger elevator.
- 2) Except as provided in Sentence (4), where parking stalls are required by the development authority, made pursuant to the Municipal Government Act and its Regulations, parking stalls for use by persons with disabilities shall be provided in conformance with Table 3.8.2.5.

Number of Parking Stalls Required per Dev't Permit	Number of Designated Parking Spaces required
2-10	1
11-25	2
26-50	3
51-100	4
each additional 100 stalls or part thereof (101-200, etc)	+1 additional designated parking stall

- 3) Exterior passenger-loading zones shall comply with Subsection 3.8.3.
- 4) If adaptable dwelling units or barrier-free dwelling units are provided, one parking stall per dwelling unit shall be provided for use by persons with physical disabilities.
- 5) Parking stalls for use by persons with disabilities required by Sentence (2) or (4) shall be designed in accordance with Article 3.8.3.22.

Access to Parking Areas, Exterior Passenger-Loading Zones and Stall Design [was ABC 2014 3.8.2.2.]

Provide a barrier-free path of travel from the entrance(s) in **3.8.2.2.** to

- an exterior parking area, if exterior parking is provided
- at least one parking level in a parking structure to designated parking stall(s) (portion provided on equal amenity basis)
- every parking level served by a passenger elevator in a parking structure (but not all levels must have designated parking)

Provide parking stalls designated for use by persons with disabilities

- per **Table 3.8.2.5.** and per **3.8.3.22.** where a total number of parking stalls is stipulated by the Development Permit
- per **3.8.3.22.** where a total number of designated barrier-free parking stalls is stipulated by the Development Permit
- per **3.8.3.22.** for adaptable and/or barrier-free dwelling units provided, @ ≥ 1 designated parking stall/dwelling unit.

Exterior passenger-loading zones- **if provided-** shall be per **3.8.3.4.**

A-3.8.2.5. Access to Parking Areas and Stall Design. The Municipal Government Act and its Regulations provide a mechanism for determining the characteristics of our communities. Where local bylaws require that parking be available, the Code requires that a percentage of parking spaces be designed to allow persons using wheelchairs sufficient room to get in and out of a vehicle. A barrier-free path of travel must also be provided from the parking area to the building. The designer must provide a properly identified and unobstructed path of travel from the parking area to the entrance that is accessible. The entrance chosen should, in any case, be one normally used by the occupants of the building. Long paths of travel are not recommended.

3.8.2.6. Controls

- 1) Except as provided in Sentence 3.5.2.1.(3) and Article 3.8.3.7. for elevators and platform-equipped passenger-elevating devices, controls for the operation of *building* services or safety devices, including electrical switches, thermostats, faucets, door hardware and intercom switches, that are intended to be operated by the occupant and are located in or adjacent to a barrier-free path of travel shall comply with Subsection 3.8.3.

Controls [was ABC 2014 3.8.1.5.]

Install controls per **3.8.3.8.** for building services or safety devices intended for occupant use e.g., electrical switches, thermostats, faucets, door hardware and intercom switches, fire alarm manual stations, etc. in or adjacent to a barrier-free path of travel.

See **3.5.2.1.** for passenger elevators; **3.8.3.7.** for passenger elevators and platform-equipped passenger-elevating devices.

A-3.8.2.6.(1) Application to Security Access Systems. Sentence 3.8.2.6.(1) is not intended to reduce the functionality of security devices that limits access to secure areas and are addressed by other Sections of the NBC(AE).

3.8.2.7. Power Door Operators

- 1) Except as provided in Sentences (2) and (3), every door that provides a barrier-free path of travel through an entrance referred to in Article 3.8.2.2., including the interior doors of a vestibule where provided, shall be equipped with a power door operator that complies with Subsection 3.8.3. and allows persons to activate the opening of the door in the intended direction of travel, where the entrance serves
 - a) a hotel,
 - b) a *building* of Group B, Division 2 major occupancy,
 - c) a *building* of Group A, Group B, Division 3, Group D or E major occupancy more than 500 m² in *building* area, or
 - d) a *building* that contains a physician clinic or office within the scope of Subsection 3.8.5.
- 2) The requirements of Sentence (1) do not apply to an individual suite having an area less than 500 m² in a *building* having only suites of assembly, care, business and personal services or mercantile occupancy if the suite is completely separated from the remainder of the building so that there is no access to the remainder of the *building*.
- 3) Only the active leaf in a multiple leaf door in a barrier-free path of travel need conform to the requirements of this Article.

Power Door Operators [was ABC 2014 3.8.3.3.(5),(6),(12)]

Provide a power door operator per **3.8.3.6.(6)-(14)** to activate a door opening in the intended direction of travel, including any vestibule, at every door that provides a barrier-free entrance required per **3.8.2.2.**, serving any

- hotel
- B2
- A, B3, D, or E > 500 m² in **Building Area**
- building that contains a physician clinic or office within the scope of Subsection 3.8.5.

except to an individual **Suite Area < 500 m² in a building of only A, B3, D and E** occupancy if the suite is completely separated from the remainder of the building with no interior general-use access available to it, other than a suite within the scope of 3.8.5.

*Only the active leaf in a multiple leaf door in a barrier-free path of travel need conform to this Article.

3.8.2.8. Plumbing Facilities

- 1) Except as permitted by Sentence (2), all washrooms in a barrier-free path of travel shall be barrier-free in accordance with Subsection 3.8.3.
- 2) A washroom need not conform to the requirements of Sentence (1) provided it is located
 - a) within a suite of residential occupancy or a suite of care occupancy that has not been designated by Sentence 3.8.1.1.(3) to be accessible, or
 - b) in an individual suite having an area less than 500 m² and there are barrier-free washrooms on the same floor area within 45m.
- 3) In a *building* in which water closets are required in accordance with Subsection 3.7.2., at least one barrier-free water closet shall be provided in the entrance storey, unless
 - a) a barrier-free path of travel is provided to barrier-free water closets elsewhere in the *building*, or
 - b) the water closets required by Subsection 3.7.2. are for dwelling units only.
- 4) 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 physical disabilities in washrooms used by the general public.
- 5) If more than one water closet is provided in a washroom required to be barrier-free, a barrier-free stall complying with Subsection 3.8.3. shall be provided for every 10 stalls or part thereof.
- 6) Where urinals are provided in a barrier-free washroom, at least one urinal shall comply with Subsection 3.8.3.
- 7) A barrier-free washroom shall be provided with a lavatory that complies with Subsection 3.8.3.
- 8) Where mirrors are provided in a barrier-free washroom, at least one mirror shall comply with Subsection 3.8.3.
- 9) Where drinking fountains are provided, at least one shall comply with Subsection 3.8.3.
- 10) Where showers are provided in a *building*, at least one shower stall shall comply with Subsection 3.8.3., except where showers are provided within
 - a) a suite of care occupancy,
 - b) a suite of residential occupancy,
 - c) an industrial occupancy,
 - d) a business and personal services occupancy where the showers are not required for provision of hygienic services related to the business, or
 - e) a mercantile occupancy.
- 11) Where a bathtub is installed in a suite of residential occupancy required to be barrier-free, it shall comply with Subsection 3.8.3.
- 12) In addition to the requirements of Sentence (1), at least one universal washroom conforming to Article 3.8.3.12. shall be provided in a regional transportation terminal.
- 13) For temporary uses, such as outdoor fairs and festivals, a barrier-free stall shall be provided for every 10 stalls or part thereof.

Plumbing Facilities [was ABC 2014 3.8.2.3.]

All washrooms in a barrier-free path of travel shall be barrier-free per **3.8.3.**, except where the washroom is

- within a suite of residential **or** care occupancy **not** designated through **3.8.1.1.(3)** Government of Alberta funding to be accessible, **or**
- in an individual suite < 500 m² and barrier-free washrooms on the same floor area within 45 m are available for use during normal business hours and without going outside to access another part of the building.

Provide ≥ 1 barrier-free water closet/lavatory/room/etc. in the entrance storey where WCs are required per **3.7.2.**, unless

- a barrier-free path of travel is provided to barrier-free water closets elsewhere in the building (recall 3.8.2.10.(2)), **or**
- the water closets required by **3.7.2.** are for dwelling units only.

Universal washrooms per **3.8.3.12.** may be built instead of altering public washrooms in an existing building being renovated.

Provide ≥ 1 barrier-free stall or enclosed water-closet-room per **3.8.3.11.** per 10 WC/part thereof, where a required barrier-free washroom contains > 1 WC.

Where **urinal(s)** are provided in a barrier-free washroom, provide **≥ 1** per **3.8.3.14.**

A barrier-free washroom requires **≥ 1 lavatory** that complies with **3.8.3.15.(1).**

- Where **mirrors** are provided in a barrier-free washroom, provide **≥ 1** per **3.8.3.15.(2)**
- Where **drinking fountains** are provided, provide **≥ 1** per **3.8.3.10.**
- Where **showers** are provided in a building/suite, provide **≥ 1** barrier-free shower stall per **3.8.3.16.** except not required within:
 - suites of B3 or of C occupancy
 - D occupancy --where showers are not required for provision of hygienic services related to the business
 - E or F occupancy
- Where a **bathtub** is provided in a residential suite required to be barrier-free, provide it per **3.8.3.17.**
- At a regional **transportation terminal**, provide **≥ 1** universal washroom per **3.8.3.12.** in addition to barrier-free facilities required above.
- At a **temporary/special event** (eg: fair/festival), provide **≥ 1** barrier-free stall for every 10/part thereof.

A-3.8.2.8.(1) to (4) Washrooms. The primary intent of this requirement is that all regular washrooms be made accessible to all persons, including persons with disabilities, primarily those who use a wheelchair.

Clause 3.8.2.8.(2)(b) is intended to address “strip malls” (a shopping mall with no public corridor). Section 3.7. for plumbing facilities does not address the concept of suite and could permit, for instance, a shopping mall containing only Group E occupancies (assuming the mall is more than 100 m²) to have only one washroom for each sex located in any one of the suites. It is desirable, however, that washrooms be located so as to be accessible at all times, since the owner or tenant of one suite has no control over the activities of another. These buildings may have either public barrier-free washrooms in a central location or washrooms that can accommodate persons with physical disabilities in each suite. This arrangement relieves any one tenant from having to provide “public” washrooms. Hence, the exception for suites of less than 500 m² is meant as a relaxation to avoid an unnecessary burden on small facilities but should not be construed as meaning that these buildings need not provide accessible washrooms. **Sentence 3.8.2.8.(4) clarifies that universal washrooms (“unisex”) should not be used as a substitute for making regular washrooms accessible. These washrooms are an alternative which the AHJ could require in the course of renovations to an existing building to satisfy the requirements of Sentence 3.8.2.8.(1) OR where modifying existing washrooms proves impracticable OR where Section 3.7. permits the use of a single washroom for both sexes.** This does not preclude the provision of special washrooms in addition to barrier-free regular washrooms; “unisex” washrooms are desirable in large shopping complexes and multiple use complexes, as well as transportation terminals, in cases where persons must be accompanied by an attendant because of their degree of disability. These facilities are convenient because they may be used regardless of the gender of the person with the disability or of the attendant.

3.8.2.9. Assistive Listening Devices

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

Assistive Listening Devices [was ABC 2014 3.8.3.7.(1)]

Provide an assistive listening system per **3.8.3.18**. in all classrooms, auditoria, meeting rooms and theatres >100m² in room area in any A occupancy building.

3.8.2.10. Signs and Indicators

- 1) Signs complying with Subsection 3.8.3. shall be installed to indicate the location of
 - a) barrier-free entrances,
 - b) barrier-free washrooms,
 - c) barrier-free showers,
 - d) barrier-free elevators,
 - e) barrier-free parking spaces, and
 - f) facilities for persons with hearing disabilities.
- 2) Where a washroom is not designed to accommodate persons with physical disabilities in a storey to which a barrier-free path of travel is required, signs shall be provided to indicate the location of barrier-free facilities.

Signs and Indicators

Provide signs per **3.8.3.9**. to indicate location of barrier-free entrances, passenger elevators/platform-equipped passenger-elevating devices, parking, washrooms, showers, **as well as** facilities for persons with hearing disabilities.

Provide signs to indicate the location of barrier-free washroom(s) on another storey where no washroom is barrier-free in a storey required to be barrier-free-principally a retrofit condition (recall 3.8.2.8.(2)(b)).

3.8.2.11. Counters and Counters for Telephones

- 1) Every counter more than 2 m long at which the public is served shall comply with Subsection 3.8.3. (A-3.8.2.11.(1).) (also A-3.8.2.3.)
- 2) Built-in shelves and counters provided for public telephones shall comply with Subsection 3.8.3.

Counters and Counters for Telephones [was ABC 2014 3.8.3.14. and 3.8.3.15.]

Provide any public-use/public service counter > 2m long with barrier-free section per **3.8.3.19**

Design built-in shelves and counters provided for public telephones per **3.8.3.20**

A-3.8.2.11.(1) Counters with Work Surfaces. It is not intended that all counters be barrier-free, but that sufficient barrier-free counter space be available. Examples of counters that should be barrier-free include check-in counters and those in financial institutions and reception areas as well as any counter at which processing and signing of documents takes place. The provision is **not** intended to apply to work surfaces in industrial occupancies.

3.8.3. Design

3.8.3.1. General

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

3.8.3.2. Barrier-Free Path of Travel

- 1) Except as required elsewhere in this Part or as permitted by Article 3.8.3.6. pertaining to doorways, the unobstructed width of a barrier-free path of travel shall be not less than 920 mm.
- 2) Interior and exterior walking surfaces that are within a barrier-free 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. (A-3.8.3.2.(2).)
- 3) A barrier-free path of travel is permitted to include amps, passenger elevators or other platform-equipped passenger-elevating devices to overcome a difference in level.
- 4) The width of a barrier-free path of travel that is more than 30 m long shall be increased to not less than 1500 mm for a length of 1500 mm at intervals not exceeding 30 m.
- 5) In a barrier-free path of travel, a downward change in elevation shall be signaled by the use of a 600 mm wide tactile warning strip placed 250 mm from the edge and for the full width of a stair, escalator, moving walk, ramp or platform, and identified using colour and brightness contrast

Barrier-Free Path of Travel [was ABC 2014 3.8.1.3.]

Provide an unobstructed barrier-free path of travel $\geq 920\text{mm}$ wide where required per **3.8.2.3.**, except as required elsewhere in **Part 3** or per **3.8.3.6.** for doorways or 3.8.5. for physician’s clinics and offices

Provide interior and exterior walking surfaces within a barrier-free path of travel with

- no openings that will permit the passage of a sphere $> 13\text{mm}$ in diameter
- any elongated openings oriented approximately perpendicular to the direction of travel
- stable, firm and slip-resistant surface
- a cross slope no steeper than 1:50
- bevel at a maximum slope $\leq 1:2$ at changes in level between 6--13mm,
- with sloped floors or ramps at changes in level $> 13\text{mm}$.
- tactile warning strip signaling **downward** change in elevation in a barrier-free path that is
- 600mm wide
- 250mm from the edge for full width of stair, escalator, moving walk, ramp or platform, and
- identified using colour and brightness contrast (raised-dome strip not recommended) (See 3.4.6.1. for additional demarcations)

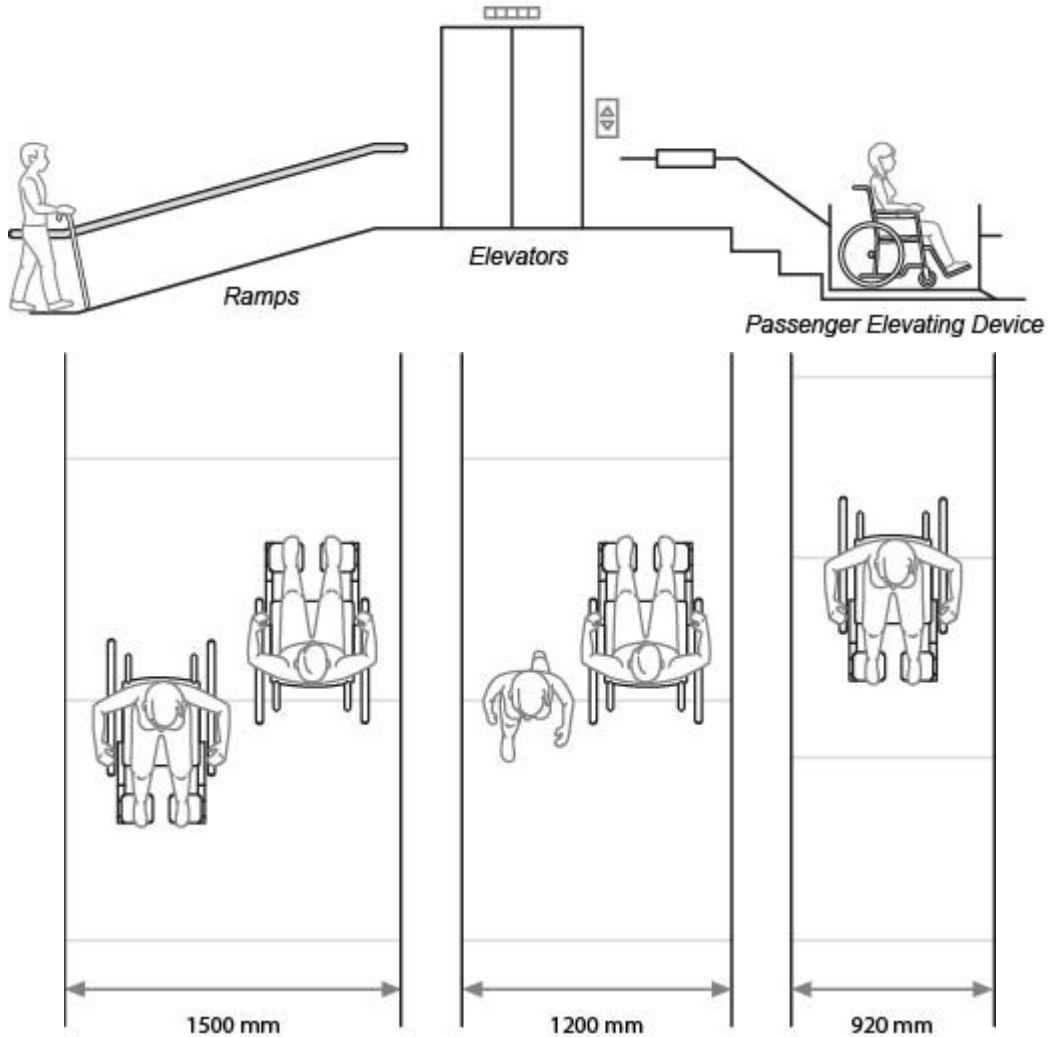
A barrier-free path of travel may include ramps, passenger elevators or other platform-equipped passenger elevating devices.

The width of a barrier-free path of travel $> 30\text{m}$ long must increase to $\geq 1500\text{mm}$ for $\geq 1500\text{mm}$ at maximum 30m intervals.

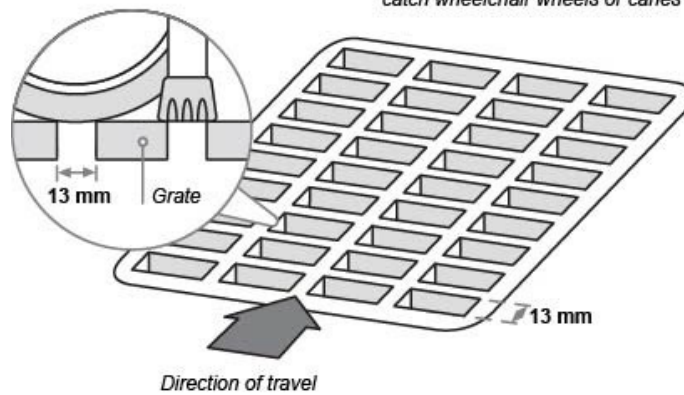
A-3.8.3.2.(2) Surfaces in a Barrier-free Path of Travel. Floor finishes, including walk-off mats and carpet, should be selected, installed and securely fixed to provide a firm and stable surface so that persons using wheelchairs, walkers or other mobility aids can easily travel over them without tripping or expending undue energy. Other than very high-density, short-pile carpeting, most carpeting does not meet these criteria.

Furthermore, where the path of travel is exposed to intense light conditions, such as daylight or directional lighting, a low-glare or matte floor surface should be selected, as glare from floor surfaces can influence all users’ perception and be particularly problematic for persons with low vision. For the same reasons, heavily patterned flooring should also be avoided.

Barrier-Free path of travel may include:



Openings larger than 13 mm may catch wheelchair wheels or canes



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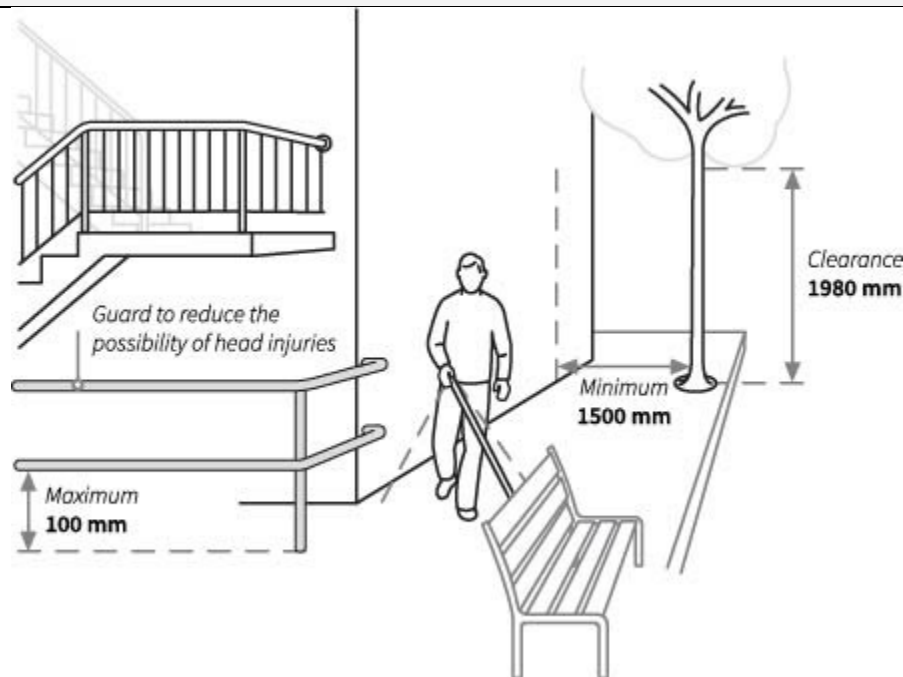
3.8.3.3. Exterior Walks

- 1) Exterior walks that form part of a barrier-free path of travel shall
 - a) have a slip-resistant, continuous and even surface,
 - b) be not less than 1100 mm wide,
 - c) have a level area conforming to Clause 3.8.3.5.(1)(c) adjacent to an entrance doorway,
 - d) have a curb not less than 75 mm high wherever there is a vertical drop more than 75 mm from the walk surface and there is no wall, railing, or other barrier to provide protection,
 - e) have a surface not less than 1100 mm wide of a different texture and contrasting in colour to that surrounding it, if the path of travel is level and even with adjacent surfaces,
 - f) be free of obstructions for the full width of the walk to not less than 1 980 mm high, except that handrails are permitted to project not more than 100 mm from either or both sides into the clear area, and
 - g) be designed as a ramp where the slope of the walk is more than 1 in 20.

Exterior Walks [was ABC 2014 3.8.3.2.]

Provide any exterior walk that forms part of a barrier-free path of travel per **3.8.3.2./3.8.2.3.** with

- $\geq 1100\text{mm}$ clear width, except handrails may project $\leq 100\text{mm}$ from **either or both** sides into the clear width
- $\geq 1980\text{mm}$ clear height
- slip-resistant, continuous, even surface, and designed as a ramp where the slope of the walk $> 1:20$.
- a level area per **3.8.3.5.(1)(c)** adjacent to any entrance doorway required by 3.8.2.2.(1)
- a surface $\geq 1100\text{mm}$ wide of different texture **or** contrasting in colour to that surrounding it, if the path of travel is level and even with adjacent surfaces
- a curb $\geq 75\text{mm}$ high wherever there is a vertical drop $> 75\text{mm}$ from the walk surface and there is no guard, wall, railing, or other barrier.



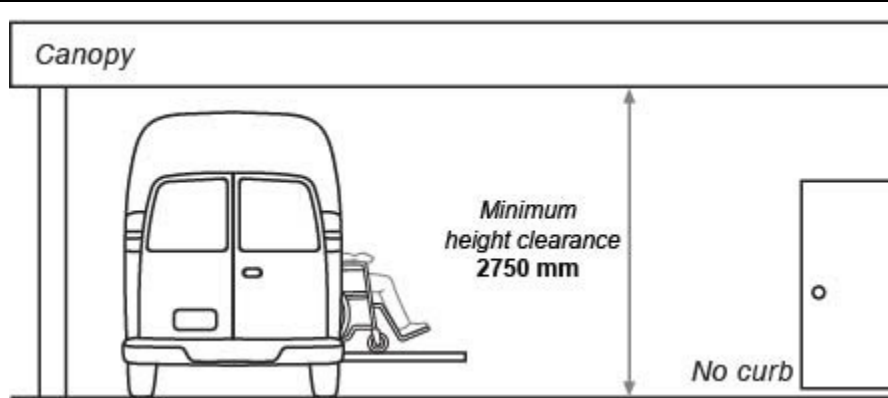
3.8.3.4. Exterior Passenger-Loading Zones

- 1) If an exterior passenger-loading zone is provided, it shall have
 - a) an access aisle not less than 1500 mm wide and 6000 mm long adjacent and parallel to the vehicle pull-up space,
 - b) a curb ramp, where there are curbs between the access aisle and the vehicle pull-up space, and
 - c) a clear height of not less than 2750 mm along the vehicle access and egress routes.

Exterior Passenger-Loading Zones [was ABC 2014 3.8.2.2.(3)]

Provide any loading zone in a barrier-free path of travel with

- an access aisle $\geq 1500\text{mm}$ wide X $\geq 6000\text{mm}$ long adjacent and parallel to the vehicle pull-up space
- a curb ramp, where there are curbs between the access aisle and the vehicle pull-up space
- a clear height of $\geq 2750\text{mm}$ at the pull-up space and along the vehicle access and egress routes



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3.8.3.5. Ramps

- 1) A ramp located in a barrier-free path of travel shall
 - a) have a clear width not less than 870 mm (A-3.4.3.4.),
 - b) have a slope not more than 1 in 12,
 - c) have a level area not less than 1500 by 1500 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, (A-3.8.3.5.(1)(c)),
 - d) have a level area not less than 1200 mm long and at least the same width as the ramp at intervals not more than 9 m along its length,
 - 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,
 - f) be equipped with guards conforming to Article 3.4.6.6.,
 - g) have a level area not less than 1200 by 1200 mm where a ramp makes a 90° turn, and
 - h) have a level area not less than 1500 mm wide that extends to not less than the outer edge of each ramp section, where a ramp makes a 180° turn.
- 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,
 - 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 grade or adjacent to a wall shall have edge protection consisting of
- 6) a curb not less than 75 mm high, or
- 7) a raised barrier or rail located not more than 100 mm from the ramp or landing surface.
- 8) Floors or walks in a barrier-free path of travel having a slope steeper than 1 in 20 shall be designed as ramps.

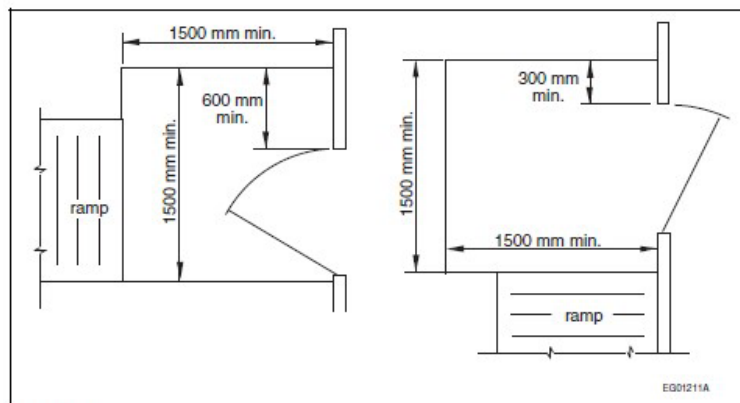
Ramps [was ABC 2014 3.8.3.4., 3.4.6.1, 3.4.6.5.]

Design floors or walks in a barrier-free path of travel **steeper than 1:20** as ramps, with

- **slope** \leq 1:12
- **clear width** \geq 870mm
- a **level landing** area \geq 1500 X 1500mm at
 - ramp top and ramp bottom
 - any intermediate levels leading to a door, so that on the latch side the 1500 X 1500mm level area extends
- \geq 600 mm beyond the edge of the door opening where the door opens towards the ramp, **or**
- \geq 300 mm beyond the edge of the door opening where the door opens away from the ramp,
 - \geq 1200mm long and \geq width of the ramp at intervals of \leq 9m along its length,
 - \geq 1200 X 1200mm at 45°- 90° turns, and
 - \geq 1500mm wide extending at least to the outer edge of each ramp section at 91°-180° turns
- **handrails** per **3.4.6.5.** which must be 865-965mm high except that
- extra handrails installed in addition to required handrails may be any height, and
- no handrails are required for a ramped aisle for fixed seating unless as elsewhere in Part 3.
- **guards** per **3.4.6.6.**
- ramp and landing **surfaces** that
- are hard or resilient where ramp slope $>$ 1:15,
- have a cross slope \leq 1:50, and
- where exposed to water, are designed to drain
- have edge protection where not at grade or adjacent to a wall consisting of a
 - curb \geq 75mm high **or**
 - raised barrier or rail located \leq 100mm from the ramp/landing surface.

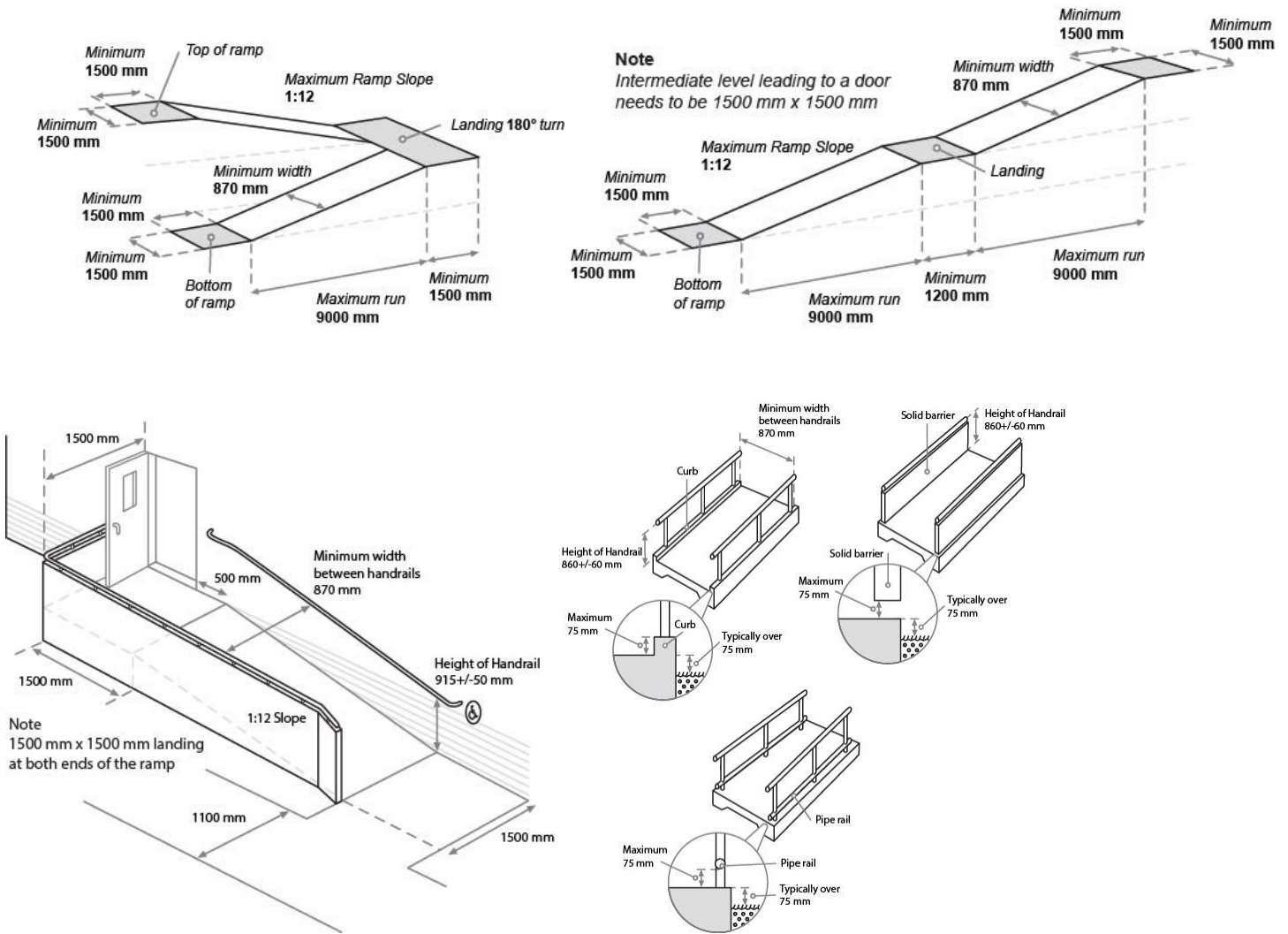
A-3.8.3.5.(1)(b) Ramp Slopes. Ramps with a slope of more than 1 in 16 can be very difficult for persons with physical disabilities with upper body mobility to manage. Even though they pose less of a problem for persons in motorized wheelchairs, these ramps can be unsafe to descend, especially in cold climates. Although Article 3.8.3.5. permits slopes on ramps as great as 1 in 12 for distances of up to 9 m, slopes of 1 in 20 are safer and less strenuous. Ramps with a slope of 1 in 12 should be restricted to lengths not exceeding 3 m whenever possible. A tactile warning strip, contrasting in colour, should be used at the top of ramps to warn persons with low or no vision of the change in elevation.

A-3.8.3.5.(1)(c) Landing Design at Doorways Leading to Ramps. Figure A-3.8.3.5.(1)(c) in NBC-2019AE



A-3.8.3.5.(4)(a) Surface of Ramps. Sentence 3.8.3.2.(2) requires that all walking surfaces in a barrier-free path of travel be stable and firm to limit the effort required by persons using wheelchairs or other mobility aids. Therefore, Sentence 3.8.3.5.(4) requires that hard or resilient flooring be used on the surfaces of steeper ramps. Furthermore, carpet and like materials should not be installed on any ramp.

Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.



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3.8.3.6. Doorways and Doors

- 1) Except where stated otherwise, this Article applies to swinging and sliding doors.
- 2) Except as required in Article 3.8.5.2., every doorway that is located in a barrier-free path of travel shall have a clear width not less than 850 mm when the door is in the open position.
- 3) Reserved
- 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 1100 mm above the floor.
- 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 Sentences 3.8.2.7.(1) and 3.8.5.2.(2) shall
 - a) activate automatically or through the use of controls that
 - i) are located in a barrier-free path of travel,
 - ii) are marked with the International Symbol of Access,
 - iii) are located clear of the door swing and no more than 1500 mm from that door swing,
 - iv) comply with Subclause 3.8.3.8.(1)(a)(ii),
 - v) are operable from a height between 150 mm and 300 mm as well as between 900 mm and 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.
- 7) A cane-detectable guard shall be installed on the hinged side of power-assisted doors that swing open into the path of travel.
- 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 a barrier-free 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.
- 10) Except for a door at the entrance to a dwelling unit, a closer for an interior door in a barrier-free 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.
- 11) Unless equipped with a power door operator complying with Sentence (6), a swinging door in a barrier-free 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.
- 12) A vestibule located in a barrier-free 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 1200 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 a barrier-free path of travel need conform to the requirements of this Article.
- 14) Except as provided in Clause 3.8.3.5.(1)(c), the floor surface on each side of a door in a barrier-free path of travel shall be level within a rectangular area
 - a) as wide as the door plus the clearance required on the latch side by Sentence (11), and
 - b) whose dimension perpendicular to the closed door is not less than the width of the barrier-free path of travel but need not exceed 1500mm.
- 15) If an entrance is equipped with a security system, both visual and audible signals shall be used to indicate when the door lock is released.

Doorways and Doors for swinging and sliding doors [was ABC 2014 3.8.3.3. and 3.8.1.2.(6).]

Only the active leaf in a multiple-leaf door in a barrier-free path of travel need conform to the following.

Provide a clear width $\geq 850\text{mm}$ through every doorway, measured when any door is in the open position,

- measured between the face of door stop and the face of the butt edge of door, disregarding typical hardware (Hint: Use offset hinges if door does not open wide enough to achieve the 850mm clear width)
- in a barrier-free path of travel, except 915mm is required per **3.8.5.2.** for physician office and clinic,
- with any doorway threshold $\leq 13\text{mm}$ higher than the adjacent finished floor surfaces and beveled.

Provide a level floor surface on each side of a door in a barrier-free path of travel within a rectangular area with

- width of the **door + clearance** as **required** on the latch side (where there is no power door operator) of
 - $\geq 600\text{mm}$ beyond the edge of the door opening if the door swings toward the approach side, or
 - $\geq 300\text{mm}$ beyond the edge of the door opening if the door swings away from the approach side but **minimum 1500mm,**
- dimension perpendicular to the closed door \geq the width of the barrier-free path but **need not exceed 1500mm.**

Provide any **vestibule** in a barrier-free path of travel of dimensions that

- allow the movement of a wheelchair between doors, and
- have a distance between 2 doors in series of $\geq 1200\text{mm}$ + width of any door swinging into the linear path of travel from one door to another.

Provide levers, locks, controls, or other door-operating devices that are

- in conformance with **3.8.3.8.(1)(b)**, and
- operable between 900-1100mm above the floor.

Provide power door operators required by **3.8.2.7.(1)** and **3.8.5.2.(2)** that activate automatically or through the use of controls that are

- located in the barrier-free path of travel,
- marked with the International Symbol of Access,
- located clear of the door swing and $\leq 1500\text{mm}$ from that door swing,
- in compliance with **3.8.3.8.(1)(a)(ii)**,
- operable between 150-300mm **and** between 900-1100mm above the floor,
- operable by touching or approaching any part of their surface with a fist, arm or foot,
- equipped with safety sensors, **or**
 - fully open the door in ≥ 3 s, **and**
 - require a force ≤ 65 N to stop movement of the door, and
- with a cane-detectable guard on the hinged side of any power-assisted door that swings open **into** the path of travel.

Provide visual and audible signals at any entrance equipped with a security system to indicate when the door lock is released.

Adjust any unlatched door in a barrier-free path of travel to open with applied force (to handle, push plate, latch-release, etc.)

- ≤ 38 N for exterior swinging door, **or**
- ≤ 22 N for interior swinging door or sliding door unless it is a power-operated door **except** this limit does not apply to an entrance door 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 a door.

Adjust a closer for any interior door in a barrier-free path of travel to take ≥ 3 s to travel from “door open 70°” to “door 75mm from closed”, as measured from the leading edge of the latch side of the door- **except** for a dwelling unit entrance door.

A-3.8.3.6.(2) Doorway Width. Standard wheelchair width specifications indicate a range of sizes from 584 mm overall to 685 mm overall. Every doorway that is located in a barrier-free path of travel must have a clear width of not less than 850 mm when the door is in the open position and therefore it is important that this dimension be measured correctly. Figure A-3.8.3.6.(2) shows a door opened to 90°. It is clear that the door, and to a lesser extent the stop, impinges on the space within the door frame. The clear width of not less than 850 mm is measured **from the face of the door to the outside edge of the stop on the door frame**. It is not sufficient just to measure the inside width of the door frame. Other factors, including location of door stops other than on the door frame, and the installation of door closers and exit devices, should be taken into account. The intrusion of a door handle into the space is of lesser importance. It is recognized that there are many types of door frame and door mounts but the overall objective is to maintain a clear width of not less than 850 mm. The diagram depicts a somewhat restrictive scenario, as many doors can open wider than 90°, however, a door smaller than 914 mm would not be wide enough to ensure the minimum clear width of 850 mm that is required.

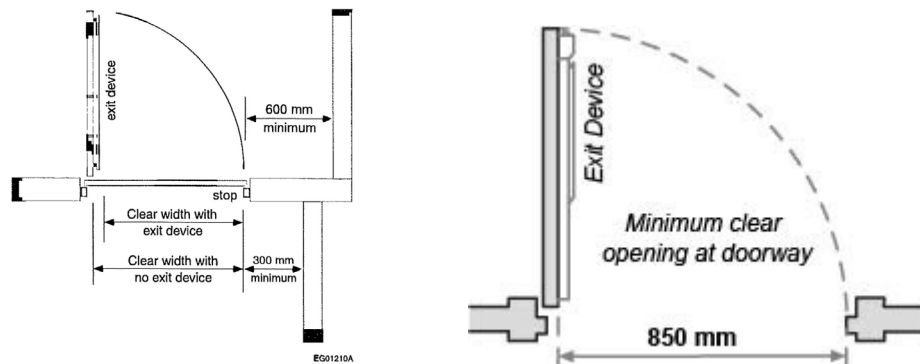


Figure A-3.8.3.6.(2) in NBC-2019AE

A-3.8.3.6.(4) Lever Handles. Lever handles are usable by most persons with limited hand mobility and will meet the intent of this requirement. Lever handles with an end return towards the door are less prone to catch the clothing of someone passing through the doorway.

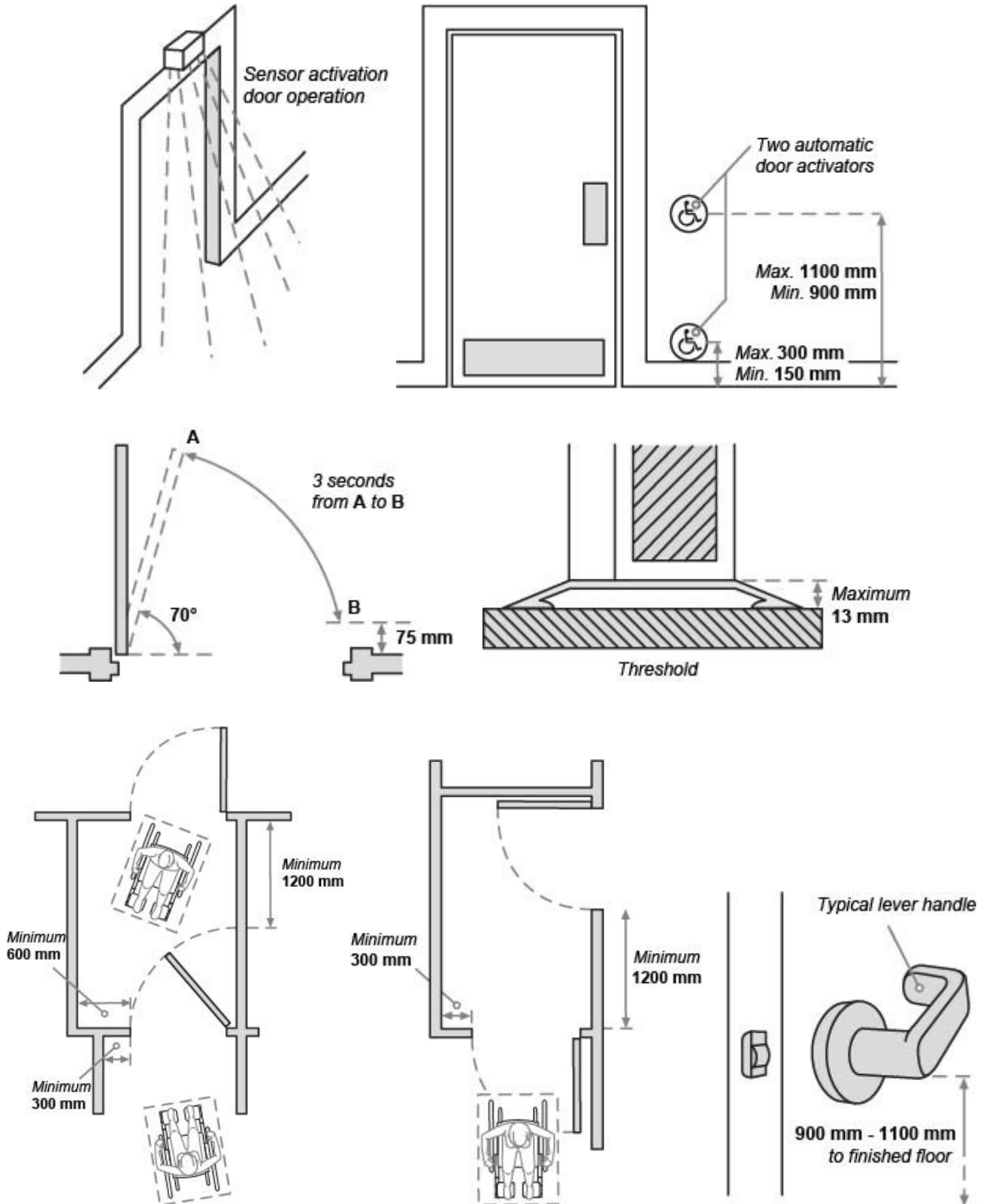
A-3.8.3.6.(6) and (7) Doors with Power Operators. Doors equipped with a power operator actuated by a pressure plate identified with the International Symbol of Access or, where security is required, by a key, card or radio transmitter, and that can otherwise be opened manually, meet the intent of the requirement. The location of these actuating devices should ensure that a wheelchair will not interfere with the operation of the door once it is actuated. Swinging doors equipped with power operators which are actuated automatically and open into passing pedestrian traffic should be provided with a guard or other device designed to prevent pedestrians from stepping in the swing area of the door. These guards or devices should be detectable by blind persons. For example, inverted U-shaped guards should have an additional rail at a height not more than 680 mm so that it is detectable by the long cane. These doors should also have a device (mat or other sensor) on the swing side to prevent the door from opening if someone is standing in the swing area.

A-3.8.3.6.(9) Air Pressure Differences. Differences in air pressure on opposite sides of a door may be due to the operation of mechanical systems such as those associated with smoke control. So-called “stack action” in buildings in winter can also cause differential pressures due to the buoyancy of warm air. Stack action is usually most noticeable between stairwells and the remainder of the building, and at the entrances to buildings; the taller the building, the greater the effect. Doors with automatic closers have to operate with sufficient opening force to allow the return action to overcome the differential pressure.

A-3.8.3.6.(10) Delayed Action on Door Closers. In some circumstances, closers with a delay feature which keeps the door open for several seconds before it begins to close might be desirable. However, closers with this feature have limited back-check, a feature of a normal door closer where resistance to opening increases as the door reaches the full arc of swing. Doors equipped with a delayed action closer are therefore more susceptible to damage should the door be opened with too much force or should someone try to force it closed, thinking the closer has failed to operate.

Delayed action closers are not recommended for such occupancies as schools.

A-3.8.3.6.(11) Clearance at Doorways. Sufficient clearance must be provided on the latch side of doors for a user to operate the door-opening mechanism and open the door without interference from the wheelchair. This is particularly important for a door swinging towards the approach side. Figure A-3.8.3.6.(11) from NBC-2019AE



Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

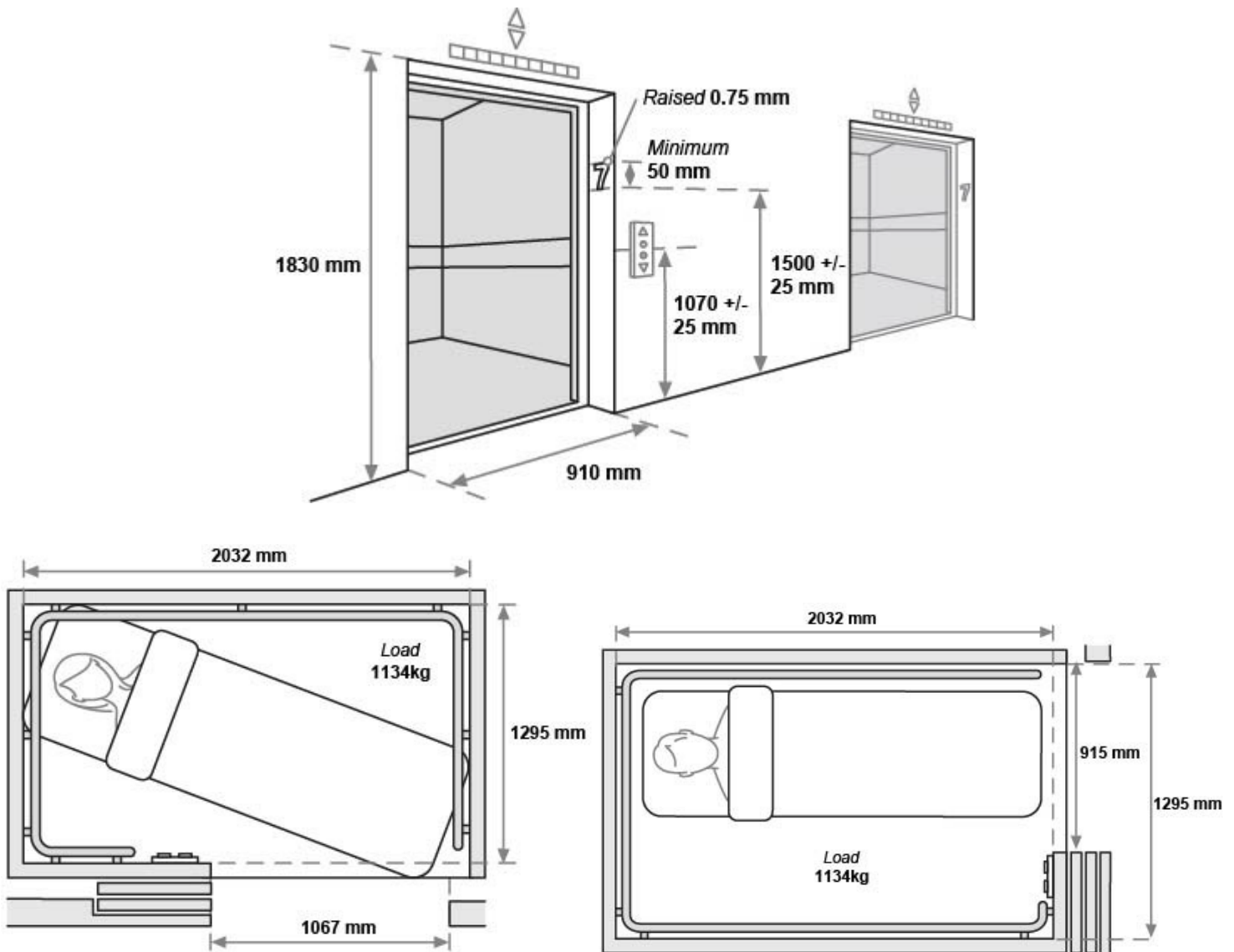
3.8.3.7. Passenger-Elevating Devices

- 1) Where passenger elevators are used in a barrier-free path of travel, features described in Appendix E of ASME A17.1/CSA B44, “Safety Code for Elevators and Escalators,” shall be included in their design and construction.
- 2) A platform-equipped passenger-elevating device used in a barrier-free path of travel shall conform to the Elevating Devices Codes Regulation made pursuant to the Safety Codes Act.

Passenger-Elevating Devices [was ABC 2014 3.8.3.5.]

Passenger elevators used in a barrier-free path of travel must have features per Appendix E of ASME A17.1/CSA B44.

Platform-equipped passenger-elevating devices used in a barrier-free path of travel must conform to AEDERSA regs (Standata).



Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

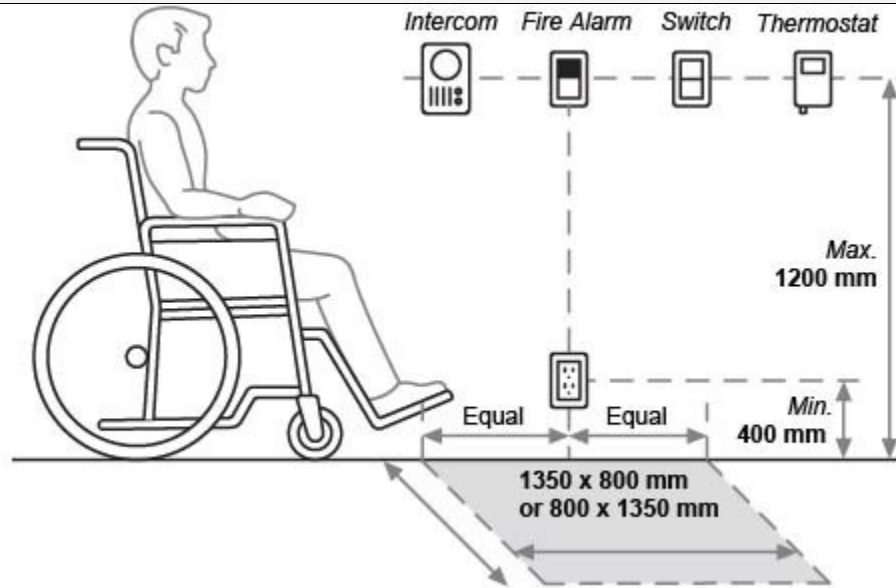
3.8.3.8. Controls

- 1) Controls described in this Section shall
 - a) where located in or adjacent to a barrier-free path of travel, and unless otherwise stated,
 - i) be mounted 400 mm to 1200 mm above the floor,
 - ii) be adjacent to and centered on either the length or the width of a clear floor space of 1350 mm by 800 mm, and
 - 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.

Controls [was ABC 2014: B:3.8.1.5.]

Provide controls which

- where located in or adjacent to a barrier-free path of travel, and unless otherwise stated (note 3.8.3.12.), are
- mounted 400-1200mm above the floor to the centre of the operable part of the controls, and
- adjacent to and centered on either the length or the width of a 1350 X 800mm clear floor area
- are opeable with
 - one hand/closed fist position, without requiring tight grasping/pinching with fingers/twisting of the wrist, **and**
 - a force ≤ 22 N, unless otherwise stated



3.8.3.9. Accessibility Signs

- 1) Signs required by Article 3.8.2.10. shall incorporate the 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.
- 2) Where tactile signage is installed, it shall
 - a) be not less than 60 mm high, raised approximately 0.7 mm above the surface,
 - b) be located not more than 1200 mm above the finished floor,
 - c) begin not more than 150 mm from the door or entrance,
 - d) be contrasting in colour with the surface on which it is applied, and
 - e) include Braille identification by use of Braille dots not less than 1mm in relief, located directly below the tactile signage.

Accessibility Signs [was ABC 2014 3.8.3.1.(1),(5)]

Provide any sign required in **3.8.2.10.** with

- the International Symbol of Access and/or the International Symbol of Access for Hearing Loss incorporated
- appropriate graphical or textual information that clearly indicates the type of facilities available
- location
 - ≤ 1200mm above the finished floor,
 - beginning or terminating ≤ 150mm from the door or entrance
- contrasting colour to the surface on which it is applied
- tactile characters ≥ 60mm high, raised approximately 0.7mm above the surface, **and**
- with Braille identification by use of Braille dots ≥ 1mm in relief, located directly below the tactile signage.

A-3.8.3.9.(1) Accessibility Signs. The International Symbol of Access shown in Figure A-3.8.3.9.(1)-A indicates to persons with physical disabilities that they will have reasonable freedom of movement within a building so signed. The symbol is usually white on a blue background; where these colours do not stand out, the sign can be set on a white background. An arrow can be added to indicate direction or the location of an accessible space or facility.

The International Symbol of Access for Hearing Loss shown in Figure A-3.8.3.9.(1)-B, which indicates accessibility for persons with hearing loss, should be used to indicate the availability of variable volume controls on telephones, assistive listening systems, and text telephones (TT). These latter devices may also be referred to as teletypewriters (TTY) or telecommunications devices for the deaf (TDD).

Figure A-3.8.3.9.(1)-A in NBC-2019AE & Figure A-3.8.3.9.(1)-B in NBC-2019AE



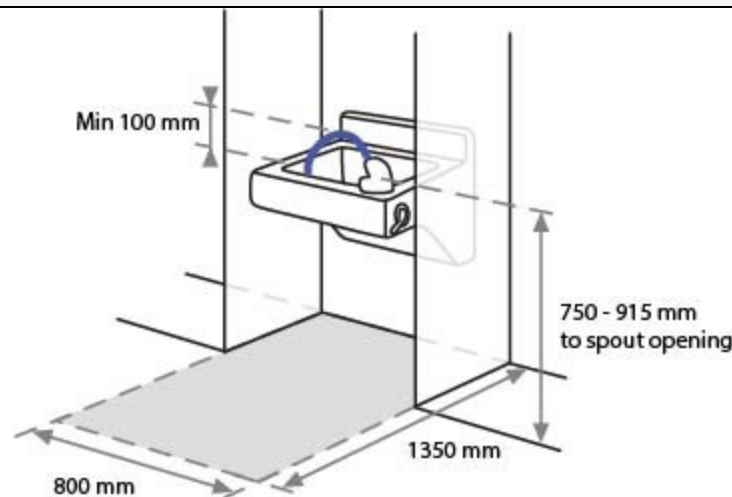
3.8.3.10. Drinking Fountains

- 1) Drinking fountains required by Sentence 3.8.2.8.(9) shall
 - a) be located along a barrier-free path of travel,
 - b) have a minimum clear floor space of 800 mm by 1350 mm in front of it,
 - c) where it has frontal access, provide a knee clearance in accordance with Clause 3.8.3.15.(1)(d),
 - 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, and
 - e) be equipped with controls that
 - i) activate automatically, or
 - ii) are located either on the front or on both sides of it and comply with Clause 3.8.3.8.(1)(b).

Drinking Fountains [was ABC 2014: B:3.8.3.16.]

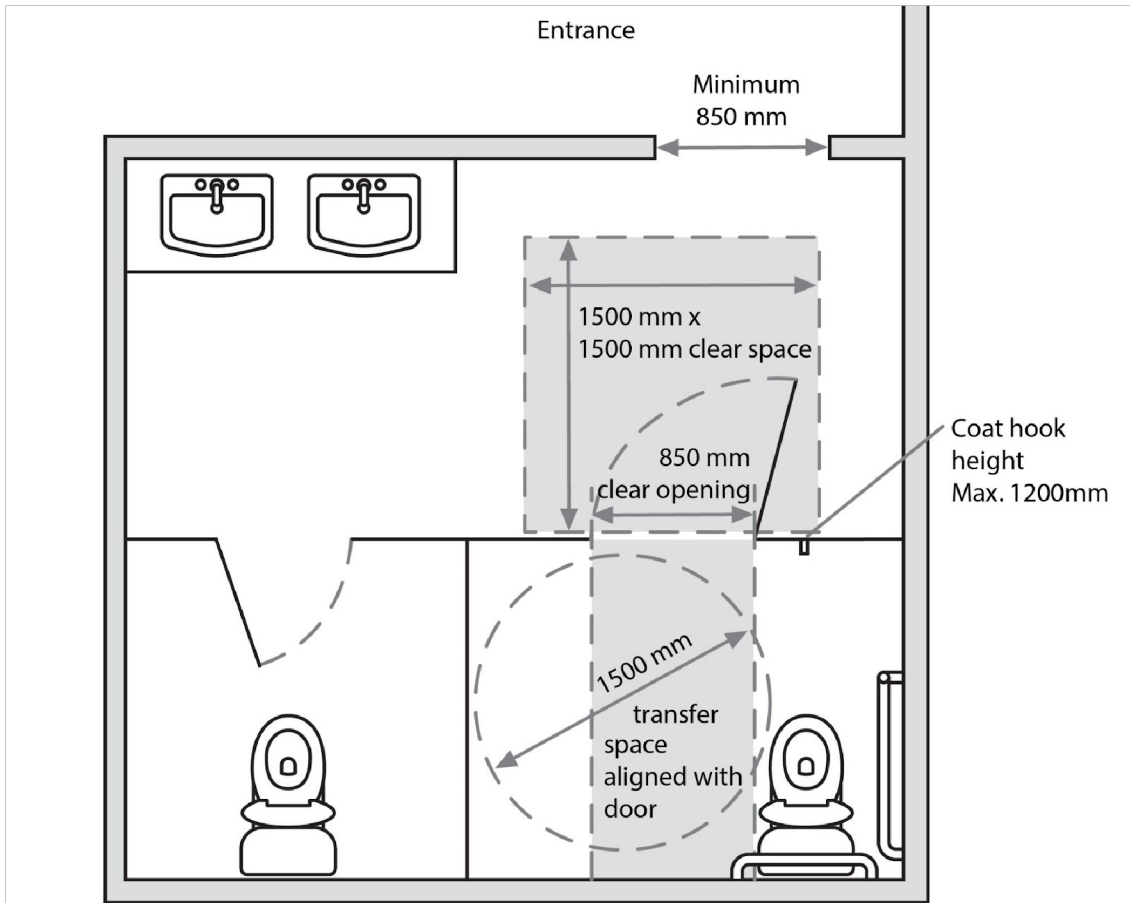
Provide any drinking fountain per **3.8.2.8.(9)** with

- a minimum clear floor area of 800 X 1350mm in front
 - knee space per **3.8.3.15.(1)(d)** where accessed from the front
 - a spout near the front edge of the fountain
 - 750--915mm above the floor, and
 - directs water flow in a trajectory ≥ 100 mm high and approximately parallel to the front edge of the fountain
 - controls that are
 - automatic, **or**
 - per **3.8.3.8.(1)(b)** mounted on the front **or** both sides of the fountain
- on/adjacent a barrier-free path of travel



3.8.3.11. Water Closet Stalls

- 1) Water closet stalls and enclosures required by Sentence 3.8.2.8.(5) shall
 - a) be designed to allow a person using a wheelchair to turn in an open space that has a diameter of not less than 1 500 mm,
 - b) have a clear floor space of 1500 mm by 1500 mm in front of the accessible stall,
 - c) be equipped with a door that
 - i) can be latched from the inside with a mechanism conforming 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 1500 mm by 1500 mm within the stall,
 - iii) provides a clear opening not less than 850 mm wide when it is open,
 - 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 1350 mm
 - 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 mm to 1 000 mm above the floor, 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 mm to 1000 mm above the floor,
 - d) 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,
 - e) 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, and
 - iii) complies with Article 3.7.2.8.,
 - f) 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 3.7.2.8.,
 - 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,
 - g) be equipped with a coat hook mounted not more than 1200 mm above the floor on a side wall and projecting not more than 50 mm from the wall, and
 - h) 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 300 mm from the front of the water closet.



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Water Closet Stalls [was ABC 2014 3.8.3.8.]

Provide any water closet stall/enclosure required per **3.8.2.8.(5)** with

- interior clear floor area for a wheelchair to turn in a $\geq 1500\text{mm}$ diameter circle unobstructed by fixed objects within 1980mm above the floor inside the accessible stall
- clear floor area of 1500 X 1500mm in front of the accessible stall
- a door that
 - can be latched from the inside with a mechanism per **3.8.3.8.(1)(b)**
 - is aligned with either
 - the transfer space adjacent to the water closet **or**
 - with a clear floor area $\geq 1500 \text{ X } 1500\text{mm}$ within the stall
 - provides a clear opening $\geq 850\text{mm}$ wide when door is open
 - is self-closing so that, when at rest, the door is ajar $\leq 50\text{mm}$ beyond the jamb
 - must swing outward unless the stall is large enough for the door to swing inward without impinging on an interior clear floor space $\geq 800 \text{ X } \geq 1350\text{mm}$ located adjacent the door
 - has a horizontal, D-shaped, visually contrasting door pull $\geq 140\text{mm}$ long on the **outside** such that its midpoint is
 - 120-220mm from the latch side and
 - 800-1000mm above the floor
 - where the door swings outward, has a horizontal, D-shaped, visually contrasting door pull $\geq 140\text{mm}$ long on the **inside** such that its midpoint is
 - 200-300mm from the hinged side of the door and
 - 800-1000mm above the floor
- a water closet located with 460-480mm between its centre line and one wall/partition panel
- grab bars conforming to **3.7.2.8.(1)**, consisting of
 - L-shaped: 1 bar mounted on the side wall adjacent the water closet, with
 - the horizontal part $\geq 760\text{mm}$ long mounted 750-850mm above the floor, and
 - the vertical part $\geq 760\text{mm}$ long mounted 150mm in front of the water closet
 - Straight: mounted on the rear wall and centred on the water closet, consisting of either
 - 1 bar $\geq 600\text{mm}$ long, and mounted at the same height as the horizontal part of the side wall L-shaped bar but $\geq 100\text{mm}$ above any attached water tank, notwithstanding, **OR**
 - 2 bars $\geq 300\text{mm}$ long, mounted on each side of the flush valve at the same height as the horizontal part of the side wall L-shaped bar.
- a toilet paper dispenser mounted on the side wall adjacent the water closet such that
 - the bottom of the dispenser is 600–800mm above the floor, and
 - the closest edge of the dispenser is 300mm from the front of the water closet.
- a coat hook mounted $\leq 1200\text{mm}$ above the floor on a side wall and projecting $\leq 50\text{mm}$ from the wall

A-3.8.3.11.(1)(c)(v) Water Closet Stalls. Doors to water closet stalls for persons with physical disabilities should swing outward, preferably against a side wall.

A-3.8.3.11.(1)(c)(vi) Door Pulls. The door pull should consist of a D-shaped handle mounted horizontally. The centre lines are the lines drawn through the long axis and the short axis of the handle. The midpoint of the handle must be located horizontally at 200 to 300 mm from the hinged side of the door and vertically at 800 to 1000 mm above the finished floor surface.

A-3.8.3.11.(1)(e)(ii) Additional Grab Bars. It is the designer's prerogative to exceed the minimum requirements found in the NBC(AE) and specify the installation of additional grab bars in other locations. These additional grab bars may be of different configurations and can be installed in other orientations.

3.8.3.12. Universal Washrooms

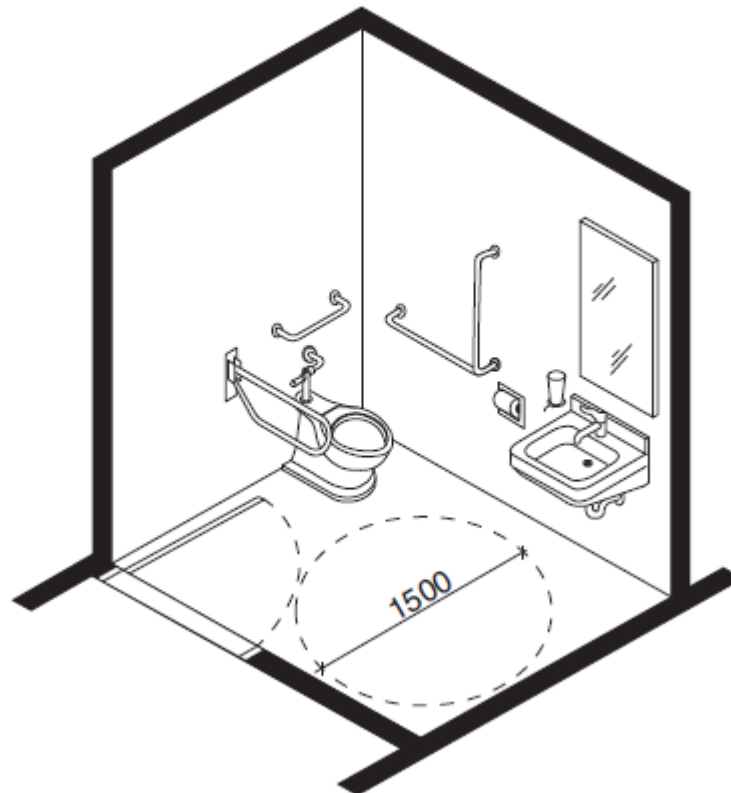
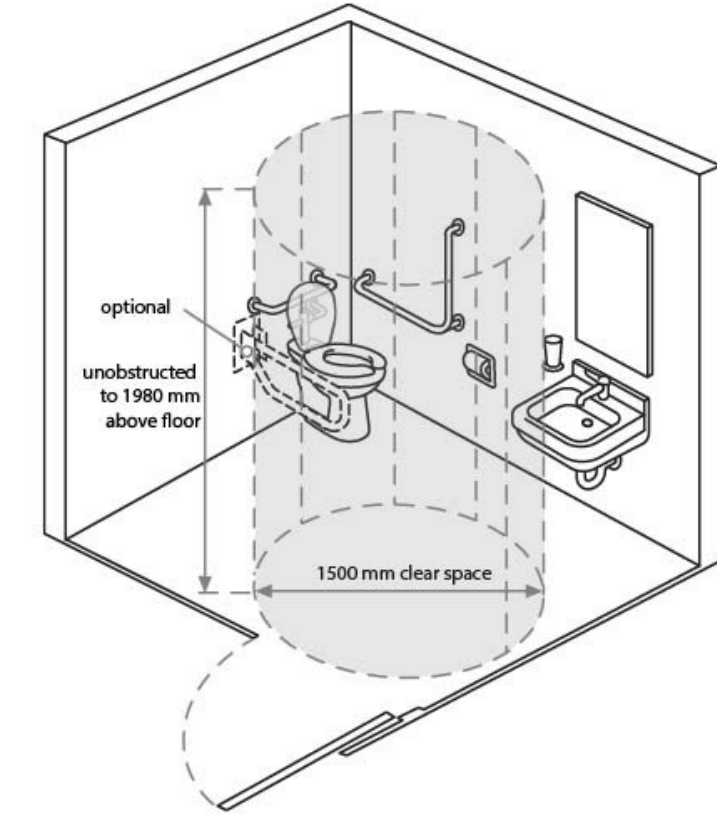
- 1) A universal washroom shall
 - a) be served by a barrier-free path of travel,
 - b) have a door complying with Article 3.8.3.6. that
 - i) has a latch-operating mechanism located 900 mm to 1000 mm above the floor that complies with Clause 3.8.3.8.(1)(b) and is capable of being locked from the inside, 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 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 1000 mm above the floor
 - c) have one lavatory conforming to Article 3.8.3.15.,
 - d) have one water closet conforming to Article 3.8.3.13. And Clause 3.8.3.11.(1)(d), with a clear floor space at least 900 mm wide that is parallel and adjacent to the open side of the water closet,
 - e) have grab bars conforming to Clauses 3.8.3.11.(1)(e) and (f),
 - f) have a coat hook conforming to Clause 3.8.3.11.(1)(g),
 - g) have a toilet paper dispenser conforming to Clause 3.8.3.11.(1)(h),
 - h) unless a counter is provided, have a shelf located not more than 1200 mm above the floor, and
 - i) be designed to permit a wheelchair to turn in an open space not less than 1500 mm in diameter

Universal Washrooms [was ABC 2014 3.8.3.12.]

Provide any universal washroom required per **3.8.2.8.(4) or (12)** with

- a barrier-free path of travel to and within the room,
- a door per **3.8.3.6.** that
 - has a latch-operating mechanism per **3.8.3.8.(1)(b)** located 900-1000mm above the floor
 - may be locked from the inside and released from the outside in case of emergency
 - swings outward unless the room is large enough for the door to swing inward without impinging on an interior clear floor space $\geq 800 \times \geq 1350\text{mm}$ located adjacent the door (as for WC stall)
 - where the door swings outward, has a horizontal, D-shaped, visually contrasting door pull $\geq 140\text{mm}$ long on the **inside** such that its midpoint is
 - 200-300mm from the hinged side of the door and
 - 900-1000mm above the floor (as for WC stall)
- clear floor area for a wheelchair to turn in a $\geq 1500\text{mm}$ diameter circle unobstructed by fixed objects within 1980mm above the floor inside the room (as for WC stall)
- one lavatory per **3.8.3.15.**
- one water closet per **3.8.3.13. + 3.8.3.11.(1)(d)** (as for WC stall), with a clear floor area $\geq 900\text{mm}$ wide transfer space parallel and adjacent to the open side of the water closet,
- grab bars per **3.8.3.11.** (as for WC stall)
- coat hook per **3.8.3.11.** (as for WC stall)
- toilet paper dispenser per **3.8.3.11.** (as for WC stall)
- shelf mounted $\leq 1200\text{mm}$ above the floor, unless a counter is provided.

A-3.8.3.12. Universal Washrooms. Unobstructed areas in front of the lavatory, in front of the water closet and on one side of the water closet are necessary for maneuverability of a person using a wheelchair. Although outward swinging doors are preferable for accessibility, inward swinging doors are also permitted. Figures A-3.8.3.12.-A and A-3.8.3.12.-B from NBC-2019AE show design options that meet the intent of Article 3.8.3.12.



Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

3.8.3.13. Water Closets

- 1) A water closet for a person with physical disabilities shall
 - a) be equipped with a seat located 430 mm to 460 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.

Water Closets [was ABC 2014: B:3.8.3.9.]

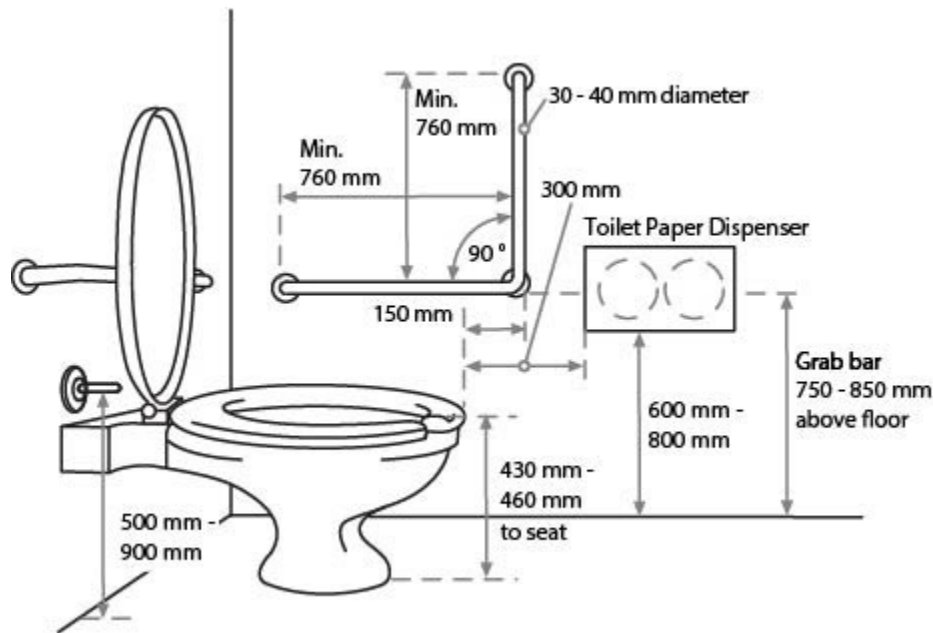
Provide a water closet for a person with physical disabilities with

- a seat located 430--460mm above the floor,
- a seat lid or other back support
- a securely-attached tank top where the fixture has an attached tank
- flush control that is
 - automatic, **or**
 - per **3.8.3.8.(1)(b)**, located 500-900mm above the floor, ≤ 350mm from the transfer side.

NOTE: National Plumbing Code 2015: B:2.2.2.5. Water Closets in Public Washrooms

(1) When a water closet is installed in a washroom for public use, it shall be of the elongated type and provided with a seat of the open front type.

A-3.8.3.13.(1) Water Closets. Wall- or floor-mounted water closets with recessed bases are preferable because they provide the least amount of obstruction.



Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

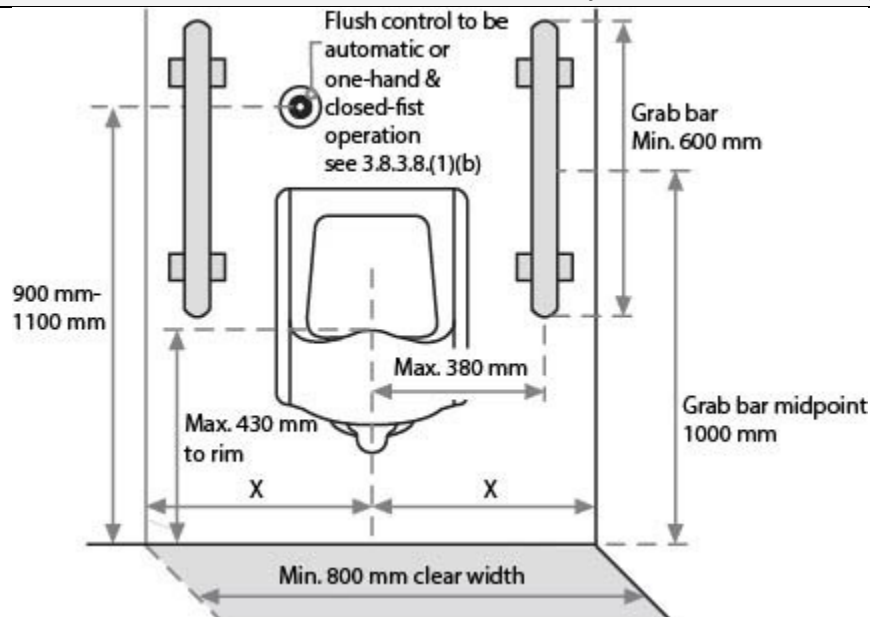
3.8.3.14. Urinals

- 1) 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 route,
 - c) have a clear width of approach of 800 mm 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 1100 mm above the floor, and
 - f) have a vertically mounted grab bar installed on each side that
 - i) complies with Article 3.7.2.8.,
 - ii) is not less than 600 mm long, with its centre line 1000 mm above the floor, and
 - iii) is located not more than 380 mm from the centre line of the urinal.

Urinals [was ABC 2014 3.8.3.10.]

Provide any urinal required per **3.8.2.8.(6)** | with

- rim located ≤ 430mm above the floor, wall-mounted with no raised/stepped floor surface
- unobstructed clear width of approach ≥ 800mm centred on the urinal
- flush control that is
 - automatic, **or**
 - per **3.8.3.8.(1)(b)**, located 900-1100mm above the floor
- grab bars ≥ 600mm long conforming to 3.7.2.8. installed vertically on each side
 - centred 1000mm above the floor, and
 - ≤ 380mm from the vertical centre line of the urinal on/adjacent to a barrier-free path of travel.



Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

3.8.3.15. Lavatories and Mirrors

- 1) Lavatories required by Sentence 3.8.2.8.(7) 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 rim height not more than 865 mm above the floor,
 - d) have a clearance beneath the lavatory not less than
 - i) 760 mm wide,
 - 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,
 - e) have insulated water supply and drain pipes where these pipes are exposed,
 - f) 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 1100 mm above the floor, within 500 mm from the front of the lavatory, and
 - g) have a towel dispenser or other hand-drying equipment located close to the lavatory, not more than 1200 mm above the floor in an area that is accessible to persons in wheelchairs.
- 2) Mirrors required by Sentence 3.8.2.8.(8) shall be
 - a) mounted with their bottom edge not more than 1000 mm above the floor, or
 - b) fixed in an inclined position so as to be usable by a person in a wheelchair.

Lavatories and Mirrors [was ABC 2014 3.8.3.11.]

Provide any lavatory required per **3.8.2.8.(7)** or **3.8.5.3.** with

- **faucets** per **3.7.2.3.(4)**, except as provided by the Plumbing Code and Energy Code, that operate automatically, or have a manual control that
 - complies with Clause 3.8.3.8.(1)(b),
 - does not require the application of continuous force to maintain water flow, and
 - where metered, provides at least 10 s of water flow. (See Note A-3.7.2.3.(4).)

ALSO National Plumbing Code 2015:B: 2.2.10.6.(5) Each lavatory in a public washroom shall be equipped with a device capable of automatically shutting off the flow of water when the lavatory is not in use, such as occupant sensors or self-closing valves.

Definition: Public use (as applying to the classification of plumbing fixtures) means fixtures in general washrooms of schools, gymnasiums, hotels, bars, public comfort stations and other installations where fixtures are installed so that their use is unrestricted.

AND

NOTE: National Energy Code for Buildings 2017: B: 6.2.6.2.(2) :Each lavatory in a public access washroom in a building of assembly occupancy shall be equipped with a device capable of automatically shutting off when the lavatory is not in use, such as occupant sensors and self-closing valves.

So altogether

- $\geq 460\text{mm}$ from any side wall to its centre line
- $\leq 865\text{mm}$ above the floor to its rim
- $\geq 760\text{mm}$ wide knee space underneath it that is
 - $\geq 735\text{mm}$ high at the front edge,
 - $\geq 685\text{mm}$ high at a point 200mm back from its front edge, and
 - $\geq 230\text{mm}$ high over the distance 280-430mm back from its front edge
- insulated supply/drain pipes where pipes exposed such that a person using a wheelchair may inadvertently contact them
- with a soap dispenser that is automatic or per **3.8.3.8.(1)(b)**, mounted
 - $\leq 1100\text{mm}$ above the floor, and
 - within 500mm of the lavatory front edge
- with towel dispenser or other hand-dryer mounted
 - $\leq 1200\text{mm}$ above the floor, while being
 - close to the lavatory where accessible to a person using a wheelchair.

Provide any mirror required per **3.8.2.8.(8)** that is

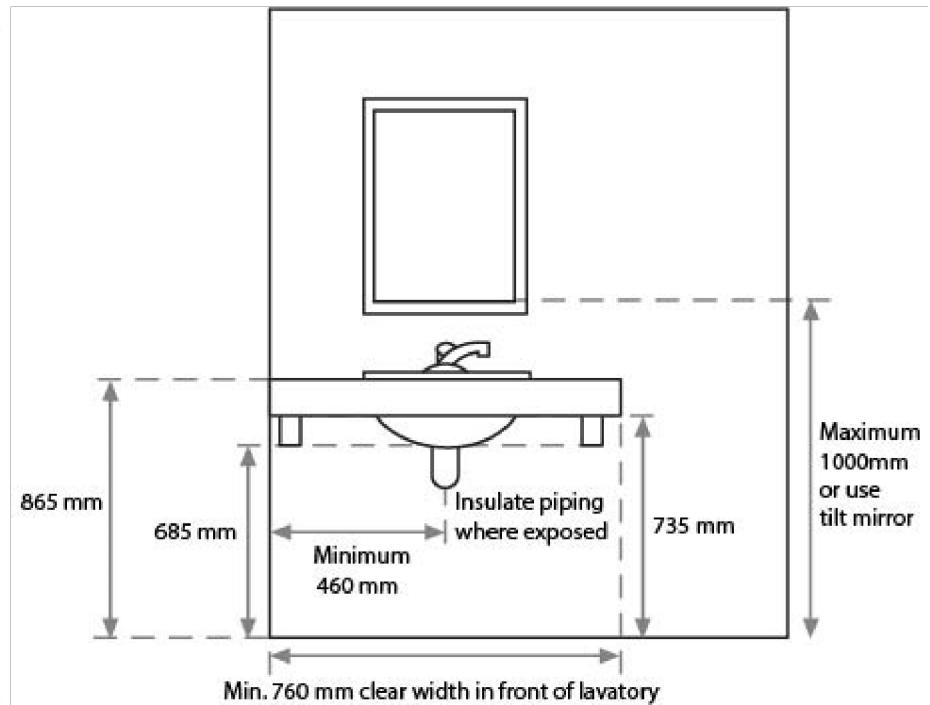
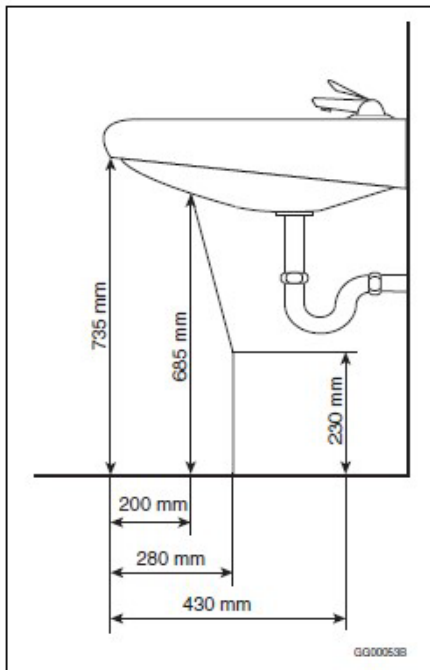
- mounted $\leq 1000\text{mm}$ above the floor, or
- fixed in an inclined position to be usable by a person using a wheelchair.

A-3.8.3.15.(1)(e) Pipe Protection. Persons who have lost the sense of touch in their limbs cannot feel hot or cold and are therefore susceptible to burns from exposed pipes without knowing. The pipes referred to in Clause 3.8.3.15.(1)(e) include both supply and waste pipes.

A-3.8.3.15.(1)(f) Soap Dispenser Location. The location of accessories, such as soap dispensers and faucets, serving barrier-free lavatories should be established while taking into consideration that their controls must be usable by and within the direct reach of a person in a seated position directly in front of the accessible lavatory.

A-3.8.3.15.(1)(d) Clearances Beneath a Lavatory.

Figure A-3.8.3.15.(1)(d) in NBC-2019AE



3.8.3.16. Showers

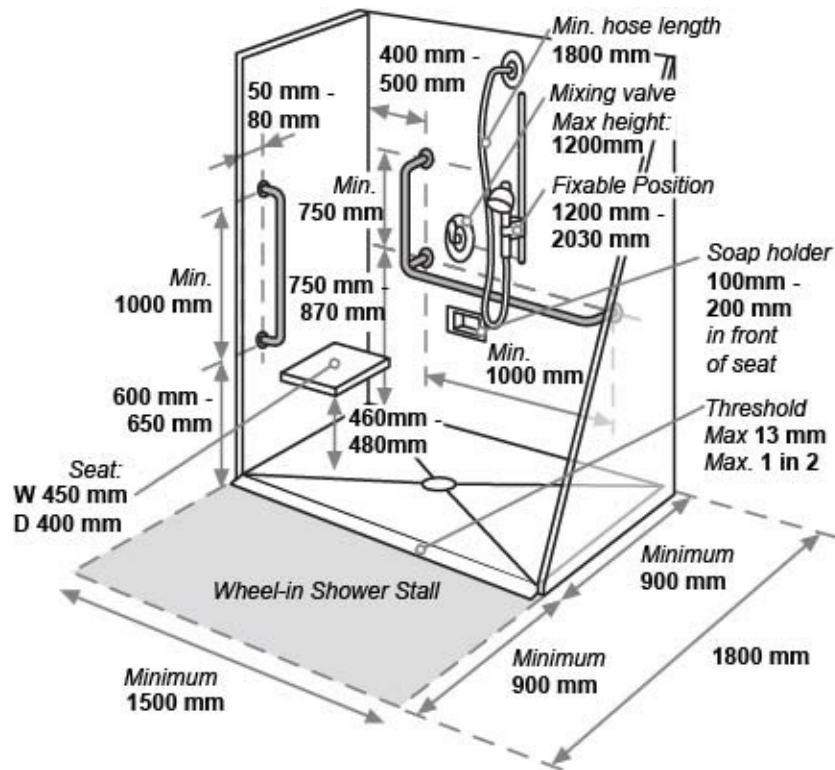
- 1) Showers required by Sentence 3.8.2.8.(10) shall
 - a) be not less than 1500 mm wide and 900 mm deep,
 - b) have a clear floor space at the entrance to the shower that is not less than 900 mm deep and the same width as the shower, except that fixtures are permitted to project into that space provided they do not restrict access to the shower (see Note A-3.8.3.16.(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 in 2 (50%),
 - f) have 2 grab bars that
 - i) conform to Sentence 3.7.2.8.(1),
 - ii) one of which is not less than 1000 mm long and located vertically on the side wall 50mm to 80mm 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-3.8.3.16.(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, and
 - iii) designed to carry a minimum load of 1.3 kN,
 - h) have a pressure-equalizing or thermostatic-mixing valve and other controls that
 - i) comply with Clause 3.8.3.8.(1)(b),
 - ii) are mounted on the wall opposite the entrance to the shower at not more than 1200 mm above the floor and within reach of the seat,
 - i) have a hand-held shower head with not less than 1800 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 1200 mm and 2030 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 and located on the side wall between 100 mm and 200 mm in front of the seat.

Showers [was ABC 2014 3.8.3.13.]

Provide any shower required per **3.8.2.8.(10)** with

- $\geq 1500\text{mm}$ wide X $\geq 900\text{mm}$ deep floor, with a slip-resistant surface
- a clear floor area at the entrance to the shower $\geq 900\text{mm}$ wide adjacent to its entire length, except that fixtures may project into the space provided they do not restrict access to the shower
- no doors or curtains that obstruct the controls or the clear floor space at the entrance to the shower
- a threshold $\leq 13\text{mm}$ higher than the finished floor, but where $> 6\text{mm}$ must be beveled to a slope $\leq 1:2$
- a hinged seat that is not spring-loaded **or** a fixed seat
 - with a smooth, slip-resistant surface and no rough edges
 - $\geq 450\text{mm}$ wide X $\geq 400\text{mm}$ deep
 - mounted on the same side wall as the vertical grab bar, at 460-480mm above the floor, and
 - designed to carry load $\geq 1.3\text{ kN}$
- a pressure-equalizing or thermostatic-mixing valve and other controls per **3.8.3.8.(1)(b)** mounted on the wall opposite the entrance to the shower at $\leq 1200\text{mm}$ above the floor and within reach of the seat **to address thermal shock and scalding risk, see National Plumbing Code 2015 (NPC 2015): B:2.2.10.6.(3) for matching of automatic compensating valves and showerheads. Also NPC 2015:B: 2.2.10.7.(3) Mixing valves that supply shower heads shall be of the pressure-balanced, thermostatic, or combination pressure-balanced/thermostatic type capable of maintaining a water outlet temperature that does not exceed 49°C, and limiting thermal shock.**
- a hand-held shower head with $\geq 1800\text{mm}$ of flexible hose reachable from a seated position and does not obstruct the use of the grab bars, usable in fixed positions of 1200mm and 2030mm above the floor
- recessed soap holders reachable from a seated position and located on the side wall 100-200mm in front of the seat
- 2 grab bars conforming to 3.7.2.8.(1), consisting of
 - 1 bar $\geq 1000\text{mm}$ long, installed vertically on the side wall with lower end at 600-650mm above the floor, located 50-80mm from the adjacent clear floor space
 - 1 L-shaped bar mounted on the wall opposite the entrance to the shower with
 - the horizontal member $\geq 1000\text{mm}$ long located 750-870mm above the shower floor, and
 - the vertical member $\geq 750\text{mm}$ long located 400-500mm from the side wall on which the other vertical grab bar is mounted

A-3.8.3.16.(1)(b) Clear Space at Entrances to Showers. The clear space at the entrance to a shower may be encroached upon by fixtures such as a wall hung sink which does not interfere with the leg rests of the wheelchair. However, this sink could restrict movement for persons who need to make a lateral transfer if it were installed at the seat end of the shower. Figure A-3.8.3.16.(1)(b) from NBC-2019AE



A-3.8.3.16.(1)(f) Grab Bars. One L-shaped grab bar is required to be installed on the wall next to the seat. A grab bar behind the seat would prevent the user from leaning back against the wall, while one located on the wall opposite the seat cannot be reached from the seated position. The seat itself may be used in conjunction with the bar for transfer. If design flexibility is required, fold away grab bars can be used as an alternative.

3.7.2.8. Grab Bars

- 1) Grab bars shall
 - a) be slip-resistant and free of any sharp or abrasive elements,
 - b) be mounted on surfaces that are free of any sharp or abrasive elements,
 - c) be able to resist a load of not less than 1.3 kN applied vertically or horizontally,
 - d) be 30 mm to 40 mm in diameter, and
 - e) where mounted on a wall, have a clearance of 35 mm to 45 mm from the wall.

3.8.3.17. Bathtubs

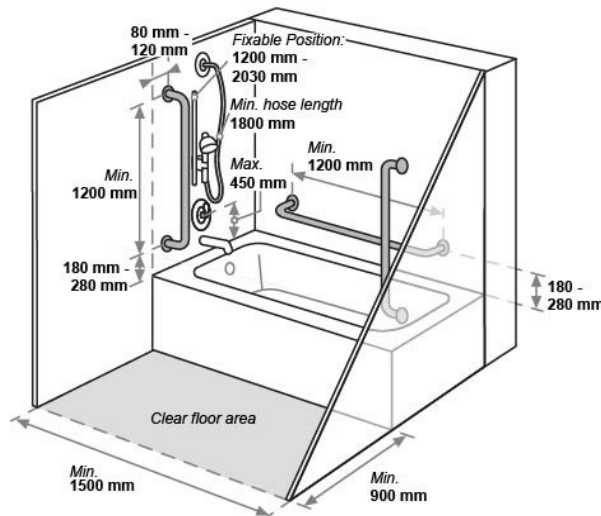
- 1) be located in a room with a clear floor space not less than 1500 mm in diameter,
- 2) be not less than 1500 mm long,
- 3) have a clear floor space not less than 900 mm wide adjacent to its entire length,
- 4) be capable of being accessed along its full length with no tracks mounted on its rim,
- 5) have faucets and other controls that
 - a) conform to Clause 3.8.3.8.(1)(b), and
 - b) 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,
- 6) have three grab bars
 - a) that conform to Sentence 3.7.2.8.(1),
 - b) that are not less than 1 200 mm long,
 - c) 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
 - d) one of which is located horizontally along the length of the bathtub at 180 mm to 280 mm above the bathtub rim,
- 7) have a slip-resistant bottom surface, and
- 8) 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 1200 mm and 2030 mm.

Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

Bathtubs [was ABC 2014 3.8.3.17.]

Provide any bathtub required per **3.8.2.8.(11)** with

- a room with interior clear floor area for a wheelchair to turn in a $\geq 1500\text{mm}$ diameter circle unobstructed by fixed objects within 1980mm above the floor
- $\geq 1500\text{mm}$ long bathtub with a slip-resistant bottom surface
- a clear floor area $\geq 900\text{mm}$ wide adjacent to its entire length, with no tracks mounted on its rim
- faucets and other controls per **3.8.3.8.(1)(b)** installed $\leq 450\text{mm}$ above the rim, on the centre line or between centre line and exterior edge of the bathtub rim **Also see National Plumbing Code 2015: B:2.2.10.7.(4)** The temperature of water discharging into a bathtub shall not exceed 49°C . And Note, in part: At 49°C , the time for a full thickness scald burn to occur is 10 minutes. Children, the elderly and persons with disabilities are particularly at risk of scald burns
- a hand-held shower with $\geq 1800\text{mm}$ of flexible hose usable in fixed positions of 1200mm and 2030mm above the bottom surface of the bathtub
- 3 grab bars $\geq 1200\text{mm}$ long conforming **3.7.2.8.(1)**, consisting of
 - bar installed horizontally along the length of the bathtub at $180\text{--}280\text{mm}$ above the rim
 - 2 bars-- one installed vertically at each end of the bathtub with lower end at $180\text{--}280\text{mm}$ above the rim, located $80\text{--}120\text{mm}$ in from the outside edge of the bathtub.



3.8.3.18. Assistive Listening Devices

- 1) Except as provided in Sentence (2), assistive listening systems required by Article 3.8.2.9. shall encompass the entire seating area.
- 2) If an assistive listening system referred to in Article 3.8.2.9. is an induction loop system, only half the seating area in the room need be encompassed.

Assistive Listening Devices [was ABC 2014 3.8.3.7.]

Provide an assistive listening system required per **3.8.2.9.** that encompasses the entire seating area in the room, except for an induction loop system wherein only $\frac{1}{2}$ the seating area in the room need be looped.

A-3.8.3.18. Assistive Listening Devices. Although the NBC(AE) does not regulate the purchase of appliances, televisions used for public notices should be designed for closed captioning. Where the public relies on information for directions or on public announcements, provisions should be made to broadcast these both audibly and visually. For instance, public announcements at sports events could be displayed visually on the scoreboard; schedules for trains and planes should be available audibly as well as visually.

Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

Wireless sound transmission systems, including FM, infrared or magnetic induction loop systems, improve sound reception for persons with hearing disabilities by providing amplification which can be adjusted by each user while blocking out unwanted background noise. These systems transmit a signal that is picked up by a special receiver available for use by a person with a hearing disability, whether or not a hearing aid is used. Neither system interferes with the listening enjoyment of others. The transmitter can be jacked into an existing P.A. system amplifier or used independently with microphones. The induction loop system requires users to sit in the area circumscribed by the loop; though installation of the loop is relatively simple, the installer should be knowledgeable about these systems if proper functioning is to be achieved. FM or infrared systems can be designed to broadcast signals which cover the entire room and thus do not restrict seating to any one area. Figures A-3.8.3.18.-A and A-3.8.3.18.-B show the general configuration of FM and infrared systems. Although portable systems (FM in particular) are available, these are best suited to small audiences. Generally, the systems installed in church halls, auditoria, theatres and similar places of assembly are not easily portable, as they are installed in a fixed location by a sound technician and form an integral part of the P.A. system of the room or building.

Hard-wired systems (where a jack is provided at a particular seat) will not meet this requirement unless adequate provisions are made to accommodate persons with hearing aids. In choosing the most appropriate system, a number of factors must be taken into account including cost, installation and maintenance, suitability to the audience, ease of operation and the need for privacy. Information on designers and suppliers of these systems may be obtained from the Canadian Hearing Society.

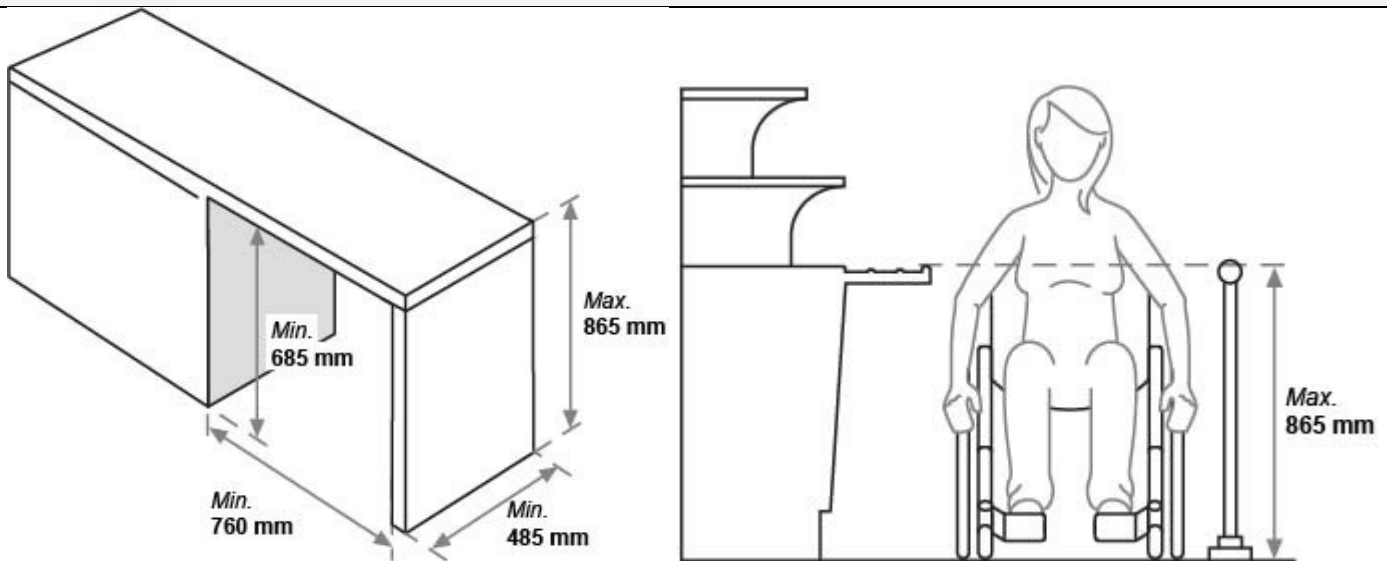
3.8.3.19. Counters

- 1) Counters required by Sentence 3.8.2.11.(1) shall have
 - a) at least one barrier-free section not less than 760 mm long centred over a knee space conforming to Clause (c),
 - b) a surface not more than 865mm above the floor, and
 - c) except as provided in Sentence (2) and where the counter is intended to be used as a work surface, a knee space underneath it that is
 - i) not less than 760 mm wide,
 - ii) not less than 685 mm high, and
 - iii) not less than 485 mm deep.
- 2) A counter that is used in a cafeteria, or one that performs a similar function whereat movement takes place parallel to the counter, need not provide a knee space underneath it.

Counters [was ABC 2014 3.8.3.14.]

Provide any counter required per **3.8.2.11.(1)** with

- a surface $\leq 865\text{mm}$ above the floor, and
- ≥ 1 section $\geq 760\text{mm}$ long, where intended as a work surface, with knee space underneath it- **except** for a cafeteria/self-serve type counter where motion is parallel to the counter does not require it- that is
 - $\geq 760\text{mm}$ wide
 - $\geq 685\text{mm}$ high
 - $\geq 485\text{mm}$ deep



3.8.3.20. Shelves or Counters for Telephones

- 1) Shelves or counters required by Sentence 3.8.2.11.(2) shall
 - a) be level,
 - b) be not less than 265 mm deep,
 - c) have, for each telephone provided, a clear space not less than 265 mm wide having no obstruction within 265 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.
- 2) Where a wall-hung telephone is provided above the shelf or counter section described in Clause (1)(d), it shall be located so that the receiver and coin slot are not more than 1200mm above the floor.
- 3) At least one telephone with a built-in communication device for the deaf shall be provided where public telephones are installed.

Shelves or Counters for Telephones [was ABC 2014 3.8.3.15.]

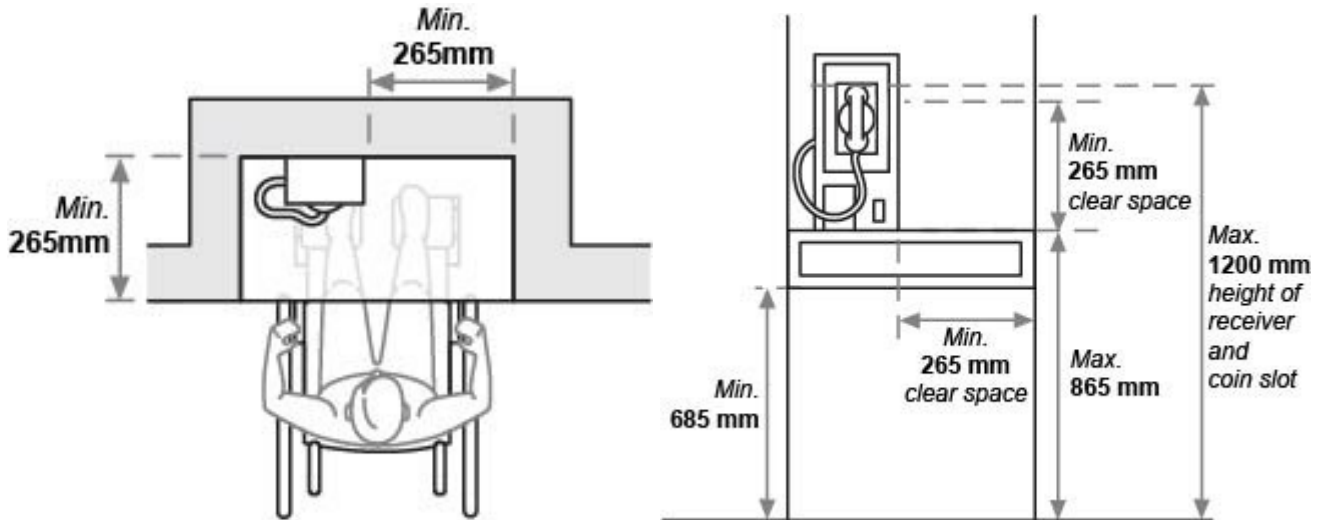
Provide any shelf/counter required per **3.8.2.11.(2)** with a level surface that is

- ≤ 865mm above the floor serving at least one telephone
- ≥ 265mm wide X ≥ 265mm deep area without obstruction within 265mm above the surface

Where the telephone is wall-hung above the shelf/counter, its receiver and any coin slot must be ≤ 1200mm above the floor.

Where public telephones are installed, provide ≥ 1 telephone with a built-in communication device for the deaf.

A-3.8.3.20. Telephone Shelves. Generally, pay phone booths are pre-manufactured by a limited number of suppliers. There is often little choice in regard to the dimensions. The intent of the various dimension requirements of Article 3.8.3.20. is to ensure that persons using wheelchairs will be able to conveniently use the pay phones. The shelf dimensions ensure that there is a convenient usable shelf for all persons that will also accommodate a portable TTY/TDD for persons who are deaf or hard of hearing. The pay phone can be mounted to the side of the booth to allow for the open area above the shelf.



3.8.3.21. Spaces in Seating Area

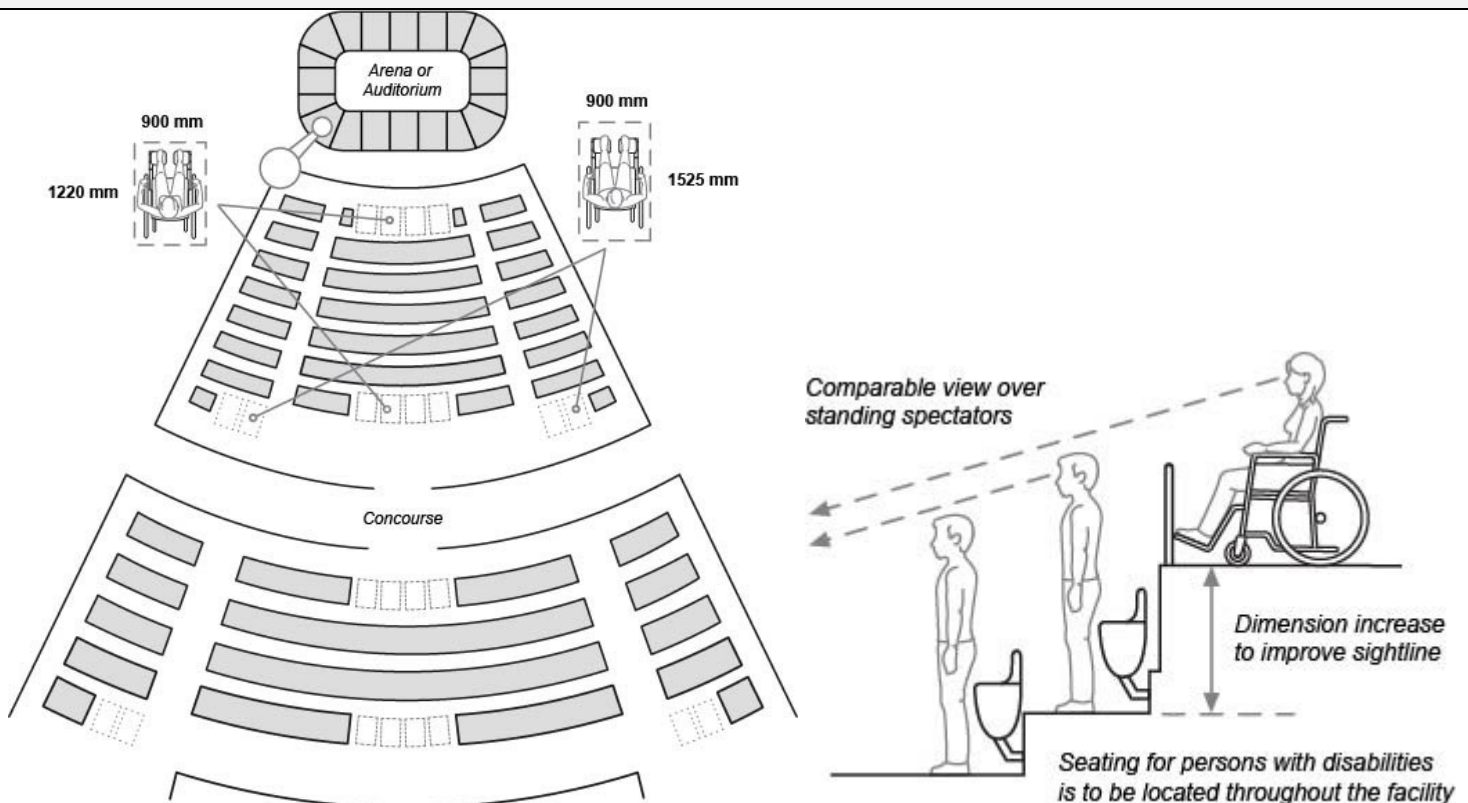
- 1) Spaces designated for use by persons using wheelchairs referred to in Sentence 3.8.2.3.(3) shall be
 - a) clear and level, or level with removable seats,
 - b) not less than 900 mm wide and 1525 mm long to allow a person using a wheelchair to enter from a side approach and 1220 mm long where the person using a wheelchair enters from the front or rear of the space,
 - c) arranged so that at least 2 designated spaces are side by side,
 - d) located adjoining a barrier-free path of travel without infringing on egress from any row of seating or any aisle requirements, and
 - e) situated, as part of the designated seating plan, to provide a choice of viewing location and a clear view of the event taking place.

Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

Spaces in Seating Area [was ABC 2014 3.8.3.6.]

Provide spaces required per **3.8.2.3.(3)** designated for use by persons using a wheelchair that are

- level and
 - on clear floor area or
 - with removable seats
- ≥ 900mm wide
- ≥ 1525mm long where a person using a wheelchair enters from the side
- ≥ 1220mm long where a person using a wheelchair enters from the front or rear
- located with ≥ 2 designated spaces are side by side, adjoining a barrier-free path of travel without infringing on egress from any seating or aisle, and
- part of the designated seating plan, and provide a choice of viewing location and clear view of the event taking place.



3.8.3.22. Parking Stalls

- 1) A parking stall intended for use by persons using a wheelchair or other mobility aid shall
 - a) be designed as a 2.4 m wide parking stall adjacent to a 2.4 m wide access aisle where the access aisle is demarcated to indicate no parking,
 - b) have a firm, slip-resistant and level surface,
 - c) be clearly marked and identified by
 - i) a vertically mounted sign, located near the centre line of each designated stall, with the centre of the sign between 1600 to 2500 mm from the finished surface, and
 - ii) the International Symbol of Access painted on the pavement,
 - d) be located near to or adjoining a barrier-free path of travel leading to the nearest barrier-free entrance, and
 - e) be designed so that parked vehicles shall not obstruct access onto an elevated and level surface.

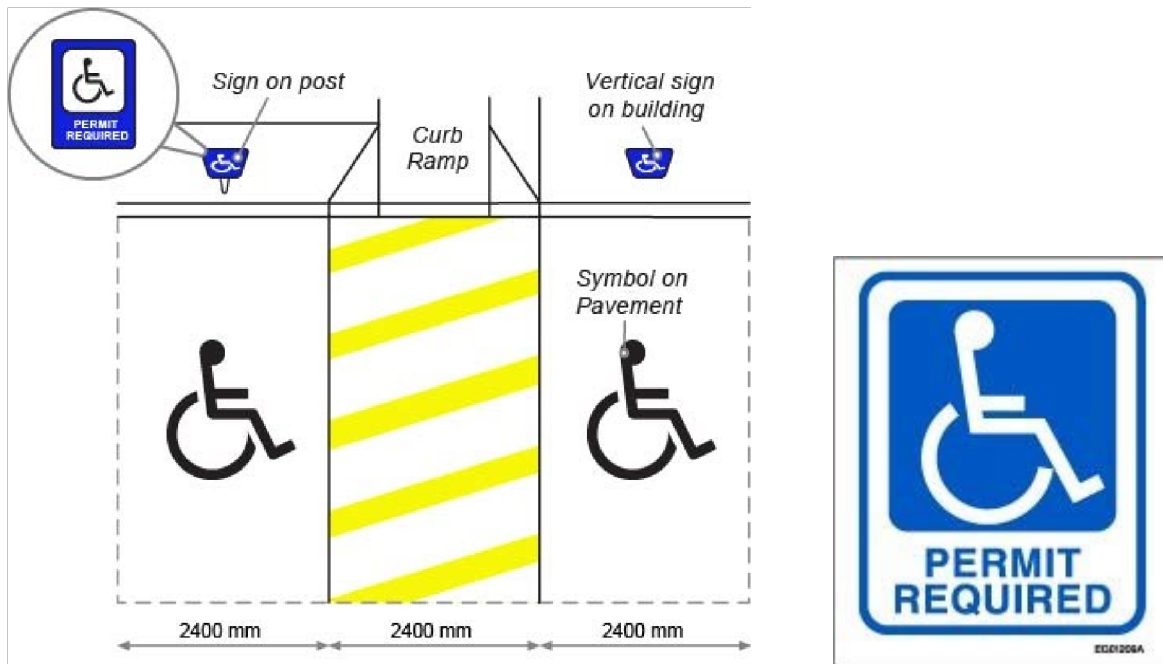
Parking Stalls [was ABC 2014 3.8.2.2.]

Provide any parking stall required per **3.8.2.5.** intended for use by persons using a wheelchair or other mobility aid that is

- ≥ 2.4 m wide stall adjacent to a ≥ 2.4 m wide access aisle marked to indicate no parking is permitted in the aisle,
- with a firm, slip-resistant and level surface,
- clearly marked and identified by
 - the International Symbol of Access painted on the pavement, **and**
 - a vertically-mounted sign, centred 1600-2500mm above the parking surface in front of the designated stall
- located near to or adjoining a barrier-free path of travel leading to the nearest barrier-free entrance, and
- designed so that parked vehicles do not obstruct access onto an elevated and level surface.

A-3.8.3.22.(1) Parking. Many wheelchair users who drive enter their vehicles on the passenger side (right-hand side) of the vehicle; many use a lift. It is possible to place two stalls side by side and make use of a common access aisle; Figure A-3.8.3.22.(1)-A shows the required design and dimensions. Marking the access aisle with white or blue lines and marking the stalls with a large blue dot has been an effective way of designating the parking area for wheelchair users; however, such painted surfaces can become a slip hazard and, unless they can be made slip-resistant, must be avoided. A sign indicating that a permit is required to use the designated stall must also be posted.

Figures A-3.8.3.22.-A and A-3.8.3.22.-B From NBC-2019AE



3.8.4. Adaptable Dwelling Units

3.8.4.1. Application

- 1) Where dwelling units are required to be adaptable in accordance with **3.8.1.1.(3)**, they shall be designed in accordance with this Subsection.

3.8.4.2. General Accessibility

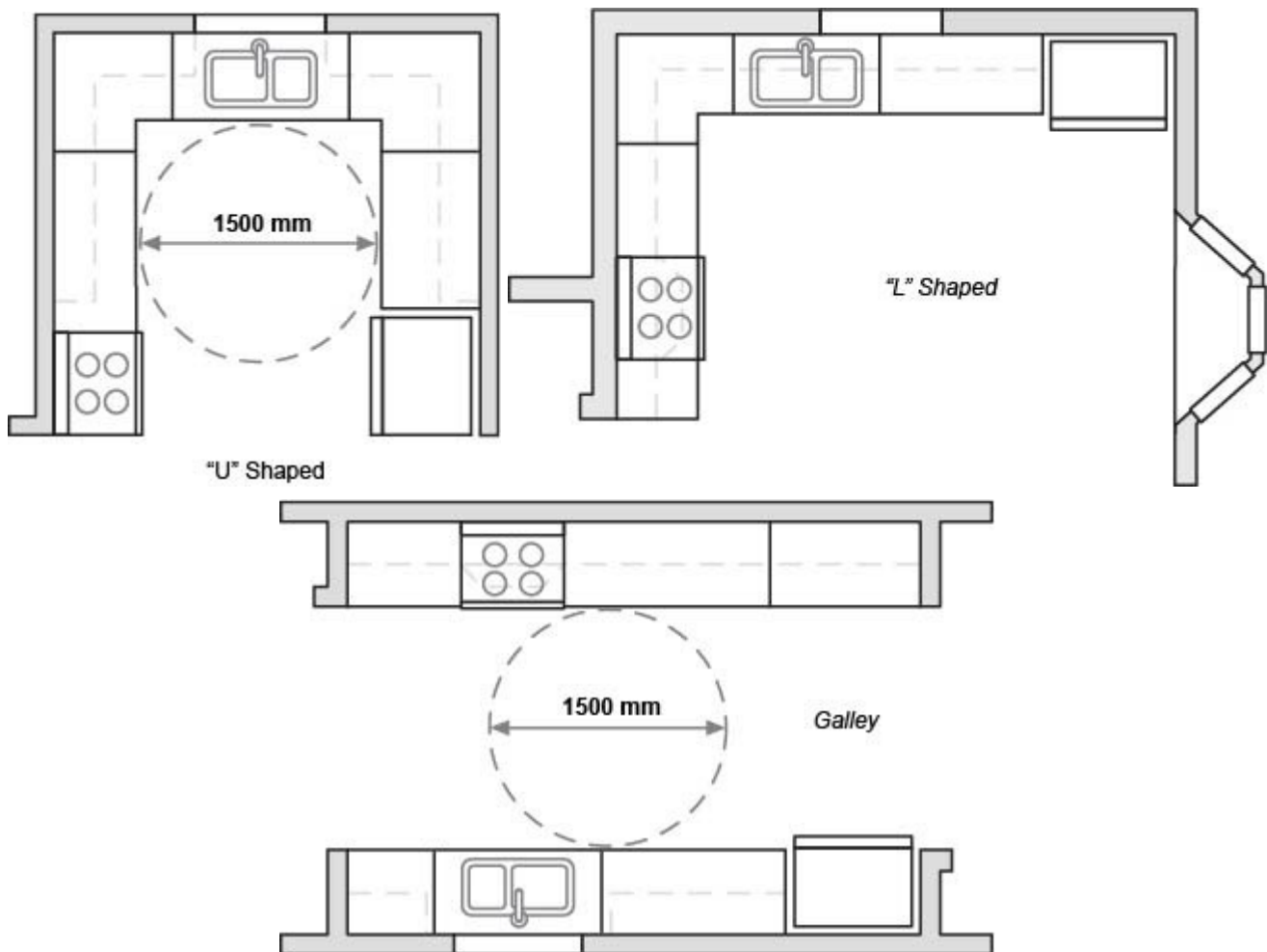
- 1) At least one entrance serving an adaptable dwelling unit, including exterior walks leading to the entrance from a public thoroughfare and from on-site parking areas, shall be barrier-free. (See 3.8.2.2. for common entrances to buildings.) (See 3.8.2.5. for parking stalls.)
- 2) A barrier-free path of travel shall be provided between the interior living space of the dwelling unit and any ancillary space serving it, including the garage, balcony or deck.
- 3) Entryways, kitchens, washrooms, laundry rooms and other areas of a dwelling unit shall be designed with an unobstructed turning diameter of $\geq 1500\text{mm}$.
- 4) Windows shall
 - a) be equipped with opening devices located $\leq 60\text{mm}$ above the window sill and of a design that does not require tight grasping, pinching with fingers, or twisting of the wrist as the only means of operation, and
 - b) be located so that the sill is $\leq 865\text{mm}$ above the floor level.
- 5) Controls for the operation of building services or safety devices, including electrical switches, electrical panels, thermostats and intercom switches, shall conform to 3.8.3.8.
- 6) Electrical receptacles shall be mounted between 400-1200mm above the finished floor.
- 7) Every doorway into rooms within the dwelling unit shall have a clear width $\geq 850\text{mm}$ when the door is in the open position.
- 8) A doorway referred to in (7) or present in the barrier-free path of travel referred to in (1) and (2) shall conform to 3.8.3.6.(5) and (11) .
- 9) Structural support shall be provided in at least one bedroom and one washroom to accommodate a ceiling track lift.
- 10) Door and window frames and baseboards shall be contrasting in colour to doors, walls and floors.

General Accessibility

Provide general barrier-free path and design elements in/serving an adaptable dwelling unit:

- ≥ 1 exterior walk from a public thoroughfare and from on-site parking areas
- entryway and all room doorways with
 - any threshold $\leq 13\text{mm}$ higher than the adjacent finished floor surfaces and beveled
 - a clear width $\geq 850\text{mm}$ measured when any door is in the open position (3.8.2.2. for common entrances to buildings.) (3.8.2.5. for parking stalls.)
 - a level floor surface on each side of any door within a rectangular area per 3.8.3.6.(11), being
 - width of the **door + clearance** as **required** on the latch side of
 - $\geq 600\text{mm}$ beyond the edge of the door opening if the door swings toward the approach side, or
 - $\geq 300\text{mm}$ beyond the edge of the door opening if the door swings away from the approach side
 - but **minimum 1500mm**,
 - dimension perpendicular to the closed door \geq the width of the path but **need not exceed 1500mm**.
- interior living space path to any ancillary interior or exterior space serving it (garage, balcony, deck, etc)
- clear floor area for a wheelchair to turn in a $\geq 1500\text{mm}$ diameter circle unobstructed by fixed objects within 1980mm above the floor within rooms (entryway, kitchen, bedroom, washroom, laundry room, etc)
- windows with
 - sill $\leq 865\text{mm}$ above the floor level
 - opening devices that are
 - $\leq 60\text{mm}$ above the window sill, and
 - operable without tight grasping, pinching with fingers, or twisting of the wrist

- contrasting colours for door and window frames and baseboards in respect of doors, walls and floors.
- controls for building services or safety devices (electrical panels, switches and receptacles (convenience plug outlets), thermostats, intercom switches, etc) per **3.8.3.8.**, being
 - mounted 400-1200mm above the floor to the centre of the operable controls, and
 - adjacent to and centered on either the length or the width of a 1350 X 800mm clear floor area
 - are operable with
 - one hand/closed fist position, without tight grasping/pinching with fingers/twisting of the wrist, **and**
 - a force ≤ 22 N, unless otherwise stated.
- structural support (solid blocking or backing across ceiling), in at least one bedroom and one bathroom to accommodate ceiling track lift. (Provisions and design parameters/specifications must be left on site for reference by installer.)



3.8.4.3. Bathrooms

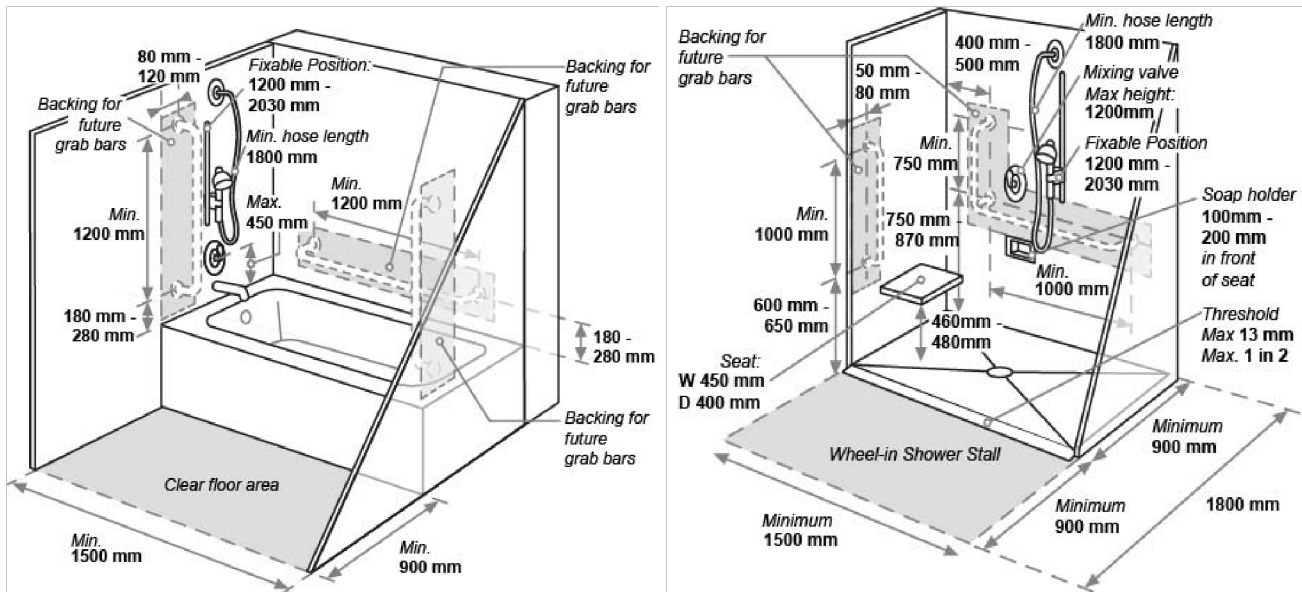
- 1) An adaptable dwelling unit shall be provided with a bathroom containing either a barrier-free shower or bathtub, in accordance with the following:
 - a) where there is an even number of adaptable dwelling units required, 50% of the dwelling units shall have a bathroom containing a barrier-free shower, and the remaining 50% shall have a bathroom containing a barrier-free bathtub, and
 - b) where there is an odd number of adaptable dwelling units required, the number of dwelling units with a bathroom containing a barrier-free shower shall exceed the number of dwelling units with a bathroom containing a barrier-free bathtub by 1.
- 2) The barrier-free bathroom referred to in (1) shall have the
 - a) shower conform to **3.8.3.16.(1)(a) to (e) and (h)** where a shower is provided, and
 - b) bathtub conform to **3.8.3.17.(1)(a) to (d)** where a bathtub is provided.
- 3) The bathroom referred to in (1) shall be provided with a lavatory per **3.8.3.15.(1)(b) to (e)**.
- 4) The bathroom referred to in (1) shall be provided with a water closet per **3.8.3.12.(1)(d)**.
- 5) The bathroom referred to in (1) shall be designed to allow for the installation of grab bars per
 - a) **3.8.3.11.(1)(e) and (f)** to serve the water closet,
 - b) **3.8.3.16.(1)(f)** to serve the shower where one is provided, and
 - c) **3.8.3.17.(1)(f)** to serve the bathtub where one is provided.

Bathrooms

Provide a bathroom containing

- a lavatory per **3.8.3.15.(1)(b) to (e)**
- a water closet per **3.8.3.12.(1)(d)**, being per **3.8.3.13. + 3.8.3.11.(1)(d)** with a clear floor area \geq 900mm wide transfer space parallel and adjacent to the open side of the water closet, with provision (solid blocking or backing in walls) for the installation of grab bars per **3.8.3.11.(1)(e) and (f)**
- a bathing facility consisting of
 - a shower per **3.8.3.16.(1)(a) to (e) and (h)** with provision (solid blocking or backing in walls) for the installation of grab bars per **3.8.3.16.(1)(f)**, or
 - a bathtub, per **3.8.3.17.(1)(a) to (d)** with provision (solid blocking or backing in walls) for the installation of grab bars per **3.8.3.17.(1)(f)**.

If an adaptable dwelling unit project involves one dwelling unit, a shower must be installed. If >1 dwelling units are involved, ½ have tubs and ½ have showers; odd # dwelling gets a shower (see Code).



3.8.4.4. Kitchens

- 1) Every kitchen counter shall have at least one barrier-free section ≥ 760 mm long centred over a knee space conforming to (3).
- 2) The top surface of the barrier-free section referred to in (1) shall be ≤ 865 mm above the finished floor.
- 3) The knee space beneath the barrier-free section referred to in (1) shall be not less than
 - a) 760mm wide,
 - b) 685mm high, and
 - c) 485mm deep.
- 4) Counters intended for the installation of a kitchen sink or a cooktop shall be provided with a means of adjusting their height so that the counter surface is
 - a) ≥ 710 mm above the finished floor, and
 - b) \leq the height of the adjacent counter surface.
- 5) The kitchen sink or cooktop referred to in (4) shall be provided with a clearance beneath the sink or cooktop of not less than
 - a) 760mm wide,
 - b) 685mm high at a point 205mm back from the front edge, and
 - c) 230mm high over the distance from a point 280mm to a point 430mm back from the front edge.
- 6) Overhead kitchen cabinets shall be provided with a means of adjusting their height by ≥ 50 mm, provided the minimum clearances for cooktops specified in 9.10.22. are not reduced at the lowered height.

Kitchens

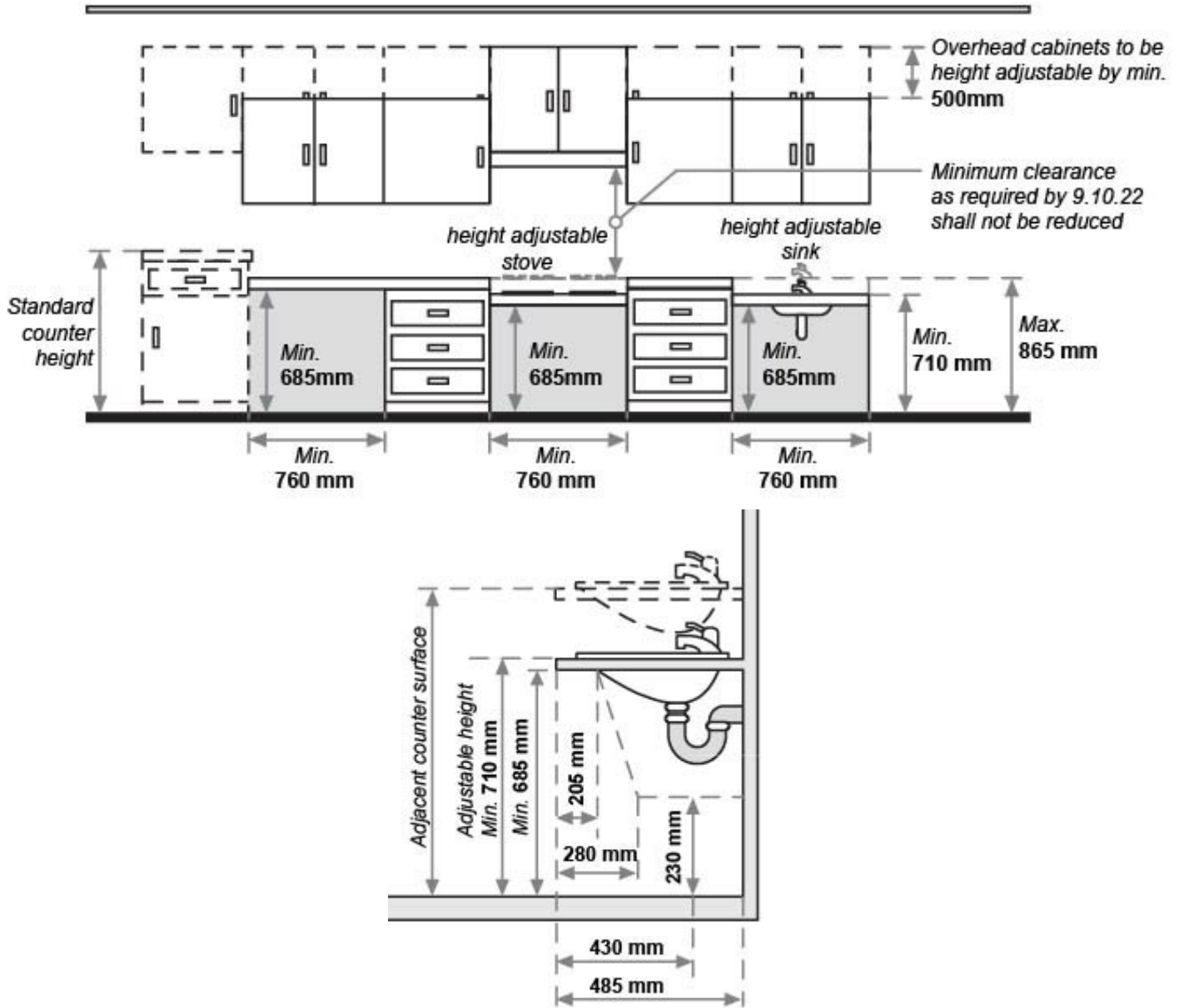
Provide every kitchen counter in an adaptable dwelling unit with

- surface $\leq 865\text{mm}$ above the floor, and
- ≥ 1 section $\geq 760\text{mm}$ long with $\geq 760\text{mm}$ wide knee space underneath it that is
 - $\geq 685\text{mm}$ high
 - $\geq 485\text{mm}$ deep

Provide height-adjustable counter(s) for sink or cooktop with

- surface $\geq 710\text{mm}$ high and \leq the height of the adjacent counter being $\leq 865\text{mm}$ above the floor, and
- $\geq 760\text{mm}$ wide knee space underneath the sink or cooktop that is
 - $\geq 685\text{mm}$ high at a point 200mm back from its front edge, and
 - $\geq 230\text{mm}$ high over the distance $280\text{--}430\text{mm}$ back from its front edge
- insulated supply/drain pipes where pipes exposed such that a person using a wheelchair may inadvertently contact them (as for Lavatory)

Provide any overhead kitchen cabinets with a means of adjusting their height by $\geq 500\text{mm}$, provided the minimum clearances for cooktops specified in **9.10.22**. are maintained at the lowered height.



Source: National Building Code-2019 Alberta Edition and NRC. Every project is unique. Commentary and clarification is for information only and may not apply to conditions or circumstances specific to a particular project. Refer to NBC-2019AE for exact wording and final determination of compliance.

3.8.5. Access to Physician Clinics and Offices

3.8.5.1. Application

1) This Subsection applies to physician clinics and offices that provide professional health care services.

A-3.8.5.1.(1) “Professional health care services” mean services offered by physicians registered with College of Physicians and Surgeons of Alberta.

3.8.5.2. Physician Clinics and Offices

- 1) Every doorway that is located in a barrier-free path of travel to a physician clinic or office shall have a clear width not less than 915mm when the door is in the open position.
- 2) Every door that is located in a barrier-free path of travel to a physician clinic or office shall be equipped with a power door operator that complies with 3.8.3. and allows persons to activate the opening of the door in the intended direction of travel.
- 3) The main waiting area shall be designed to allow a person using a wheelchair to turn in an open space not less than 1500mm in diameter.
- 4) An assistive listening device shall be provided at the main reception area and in at least one physical examination or treatment room.

3.8.5.3. Accessible Examination and Treatment Rooms (A-3.8.5.3.)

- 1) One in every five examination rooms or part thereof shall
 - a) have a doorway with a clear width not less than 915 mm when the door is in the open position,
 - b) be designed to allow a person using a wheelchair to turn in an open space not less than 1 500 mm in diameter, and
 - c) have one lavatory conforming to Article 3.8.3.15.
- 2) One in every five treatment rooms or part thereof shall
 - a) have a doorway with a clear width not less than 915 mm when the door is in the open position,
 - b) be designed to allow a person using a wheelchair to turn in an open space not less than 1 500 mm in diameter, and
 - c) have one lavatory conforming to Article 3.8.3.15.

Physicians Clinics and Offices, and Examination and ‘Procedure’ Rooms

Provide every doctor clinic or office with

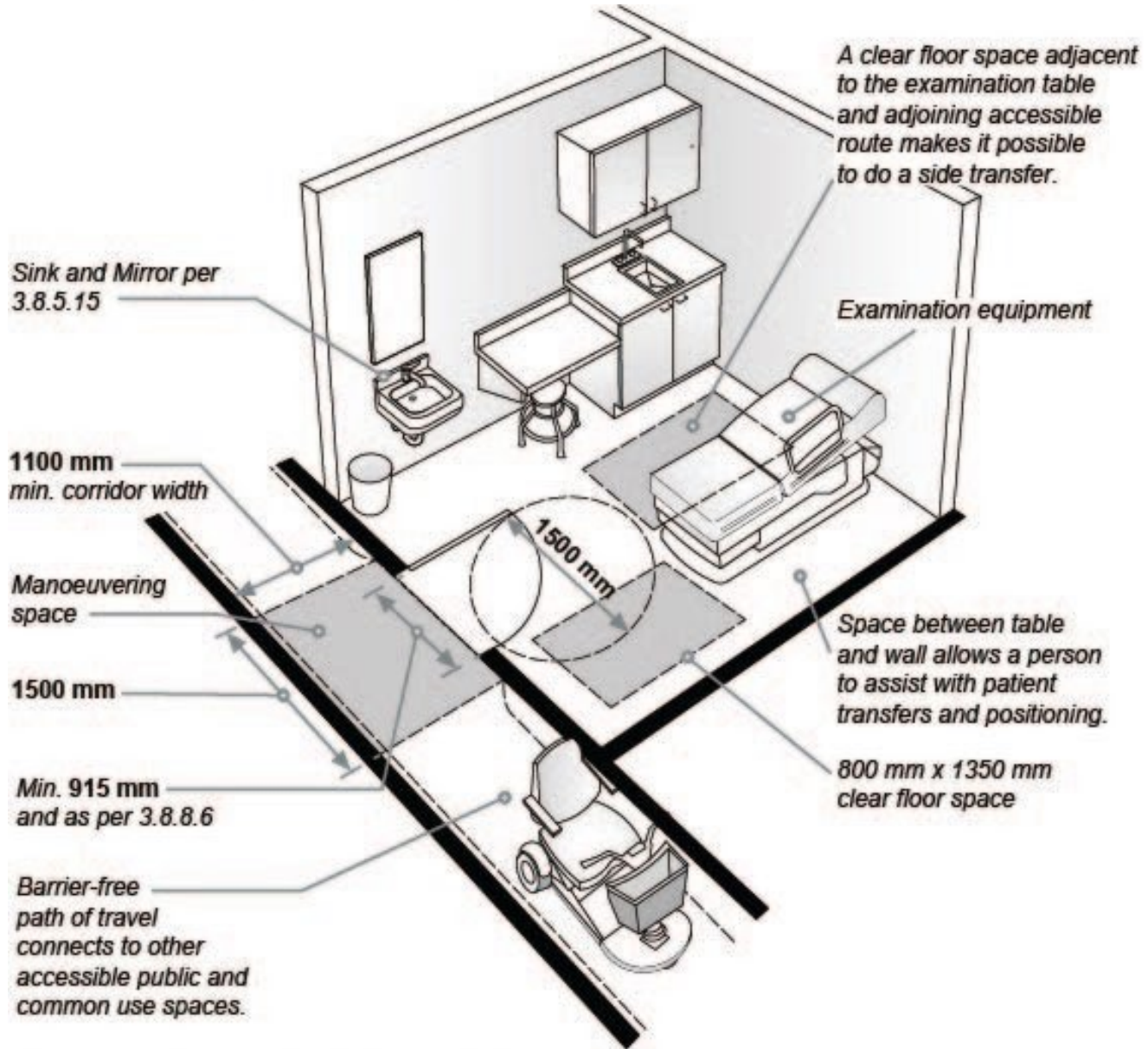
- a power door operator per **3.8.3.6.(6)** at every doorway on a barrier-free path **to the clinic/office premises**
- ≥1 in 5 (or part thereof) examination rooms and ‘procedure’ rooms “designated” as fully accessible
- clear width ≥ 915mm through every doorway, measured when door is in open position, on the path of travel to the
 - clinic/office premises, and
 - “designated” examination rooms and ‘procedure’ rooms
- clear floor area for a wheelchair to turn in a ≥ 1500mm diameter circle unobstructed by fixed objects within 1980mm above the floor, in
 - main patient waiting area
 - “designated” examination rooms and ‘procedure’ rooms
- an assistive listening device in
 - the main patient reception area and
 - ≥ 1 physical examination room or ‘procedure’ room
- a lavatory per **3.8.3.15.** in “designated” examination rooms and ‘procedure’ rooms

An exam room and a procedure room may be with combined “designation”, provided ≥ 1 in 5 (or part thereof) of each type of room is fully accessible per 3.8.5.3.

A-3.8.5.3. Accessible Examination and Treatment Rooms. These provisions are intended to allow a person using a wheelchair to comfortably enter and use an examination or treatment ‘procedure’ room. Figure A-3.8.5.3., which is adapted from “Americans with Disabilities Act: Access to Medical Care for Individuals with Mobility Disabilities,” shows settings for an accessible examination room.

A-1.4.1.2.: Treatment Occupancy “Treatments” may include such things as surgery, intensive care, and emergency medical intervention.

Treatment services differ from the services provided by care occupancies like personal care assistance or the administration of medication, and from those provided by business and personal services occupancies like dentistry or day procedures. (*Treatment* occurs in B2 occupancy.)



Adapted from NBC 2019 (AE) Div.B, Page 3-267

A-3.8.5.3. Accessible Examination and Treatment Rooms. These provisions are intended to allow a person using a wheelchair to comfortably enter and use an examination or treatment room.

Figure A-3.8.5.3., which is adapted from “Americans with Disabilities Act: Access to Medical Care for Individuals with Mobility Disabilities,” shows settings for an accessible examination room.

The base drawing provided in NBC-2019AE was adapted from “Americans with Disabilities Act: Access to Medical Care for Individuals with Mobility Disabilities” and has been further adapted above to illustrate the NBC-2019AE specifications and intended characteristics of an accessible examination and/or procedure room.