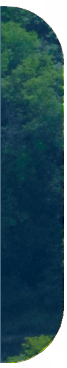
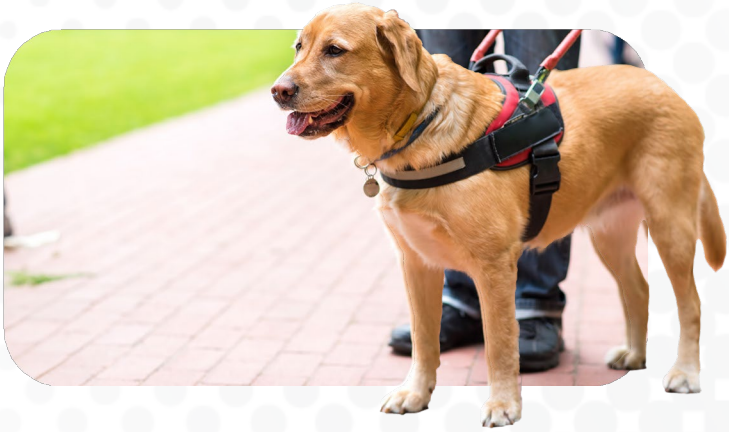






Municipality of Clarington's

Accessibility Design Standards

2024

Clarington

Table of Contents

Introduction

Clarington's 2024-27 Strategic Plan outlines our vision of being a connected, dynamic, and welcoming community. The Clarington Facility Design Standards (CADS) aims to support these Strategic Plan elements by outlining specific requirements for accessibility to ensure municipal facilities meet the needs of our diverse community.

This CADS is intended to provide an inclusive and user-friendly built environment through design and with the careful use of materials and equipment. It reconciles legislative changes and incorporates recent ergonomic research from the United States, and best practices from other municipalities and organizations. All the accessibility design requirements use Universal Design Principles as the core principle. The CADS is a document that must be consulted for new construction and extensive renovations. It is a best practices document on how to make buildings and other municipal spaces as inclusive as possible.

The applicable department/project lead, in consultation with the Senior Leadership Team, will determine the feasibility and financial implications of the design that goes beyond the OBC and AODA but will consider input from Clarington's Accessibility Coordinator when making their decision. If complying with aspects of the CADS is found technically infeasible or financially prohibitive, the minimum requirements in the latest edition of the *Ontario Building Code* (OBC), *Accessibility for Ontarians with Disabilities Act* (AODA), or other applicable code shall govern. The goal of the CADS is to ensure it is implemented as much as possible within reason.

Design consultants must exercise professional judgement and expertise when using the document. The CADS does not release the consultant from liability or the need for due diligence in the design and construction process. The Accessibility Coordinator will review and/or update this document no less than every five years to reflect changes in legislation, innovation and best practices.

Acknowledgement

The Municipality of Clarington would like to acknowledge the efforts of the Town of Oakville, Oakville's Accessibility Advisory Committee and AccessAbility Advantage (a joint venture between Quadrangle Architects Limited and March of Dimes Canada) for their guidance and work in drafting the document. The Municipality of Clarington would also like to acknowledge the City of Vaughan, City of Markham, and the City of Toronto for permitting the adaptation of their Accessibility Design Guidelines to create this one. Each Municipality and Region are acknowledged as the owners of each of their Guidelines and Standards.

The Municipality of Clarington would also like to thank members of staff and the Clarington Accessibility Advisory Committee for their contributions.

Principles of Universal Design

The principles of universal design is to help guide the design of environments, products, and communication about the characteristics of more usable products and environments.

1. **Equitable Use**: the design is useful and marketable to people with diverse abilities.
2. **Flexibility in Use**: the design accommodates a wide range of individual preferences and abilities.
3. **Simple and Intuitive Use**: use of the design is easy to understand, regardless of the user's experience, knowledge, language skills or current concentration level.
4. **Perceptible Information**: the design communicates necessary information effectively to the user, regardless of ambient condition or the user's sensory abilities.
5. **Tolerance for Error**: the design minimizes hazards and the adverse consequences of accidental or unintended actions.
6. **Low Physical Effort**: the design can be used efficiently and comfortably with a minimum fatigue.
7. **Size and Space for Approach and Use:** appropriate size and space are provided for approach, reach, manipulation, and use, regardless of user's body position, size, posture, or mobility.

The principles of universal design were developed by NC State University, The Center for Universal Design.

The Goals of Universal Design

The goals of universal design further develop and complement the Principles of Universal Design. It shifts the focus from product usability to a more people-centric lens to include human performance, health and wellness, and social participation. The goals are an outcome-based approach of universal design practice that can be measured within existing recourses, encompassing functional, social, and emotional dimensions through frameworks of anthropometrics, biomechanics, perception, cognition, safety, health promotion and social interaction. The goals of universal design are:

1. **Body Fit**: accommodating a wide range of body sizes and abilities,
2. **Comfort**: keeping demands within desirable limits of body function and perception,
3. **Awareness:** ensuring that critical information for use is easily perceived,
4. **Understanding**: making methods of operation and use intuitive, clear, and unambiguous,
5. **Wellness:** contributing to health promotion, avoidance of disease and protection from hazards,
6. **Social Integration:** treating all groups with dignity and respect,
7. **Personalization:** incorporating opportunities for choice and the expression of individual preferences, and
8. **Cultural Appropriateness**: respecting and reinforcing cultural values, and the social and environmental contexts of any design project.

Note: The goals of universal design were developed by Steinfeld and Maisel, 2012, University of Buffalo.

In addition to following the principles and goals of universal design, any changes to building and site elements must consider the intent of the Ontario Human Rights Code towards respecting the dignity of individuals with varying abilities.

“The phrase ‘respect their dignity’ means to act in a manner which recognizes the privacy, confidentiality, comfort, autonomy and self-esteem of persons with disabilities, which maximizes their integration, and which promotes full participation in society.”

Ontario Human Rights Commission

Understanding Disability

Using a Cross-Disability Perspective

Knowledge of the basic characteristics of different disabilities and the resulting barriers is critical to understanding individual needs and how to address them when designing the built environment. Common “types” of disabilities are identified within this document will assist with understanding how users with disabilities interact with elements of the build environment. A summary of key “types” of disabilities include:

Auditory Disabilities

Involve having partial or no hearing at all (e.g., persons who are Deaf, deafened, or hard of hearing). For some individuals, the loudness of the sound will determine whether it is heard, for others, it depends on the type of sound (e.g., consonants versus vowels, or the intonation). In other situations, individuals may also become confused by certain sounds due to excessive background noises.

Intellectual, Developmental and Learning Disabilities

The type of cognitive impairment can vary widely, from severe intellectual disabilities to the inability to remember, to the absence or impairment of specific cognitive functions (e.g., language). As an example, autism, which is a common disability, is a complex developmental because of a neurological difference in the brain. Children and adults with autism can have difficulties in verbal and non-verbal communication, social interactions, and leisure or play activities. Individuals with autism may also experience sensitivities in sight, hearing, touch, smell, and taste.

Mental Health Disabilities

Can take many forms and ‘overlap’ with other types of disabilities. Stigma and stereotypes about mental health are unfortunately still prevalent, including common fears and misunderstandings by society. Some examples of common mental health disabilities include: bipolar disorder, psychosis, schizophrenia, anxiety, attention deficit, mood and eating disorders. Overall, mental health is affected by many factors including where people live, the state of individual environments, genetics, income and education levels, and people’s relationships with friends and families.

Physical Disability

Involve limited mobility (e.g., limited ability to walk, move, stand for long period or to carry objects) or stamina, or restricted agility (e.g., limited ability to bend, dress, feed oneself, or to manipulate objects).

Visual Disabilities

Involve complete blindness, limited or residual sight. It may involve a loss of visual clarity/acuity or a decrease in the visual field.

Scope

The CADS must be consulted for new construction and redevelopment of elements in owned, operated, or leased facilities, designed or construction by the Municipality, or any individual representing or performing a function on behalf of the Municipality. Additions to existing facilities are considered new construction and as such, must meet all applicable requirements. The CADS does not require forced retrofits or renovations of existing facilities. The CADS does not apply to emergency repairs. Spaces governed by the *Minimum Maintenance Standards for Municipal Highways* (O. Reg. 239/02) shall be maintained to those standards.

Designing and constructing in accordance with the CADS will be included in all Municipality of Clarington procurement policies, tender documents, and construction contracts. Municipal departments managing construction projects must ensure compliance with this standard during the pre-planning, design, construction documents, preparation, and contract administration phases. Additionally, all Municipal departments managing construction and design consultants must ensure compliance with any other applicable Municipal standard, by-law and Strategic Plan.

Any deviation from the CADS should be carefully assessed with the Senior Leadership Team, the Accessibility Coordinator, Accessibility Advisory Committee and Heritage Planning (if applicable), to determine the validity of the application. When found technically infeasible or financially prohibitive, the minimum requirements in the latest edition of the OBC, AODA, or other applicable code shall govern.

The term ‘technically infeasible’ refers to the renovation or replacement of a building element that cannot meet the requirements of the CADS based on the following:

- Existing structural conditions would require moving or altering a load-bearing member which is an essential part of a structural frame.
- Other existing physical or site constraints prohibit modification or addition of necessary elements, spaces or features to be non-compliant with the CADS; and/or
- Heritage attributes would be removed or adversely impacted.

The CADS does not apply to building service rooms, electrical rooms, sprinkler rooms, crawl spaces, attics, etc. The CADS does not apply to structures that are not normally occupied by persons, such as telephone exchanges, pump houses, etc.

Heritage Properties

The use of CADS must be consulted for renovations and replacements to Municipally owned Protected Heritage Properties. However, the Ontario Human Rights Code provides allowances for modifications to Heritage attributes of a Protected Heritage Property such that the renovation or replacement should not alter the essential nature of the Heritage attributes. As such, any work on a Protected Heritage Property must be assessed on an individual basis to determine the most effective and least disruptive means of renovation or replacement and the extent to which the property can be made accessible by consulting with the Heritage Committee and the Planning Department.

If the work is deemed to not affect Heritage attributes of the Protected Heritage Property, it should meet the requirements of the CADS. If the main public entrance to a Protected Heritage Property cannot be made accessible without impacting the Heritage attributes of the facility, every effort must be made to provide an alternative and accessible entrance with directional signage from the main public entrance, subject to heritage approval.

It is desirable to provide a complete experience of a Protected Heritage Property. Where it is not possible to provide access to all interior facilities without impacting its Heritage attributes, alternative formats of communication or equivalent experience must be incorporated into the facility in lieu of access to the exhibit. Alternative formats may include accessible audio and visual observation kiosk. If a property cannot be made accessible, every effort must be made to provide access to as much of the facility as possible while still maintaining the Heritage attributes of the property.

Dimensions

Dimensions used in this standard are in metric units (millimeters) and shown as mm. Dimensions that are not indicated within a range (max or min) are absolute and must be met unless noted otherwise.

Definitions

The following defined terms and their meanings are provided for clarification. The defined terms are indicated throughout the document in italics.

Accessible: Describes design elements of the built environment that comply with the requirements of this standard.

Accessible path: A continuous unobstructed path connecting accessible elements and spaces at the exterior of a building and within the interior spaces of a building. Interior accessible paths include corridors, floors, ramps, elevators, and clear floor spaces at fixtures. Exterior accessible paths include parking access aisles, curb ramps, crosswalks, etc.

Accessible space: The design of the built environment to be useable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

Addition: Adding usable square foot area to a temporary or permanent structure or building.

A.F.F.: At Finished Floor.

Area of refuge: An area which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.

Basic renovation: when existing interior walls, ceilings, floor, or roof assemblies are maintained during construction by the reuse, relocation, or extension of the same or similar materials or components of the building.

Building: A structure occupying an area greater than ten square meters and consisting of walls, roof, and floor or other types of structures designated as buildings under the Ontario Building Code.

Clear floor space: The minimum unobstructed floor or ground space required to accommodate a person in a wheelchair, scooter, or other mobility aid.

Color / tonal contrast: A significant contrast (minimum 70%) in colour or tone between an element and its surrounding environment.

Cross slope: The slope that is perpendicular to the direction of travel. (See running slope).

Curb ramp: A short ramp cutting through a curb or built up to a curb to provide access from a driveway / parking area to a sidewalk.

Depressed curb: A continuous and gradual ramp through a curb or built up to a curb to provide access from a driveway / parking area to a sidewalk.

Elevated platforms: Elevated platforms include, but not limited to, stage areas, speaker podiums and other raised areas.

Extensive renovation: Defined in the Ontario Building Code as to when existing interior walls, ceilings, floor, or roof assemblies are substantially removed and new interior walls, ceilings, floor, or roof assemblies are installed.

Forward approach: Where a person must make use of a feature, amenity or element of the built environment by positioning their body and/or mobility aid directly in front of and facing the feature, amenity or element.

Heritage attributes: The principal features or elements that contribute to a protected heritage property's cultural heritage value or interest, and may include the property's built, constructed, or manufactured elements, as well as natural landforms, vegetation, water features, and its visual setting (e.g., significant views or vistas to or from a protected heritage property).

Max: Maximum.

Max to min illuminance ratio: a ratio to measure the brightest location to the dimmest location to determine the distribution of light across a platform.

Min: Minimum.

Mobility aids: Refers to a range of assistive equipment used by persons with disabilities to assist with mobility. Examples include crutches, manual or powered wheelchairs, scooters, walkers, and canes.

New construction: Site preparation for, and construction of, entirely new structures or buildings and including adjacent and surrounding site area whether the site was previously occupied. Development classified as new construction is subject to the full compliance with the latest version of CADS.

Operable portion: A part used to insert or withdraw objects, or to activate, deactivate, or adjust the equipment or appliance (for example coin slot, push button, handle).

Power door operator: A power operated mechanism that allows a door to open by activating a push button, bar, or automatic sensor.

Primary path: An accessible path designed to accommodate two persons in mobility devices. The path is utilized by a frequent flow of people throughout the course of a day.

Protected Heritage Property: Property designated under Parts IV, V or VI of the Ontario Heritage Act; property subject to a heritage conservation easement under Parts II or IV of the Ontario Heritage Act; property identified by the province and prescribed public bodies as provincial heritage property under the Standards and Guidelines for Conservation of Provincial Heritage Properties; property protected under federal legislation and UNESCO World Heritage Sites.

Public spa: Identified in the Ontario Building Code as hydro-massage pool, commonly referred to as a 'hot tub'.

Ramp: A sloped surface that provides an accessible connection between changes in ground elevation. The ramp includes all elements and features necessary to provide an accessible path as described in this standard.

Renovation: Construction or modifications to existing buildings or site elements but that retains some parts of the existing structure or layout or finishes. The renovation may or may not impact the existing character, structural uniqueness, cultural heritage value, or aesthetic appearance of all or part of the building. Material alterations to walls, ceilings and floors are considered a renovation.

Replacement: Construction, modification, or material alteration of a building element.

Running slope: A slope that is parallel to the direction of travel. (See cross slope).

Screen reader: A software application that convey the visual information (for example text, pictures, charts) to the user in a non-visual manner (for example text-to-speech, sound icons, Braille device).

Secondary path: An accessible path designed to accommodate one person using a mobility device and one ambulatory person. The path is considered a main access path for the building;

however, the flow of people using the path is not constant, nor is it considered a high traffic route.

Service Areas: Areas within the building that include service rooms, elevator machine rooms, janitor rooms, service spaces, crawl spaces, attic, or roof spaces.

Signage: Displayed verbal, symbolic and tactile, information and pictorial illustrations.

Storey(s): That portion of a building included between the upper surface of a floor and the upper surface of the floor next above. If such portion of a building is not designed to be occupied, it is not considered a storey for the purposes of this standard. There may be more than one floor level within a storey, as in the case of a mezzanine or mezzanines.

Tactile: Describes an object that can be perceived using the sense of touch.

Tactile Attention Indicators (TAI): A surface feature consisting of truncated domes designed to warn persons of an upcoming hazard.

Tactile Direction Indicators (TDI): A surface feature consisting of elongated bars designed to help persons navigate the built environment.

Tactile Walking Surface Indicators (TWSI): A standardized surface feature built into or applied to walking surfaces or other elements to warn persons with a visual impairment of hazards on a circulation path. There are two types of TWSI which include Tactile Attention Indicators and Tactile Direction Indicators.

Text telephone (TTY): Machinery or equipment that employs text-based communication through the transmission of coded signals across the standard telephone network. Text telephones can include, for example, devices known as TDDs (telecommunication devices for persons with hearing impairments) or computers with special modems. Text telephones are also called TTY, an abbreviation for teletypewriter.

TTY: Teletypewriter. (See text telephone)

Clarington

Common Exterior and Interior Elements

1

1. Space and Reach Requirements

Contents in Section

Application

The following dimensions and diagrams represent space and reach requirements for persons using mobility devices, to assist in the planning stages of construction projects.

1.1 Clear Floor Space

An 860 mm x 1480 mm clear floor space [Diagram 1.A] is recognized as the universal mobility device size that would accommodate 95% of mobility devices utilized in Canada. Unless otherwise specified, the clear floor space must be provided in areas that require access to wall mounted controls, power door operators, tactile signage, information counters, workstations, or under any tabletops, and under lavatories, sinks, or drinking fountains. For clear space requirements specific to the various building elements, refer to the appropriate part in the Design Standards section.

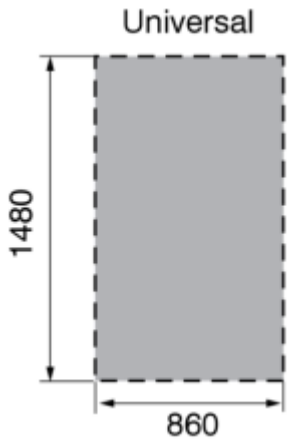


Diagram 1.A Clear Floor Space

1.2 Turning Circles

A 2500 mm turning circle is recognized as the dimension that would accommodate 95% of mobility devices. Unless otherwise specified, a 2500 mm turning circle must be provided throughout the building [Diagram 1.B]. For turning circle requirements specific to the various building elements, refer to the appropriate part in the Design Standards section.

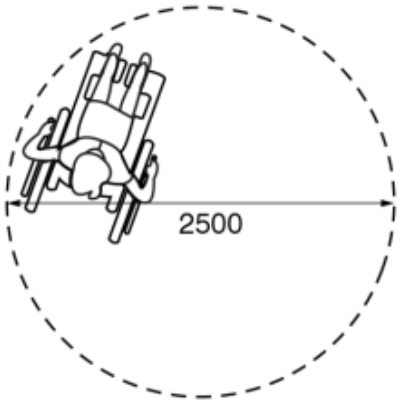


Diagram 1.B Turning Circle

1.3 Forward Reaching Range

For a front approach to an object or item; the forward reach range requires the object to be between 400 mm and 1200 mm AFF [Diagram 1.C].

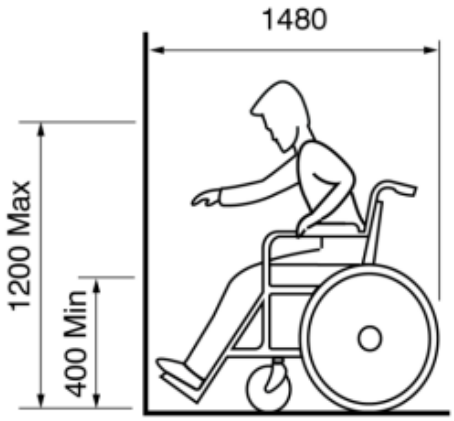


Diagram 1.C Forward Reach Range

1.4 Forward Reach Range over an Obstruction

For a front approach to an object or item over an obstruction with a max of 865 mm in height, the forward reach requires the object to be max 500 mm deep and max 1100 mm AFF [Diagram 1.D].

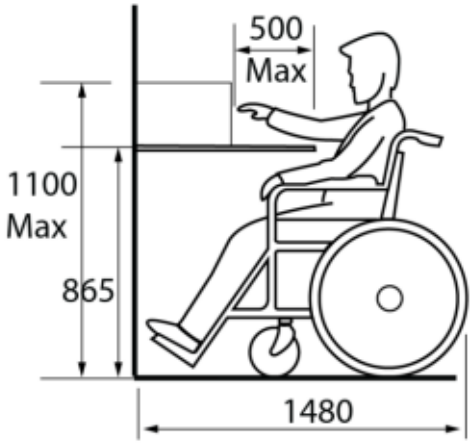


Diagram 1.D Forward Reach over an Obstruction

1.5 Side Reach Range

For a side approach to an object or item, the side reach range requires the object to be between 230 mm and 1200 mm AFF. [Diagram 1.E].

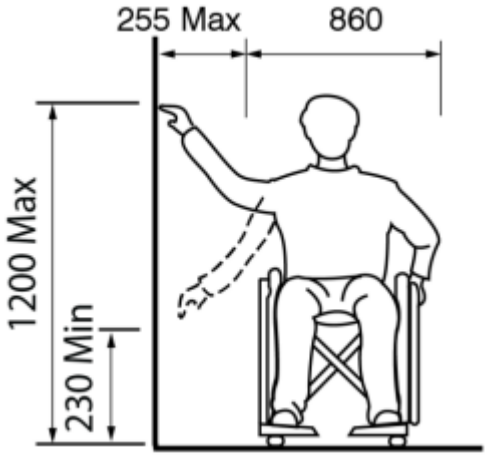


Diagram 1.E Side Reach Range

1.6 Side Reach Range over an Obstruction

For a side approach to an object or item over an obstruction with a max of 500 mm in width and 865 mm in height, the side reach range requires the object to be between 865 mm to 1170 mm AFF [Diagram 1.G].

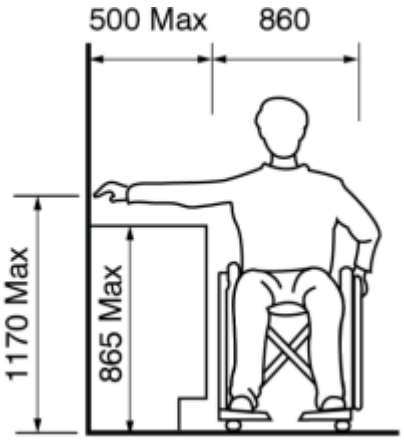


Diagram 1.F Side Reach Over Obstruction

2. Interior Accessible Paths

Contents in Section

Application

Interior accessible paths are continuous unobstructed paths that connect accessible elements and spaces of a building or structure.

2.1 Path Widths

1. Accessible paths are required throughout new construction, additions, and renovations.
2. For paths specific to the various building elements, refer to the appropriate part in the Design Standards section. General paths must comply with the following:
    a. Primary accessible path min 1800 mm clear floor space [Diagram 2.A],
    b. Secondary accessible path min 1300 mm clear floor space [Diagram 2.B],
    c. Accessible path between workstations min 1100 mm clear floor space,
    d. For 90 degree turns, min 1300 mm clear floor space [Diagram 2.C], and
    e. For 180 degree turns, min 2000 mm clear floor space [Diagram 2.D].
3. For requirements relating to exterior accessible paths, refer to Section 40 [Exterior Paths].

2.2 Path Slope

1. Slopes are required to conform to the following:
    a. Running slope of max 1 in 25 (4%), and
    b. Cross slope of max 1 in 50 (2%).
2. Accessible paths with a running slope more than 1 in 25 (4%) must be designed as ramps and meet criteria in Section 5 [Ramps].

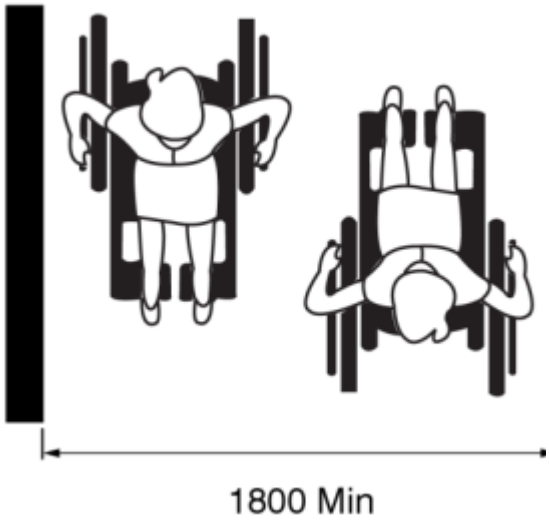


Diagram 2.A Primary Path

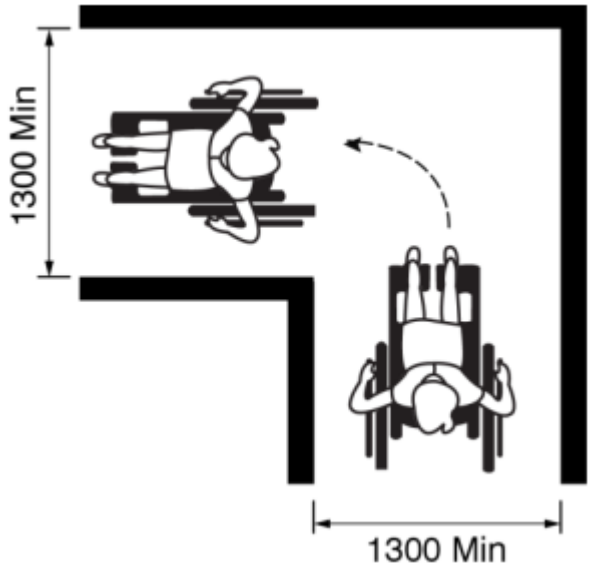


Diagram 2.C 90 Degree Turn

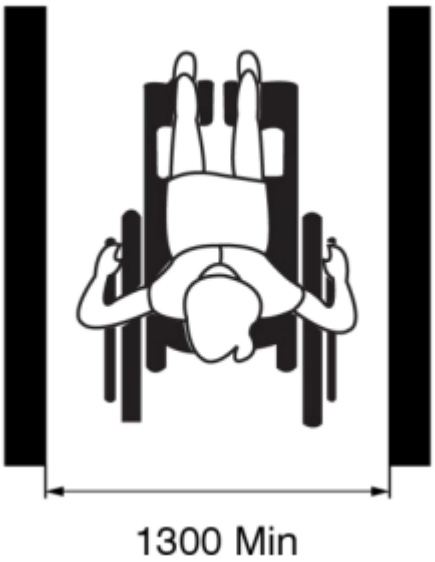


Diagram 2.B Secondary Path

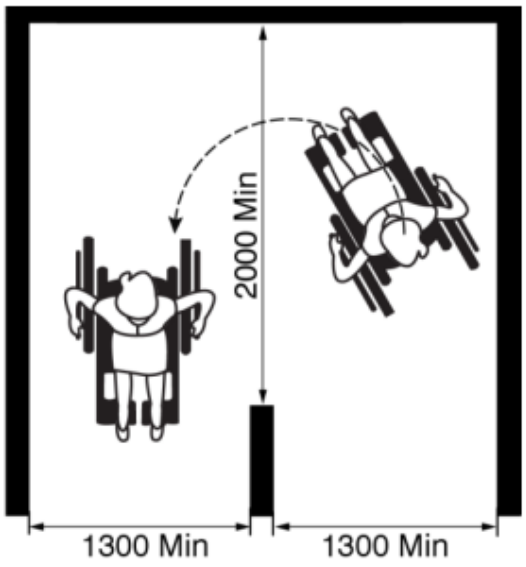


Diagram 2.D 180 Degree Turn

2.3 Passing Area

1. Where the path of travel is less than 1800 mm, provide passing areas that are:
    a. Min 1800 mm x 1800 mm, and
    b. Located every 30 m on an accessible path [Diagram 2.E].

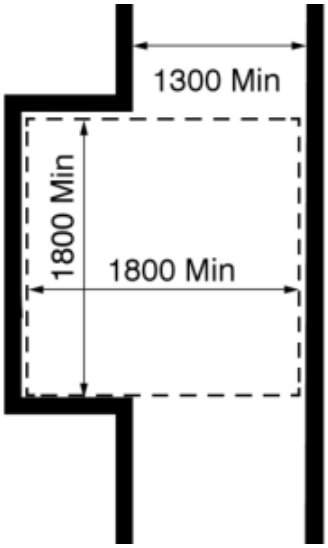


Diagram 2.E Passing Area

2.4 Changes in Level

1. [Table 2.4.1] identifies the required edge treatment based on the vertical rise of the ground or floor surface [Diagram 2.F].

Table 2.4.1 Changes in Level

Vertical Rise	Edge Treatment
0 mm to 6 mm	Vertical – does not require a slope
6.1 mm to 13 mm	Beveled – Max slope 1 in 2 (50%)
Greater than 13 mm	Must be treated as a slope

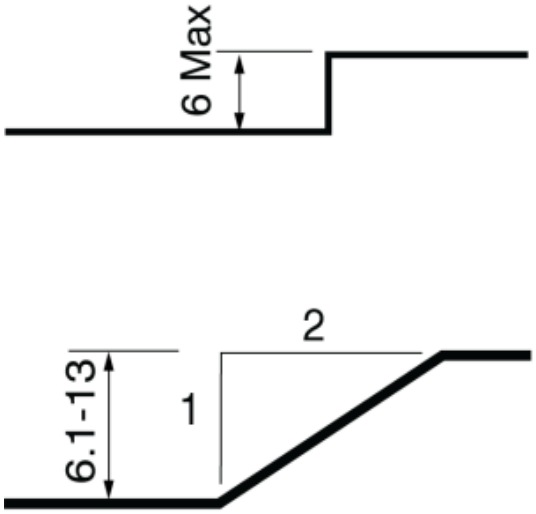


Diagram 2.F Changes in Level and Thresholds

2. Edge protection must be provided at changes in level between 200 mm and 600 mm; except at stairs, performance areas, or loading docks.
3. Changes in level greater than 600 mm or within 1500 mm of a drop off greater than 600 mm must be protected by a guard on both sides.
4. Edge protection must consist of a curb min 75 mm on the edge with min 70% color / tonal contrast.
5. Refer to Section 6.8 for edge protection requirements in the interior environment and Section 40 [Exterior Paths] for edge protection requirements in the exterior environment.

2.5 Exceptions

1. Accessible paths are not required in the following locations:
    a. Service areas or high-hazard industrial occupancies,
    b. Within portions of a floor area with fixed seats in an assembly occupancy not part of an accessible path to spaces designated for mobility device use, or
    c. Within a suite of a residential occupancy.

3. Ground and Floor Surfaces

Contents in Section

Application

This section applies to ground and floor surfaces throughout interior and exterior environments. The type of materials and finishes used for ground and floor surfaces are essential in determining accessibility.

Note: Irregular surfaces, such as cobblestones or pea-gravel finished concrete are difficult for both walking and pushing a wheeled mobility device. Uneven surfaces can create unpleasant and damaging vibration for wheeled mobility aids users. Sand and gravel surfaces are extremely difficult surfaces for users of mobility aids to maneuver. Hard floor surfaces, such as marble or terrazzo may amplify footsteps and add another level of noise for persons who are Deaf, deafened, or hard of hearing.

3.1 Surface

1. Ensure ground and floor surfaces:
    a. are firm, stable and slip-resistant;
    b. have a matte finish to minimize glare;
    c. are not heavily patterned;
    d. are well-drained;
    e. have a vertical change in level less than 6mm;
    f. have joints between surfaces no wider than 13mm (max) or 6 mm (preferred) [Diagram 3.A];
    g. where ground and floor surfaces have a change in level:
        i. no bevel is required (e.g., vertical change permitted), where the change in level is less than 6 mm;
        ii. provide a beveled slope of 1:2 (max - the ratio rise to run), where the change in level is between 6 and 13mm;
        iii. provide a slope, ramp or curb ramp, where the change in level is greater than 13mm; and
        iv. for exterior ground surfaces, refer to Section 40 [Exterior Paths] for additional details;
    h. do not amplify occasional noise; and
    i. provide colour contrast or a change in texture with surrounding surfaces:

i. at curb ramps and depressed curbs;
ii. adjacent wall surfaces or their baseboards;
iii. at changes in level (e.g., stairs and ramps);
iv. at obstacles; and
v. for tactile walking surface indicators (TWSI).

2. Where possible, include heating cables on ground surfaces where ice may accumulate at main or service entrances.

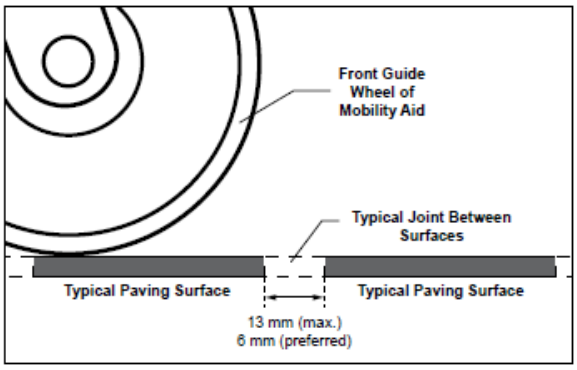


Diagram 3.A Joints Between Surfaces – Section View

3.2 Carpets

1. Carpets must:

a. Be a max height of 13 mm,
b. Be securely fixed to the floor,
c. Have a firm, low level loop,
d. Have a firm cushion, pad or backing,
e. Have 10- or 12-gauge non-static fiber, and
f. Have a non-zipper, cut or uncut pile.

3.3 Gratings and Floor Drains

1. Gratings and floor drains must:

a. Be max 13 mm wide, and

b. Have openings in one direction and perpendicular to the dominant direction of travel [Diagram 3.B and Diagram 3.C].

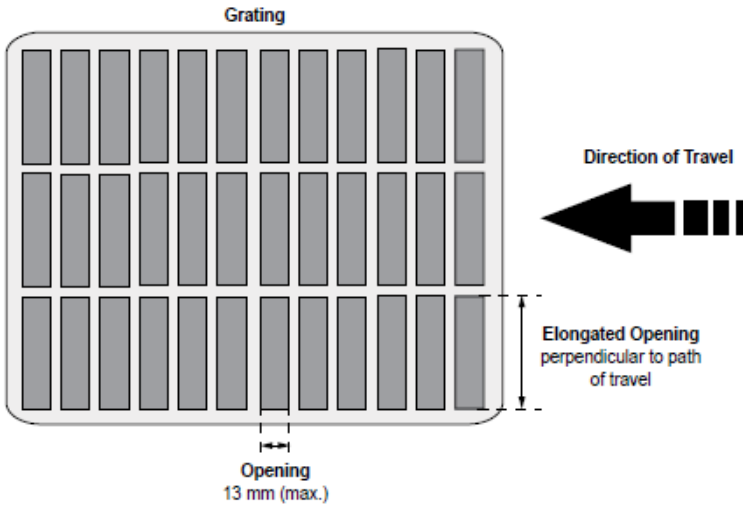


Diagram 3.B Gratings Opening – Plan View

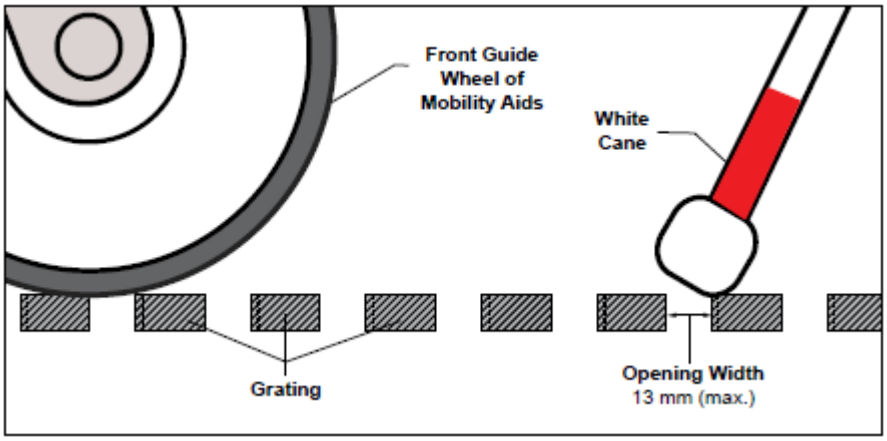


Diagram 3.C Gratings - Section View

3.4 Finishes and Materials

1. Finishes and materials must:

   a. Have high visual color / tonal contrast, min 70%, between floor surfaces, the surrounding environment, and any changes in level, and

b. Not incorporate disruptive or largescale patterns or designs.

3.5 Floor Mats

1. Floor mats must have min 70% color / tonal contrast from surrounding surfaces.
2. Pedimat and floor mats placed in a depression that is level with the surrounding floor are preferred over mats placed on top of the finished floor.
3. If floor mats are placed on top of the finished floor, it must:
4. Have a max height of 13 mm,
5. Have a beveled edge,
6. Be non-slip between underside of mat and the floor finish, and
7. Be weighted or securely fixed.

4. Headroom – Overhanging and Protruding Objects

Contents in Section

Application

This section applies to overhanging and protruding objects throughout and around facilities (interior and exterior environments) to prevent any hazard or obstruction for all users. Protruding objects are typically mounted on walls, ceilings, or other locations adjacent to interior and exterior paths of travel.

4.1 Clear Width

Protruding objects must not reduce the clear width of an accessible path to less than required in Section 2 [Interior Accessible Paths] and Section 40 [Exterior Paths].

4.2 Protruding Objects

Objects protruding on accessible paths must not protrude more than 100 mm unless they are cane detectable at or below 680mm AFF [Diagram 4.A].

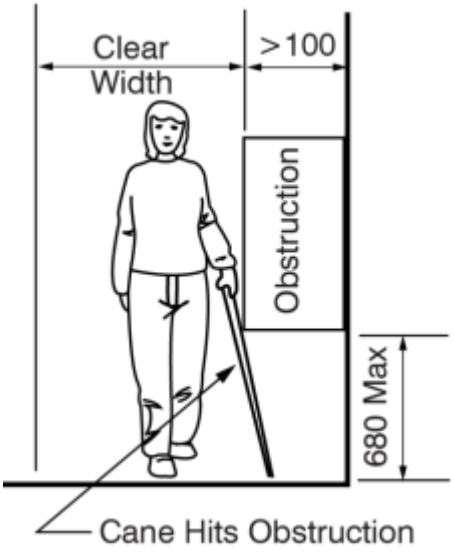


Diagram 4.A Protruding Objects

4.3 Headroom

1. Headroom must:
    a. Have a min 2100 mm clear height AFF [Diagram 4.B], and
    b. Be cane detectable at or below 680 mm where headroom is less than 2100 mm [Diagram 4.C].

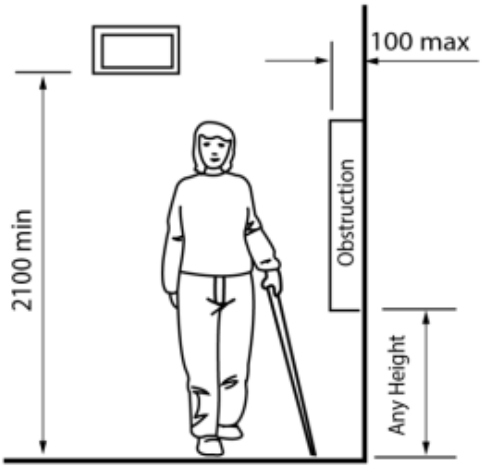


Diagram 4.B Overhead Obstruction and an Acceptable Protruding Obstruction

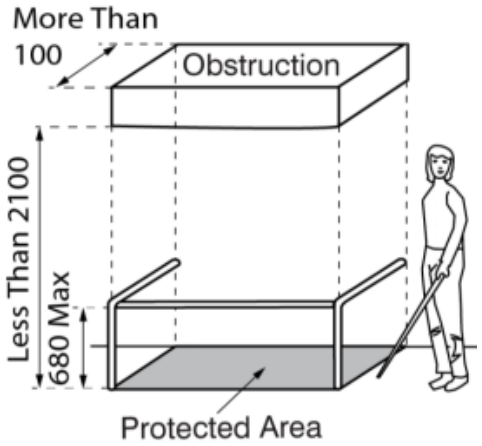


Diagram 4.C Cane-detectable Guard for Overhead Obstruction and Protruding Obstruction

5. Ramps

Contents in Section

Application

This section applies to ramps provided as part of an accessible route within exterior or interior environments, where the slope of a path of travel exceeds a gradient of 1:20 (5%).

Additionally, refer to *Ontario Building Code* (OBC) and *Integrated Accessibility Standards Regulation* (IASR), Part IV.1 Design of Public Spaces Standards for requirements for ramps.

Best Practice

For new construction and where alternate universal design solutions are possible, it is preferred that ramps are integrated as part of the overall building design.

A ramp surface of up to 1500mm wide is preferred, to allow space for a companion or guide dog.

5.1 Clear Width

Ramps must have a 1100mm min clear width.1500mm width is preferred whenever possible.

5.2 Slope

1. Ensure max gradient of 1:20 (5%) [Diagram 5.A], and
2. Max cross slope of 1 in 50 (2%).

5.3 Surface

Ramp surfaces must meet criteria in Section 3 [Ground and Floor Surfaces] as appropriate.

5.4 Landing Location

Landings must be provided:

1. At least every 9000mm [Diagram 5.A],
2. At the top and bottom of the ramp, and
3. At any change of direction on the ramp.

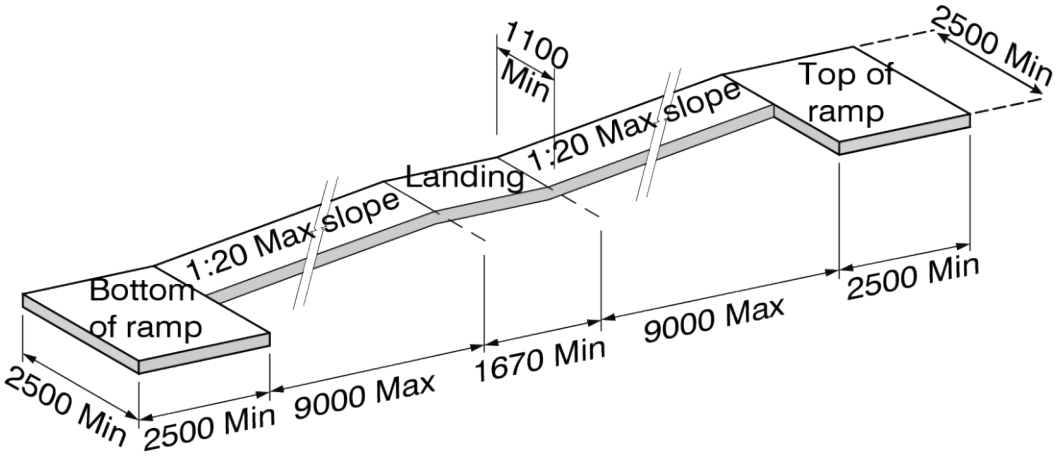


Diagram 5.A Landings Required at Every 9 Metres

5.5 Landing Design

Landings must be:

a. Min 2500 mm x 2500 mm at the top and bottom of the *ramp* and at intermediate landings with a 180-degree turn [Diagram 5.B],

b. Min 1670 mm x 1670 mm at 90 degree turns [Diagram 5.C], and

c. Min 1670 mm in length for inline landings [Diagram 5.C].

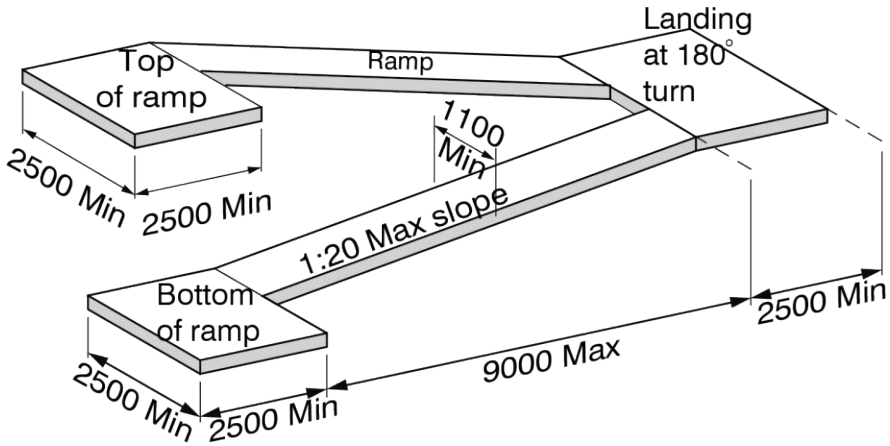


Diagram 5.B 2500mm x 2500mm Landings at Top, Bottom and at 180 Degree Turns

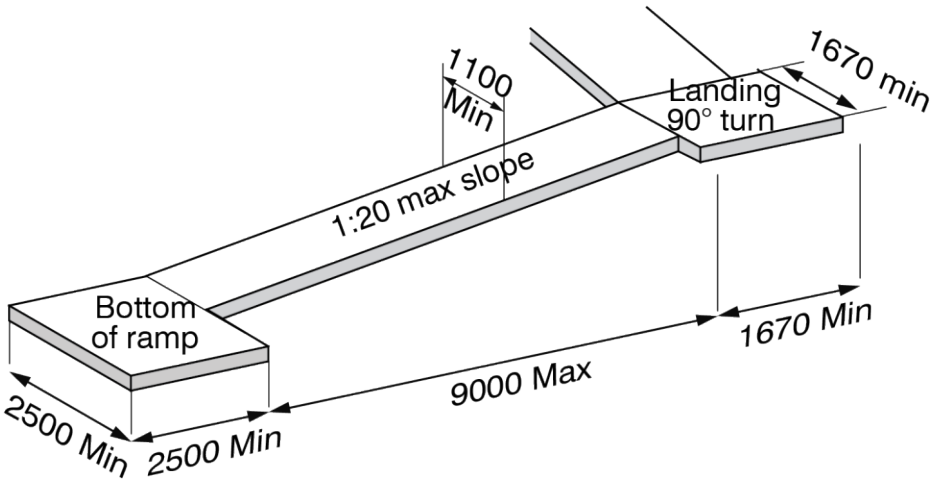


Diagram 5.C 1670 mm x 1670 mm Landings 90 Degree Turns

5.6 Colour Contrast

A visual contrasting strip, which can be a change of material, painted strip, or non-skid tape with min **70%** colour/tonal contrast must be used to demarcate the beginning and end of a ramp.

5.7 Doors on Landings

Where doors swing into the landing space, there must be a min 2500mm x 2500mm of clear floor space [Diagram 5.D].

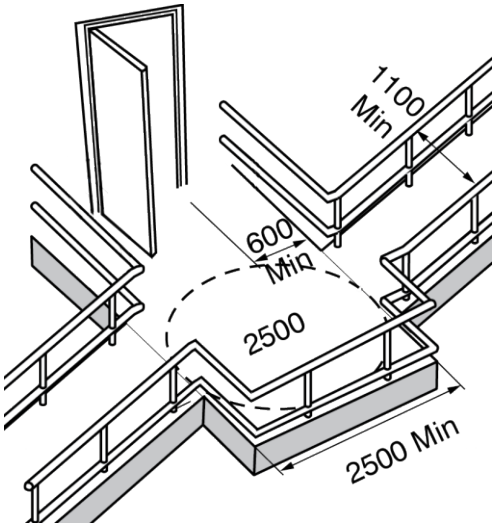


Diagram 5.D Doors on Landing

5.8 Edge Protection

Edge protection is required where *ramp* surfaces are not at grade or protected with a wall or a guard on both sides.

Edge protection must be *min* **75 mm** height. Alternatively, guards can extend to the bottom of the rail to within **75 mm** of the *ramp* surface [Diagram 5.E]

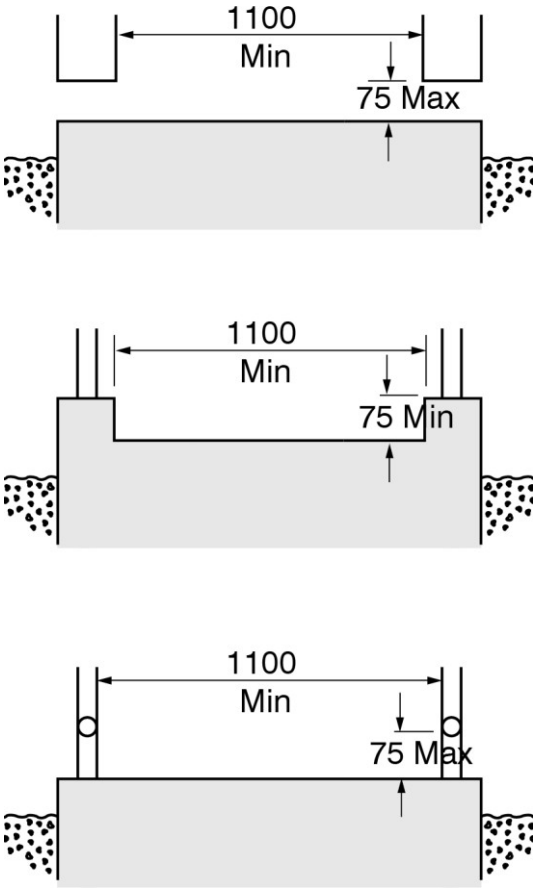


Diagram 5.E Edge Protection for Ramps

5.9 Handrails

1. Handrails are required on both sides of a ramp and must meet requirements in Section 7 [Handrails].

6. Stairs

Contents in Section

Application

This section applies to stair systems, where provided for exterior or interior environments. Additionally, refer to Ontario Building Code (OBC) and Integrated Accessibility Standards Regulation (IASR), Part IV.1 Design of Public Spaces Standards for all applied requirements for stairs.

Note: Marking strips can also be fully integrated within the design of the nosing or finish used on the tread. For exterior stairs, exposed to the elements, and/ or stair systems that have a high level of pedestrian traffic, durable marking strips are recommended (e.g., carborundum).

6.1 Treads and Risers

1. Treads and risers must:
    a. Be uniform in tread depth and riser height [Diagram 6.A],
    b. Be made of closed risers,
    c. Have a rise between 125 mm and 180 mm, and
    d. Have a run between 280 mm and 355 mm.
2. Risers must be uniform in height in any one flight with a max tolerance of 5 mm between adjacent treads or landings and 10 mm between the tallest and shortest risers in a flight.
3. Treads must be uniform in depth in any one flight with a max tolerance of 5 mm between adjacent treads and 10 mm between the deepest and shallowest treads in a flight.
4. The cross slope on treads must not exceed 1 in 50.

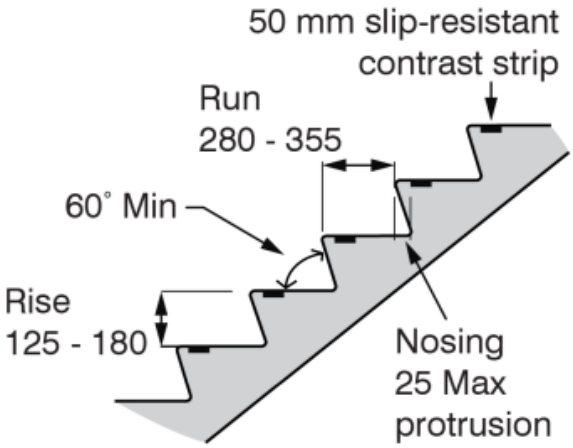


Diagram 6.A Treads, Risers, and Nosing of Stairs

6.2 Nosing

1. The nosing must have:

    a. Max 25 mm projection, sloped at an angle greater than 60 degrees to the horizontal,

    b. 6 mm to 10 mm beveled tread edge, and

    c. 50 mm slip-resistant color / tonal contrast strip, extending the full width of the tread starting max 25 mm from leading edge of tread. A visual contrasting strip can be a change of material, painted strip, or non-skid tape with min 70% color/tonal contrast from the rest of the stair surface [Diagram 6.B].

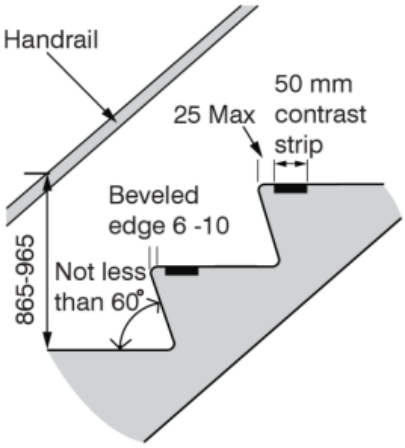


Diagram 6.B Contrast Strip on Tread

6.3 Guards

Guards are required on both sides of a stair where the elevation change is greater than **600 mm.**

6.4 Handrail Location and Design

Handrails must be provided on both sides of a stair and must meet the criteria in Section 7 [Handrails] [Diagram 6.B].

6.5 Tactile Attention Indicator (TAI)

1. TAI must:
    a. Be between 300 mm to 610 mm deep (610 mm preferred),
    b. Be located one tread depth back from the first stair at the top and at any intermediate landings where doors open onto the landing, and
    c. Meet the criteria provided in Section 10 [Tactile Walking Surface Indicators]

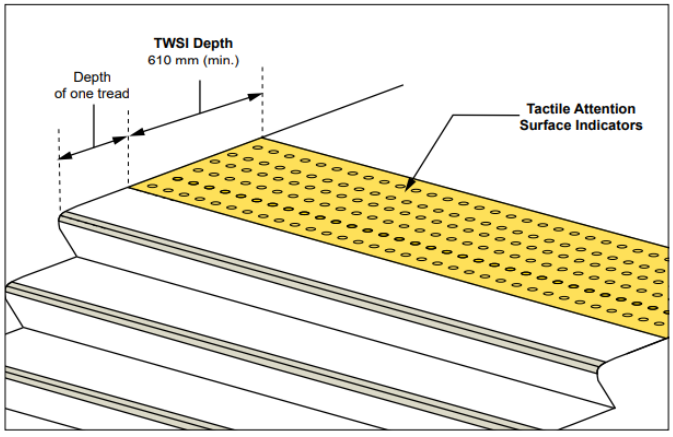


Diagram 6.C Tactile attention surface indicators at the top of stairs

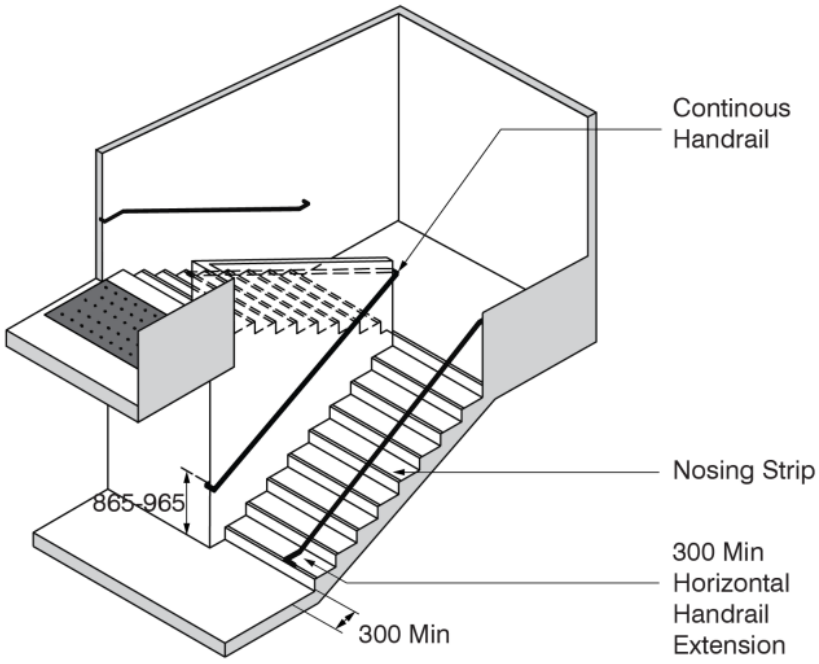


Diagram 6.D Stair Design Criteria

7. Handrails

Contents in Section

Application

Handrails help people avoid tripping or falling down ramps or stairs. They are an important safety feature for people with and without disabilities.

7.1 Handrail Locations

1. Handrails are required on both sides of a ramp or stair.
2. Intermediate handrails are required where stairs or ramps are wider than 2200 mm. The clear width between the intermediate handrail and one set of handrails must be at least 900 mm [Diagram 7.C].

7.2 Handrail Design

1. Handrails must be designed to:
    a. Be continuously graspable along entire length,
    b. Have a circular cross-section with an outside diameter between 30 mm and 40 mm [Diagram 7.A],
    c. Have a min clearance of 50 mm between the handrail and any wall immediately adjacent or 60 mm where adjacent wall is a rough surface [Diagram 7.A],
    d. Be uniform in height ranging 865 mm to 965 mm above surface, measured from the leading edge of the stair nosing to the top of the rail [Diagram 7.D],
    e. Have a continuous inside handrail on switch back stairs [Diagram 6.D],
    f. Extend horizontally 300 mm beyond the top and bottom and return to the post, floor or wall [Diagram 7.B], and
    g. Have color / tonal color between handrail and surrounding wall.
2. Loading properties for the guard and handrail design must meet the latest edition of the OBC requirement and sustain a concentrated load min **0.9kN/m** and a uniform load min **0.7kN/m.**

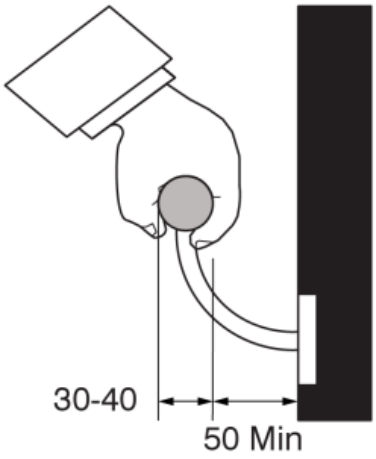


Diagram 7.A Handrail diameter and distance to wall

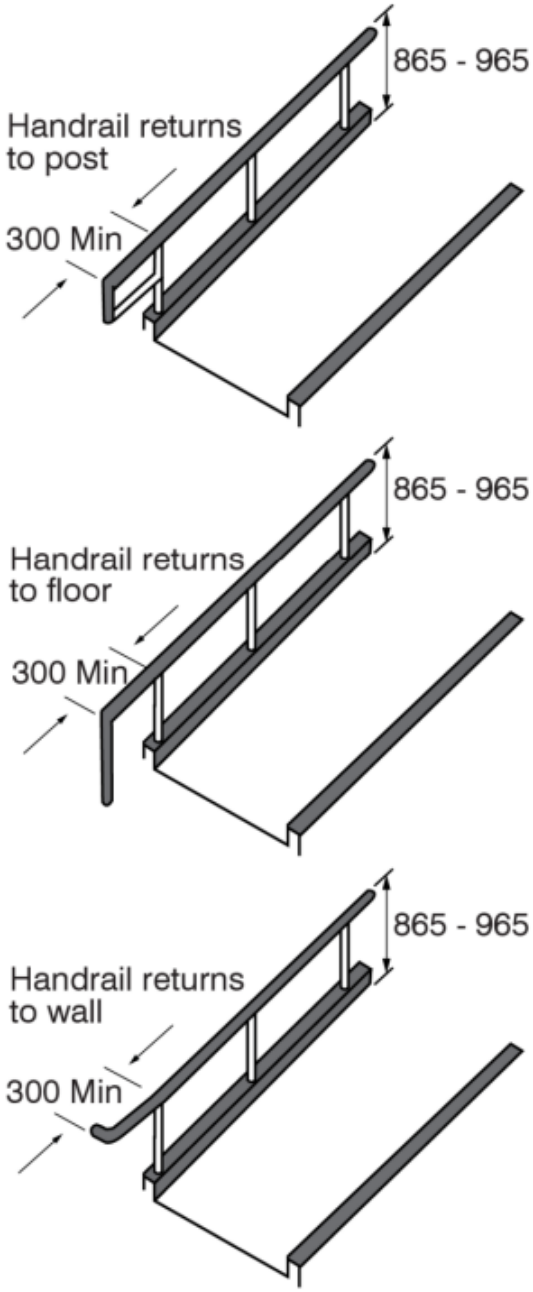


Diagram 7.B Horizontal Handrail Extensions

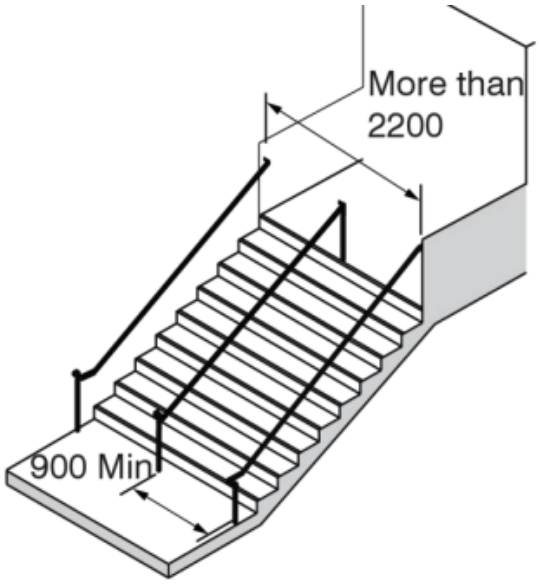


Diagram 7.C Intermediate Handrail

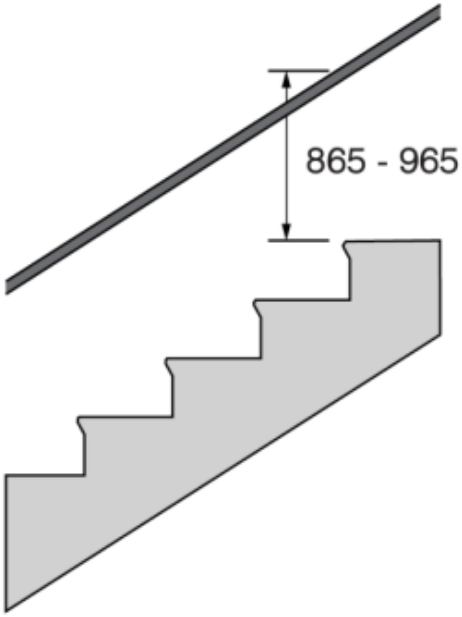


Diagram 7.D Height of Handrail Over Tread

8. Mobility Device Charging Stations

Contents in Section

Application

Mobility Device Charging Stations are required in new Municipal facilities and renovated facilities, where a charging station is not already offered.

Mobility Device Charging Stations should also be offered along accessible recreational trails where practicable, typically trail heads that are well-travelled.

8.1 Charger Specifications

The following items should be contained in a vandal-resistant, waterproof case that indicates the purpose of its contents.

1. 24v 5 amp charger
2. USB Port
3. Power source

8.2 Location Considerations

- Indoor locations should be located within viewing distance of the primary entrance or drop off location.
- Outdoor locations should be located on visible, well-travelled paths of travel. Secluded areas must be avoided to reduce vandalism.
- Proximity to other amenities, such as washrooms, and shade.

8.3 Companion Seating

Outdoor mobility device charging stations must include companion seating and conform to the requirements of Section 45.2 [Benches].

Indoor mobility device charging stations must include companion seating and conform to the requirements of Section 19.5 [Waiting Areas].

9. Operable Controls and Mechanisms

Contents in Section

Application

This section applies to typical interior and exterior controls and operating mechanisms provided for public and staff use, throughout accessible routes and spaces.

Examples of typical controls and operating mechanisms related to interior and exterior environments include, but are not limited to:

- entrance call buttons or intercoms;
- emergency call systems related to parking areas;
- light switches;
- wall outlets / duplexes;
- fire or other alarm system controls (e.g., washroom emergency alarms);
- thermostats;
- door hardware; and
- plumbing fixture hardware (e.g., faucets and water closet flush controls).

Controls related to product and dispensing machines, such as food and beverage vending equipment, payment stations for parking and ticketing devices, touch screen devices for information and self-service kiosks and other activation devices are also required to be accessible.

Note: Automatic sensors at controlled access points are preferred rather than systems requiring contact, dexterity, or close physical presence to operate.

9.1 Operable Controls and Mechanisms

1. Controls must be accessible and intuitive. Where possible, operating controls must have multiple forms of feedback (audible, visual, tactile, etc.).
2. Electrical outlets and receptacles must be min 400 mm AFF measured at the base of the outlet [Diagram 9.A].
3. Operable portions must be between 900 mm and 1100 mm AFF [Diagram 9.A] with the exception of thermostats and manual pull stations which must be 1200 mm AFF measured at the centerline of the operable portion.

4. Reach requirements to any operable controls must consider Section 1 [Space and Reach Requirements].
5. Emergency alert controls must be linked to a central and staffed monitoring location and have a visual and audible signal indicating help is on the way.

9.2 Clear Floor Area

A clear floor space min 860 mm wide x 1480 mm long must be maintained adjacent and centered to controls.

9.3 Hand Operated Mechanisms

Hand operated mechanisms must:

1. Be capable of operation with one closed fist hand,
2. Not require tight grasping, pinching or twisting of the wrist,
3. Require a max force 22N, and
4. Have min 70% color / tonal contrast from their surrounding environment.

9.4 Encoded-Entry/Exit or Card-Entry Systems

Encoded or card entry/exit systems must:

1. Have operable portions 900 mm to 1100 mm AFF
2. Have operable features such as card slots, keypads, or buttons illuminated or have min 70% color / tonal contrast from the mounting plate to surrounding wall, and
3. Be distinctive in color, texture, or raised graphic lettering. If numerals or letters are required, they must be tactile and raised.

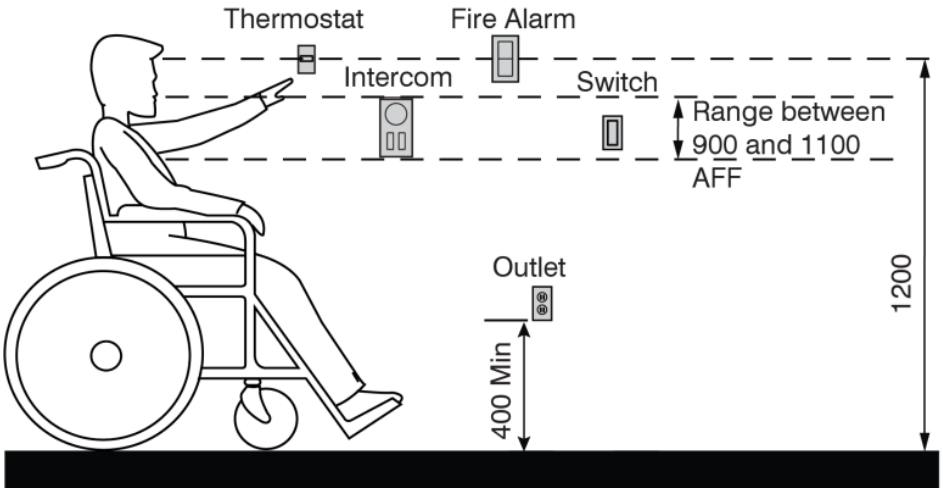


Diagram 9.A Required Range for Mounting Heights

10. Tactile Walking Surface Indicators (TWSI)

Contents in Section

Application

There are two (2) types of tactile walking surface indicators (TWSI) used in both interior and exterior environments:

- Tactile Attention Indicators (TAI) call for caution at potential hazards (e.g., change in elevation, vehicular routes). They are composed of truncated domes.
- Tactile Direction Indicators (TDI) provide information about the direction of travel through large open spaces (e.g., wayfinding). They are composed of parallel elongated bars.

Typical locations where TWSIs are required include:

- At curb ramps and depressed curbs.
- Where walking surfaces between pedestrian and vehicular areas are not separated by curbs.
- At top of all stairs and escalators.
- At unprotected edges with a major change in elevation (e.g., at the edge of a platform); and
- In large open spaces.

Note:

1. TWSIs can also be referred to as detectable warning surfaces.
2. Applying color contrasted finish to a concrete surface does not provide appropriate detection by foot or cane. Although it is recognized that an industrial yellow color provides a preferred color contrast, a light color contrasted TWSI, on a dark color contrasted ground surface is suitable. Alternatively, a dark on light contrast is also suitable. For more information on requirements for truncated domes, refer to: ISO 23599:2012 “Assistive products for blind and vision impaired persons -- Tactile walking surface indicators.”
3. Tactile direction surface indicator layout that is as continuous as possible is easiest to follow.
4. Both cast in place (e.g., embedded within concrete) and surface applied TWSI systems are available for new construction and retrofits and depends on the mounting surface and application. Surface applied systems require beveled edges to prevent potential tripping hazards.

10.1 Design Features

1. Ensure surface is slip-resistant and not exceed a glare factor of 15- matte finish,
2. Ensure color contrast of 70% (min) between the TWSI and adjacent surfaces
3. Provide TWSI with raised tactile profiles (e.g., truncated domes or elongated bars) to be detectable when walked upon and / or by a long cane; and
4. Ensure edges are beveled or level with surrounding surface (e.g., height of 3 mm or less).

10.2 Tactile Attention Indicators (TAI)

1. Ensure flat-topped domes are 5 mm (+/- 1 mm) high [Diagram 10.A];
2. Ensure the top of flat-topped domes are between 12- and 25-mm diameter.
3. Ensure diameter of the lower base of the flat-topped domes are 10 mm (+/- 1 mm) more than the diameter of the top (e.g., a base diameter of 21 to 36 mm is typical);
4. Ensure domes are arranged in a square grid; and
5. Ensure spacing between adjacent flat-topped domes is adjusted depending on the size of the domes, as identified in [Diagram 10.A].

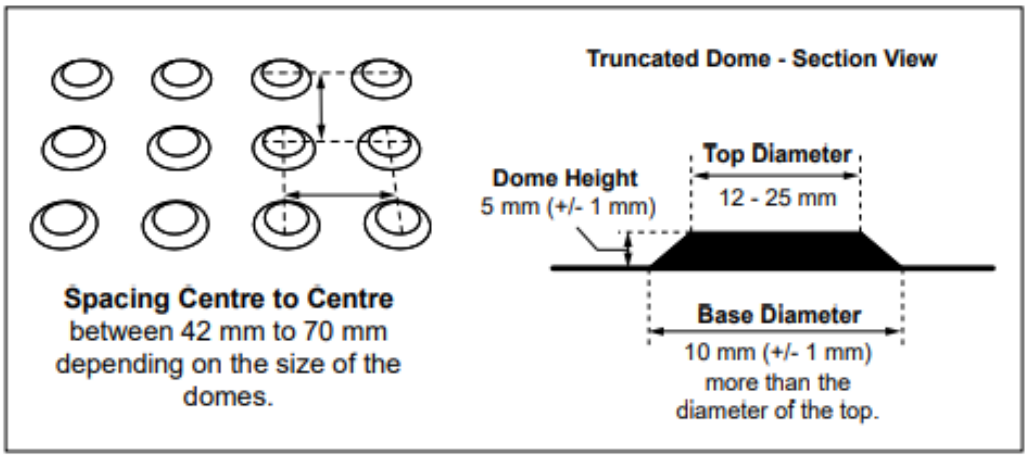


Diagram 10.A Truncated Domes Specification

10.3 Tactile Direction Indicators (TDI)

TDI should be considered to facilitate wayfinding to major destinations and along the primary path within a building and throughout the site.

1. Ensure flat-topped elongated bars are 5 mm (+/- 1 mm) high;
2. Ensure the width of the top of flat-topped bars are between 17 mm and 30 mm [Diagram 10.B];
3. Ensure width of the lower base of the flat-topped domes are 10 mm (+/- 1 mm) more than the diameter of the top;
4. Ensure the top length of the bars is 270 mm max and the base length 10 mm (+/- 1 mm) greater than the top length;
5. Ensure elongated bars have a space not more than 30 mm between the ends of the parallel bars; and
6. Ensure spacing between adjacent flat-topped domes is adjusted depending on the size of the domes, as identified in [Diagram 10.B].

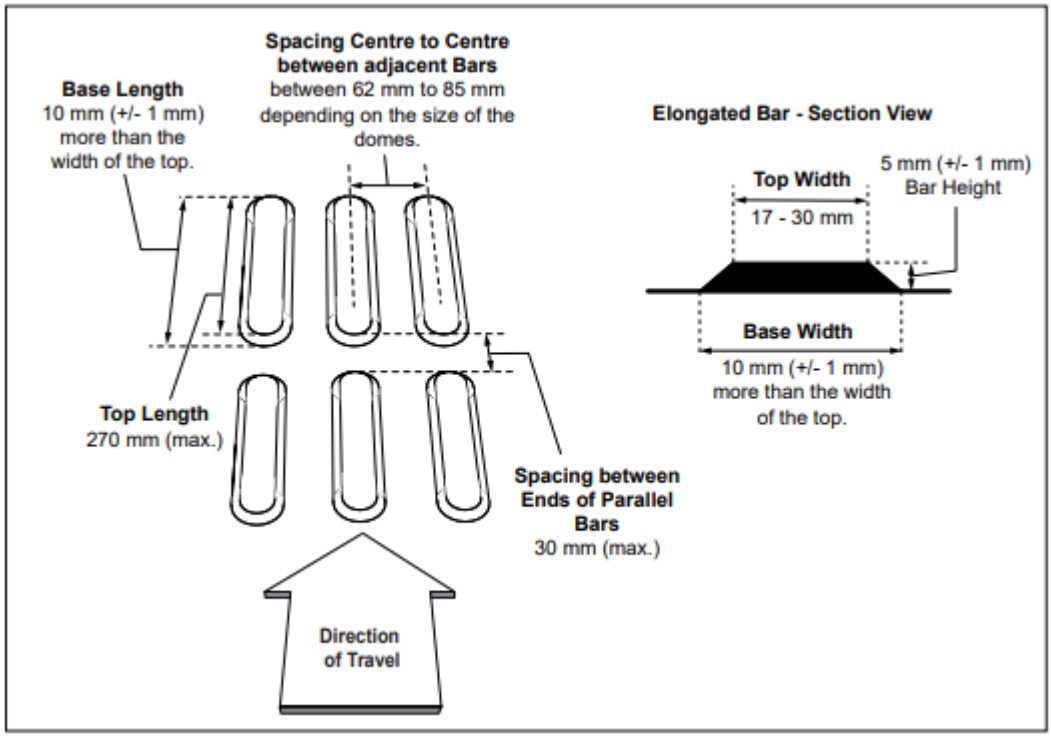


Diagram 10.B Elongated Bars Specification

10.4 Locations for Tactile Attention Indicators (TAI)

TAI must be installed:

1. At the tops of all stairs and escalators, and on landings where a door opens onto the landing. TAI must extend the full width of the stair or escalator and be 300 mm to 610 mm deep (610 mm preferred), commencing one tread depth back from the stair or escalator edge [Diagram 10.C],
2. At curb ramps and depressed curbs identified in Section 41 [Curb Ramps and Depressed Curbs]. TAI must extend the full width of the curb ramp or depressed curb and be 610 mm deep commencing 150 mm to 200 mm back from the edge of the curb [Diagram 41.A to F], and
3. At elevated platforms not protected by a guard with the TAI being 300 mm to 610 mm deep (610 mm preferred), flush from the open edge [Diagram 10.D].

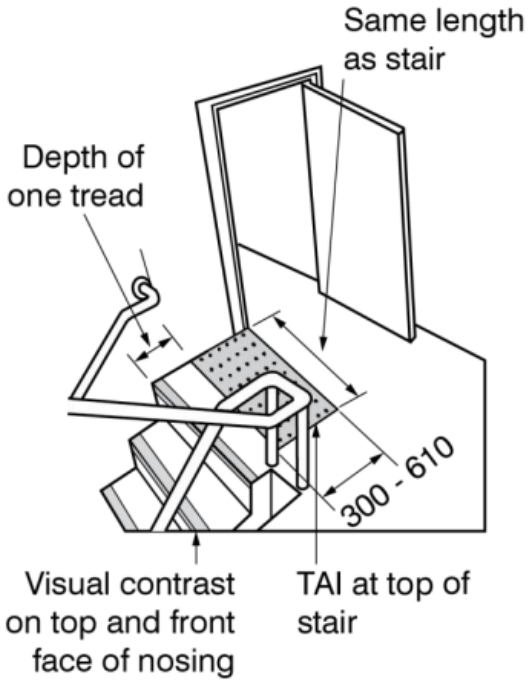


Diagram 10.C TAI on Stairs

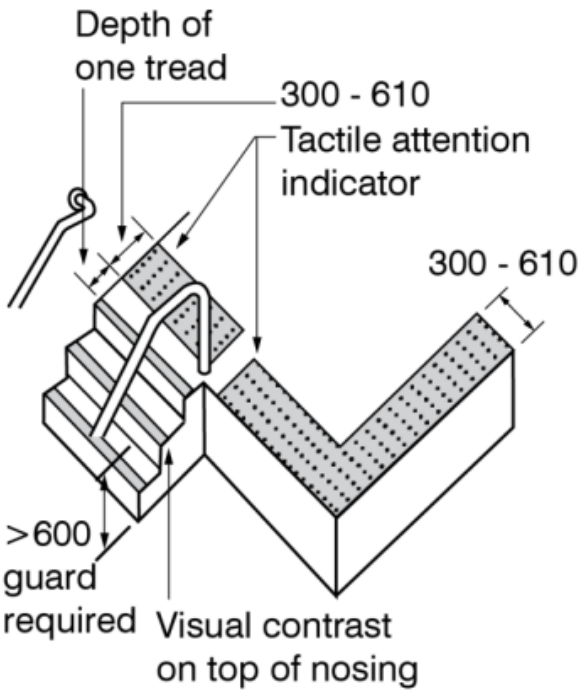


Diagram 10.D TAI on an Elevated Platform

11. Lighting, Light Sources and Glare

Contents in Section

Best Practice

The Canadian National Institute for the Blind (CNIB) recommends increasing I.E.S.N.A suggested lighting levels by a range of 25 to 50 percent to address the accessibility needs of people with vision loss.

For emergency lighting preferred lighting level of 10 lux (1 footcandle) min is required at exits, exit stairs or other paths of travel, measured at the walking surface.

11.1 Lighting Design

1. Provide even light distribution at floor level for all occupied floor areas, including at the leading / trailing edge of stairs, ramps, and escalators.
2. Reduce pools of light and areas of shadow.
3. Fixtures must shield light sources.
4. Lighting in meeting rooms and assembly areas must be adjustable.
5. Provide lighting that will comply with light trespass by-law.
6. Exterior lighting must direct light only where needed to minimize disruption to nocturnal animals.

11.2 Reflective Glare

1. Any frosting applied to glass must not enhance the reflective properties of the glass.
2. Consideration must be given to avoid creating a reflective glare of surfaces.

11.3 Exterior Illumination Levels

1. [Table 11.3.1] identifies the required min exterior lighting levels for the specified locations. Exterior lighting must be uniform with a max to min illuminance ratio is no greater than 10 to 1.

Table 11.3.1 Exterior Illumination Levels

Location	Lighting Level (Lux)
General Parking Areas and Circulation Driveways	10
Main Driveway	30
Secondary Entrances, Service Doors, and Fire Exits; Accessible Paths (walkways, stairs, ramps); Accessible Parking; Accessible Path from Accessible Parking; and Passenger Drop Off Area.	50
Main Entrance	100 below canopy or within 3 m of the door, whichever distance is greater
Exterior Signage (building sign, directional and traffic)	General area lighting + 30 measured at the sign face

11.4 Interior Illumination Levels

1. [Table 11.4.1] identifies the min required interior lighting levels along a min 80% of the floor area, unless otherwise indicated, for specified locations. Locations not identified in [Table 11.4.1] must accommodate a min lighting level as prescribed by Illuminating Engineering Society of North America (IESNA) or OBC, whichever requires the higher level of lighting.

Table 11.4.1 Interior Illumination Levels

Location	Lighting Level (Lux)
Entrance; Elevator Lobby; Elevator Cab; and Operating Controls.	100
Areas of Refuge; Interior Paths; Ramps; Waiting / Rest Areas; Meeting Spaces; Lounges; Offices; Washrooms; Dressing Rooms; Locker Rooms; Shower Rooms; and Kitchen / Kitchenette.	200
Stairs and Escalators; and Storage Rooms, Dressing Rooms, Sanitary Facility, and Service Areas serving food preparation areas.	300
Signage	General area lighting + 30 (min 200) at the sign face
Operating Controls	200 at the operating control where reading is required
Public Telephone	200 at keypad, directory, and shelf
Library Stacks; and Storage Shelving	200 at front face at the bottom of the shelves
Computer Workstations; and Study Carrels	300 at work surface

Office Workstation	350 at work surface
Reception, Service Counters, and Help Desks	500 at counter surface
Kitchen / Kitchenette	500 at counter surface

12. Signage and Wayfinding

Contents in Section

Application

This section applies to signage and wayfinding strategies, where provided in exterior and interior environments.

Recognizing signage programs and wayfinding strategies are customized based on facility types and use of space, the information and criteria in this section is provided as a starting point.

There are different types of signage for various purposes:

- Regulatory signs, which include prohibition signs denoting an order forbidding an action, and mandatory signs which denote an order requiring an action;
- Warning signs such as caution and danger signs denote a potential hazard and a definite hazard, respectively; and
- Identification signs, which include rooms, titles, names or numbers are provided for general orientation or specific information, such as washrooms, routes of egress, stairwells, doorways or offices.

Best Practice

Avoid using vertical wording and electronic scrolling signage. Where scrolling signage must be used, ensure characters and symbols move slowly across the screen.

Keep information on signage short and simple.

Using a combination of lower case and upper-case lettering is easier to read than using all upper-case lettering. The “shape” of the text or message is more legible and creates its own image for familiarity.

Avoid very fine type and very thick type font.

12.1 Design Features

1. Ensure signage surfaces have matte, eggshell or non-glare finish;
2. Ensure signage is of uniform design;
3. Provide color contrast between signage and mounting surfaces;

4. Where used to give the same type of information within the same facility, ensure signage is consistently shaped, colored and positioned;
5. Where facilities or elements, including but not limited to washrooms, elevators, telephones, information kiosks, routes, 'Areas of Refuge', and parking facilities are accessible, provide signage with the International Symbol of Accessibility to designate as accessible [Diagram 13.A]; and
6. Ensure lighting level is 200 lux (20 foot-candles) (min) at signs.

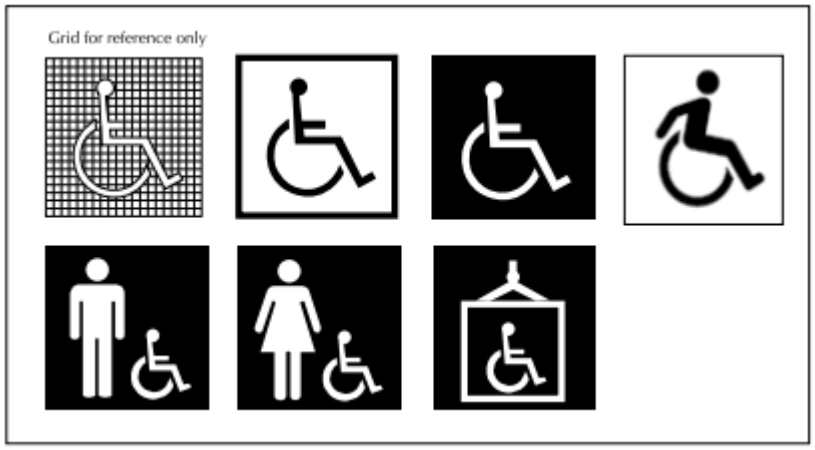


Diagram 12.A Wayfinding Principles – International Symbols of Accessibility

Note: Consistent locations include height considerations for overhead or wall mounted signs, as well as uniform placement of identification signs for facilities and services. Nearsighted persons might have to approach much closer to read a sign than persons with average visual acuity. Signs at eye level allow persons to get closer to the sign.

12.2 Character Features and Sizes

1. Ensure text characters (e.g., letter or number) are sans serif font type and have Arabic numerals.
2. Provide width to height ratio between 3:5 and 1:1 [Table 12.2.1];
3. Provide stroke width to height ratio between 1:5 and 1:10 [Diagram 12.B];
4. Ensure characters are not italic, oblique, script, highly decorative or of other unusual forms;
5. Provide color contrast of 70% (min) between text characters and background surface;

6. Ensure the min character height is provided as per viewing distance as identified in Table 12.1; and
7. Use an uppercase “X” for character measurement.

Table 12.2.1 Character Height at Max Viewing Distance

Min Character Height (mm)	Max Viewing Distance (mm)
200	6,000
150	4,600
100	2,500
75	2,300
50	1,500
25	750

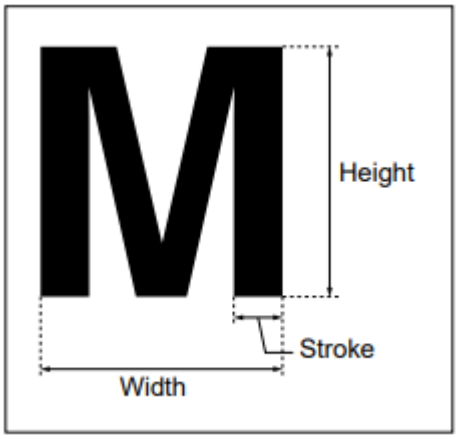


Diagram 12.B Character Features and Sizes

Note: Some factors affecting ease with which text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures. Where illuminated signage is provided, avoid using red, blue, or green LEDs on a black background as they are unreadable for most people with vision loss.

12.3 Pictograms and Symbols

Pictograms and symbols are used to complement text information and identify important facility features, elements, or services, including information desks, public washrooms, and elevators. Where pictograms are used:

1. Ensure pictogram has a field height of 150 mm (min).
2. Provide text descriptors and braille directly below the pictogram field and not in the pictogram field.
3. Provide color contrast of 70% (min) between pictogram the field.
4. Use the international symbol of accessibility to identify accessible facility features, spaces, elements, and amenities [Diagram 12.A]; and
5. Use recognized and standardized symbols for accessibility features or other key building elements (e.g., washrooms, telephones, and elevators) to facilitate wayfinding for all users [Diagram 12.C].

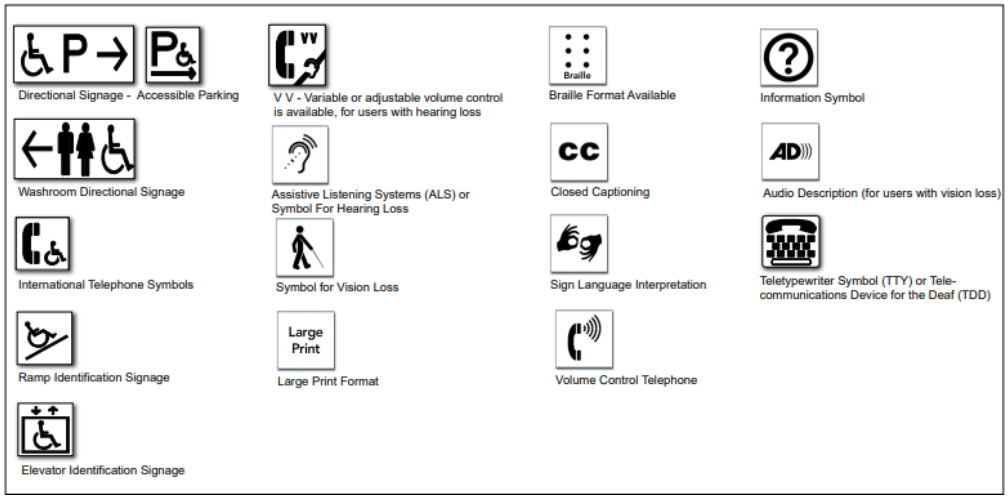


Diagram 12.C Example of Typical Pictograms and Symbols

12.4 Braille

Where braille is provided on signage:

1. ensure it is uncontracted braille (Grade 1);
2. ensure braille dots have a domed or rounded shape;
3. locate immediately below the corresponding text (e.g., room numbers, names) and / or pictogram; and d. where text is multi-lined, place braille below the entire text.

Note: Braille or tactile features are only required for signs that can be reached and touched to identify permanent rooms and spaces. These features are not required for overhead or suspended signage (e.g., directional information). Avoid mounting signage directly on external glazing where possible as it may reduce visibility and legibility of text.

12.5 Tactile Signage

Signage with tactile features (e.g., braille, raised characters / text, symbols or pictograms) are designed to be read by touch.

Design Features

Where tactile characters are provided:

1. Ensure text characters (e.g., letter or number) and pictograms (where provided) are raised between 0.8 to 1.5 mm above the surface [Diagram 12.E];
2. Ensure the edges of the text characters are gently rounded;
3. Provide high tonal contrast between the tactile characters and the background surface;
4. Ensure all raised text characters, pictograms or symbols are accompanied by equivalent description in braille;
5. Where pictogram is provided, ensure they are 150 mm (min) high; and
6. For text characters (e.g. letter or number):
   (a) Ensure they are sans serif font and Arabic numerals;
   (b) Ensure height of characters are between 16 and 50 mm; and
   (c) Ensure text is entirely in upper case lettering as it is easier to read by touch, compared to a combination of upper and lower case letters.

Mounting Locations

Where signage with tactile features is provided:

1. Mount at 1220 mm (min) high, measured from the baseline of the lowest tactile character and 1525 mm max high, measured from the baseline of the highest tactile character [Diagram 12.D];
2. Where provided at a door, install consistently on the wall beside the latch edge of door, 150 mm +/- 10 mm from the door frame;

3. Where provided at double doors with one active leaf, mount signage to the right of the right hand door;
4. Where there is no wall space at the latch side of a single door or on the right side of the double door, install signage on nearest adjacent wall; Note Braille or tactile features are only required for signs that can be reached and touched to identify permanent rooms and spaces. These features are not required for overhead or suspended signage (e.g., directional information). Avoid mounting signage directly on external glazing where possible as it may reduce visibility and legibility of text.
5. Install to allow users to approach within 100 mm of sign location, clear of any door swing or protruding objects;
6. Mount so that a clear floor space of 455 mm by 455 mm (min), centered on the tactile characters is provided beyond the arc of any door swing between the closed position and the 45 degree open position; and g. ensure a clear wall area of 75 mm wide (min) around the sign is provided.

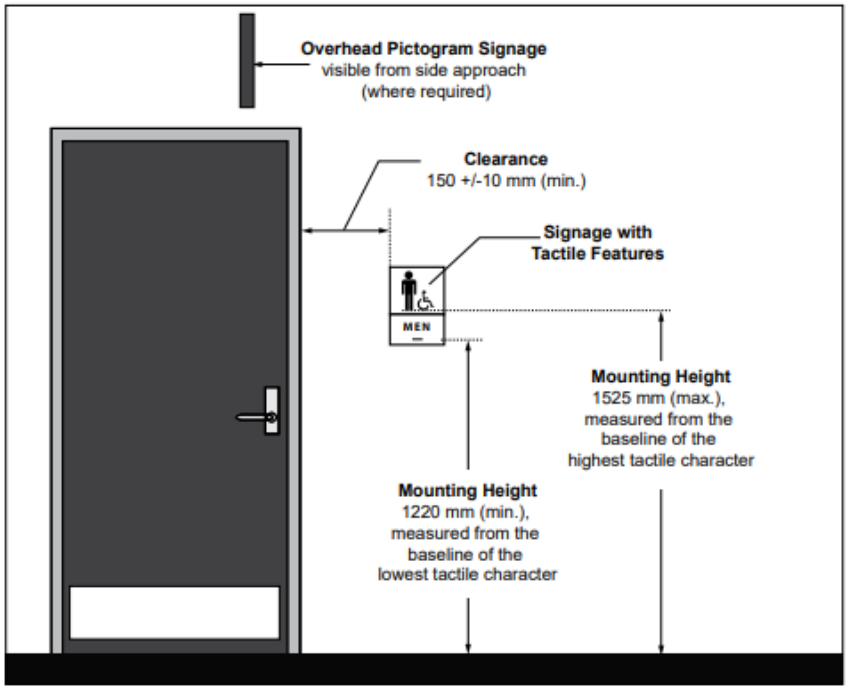


Diagram 12.D Mounting Location of Signage with Tactile Features- Elevation View

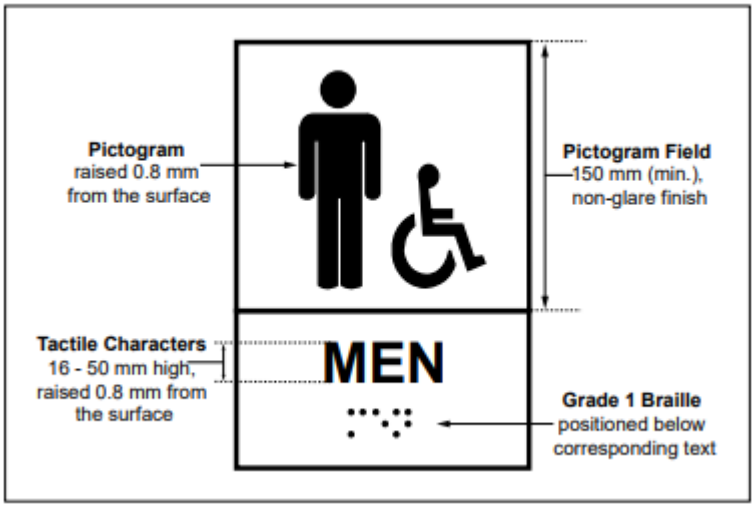


Diagram 12.E Signage with Tactile Features

12.6 Wayfinding Principles

1. Ensure consistent design, strategic placement and ideal mounting heights at key decision-making points along accessible routes for all signage,
2. provide color contrast of at least 70% between signage and mounting surfaces for full visibility,
3. ensure there is no information overload or cluttering of signage to avoid confusion, and
4. avoid placing suspended signs against a light source to ensure full visibility (e.g., at the end of corridors which have windows, glass doors or window walls).

Best Practice

Control the use of temporary signage, which can render other relevant and accessible signage ineffective, through management procedures / protocols. Temporary signage typically uses improper language, materials, and text sizes. Mount signs so that they face the direction of travel as they are easiest to notice and read for people who might have limitation moving their head or have reduced peripheral vision.

13. Materials and Finishes

Contents in Section

Application

Appropriate selection of finishes can aid in the physical, visual, and auditory navigation of the built environment. Bright colors should be used to assist with wayfinding strategies.

13.1 Finishes

1. Tiles must be laid flush.
2. Design joints in walking surfaces must be no greater than 6 mm wide, with variations in level not more than 3 mm. Exterior joints must be laid to prevent the accumulation of rainwater.
3. Hard surfaces must be non-glare, firm and finished with a non-slip material.
4. Provide wayfinding through color contrast and TDI for primary paths and public spaces.
5. Carpets must be a low-level loop of 10 or 12 gauge non-static fiber, no zippered, and anti-microbial. Carpets must be directly glued to the subfloor.
6. Floor patterns must not be visually confusing.

13.2 Textures and Color

Heavy or distinct patterns can cause visual confusion. Simple, repetitive, nondirectional patterns that use monochromatic or low-color contrast must be used.

13.3 Color Contrast

1. Min 70% color / tonal contrast is required for signage, see Section 12 [Signage and Wayfinding].
2. Min 70% color / tonal contrast must be used as a safety measure to define edges or boundaries of objects. Examples include, but is not limited to:
    a. Jogs in walls to adjacent wall;
    b. Floor to wall,
    c. Door/door frame to wall, and
    d. Furniture from surrounding surfaces.

3. End or return walls in long corridors must have visual definition at the end of the space to also identify a change in direction.
4. Black must be avoided on large surfaces as it can be interpreted as voids or holes in walls and floor surface.

13.4 Textural Cues

Textural cues on floors, as noted in Section 10 [Tactile Walking Surface Indicators] or a change in materials can help define the junction between spaces.

13.5 Acoustics

1. The sound transmissions of different areas can be used as an orientation cue and help to navigate a space.
2. Floor, wall, and ceiling surfaces must aid in reducing unnecessary sound levels within a space.
3. It is recommended that accessible paths in large facilities vary materials used for primary and secondary paths so they can be differentiated by feel and sound.
4. When designing spaces, consideration must be given to the acoustic requirements of the space to reduce echoing and sound distortion.

Note: Hard surfaces such as marble or terrazzo amplify sounds, such as footsteps, and add another level of confusion for persons who are hearing or visually impaired. These materials are to be avoided.

13.6 Wayfinding – Using Materials and Finishes

Wayfinding strategies must be considered when selecting exterior and interior finishes. Texture, color, and acoustics are elements that can aid in wayfinding.

Clarington

Interior Elements & Amenities

2

14. Entrances

Contents in Section

Application

This section applies to pedestrian entrances into facilities. Entrances include all access and entry points into a facility. An entrance typically consists of several elements and includes the approach and route leading to a facility, the components of the entrance itself and transition area between exterior and interior environments (e.g., vestibule). It may also include an interior lobby or waiting area, where applicable.

14.1 Entrance Requirements

1. 100% of entrances for buildings must be accessible.
2. The main entrance must be located as close as possible to accessible parking and to passenger loading zones.

14.2 Vestibules

Entry vestibules must have a min 2500 mm clear turning circle plus the width of the door swing [Diagram 14.A].

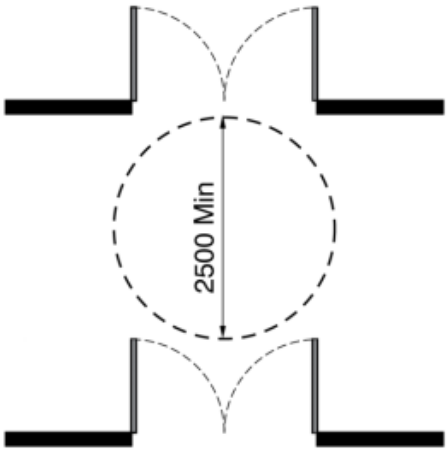


Diagram 14.A Vestibules

14.3 Ground Floor Entrances

At least 1 in 2 (50%) but not less than one accessible entrance must be provided to every space or suite located on the ground floor.

14.4 Gates

Gates must have a min clear width of 900 mm [Diagram 14.B].

14.5 Controlled Entrances

Turnstiles, mullions, revolving doors, or other barriers used to control access must have an adjacent accessible gate or door. The clear width for the adjacent accessible gate or door must be min 900 mm [Diagram 14.B].

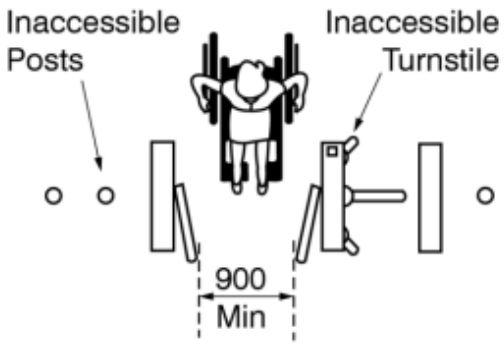


Diagram 14.B Accessible Gates

14.6 Other Access Points

1. Provide an interior accessible path to entrances and exits within a building and an exterior accessible path leading away from the exits at grade. The exterior path must meet the requirements in Section 40 [Exterior Paths] and must lead to a public thoroughfare.
2. Where access is provided for pedestrians from a pedestrian tunnel, walkway, or pedestrian bridge, at least one entrance to the facility from each tunnel, walkway, or bridge must be accessible.
3. Loading docks are not considered an entrance and are not required to be accessible.
4. If the only entrance to a facility or tenancy is a service entrance, that entrance must be accessible.
5. Accessible paths must be provided from transit stops, parking lots, or pedestrian paths to all accessible entrances of a building.

14.7 Signage

1. Signage must:
    a. Have directions indicating the nearest accessible entrance where building entrances and exits are not accessible, and
    b. Comply with Section 12 [Signage and Wayfinding].

15. Doors

Contents in Section

Application

This section applies to all interior and exterior doors intended for staff and public use, which lead into, out of and through a facility. The provision of accessible doors as part of an accessible route is an important consideration for all users of a facility. Where doors have more than one independently operated leaf (e.g., at a bank of doors), at least one of the door leafs is required to be accessible, meeting the criteria identified in this Section.

15.1 Door Specifications

1. All doors in a building must:
    a. Have a min 900mm clear width [Diagram 15.A], and
    b. Have min 70% colour / tonal contrast to differentiate the door frame from the adjacent wall. The door and the door frame can be the same colour. If there is no closer provided on the door, the edge of the door must have min 70% colour / tonal contrast from the door face.
2. Doors not requiring full user passage, such as shallow closets, must have a min 510 mm clear width and meet all space and reach requirements.
3. Where panic hardware is provided on a door, the clear width must be measured from the face of the panic hardware to the face of the door stop.

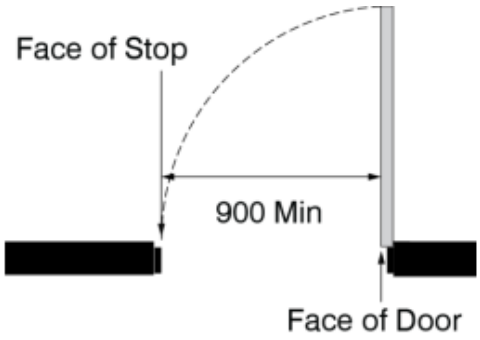


Diagram 15.A Clear Door Width

15.2 Maximum Opening Force of Doors

1. Max opening force of 38N for exterior doors.
2. Max opening force of 22N for interior doors and sliding doors.

15.3 Latch Side Clearances

1. Sliding doors must have 300 mm latch side clearances on both sides of the door.
2. Swing doors must have latch side clearances meeting the requirements in [Table 15.3.1] [Diagram 15.D].

Table 15.3.1 Latch Side Clearances

	Min. Latch Side Clearances	Min. Maneuvering Space
Push Side	300 mm	1300 x 1300 mm
Pull Side	600 mm	1600 x 600 mm

15.4 Vision Panels in Doors

1. Vision panels must:
    a. Be min 75 mm wide,
    b. Have the bottom edge of the panel max 760 mm AFF,
    c. Have the side edge of the panel max 250 mm from latch side [Diagram 15.B], and
    d. Where part of a wall assembly requiring fire resistance (e.g., Area of Refuge), comply with the requirements in the latest edition of OBC for fire resistance.

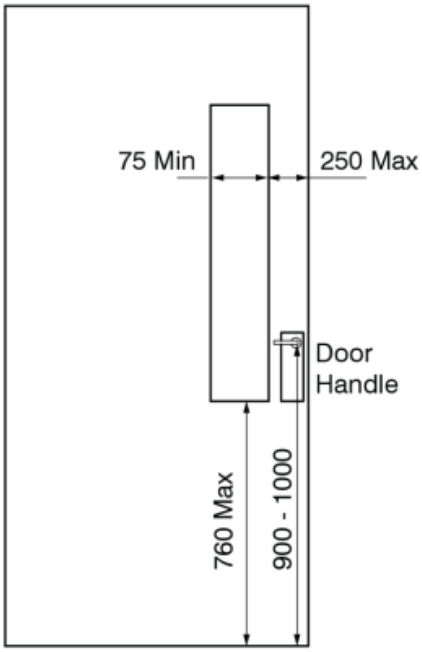
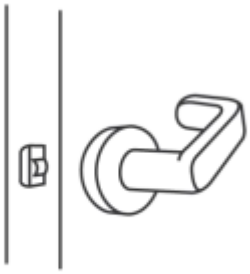


Diagram 15.B Vision Panel in Doors

15.5 Door Hardware

1. Door hardware must:
    a. Be operable by a closed fist [Diagram 15.C],
    b. Not require fine finger control, tight grasping, pinching, or twisting of the wrist, such as lever hardware, and
    c. Be mounted 900 mm to 1000 mm AFF.
2. Min 70% colour / tonal contrast must be used to differentiate the door operating mechanism from the door itself.



Lever type hardware is acceptable

Diagram 15.C Door Hardware

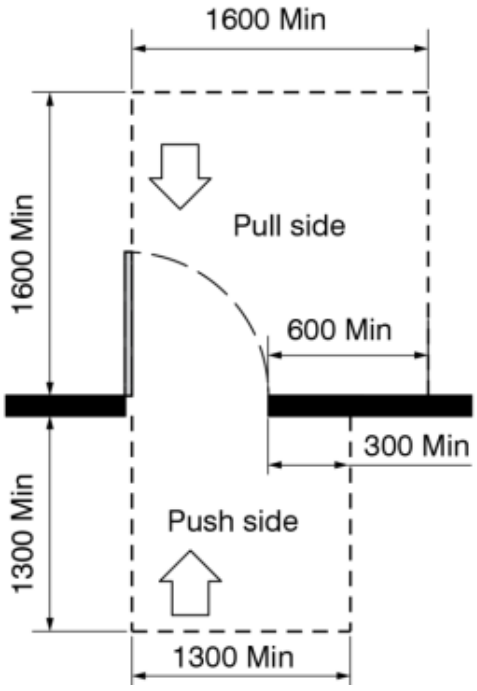


Diagram 15.D Latch Side Clearances and Maneuvering Space

15.6 Guards for Doors

1. Where doors swing into a path of travel, a cane detectable guardrail or other warning barrier must be located at right angles to the wall containing the door, extending 300 mm beyond the full length of the door [Diagram 15.E].
2. Door guards shall have a height of 865 mm to 965 mm AFF with a portion of the guard located at max 680 mm AFF for cane detection.

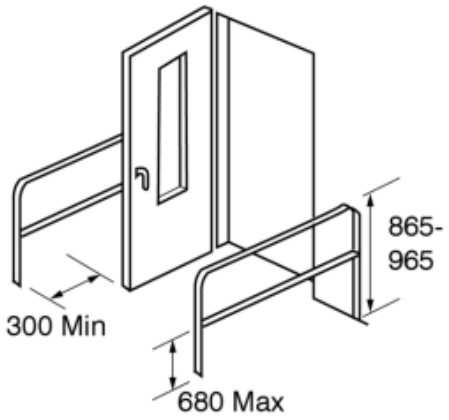


Diagram 15.E Guards for Doors

15.7 Door Closers

Closing period for a door must not be less than 3 seconds, measured when the door is in an open position of 70 degrees to the doorway to when the door reaches a point 75 mm from the closed position.

15.8 Glass Doors and Vision Strips

1. When frameless glass doors are provided, a min 70% colour / tonal contrast strip is required on the full height of the outer edge of the door.
2. Vision strips are required on glass doors and must meet the criteria in subsection [Diagram 17.A].

15.9 Doors in Series

Where there are two doors in series, they must be designed to accommodate a clear floor space at least 2500 mm [Diagram 15.F and Diagram 15.G].

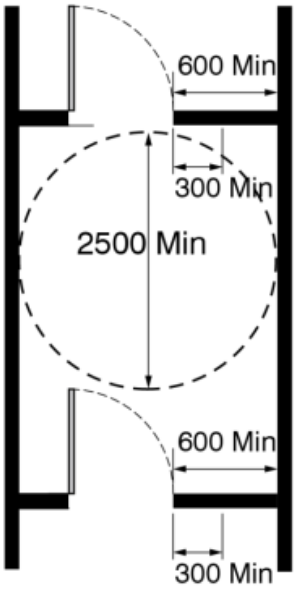


Diagram 15.F Doors in Series, Straight Run

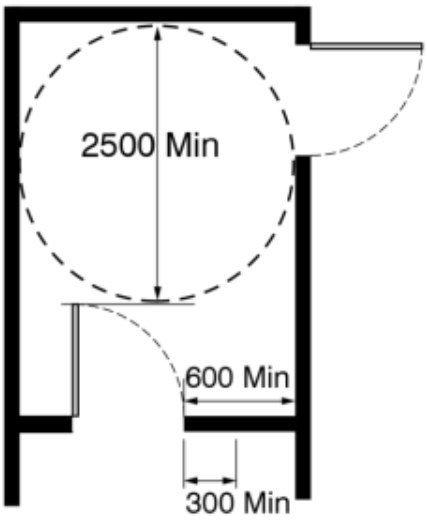


Diagram 15.G Doors in Series, 90 Degree Turn

16. Power Door Operators

Contents in Section

Application

Provide power door operators for high frequency doors (e.g., large meeting / multipurpose rooms) in new construction. Consider providing roughed in power for future power door operators at other locations. Where more than one power door operator controls are mounted on the same wall, provide directional signage to indicate which push button activates which door. Long extended power door operator controls allow activation from any approach and height level.

16.1 Types

1. There are three types of power door operators:
    a. An elongated single activation device (push panel) min 150 mm x 750 mm [Diagram 16.B], and
    b. A circular device (push button) min 150 mm in diameter [Diagram 16.C].
    c. A touchless (wave or motion) device.
2. In high traffic areas, such as entrances, provide automatic sliding doors.

16.2 Required Locations

1. Power door operators must be installed at:
    a. All accessible entrances,
    b. Interior doors along accessible paths, except for doors with an electromagnetic hold-open device,
    c. Doors entering accessible washrooms and change rooms,
    d. Doors entering all public meeting rooms,
    e. 10% of staff utilized meeting rooms, and
    f. Doors entering publicly accessed reception areas.

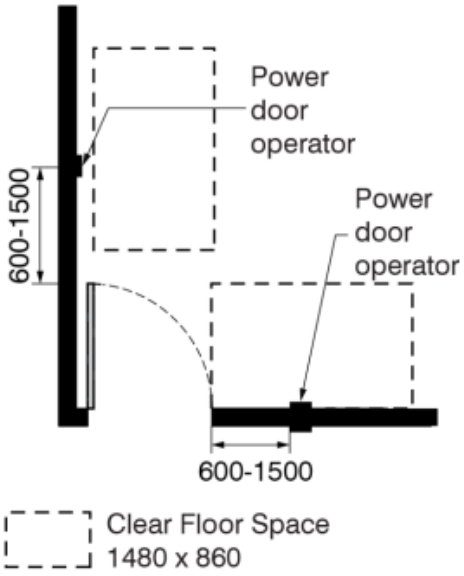


Diagram 16.A Locations of Power Door Operators and Required Clear Floor Space

16.3 Placement

1. Power door operators must be:
    a. Clearly visible on the push and pull side of the door,
    b. Located on the latch side of the door,
    c. Located min 600 mm from any inside corner or door [Diagram 16.A], and
    d. Located max 1500 mm beyond the door swing [Diagram 16.A].
2. If an elongated power door operator panel is installed, it must be located with the bottom edge max 150 mm AFF and the top edge min 900 mm AFF [Diagram 16.B].
3. If a circular power door operator is installed it must be located between 900 mm to 1100 mm AFF [Diagram 16.C].

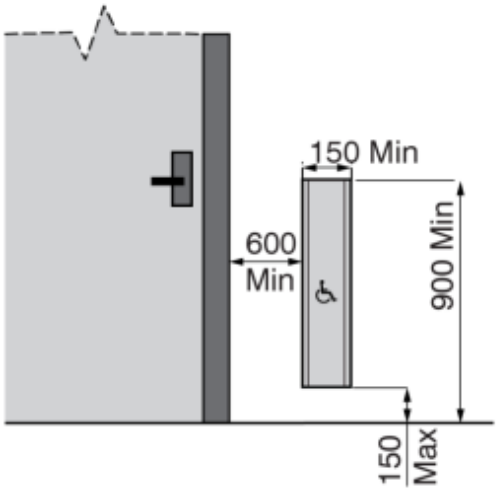


Diagram 16.B Elongated Power Door Operator (push panel)

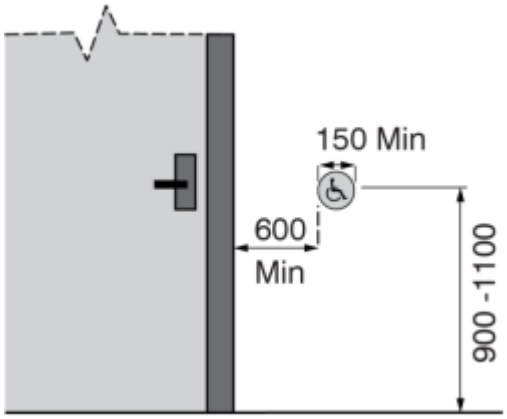


Diagram 16.C Circular Power Door Operator (push button)

16.4 Additional Design Requirements

1. A clear floor space of 860 mm x 1480 mm must be maintained in front and centered on the power door operator [Diagram 16.A]. Refer to [Diagram 15.D] for latch side clearance and maneuvering space and [Diagram 15.E] for doors opening into an accessible path.
2. The power door operator (button or panel) must incorporate the International Symbol of Access.
3. Each power door operator must have min 70% color / tonal contrast from its surroundings.
4. It must take the power door operator a max of 3 seconds to move from the closed position to a fully open position.
5. Door must remain open for a full 5 seconds (min).
6. A max force of 66N is required to stop door movement.
7. Where door operators are activated by proximity scanning sensors or pressure mats, they must be capable of detecting individuals using mobility devices.
8. Wireless power door operator must be used for window mullions. Batteries must be replaced annually or as required.

17. Windows and Glazing

Contents in Section

Application

Design consideration for windows and glazing allows for viewing by all building occupants.

17.1 Vision Strips

1. Where glazing starts below 680 mm AFF, windows, glazed screens or vision panels must be marked with vision strips that has min 70% colour / tonal contrast with the surrounding environment [Diagram 17.A].
2. Vision strips must:
    a. Be located at 1350 mm to 1500 mm and at 1170 mm to 1200 mm AFF,
    b. Span across the full length of the glazed area,
    c. Be min 75 mm wide,
    d. Be primarily solid, and
    e. Have min 70% color / tonal contrast.

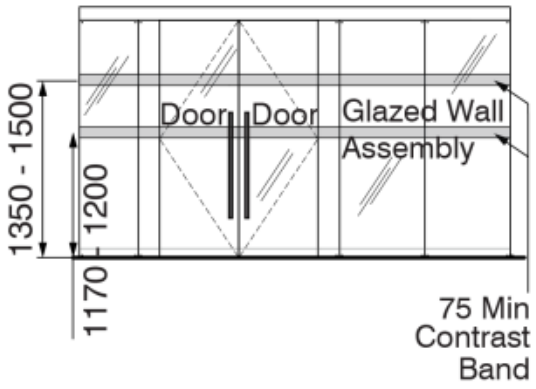


Diagram 17.A Vision Strips

17.2 Sill Height

1. Windows must
    a. Have bottom sill edge max 680 mm AFF, and
    b. Not have horizontal transoms located between 1060 mm to 1220 mm AFF.

17.3 Glazed Vision Panels

Where provided, full height glazed vision panels must meet criteria in Subsection 15.4 [Vision Panels in Doors].

17.4 Operable Windows

1. Operable windows must:
    a. Have opening hardware mounted 400 mm to 1200 mm AFF, and
    b. Be operable using one hand.
2. It is recommended to provide hardware that does not require fine finger control, tight grasping, pinching, or twisting of the wrist.

18. Passenger Elevators and Escalators

Contents in Section

Application

Passenger lifts are not considered accessible, as they generally cannot be operated independently. Passenger lifts that require a special key or any other operation that limits independence are not permitted.

In addition to escalators, consideration must be given to install elevators or ramps to floor levels as persons utilizing mobility devices, or persons pushing children in strollers may not be able to navigate an escalator.

18.1 Elevator Design

This section is adopted from the CSA B651-18 Annex E and includes only some of the requirements within the CSA standard. For a complete understanding of all requirements for the design of passenger elevators refer to the CSA Standard, the latest edition of the OBC and Technical Standards & Safety Authority.

18.2 Elevator Doors

1. Elevators doors must:
    a. Have a min 915 mm clear width [Diagram 18.A],
    b. Slide horizontally only,
    c. Have a matte finish to reduce glare,
    d. Be capable of operating independently, and
    e. Open and close automatically.

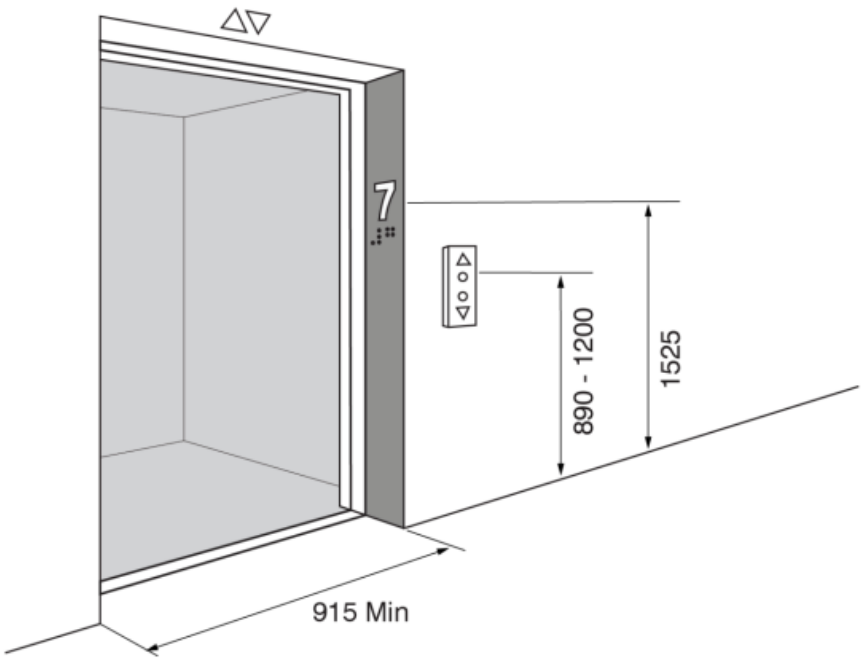


Diagram 18.A Elevator Cab and Elevator Lobby

18.3 Door Reopening Device/Sensor

1. The elevator car door must automatically open if an object or a person obstructs the door.
2. Physical contact with an obstruction is not required for the doors to reopen automatically.
3. Reopening devices located 125 mm ± 25 mm to 735 mm ± 25 mm AFF.
4. If door closes it must reopen automatically if an object or person is still in the doorway.

18.4 Door and Signal Timing

1. Door and signal timing must be:
    a. Min 5 seconds hall call notification time, and
    b. Min 10 seconds for elevator doors to remain open.

18.5 Elevator Cab Design

1. Cabs must be min 2030 mm x 1295 mm cab size with a center door or 1725 mm x 1295 mm cab size with an off-center door.
2. Handrails must be on the cab interior wall except where the elevator door is located and meet requirements in Section 7 [Handrails].
3. Mirrors must be provided on the wall opposite the door, angled downwards at the top of the cab. Mirrors must not be used elsewhere within the elevator cab.
4. The cab interior must have a glare free finish.
5. Floor surface must be firm, level, and slip resistant.

18.6 Color Contrast in Elevator Cabs

1. Min 70% color / tonal contrast must be provided:
    a. Between control buttons and control panel,
    b. Between floor surface and elevator car walls, and
    c. Between elevator lobby floor and car walls and floor.

18.7 Maneuvering Space in Elevator Lobbies

1. Provide a min clear floor space of 2500 mm x 2500 mm in front of elevator doors.
2. Elevator lobbies must be connected to an accessible path.

18.8 Elevator Signage

1. Elevator signage must be:
    a. Placed on door jamb 1525 mm above floor to the center of number [Diagram 18.A],
    b. Min 50 mm high, and
    c. Repeated in Braille [Diagram 18.B].
2. The main floor level must be indicated by a raised “star” symbol [Diagram 18.B].

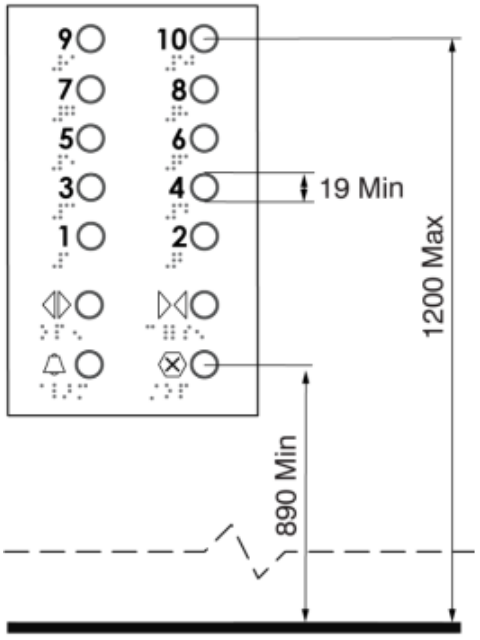


Diagram 18.B Elevator Car Control Buttons

18.9 Visual and Audible Signals

1. Audible and visual signals must be provided in the elevator cab interior and every elevator lobby and must:
    a. Indicate which elevator car is answering the call,
    b. Indicate the direction of travel,
    c. Be visible within the elevator lobby,
    d. Be located above the elevator door in the elevator lobby, and
    e. Have voice annunciation [Diagram 18.B].
2. Audible signals must be a min 10% above the ambient noise level to max 80dBA.

18.10 Elevator Operation and Levelling

1. Elevator operation and level must be automatic. The elevator cab must be equipped with an automatic self-levelling device to maintain a max floor level difference of 13 mm.

18.11 Elevator Car Control Buttons

1. Elevator car control buttons must:
    a. Have numbers arranged in ascending order from left to right on panel,
    b. Be located 890 mm to 1200 mm AFF, [Diagram 18.B]
    c. Be min 19 mm in diameter,
    d. Have a raised collar surrounding button min 1.5 mm,
    e. Have raised tactile characters,
    f. Have Braille located immediately adjacent to which they apply,
    g. Have an alarm button located at the bottom of the panel, directly connected to monitor system,
    h. Have operable portions of card access readers located 900 mm to 1100 mm AFF,
    i. Have visible signals that show when a call has been registered, and
    j. Provide hands free emergency signaling and communications.

18.12 Escalator Requirements

1. Escalators are not considered accessible; therefore, where escalators are used, an alternative accessible path of travel must be provided.
2. The path of travel must be conveniently located adjacent or near the escalator and signage must clearly identify access to the accessible path.

18.13 Escalator Requirements

1. Tread edges, nosing and handrails must have min 70% color / tonal contrast from their surrounding environment.
2. Matte finish must be used to minimize reflected glare.

18.14 Tactile Attention Indicator (TAI) Location

Escalator landings must have TAI at the top and bottom of the escalator and must meet the requirements in Section 10 [Tactile Walking Surface Indicators]

19. Service Counters and Related Areas

Contents in Section

Application

Tables, counter, and work surfaces must accommodate the needs of a range of users for both employees and the public.

19.1 Service Counters

1. At least 10%, but not less than one, of every type of service counter must be accessible and must:
    a. Be clearly identified with tactile signage including Braille and the International Symbol of Access,
    b. Be located on an accessible path, and
    c. Have a min 860 mm x 1480 mm clear floor space where a max of 500 mm can be below counter if front approach is required [Diagram 19.B and Diagram 19.C].

19.2 Accessible Service Counter

1. Accessible service counters must:
    a. Have a max 800 mm height to the counter surface [Diagram 19.A],
    b. Have a knee space that is 700 mm tall x 900 mm wide x 500 mm deep, and
    c. Have a toe space that is 350 mm tall at a min 600 mm from the front edge of the desk for toe clearance.
2. Ensure any design features available are designed in accordance with Section 1 [Space and Reach Requirements].

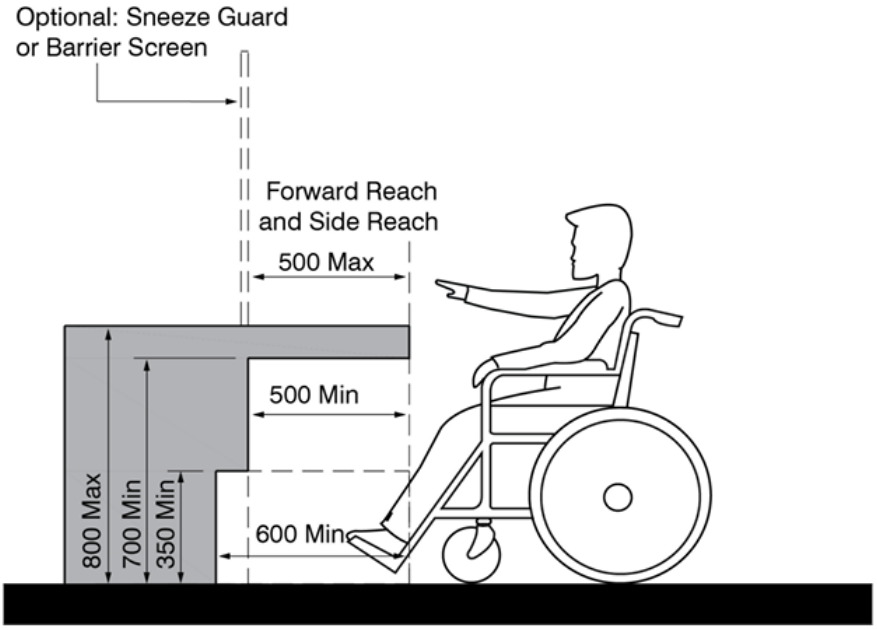


Diagram 19.A Clear Floor Space at Service Counters

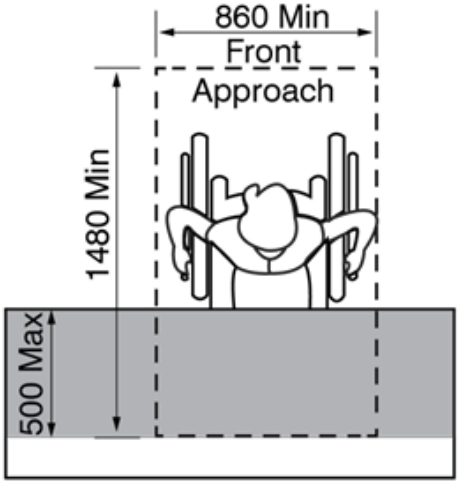


Diagram 19.B Clear Floor Space at Service Counters (Front Approach)

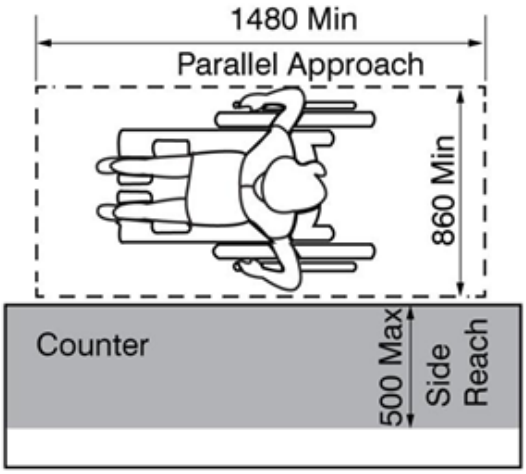


Diagram 19.C Clear Floor Space and Reach Range at Service Counters (Side Approach)

19.3 Assistive Listening System

Consideration must be given to providing an audio induction loop assistive listening system. When an assistive listening system is provided, it must be identified with signage incorporating the International Symbol of Access for Hearing Loss with the addition of text/symbol indicating the type of service provided. Signage must comply with Section 12 [Signage and Wayfinding].

19.4 Sneeze Guards and Barrier Screens

1. Where sneeze guards or barrier screens are provided, they must:
    a. Have lighting that optimizes visual communication, lipreading and/or speechreading,
    b. Have lighting that minimizes reflection on glazed component,
    c. Allow lines of sight from a sitting or standing position,
    d. Have lowered speaking ports if any speaking port is provided. The lowered speaking port must have the open portion between 1000 mm to 1050 mm AFF. A second speaking port at 1400 mm AFF should be provided for standing use, and
    e. Consider provision of a microphone to amplify low vocal volume where surrounding acoustics can mask the interaction.

19.5 Waiting Areas

1. At least 10% of waiting area spaces must accommodate a person using a mobility device.
2. Accessible waiting areas must be located on an accessible path, with a min 860 mm x 1480 mm clear floor space, located outside the path of travel and integrated into the seating [Diagram 19.D].
3. Seating should include options with and without armrests.

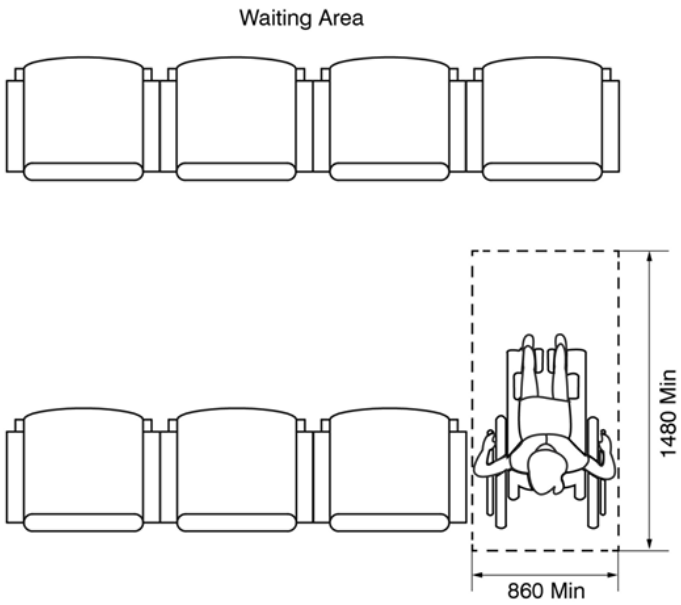


Diagram 19.D Rear Access Waiting Area

19.6 Queuing Guides

1. A clear width min 1100 mm must be provided between fixed queuing guides such as ropes, bars, or solid barriers. Guides must be laid out in parallel lines [Diagram 19.E].
2. Queuing guides must have min 70% color / tonal contrast to surroundings.
3. Directional indicating TWSI meeting the requirements of Section 10 [Tactile Walking Surface Indicators] are required if queuing guides are permanent.
4. Provide a clear floor space of 2500 mm x 2500 mm at points where there is a change in direction [Diagram 19.E].
5. Visual and auditory signals must be provided at service counters to indicate when service is available and at what location.

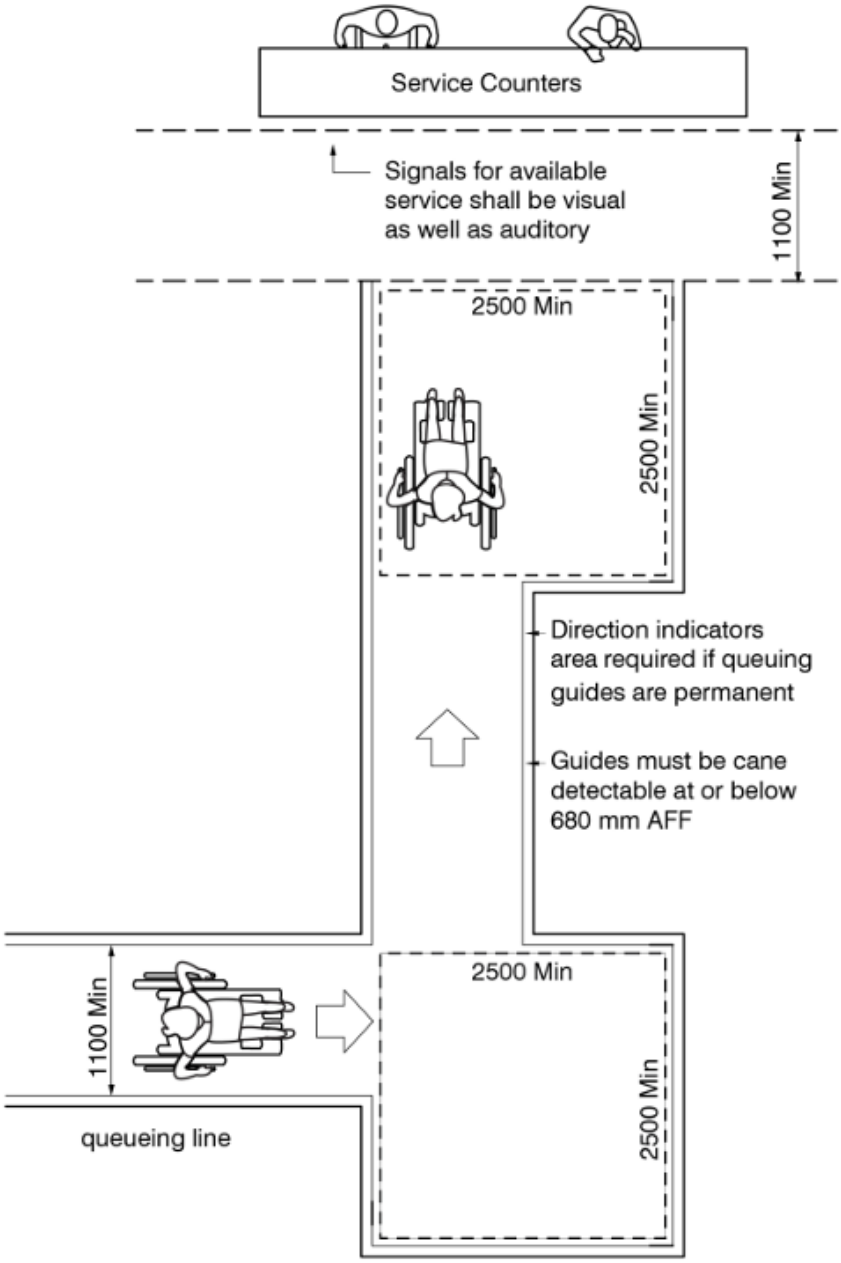


Diagram 19.E Clear Floor Space at Queuing Guides

20. Millwork, Storage and Shelving

Contents in Section

Application

If fixed or built-in storage units such as cabinets, closets, shelves, and drawers, are provided in accessible spaces, at least one of each type provided must be accessible.

20.1 Accessible Storage, Shelving and Display Units Design Requirement

1. Accessible storage, shelving, and display units must meet the following:
    a. 860 mm x 1480 mm clear floor space for forward or parallel approach,
    b. Max 1200 mm AFF for collapsible hooks or closet rods [Diagram 20.A],
    c. 230 to 1200 mm AFF for shelves [Diagram 20.A], and
    d. Touch latches or u-shaped pulls must be used. Any hardware used must meet criteria in Section 9 [Operable Controls and Mechanisms].

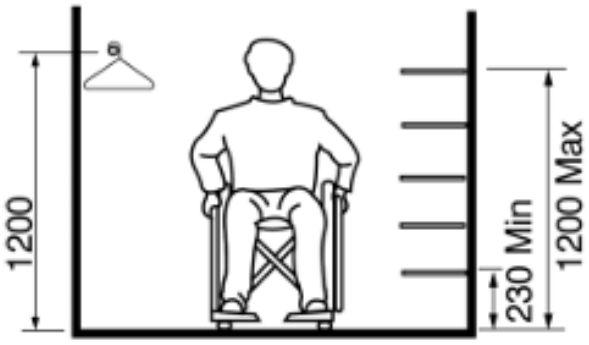


Diagram 20.A Accessible Storage and Shelving

21. Multi-Stall Washrooms

Contents in Section

Application

Accessible multi-stall washrooms and accessible universal washrooms are required on each floor.

21.1 Amount of Accessible Water Closet Stalls

1. The number of accessible water closet stalls is required to comply with [Table 21.1.1]

Table 21.1.1 Number of Accessible Water Closets Required

Number of Water Closet Stalls	Number of Accessible Water Closet Stalls Required
1-9	1
10-16	2
17-20	3
21-30	4
Greater than 30	5 + 1 for every additional 10 water closet stalls

21.2 Accessible Water Closet Stall Door

1. Stall doors for accessible water closet stalls must:
    a. Be min 900 mm in clear width [Diagram 21.B],
    b. Identified with the International Symbol of Access,
    c. Swing outward,
    d. Have 300 mm latch side clearance on push side and 600 mm latch side clearance on pull side, and
    e. Be equipped with gravity and lift off hinges.
2. All stall doors (including accessible and non-accessible water closet stalls) must have min 70% color / tonal contrast from the stall partitions.

21.3 Accessible Stall Door Hardware

1. Accessible stall door hardware must:
    a. Have “D type” door pulls.
    b. Be min 140 mm long and have a depth between 30 mm to 50 mm,
    c. Have door pull mounted on both sides vertically with the centerline 120 mm to 220 mm from the latch,
    d. Have door pull mounted on both sides horizontally with the centerline on the vertical center of the door,
    e. Be mounted 900 mm to 1000 mm AFF, and
    f. Have locks operable with a closed fist hand and not require fine finger control, tight grasping, pinching, or twisting of the wrist [Diagram 21.A].
2. Collapsible coat hooks must be provided, projecting a max 50 mm outward, with a height between 900 mm and 1200 mm AFF.

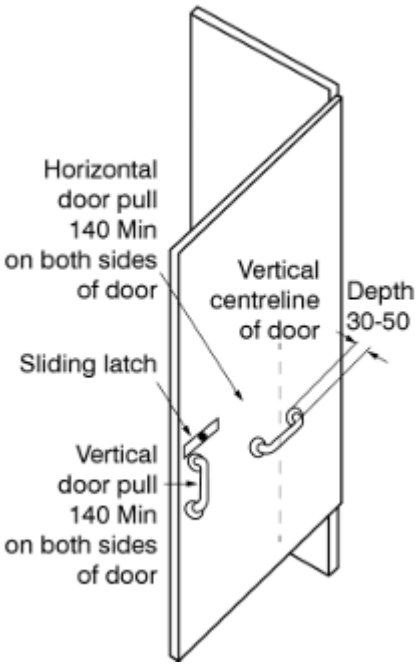


Diagram 21.A Accessible Water Closet Stall Door

21.4 Accessible Water Closet Stall

1. Where required, the accessible water closet stall must:

    a. Have min 1500 mm turning circle [Diagram 21.B]. In a change area where a universal change room is not provided, have min 2500 mm turning circle,

    b. Have min 900 mm x 1500 mm clear transfer space on one side of the water closet and be unobstructed by accessories (e.g., shelves, sanitary napkin disposal, etc.) [Diagram 21.B],

    c. Have a water closet conforming to Subsection 21.6 [Accessible Water Closets], and

    d. Have grab bars and toilet paper dispensers conforming to Section 22 [Grab Bars and Toilet Paper Dispensers].

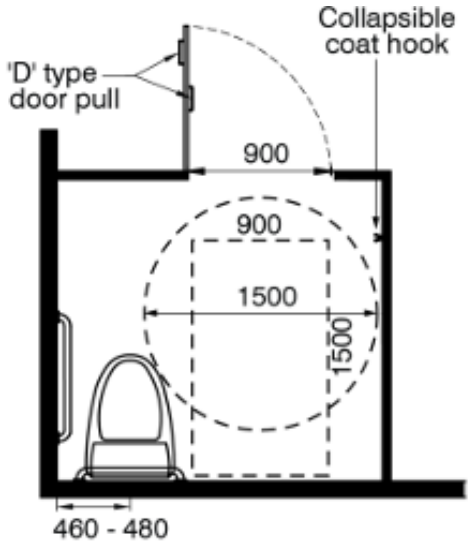


Diagram 21.B Accessible Water Closet Stall

21.5 Accessible Urinals

1. Provide at least one accessible urinal where urinals are provided. Accessible urinals must:

    a. Have a 860 mm x 1480 mm clear floor space, without any steps, in front of and centered on the accessible urinal [Diagram 21.C],

    b. Have min 920 mm clearance between privacy screens or walls,

    c. Be max 375 mm AFF to the urinal rim or located on the floor [Diagram 21.C],

d. Have min 345 mm depth [Diagram 21.D]

e. Have automatic flush controls, mounted 900 mm – 1100 mm AFF,

f. Privacy screens must be min 460 mm from the center line of the urinal, min 50 mm from the leading edge of the grab bar and have a min 70% color / tonal contrast edge [Diagram 21.C], and

g. Have grab bars meeting criteria in Subsection 22.4 [Urinal Grab Bars] [Diagram 21.C].

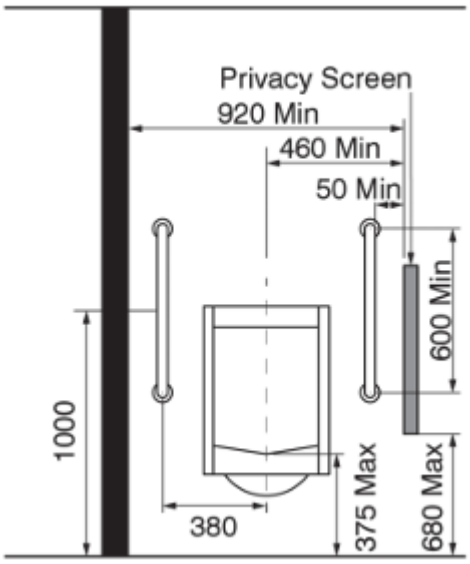


Diagram 21.C Accessible Urinal Front Elevation

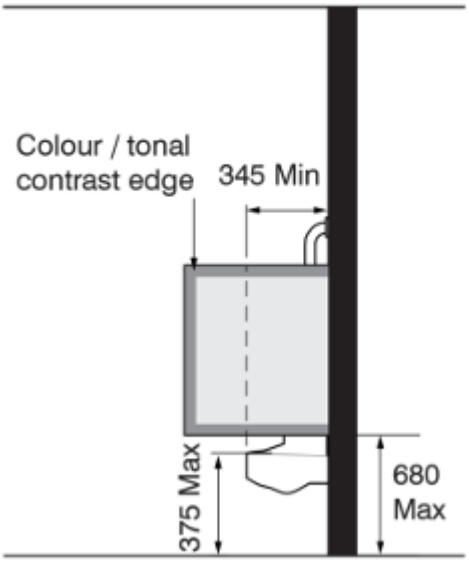


Diagram 21.D Accessible Urinal Side Elevation

21.6 Accessible Water Closets

1. The accessible water closet must be 460 mm to 480 mm from the centerline of the water closet to the adjacent wall [Diagram 21.B].
2. The seat of an accessible water closet must be located 430 mm to 460 mm AFF, must be securely mounted and not spring activated [Diagram 21.E].
3. Where a seat cover or tank style water closet is not provided, a back support must be installed.
4. Flush controls must be automatic or operated with a push button or lever. Automatic sensors must be located such that when the seat cover is open, it will not block the

sensor. Operable flush controls must be located on the transfer side and operable using a closed fist with minimal effort and max force of 22N.

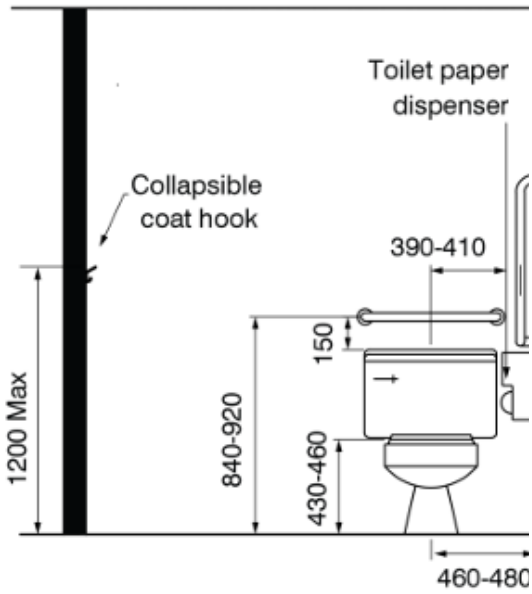


Diagram 21.E Accessible Water Closet and Grab Bars Front Elevation

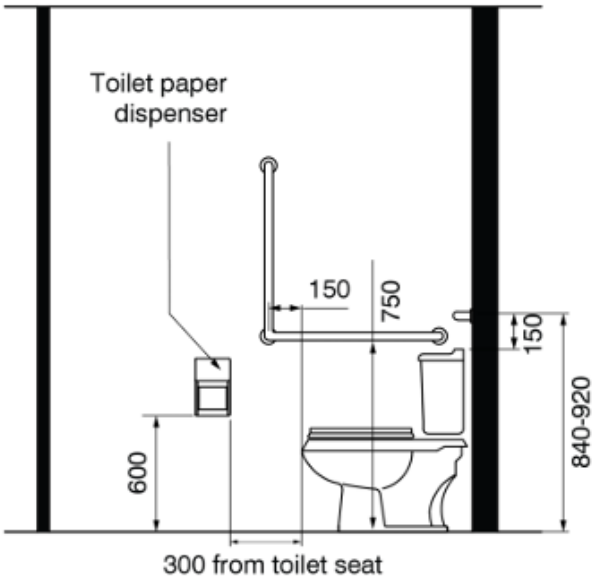


Diagram 21.F Accessible Water Closet and Grab Bar Side View

21.7 Multi-Stall Washroom

1. Accessible multi-stall washrooms must:
    a. Incorporate a clear floor space of 1800 mm x 1800 mm [Diagram 21.G],
    b. Have min 1700 mm clearance between the outside face of an accessible stall to the inside face of an in-swinging entrance door,
    c. Have min 1400 mm clearance between the outside face of an accessible stall and any wall mounted fixture or obstruction, and
    d. Have min 1500 mm x 1500 mm clear floor space in front of the accessible water closet stall [Diagram 21.G].

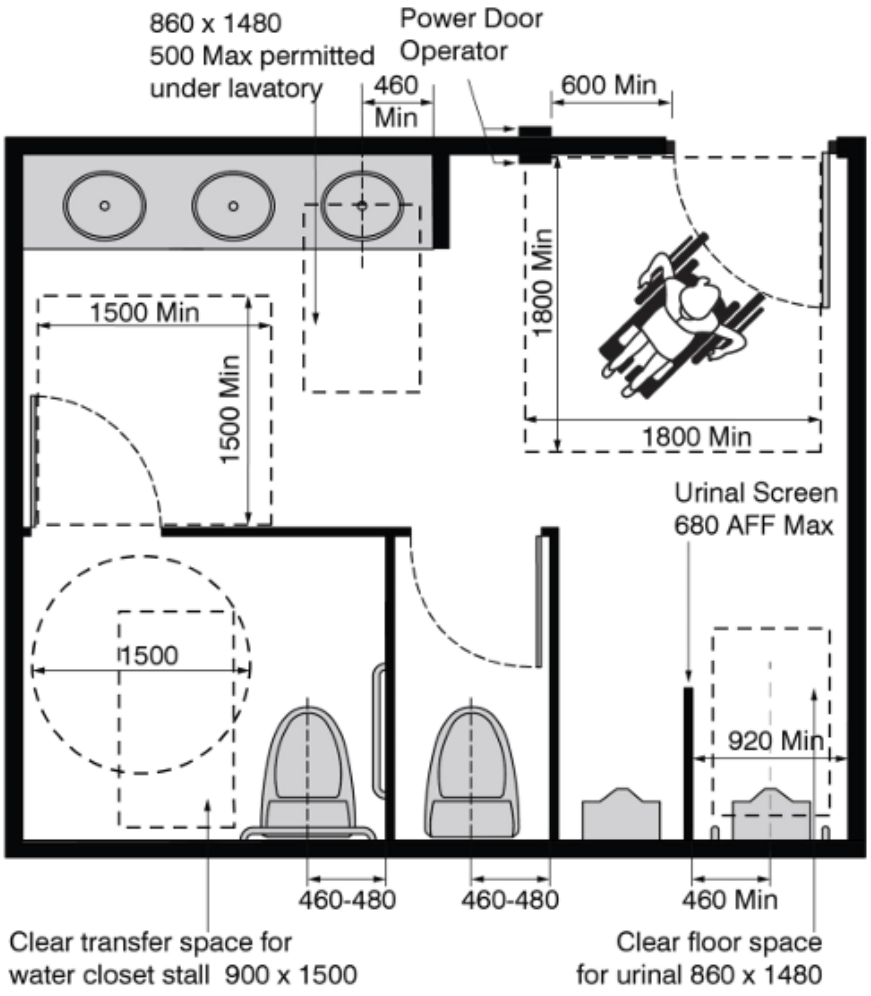


Diagram 21.G Washroom Dimensions

21.8 Baby Change Tables

Baby change tables allow parents and carers to change and clean up a baby/toddler while out in public spaces safely and securely. They should be designed to be easy to use and located near lavatories to enhance hygiene and sanitation.

1. Baby change tables are required in each muti-stall washroom;
2. Have a surface height of 860mm AFF [Diagram 21.H];
3. Have operable portions or controls that are mounted 900mm-1050mm [Diagram 21.H];

4. Are designed to support a load of 0.22KN, or 50lbs;

5. Have colour/brightness contrast edge from the back wall and at the portion to open the baby change table.

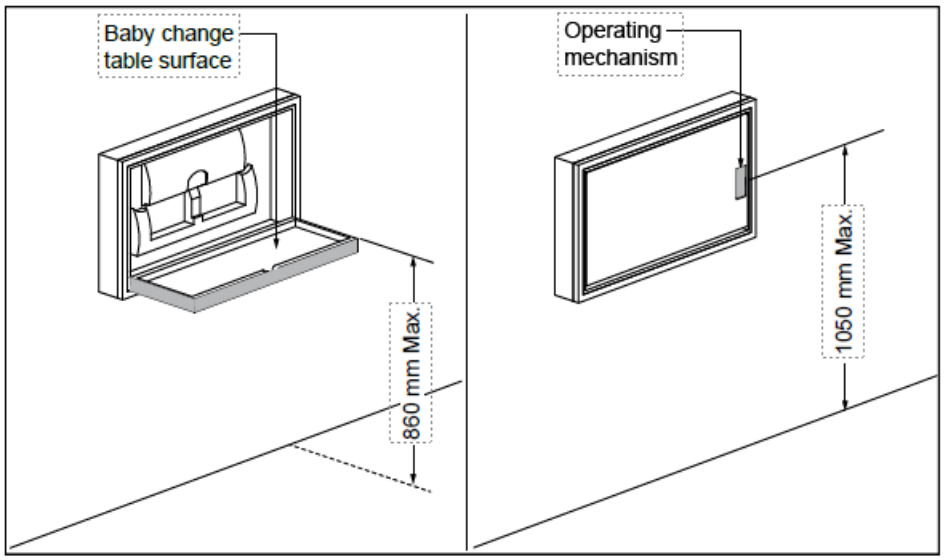


Diagram 21.H - Baby Change Table

21.9 Signage

1. Where accessible water closets are not provided in a gender specific washroom and the universal washroom is not visible from the entrance to the common or multi-stall washroom, directional signage must be provided and meet requirements in Section 12 [Signage and Wayfinding].

22. Grab Bars and Toilet Paper Dispensers

Contents in Section

Best Practices

Every accessible water closet and accessible urinal must have grab bars, which must be securely attached to the wall to support the weight of a person. Fold down grab bars should be installed at each accessible water closet.

22.1 Grab Bar Dimensions

1. Grab bars must have:
    a. A diameter between 35 mm and 40 mm [Diagram 22.A],
    b. A 50 mm clearance between the grab bar and the wall,
    c. No sharp or abrasive elements, and
    d. A slip-resistant surface.

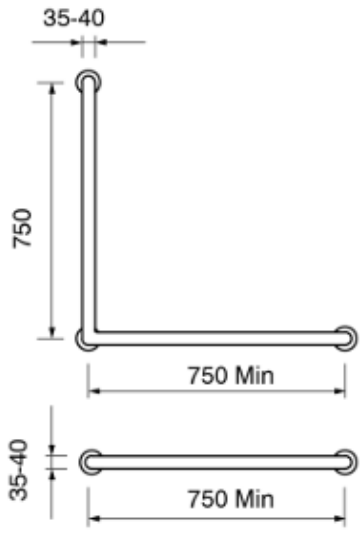


Diagram 22.A Grab Bar Dimensions

22.2 Water Closet Grab Bars

1. Two grab bars are required to be mounted adjacent to an accessible water closet. They are as follows:

a. One 750 mm long grab bar mounted behind toilet, between 840 mm and 920 mm AFF. Where a water tank is provided, mounted 150 mm above the tank [Diagram 21.E and Diagram 22.A], and

b. One 750 mm by 750 mm L-shaped grab bar on the wall beside the water closet, with the horizontal component mounted 750 mm AFF, and the vertical component located 150 mm from edge of water closet [Diagram 21.D and Diagram 22.A].

22.3 Fold Down Grab Bars

Where fold down grab bars are provided:

1. Mount on the wall behind the toilet,
2. Locate on the transfer side,
3. Ensure length of 760mm min,
4. Mount with centerline between 390mm and 410mm from centerline of the toilet [Diagram 22.B],
5. Mount with the horizontal component at 750mm high from floor level [Diagram 22.C], and
6. Ensure the force required to pull down the grab bar is no more than 22N.

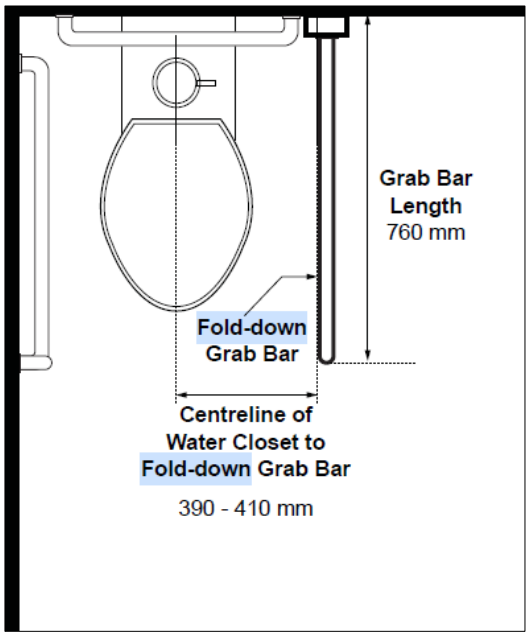


Diagram 22.B Fold Down Grab Bar – Plan View

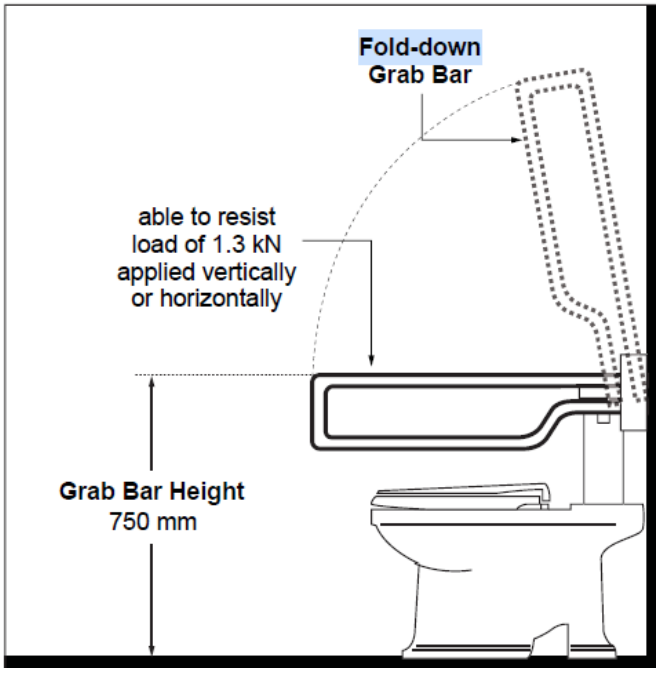


Diagram 22.C Fold Down Grab Bar – Side View

22.4 Toilet Paper Dispenser

1. The toilet paper dispenser must
    a. Be located below the grab bar,
    b. Be 300 mm in front of toilet seat to the closest edge of the toilet paper dispenser, and
    c. Have bottom edge between 600 mm and 800 mm AFF [Diagram 21.F].

22.5 Urinal Grab Bars

Accessible urinals require two grab bars on each side of the urinal min 600 mm long, vertically mounted 380 mm from the centerline of the urinal, mounted 1000 mm AFF from centerline of the grab bar [Diagram 21.C].

23. Lavatories

Contents in Section

Application

If consistency is intended in design, provide all lavatories at an accessible height with clear knee and toe space.

Provide at least one accessible lavatory in every accessible washroom.

23.1 Knee and Toe Clearance

1. Knee and toe clearance must be provided for every accessible lavatory and conform to the following:

    a. Max 865 mm AFF to top of vanity [Diagram 23.A],

    b. 920 mm wide x 500 mm deep x 735 mm high at the front edge from the underside of the lavatory,

    c. Have a knee space that is 685 mm high at min 205 mm from the front edge of lavatory, and

    d. Have a toe space that is 350 mm high at min 300 mm from the knee space.

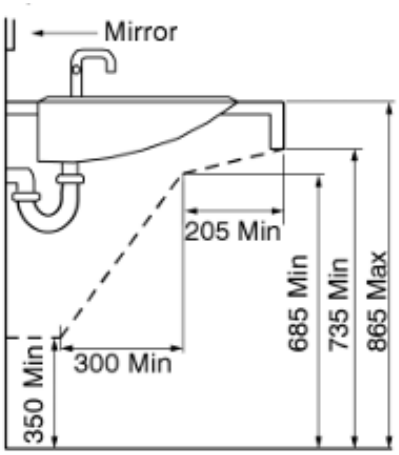


Diagram 23.A Lavatory Design

23.2 Lavatory Clear Floor Space and Location

1. Min 860 mm x 1480 mm clear floor space in front of and centered on the lavatory, where max 500 mm can be below the lavatory [Diagram 23.B].
2. Lavatory must be min 460 mm from the centerline of the lavatory to the adjacent wall [Diagram 23.B].

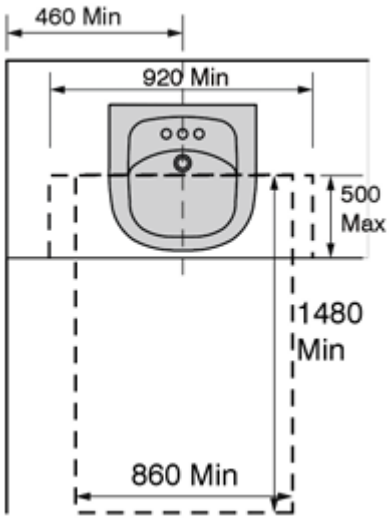


Diagram 23.B Accessible Lavatory Plan

23.3 Other Design Considerations

1. Faucet handles must be lever type or automatic sensors.
2. Exposed pipes must be insulated to prevent burns, or the water temperature must be limited to max 43ºC.
3. Soap dispensers must be located max 500 mm from the front edge of the lavatory and meet criteria in Section 24 [Washroom Accessories].
4. Towel dispensers must be located max 610 mm from the front edge of the lavatory and meet criteria in Section 24 [Washroom Accessories].
5. Consider providing plumbing trim in finishes darker and less mirror-like than polished chrome to which can be more easily seen.

24. Washroom Accessories

Contents in Section

Application

Washroom accessories include (but not limited to): paper towel dispensers /disposal receptacles, shelves, hand dryers, paper towels, soap dispensers, and vending machines. Grab bars and toilet paper dispensers have specific mounting requirements and can be found in Section 22 [Grab Bars and Toilet Paper Dispensers]

24.1 Washroom Accessories

1. A clear floor space of 860 mm x 1480 mm is required in front of controls and operating mechanisms for washroom accessories.
2. The dispensing height and operable portion of washroom accessories must be between 900 mm and 1100 mm AFF [Diagram 24.A].
3. A max of 100 mm can protrude into the accessible path within the washroom, otherwise, the item must be cane detectable at max 680 mm AFF.
4. Accessories must be automatic or operable with one closed fist applying max force of 22N to operate.
5. Waste receptacles must be open topped and located out of the accessible path.
6. Mirrors must be max 1000 mm AFF and not be inclined/tilted. Full length mirrors must start max 175 mm AFF.

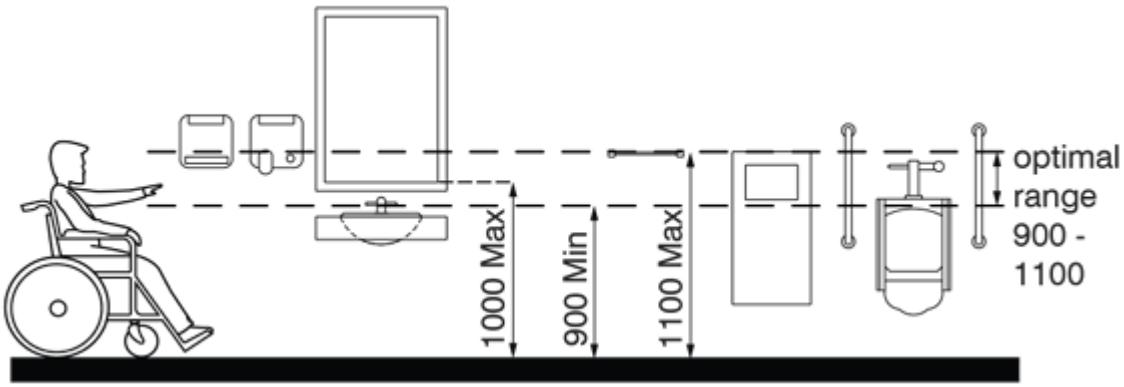


Diagram 24.A Washroom Accessory Mounting Heights

25. Universal Washroom

Contents in Section

Application

Universal washrooms benefit persons who require a larger space, have attendants of opposite gender, families, and persons who prefer alternatives to multi-stall washrooms. Universal washrooms benefit everyone.

25.1 Amount

At least one universal washroom must be provided on every floor in addition to any accessible multi-stall washrooms and no further than 30 m from multi-stall washrooms.

25.2 Clear Floor Space

1. Min 2500 mm turning circle, clear of obstruction [Diagram 25.B]
2. Min 900 mm x 1500 mm clear transfer space on one side of the water closet.
3. Clear floor spaces must not impede on the floor area when the adult change table is in the operational position.
4. Provide min 1000 mm x 2000 mm space for an adult change table with an 860 mm x 1500 mm clear floor space parallel to the long side of the adult change table and meet the requirements in Subsection 25.5 [Adult Change Table].

25.3 Washroom Door

1. The door must be equipped with a power door operator that must coordinate with an automatic locking system.
2. The door must be capable of being locked from inside and must be able to be released from the outside in case of emergency.

25.4 Fixtures

1. Provide at least one collapsible coat hook, max 1200 mm AFF and max projection 50 mm from the wall.
2. Provide a shelf max 1200 mm AFF and located not to create an obstruction.
3. An optional fold-down grab bar min 750 mm in length, mounted 390 mm to 410 mm from the centerline of the water closet on the transfer side, 750 mm AFF.
4. The following sections and subsections also apply to the Universal Washroom:

a. Subsection 21.4 [Accessible Water Closets],
b. Subsection 21.8 [Baby Change Table]
c. Section 22 [Grab Bars and Toilet Paper Dispensers],
d. Section 23 [Lavatories], and
e. Section 24 [Washroom Accessories].

25.5 Adult Change Table

1. Min 1 adult change table must be provided in a building and must:
    a. Be a min 810 mm x 1830 mm in size inclusive of the motor for height adjustment,
    b. Change table surface be electrically adjustable with a height from 450 mm AFF to 900 mm AFF,
    c. Have a reinforced wall to sustain a load of 1.33 kN, and
    d. Change table controls with operable portions max 1100 mm AFF.
2. Where space is provided for the future installment of an adult change table:
    a. Wall reinforcement supports must be installed, and
    b. A 110-volt electrical outlet or rough-in must be provided between 600 mm and 800 mm AFF in proximity to the space for the future installment of an adult change table for electric powered height adjustment.

25.6 Emergency Call System

1. A visual and audible signal device must be located inside and outside of the universal washroom located directly above the washroom door and connected to a central monitoring location (e.g., occupied reception or security desk.).
2. Signage must be provided to read “In the event of an emergency, push emergency call button or strip and audible and visual signal will activate and notify a person at the central monitoring location.” Letters must be min 25 mm tall, with a 5 mm stroke that is posted above the emergency call button or strip. Braille and Tactile signage must also be provided and meet the criteria in Subsection 12.4 and 12.5.
3. The emergency call system must consist of a call button located within reach of the water closet but not be located to be accidentally pushed when reaching for the toilet

paper or using any grab bars. The button must be mounted between 900 mm and 1100 mm AFF.

4. A vertical emergency call strip can be provided in lieu of the call button. A horizontal emergency call strip can be provided in addition to a call button or vertical call strip. An emergency call strip allows the activation of the call system for a person who has fallen. Verify the proposed call system prior to specifying or installing the components with the Building Department for approval. The call strip must be activatable by pushing anywhere along its length and mounted:
    a. Vertically with the lower edge max 200 mm AFF and with the upper edge min 900 mm AFF [Diagram 25.A], or
    b. Horizontally with the lower edge 200 mm to 400 mm AFF [Diagram 25.A].

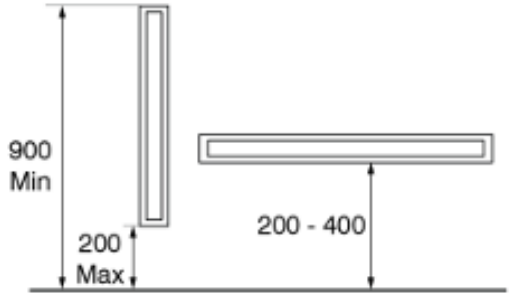


Diagram 25.A Vertical and Horizontal Emergency Call Strip

25.7 Occupied Notification

The occupied signal must:

a. Be located on the outside of the universal washroom, mounted between 900 mm and 1200 mm AFF, and
b. Be illuminated when the “Push to Lock” button on the inside of the universal washroom is activated to verify that the room is occupied.

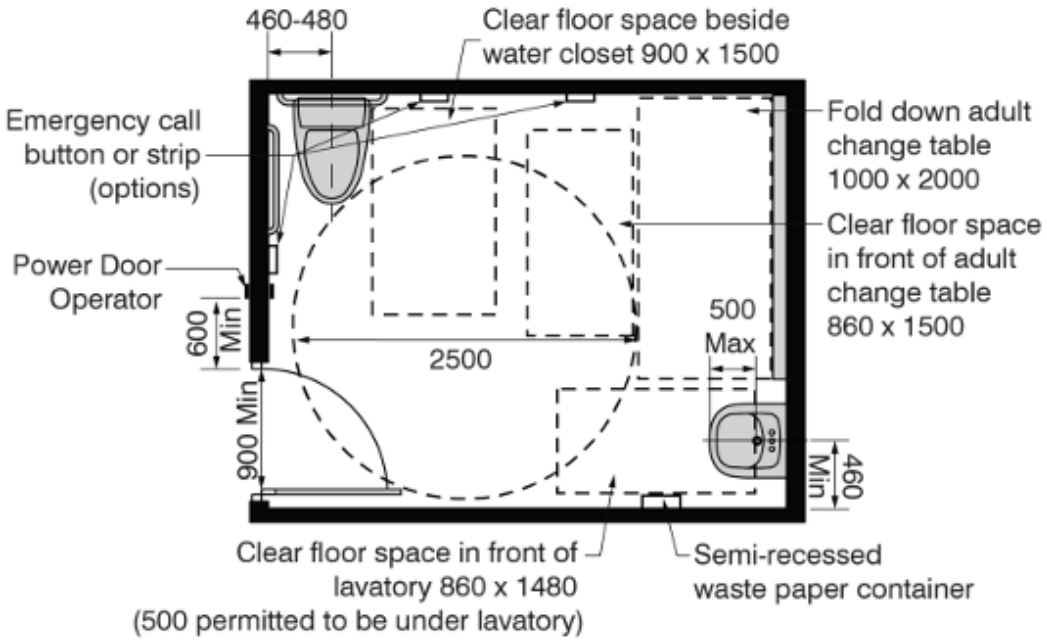


Diagram 25.B Universal Washroom

26. Accessible Shower

Contents in Section

Application

Any additional enclosures for the shower stall must not obstruct transfer from a mobility device onto the shower seat.

26.1 Showers

1. 1 in every 7 showers but no less than one must be accessible.
2. The interior shower space must be a min 1500 mm wide x 900 mm deep [Diagram 26.A]. The clear floor space in front of the shower must be min 900 mm deep and the same width as the shower.
3. The threshold for the roll-in shower must be leveled or beveled max 13 mm high.

26.2 Shower Accessories and Controls

1. A shower seat must be provided that is 450 mm wide x 400 mm deep, mounted 460 mm to 480 mm AFF, designed and installed to carry load of 1.3kN [Diagram 26.A].
2. Controls must be automatic, lever type or both, and must be accessible from the seated position max 500 mm from the edge of the shower seat and max 1000 mm AFF. Consideration must be given to the primary users of the space and provide controls that are accessible to the users. Automatic sensor provides ease of access but may not be suitable for children or little persons when mounted at higher heights.
3. Shower controls must be a pressure equalizing or thermostatic mixing valve.
4. 2 shower heads and a shower diverter must be provided:
    a. The first shower head must be handheld with a flexible hose min 1800 mm long, reachable from the shower seat, mounted 1200 mm AFF, and located max 500 mm away from seat, while not obstructing the L-shape grab bar [Diagram 26.A],
    b. The second fixed shower head must be mounted above the first shower head at 2030 mm AFF, and
    c. A shower diverter mounted 900 mm and 1100 mm AFF, reachable from the shower seat, to switch between the two shower heads and meet the requirements in Subsection 9.3 [Hand Operated Mechanisms].

5. Provide a recessed soap holder located within reach of the seat, mounted with the centerline between 900 mm and 1100 mm AFF.
6. Ensure all shower accessories meet the requirements in Section 1 [Space and Reach Requirements].

26.3 Shower Grab Bars

1. One vertical grab bar must be installed min 1000 mm long, with the lowest end mounted 600 mm to 650 mm AFF, and 50 mm to 80 mm from the outside edge of the shower, adjacent to the bench [Diagram 26.A].
2. One L-shaped grab bar must be installed min 750 mm long vertical component x 1000 mm long horizontal component located on wall opposite the entrance of the shower. Horizontal component must be mounted 750 mm to 850 mm AFF and with the vertical component 400 mm from the side wall on which the shower seat is mounted.
3. Grab bars must meet requirements in Section 22 [Grab Bars and Toilet Paper Dispensers].

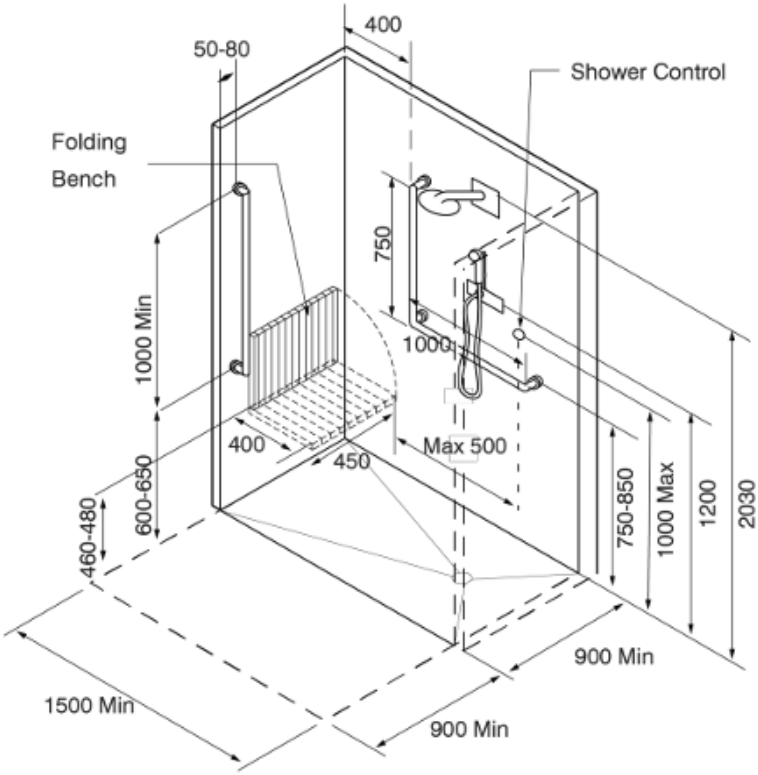


Diagram 26.A Accessible Shower

27. Change Rooms

Contents in Section

27.1 Clearances and Clear Floor Space

1. A primary accessible path, min 1800mm, must be maintained throughout the space and must meet criteria in Section 4 [Headroom - Overhanging and Protruding Objects] and Section 15 [Doors].

27.2 Lockers and Storage

1. A min 10% of all lockers (full height and half height) must be accessible, identified with the International Symbol of Access, and dispersed throughout the room when there are more than 2 accessible lockers.
2. Each accessible locker must have at least one shelf with a height 400 mm to 1200 mm AFF.
3. Locks, hooks, and any operable portions of lockers must be 900 mm to 1200 mm AFF.
4. Any storage racks must be max 680 mm AFF and have a continuous min 70% color / tonal contrast strip on the edge.
5. Numbers or names on lockers must be tactile surfaces mounted on a min 70% color / tonal contrast background.
6. A min 860 mm x 1480 mm clear floor space must be provided in front of accessible lockers. Fixed benches must not overlap the clear floor space.

27.3 Additional Requirements

1. Shower facilities must meet the criteria in Section 26 [Accessible Shower].
2. Water closet and lavatory facilities must meet criteria in Section 21 [Multi-Stall Washrooms] and Section 23 [Lavatories].
3. Dressing stalls must meet criteria in Section 29 [Accessible Dressing Stalls].
4. Fixed hair dryers must be in a separate room or an alcove that meets the requirements in Section 1 [Space and Reach Requirements]. Hair dryers must be near mirrors and electrical outlets. Shelves must be provided for personal grooming equipment.
5. Full length mirrors must start max 175 mm AFF.
6. Handrails can be used along circulation routes from change rooms to activity areas and meet the criteria in Section 7 [Handrails].

7. Flooring must be slip resistant and meet criteria in Section 3 [Ground and Floor Surfaces].

28. Universal Change Room

Contents in Section

Application

Universal change rooms are accessible, gender neutral, single use spaces that accommodate for privacy and assistance from persons of the opposite gender.

28.1 Design

1. At least one universal change room should be provided in a team, family, or gender specific change area. The change area must provide the following rooms, near each other, and must not require users to leave the enclosed change area to access all rooms [Diagram 28.A].
    a. Universal change room designed to meet the requirements in Section 25 [Universal Washroom] and Section 26 [Accessible Shower] [Diagram 28.A],
    b. A minimum of 3 accessible lockers provided outside of and near each universal change room that meet the requirements in Subsection 27.2 [Lockers and Storage],
    c. Accessible washroom stall in the change area that meet the requirements of Subsection 21.4 [Accessible Water Closet Stall], and
    d. Accessible dressing stall in the change area that meet the requirements of Section 29 [Accessible Dressing Stalls] except that the clear turning circle can be designed as 1800 mm to 2500 mm.

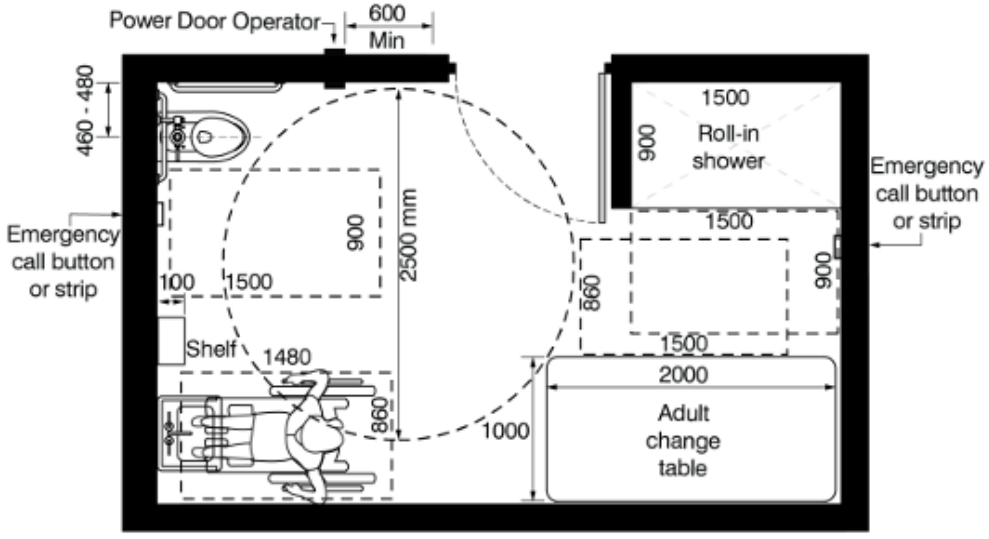


Diagram 28.A Universal Change Room

2. If a universal change room is not provided in a team, family, or gender specific change area. The change area must provide the following rooms, near each other, and must not require users to leave the enclosed change area to access all rooms:
    a. Accessible dressing stalls that meet the requirements in Section 29 [Accessible Dressing Stalls], and
    b. Accessible washroom stalls that meet the requirements in Subsection 21.4 [Accessible Water Closet Stall] except that the turning circle in the stall must be designed with a min 2500 mm clear turning circle.
3. The following sections and subsections also apply to the universal change room:
    - Section 12 [Signage and Wayfinding],
    - Section 16 [Power Door Operators],
    - Subsection 21.6 [Accessible Water Closets],
    - Section 22 [Grab Bars and Toilet Paper Dispensers],
    - Section 23 [Lavatories],
    - Section 24 [Washroom Accessories],
    - Subsection 25.2 [Clear Floor Space],
    - Subsection 25.5 [Adult Change Table], and
    - Subsection 25.6 [Emergency Call System].

29. Accessible Dressing Stalls

Contents in Section

29.1 Amount

At Least 10% but never less than one private accessible dressing stall must be provided in accessible change rooms.

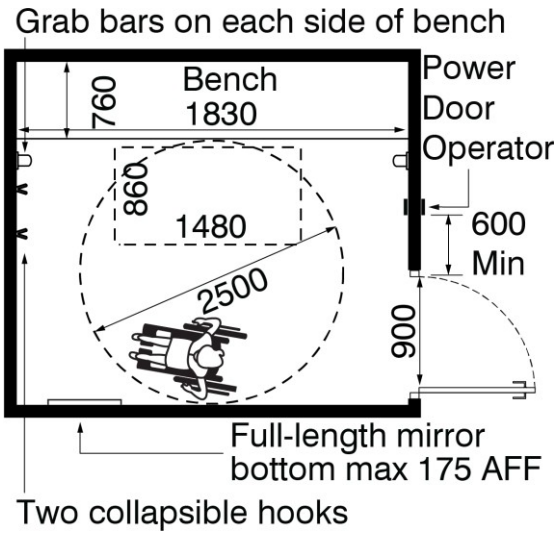


Diagram 29.A Accessible Dressing Stall

29.2 Accessible Dressing Stall Door

Private accessible dressing stall door must meet criteria in Subsection 21.2 [Accessible Water Closet Stall Door] and Subsection 21.3 [Accessible Stall Door Hardware]. When the door is a full height door, a power door operator must be provided.

29.3 Accessible Dressing Stalls

Accessible dressing stalls must have a clear turning circle of 2500 mm. In a change area where a universal change room is provided, can have a clear turning circle of 1800 mm to 2500 mm [Diagram 29.A].

29.4 Bench and Other Accessories

1. An accessible dressing stall must have a bench that meets the following requirements:
    a. Min 760 mm x 1830 mm, mounted 450 mm to 500 mm AFF [Diagram 29.A],

b. Designed to carry a min load of 1.33 kN, and

c. Min 860 mm x 1480 mm clear floor space adjacent to the bench.

2. Two coat hooks must be provided that are collapsible-style, projecting not more than 50 mm, mounted max 1200 mm AFF and max 500 mm from the bench [Diagram 29.B].

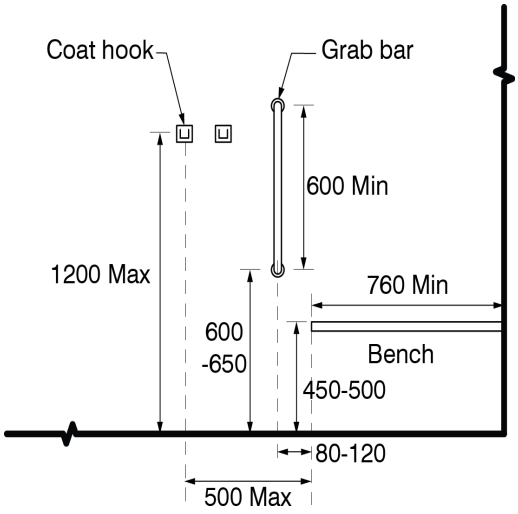


Diagram 29.B Accessible Dressing Stall: Bench and Accessories

3. Mirrors must be full length, mounted with the bottom at 175 mm AFF.

4. Provide two vertical grab bars min 600 mm long on each side of the bench, located 80 mm to 120 mm from the outside edge of the bench mounted 600 mm to 650 mm AFF [Diagram 29.B].

29.5 Surfaces

Accessible dressing stalls near wet areas must have slip resistant floors that must also prevent the accumulation of standing water.

30. Public and Staff Kitchens and Kitchenettes

Contents in Section

30.1 Kitchen Design

Min 1800 mm clear width for galley [Diagram 30.A]or L-shaped kitchens [Diagram 30.B].

Min 2500 mm x 2500 mm clear floor space in a U-shaped kitchen [Diagram 30.C], and min 2500 mm turning circle at dead end conditions.

A min of 50% of shelf space in for kitchens must be accessible.

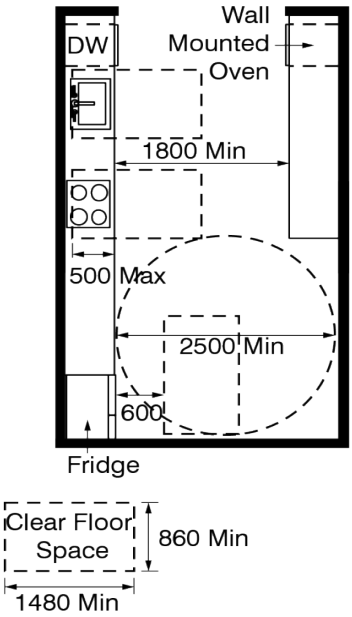


Diagram 30.A Galley Kitchen

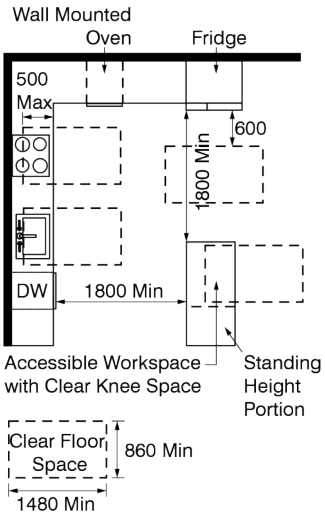


Diagram 30.B L-Shaped Kitchen

30.2 Colour and Tonal Contrast

Min 70% colour / tonal contrast must be provided:

1. Between counter tops and cabinets and walls [Diagram 30.D], and
2. Between operable hardware on cabinets and cabinet surfaces.

30.3 Dishwashers

When provided, a dishwasher door in the open position must not obstruct the clear floor space for the cooktop or the sink. A clear floor space of 860 mm x 1480 mm must be provided in front of the dishwasher when in the open position [**Error! Reference source not found.**].

30.4 Cabinet Hardware, Faucets, and Appliance Controls

1. Any operable portions on cabinetry or appliances must be mounted 900 mm to 1200 mm AFF and must meet criteria in Section 9 [Operable Controls and Mechanisms] [Diagram 30.D].
2. Faucet handles must be lever-style or automatic.
3. Max 500 mm from the centre line of the faucet basin to front edge of sink [Diagram 30.A].
4. Exposed pipes must be insulated to prevent burns, or the water temperature must be limited to max 43ºC.

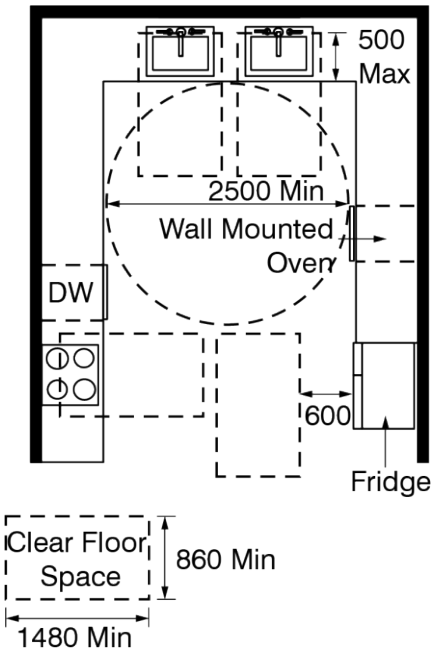


Diagram 30.C U-Shaped Kitchen

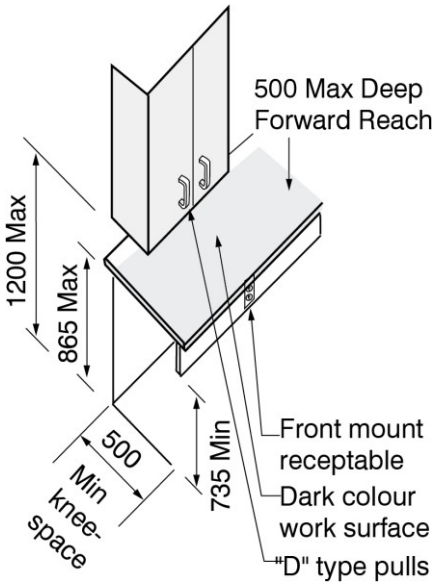


Diagram 30.D Cabinet and Counter

30.5 Sink and Countertop Knee Clearances

1. Clear knee space must be provided for both the sink and countertop. They must be:
    a. 710 mm to 865 mm AFF to top of counter [Diagram 30.D],
    b. 920 mm wide x 500 mm deep [Diagram 30.F],
    c. 735 mm high at the front edge [Diagram 30.D],
    d. Knee space of 685 mm high at 205 mm from the front edge of counter [Diagram 30.E], and
    e. Toe space of 350 mm high at 300 mm from the knee space [Diagram 30.E].
2. Where two sinks are provided, one for prep and one for sanitary purposes, both sinks must be accessible as they serve different purposes [Diagram 30.C].

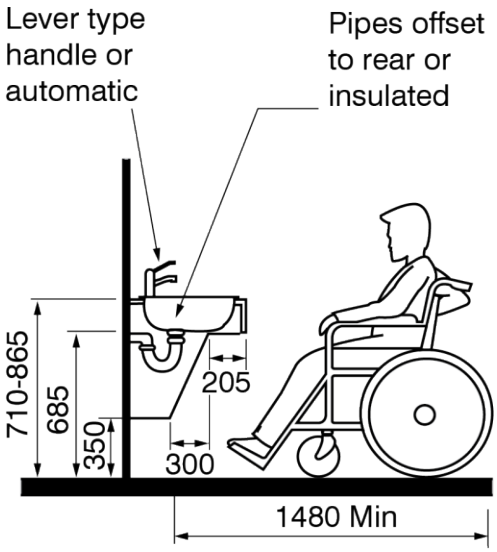


Diagram 30.E Sink Access – Toe and Knee Clearance

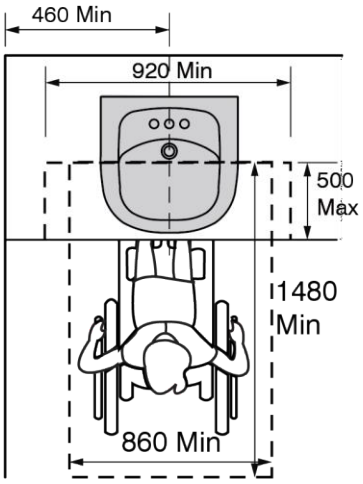


Diagram 30.F Sink Access – Reach Space

30.6 Ranges

1. Ranges selected must be appropriate to prevent burns, abrasions, or electrical shock. Controls must not require user to reach across burners.
2. Knee clearances must meet criteria in Subsection 30.5 [Sink and Countertop Knee Clearances] and [Diagram 30.G].

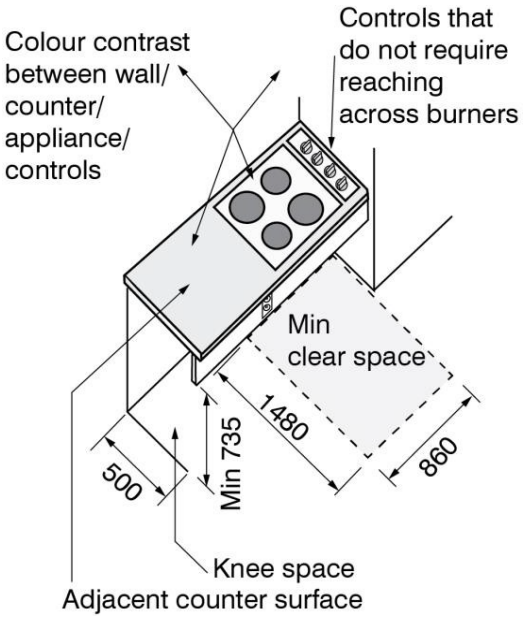


Diagram 30.G Range Access

30.7 Ovens

1. Provide a side-hinged door oven with an adjacent work surface positioned to the latch side of the door, at a max height of 1200 mm AFF.
2. Controls must be mounted no higher than 1200 mm AFF.
3. Incorporate a pull-out shelf below the oven for easy removal of hot items [Diagram 30.H].

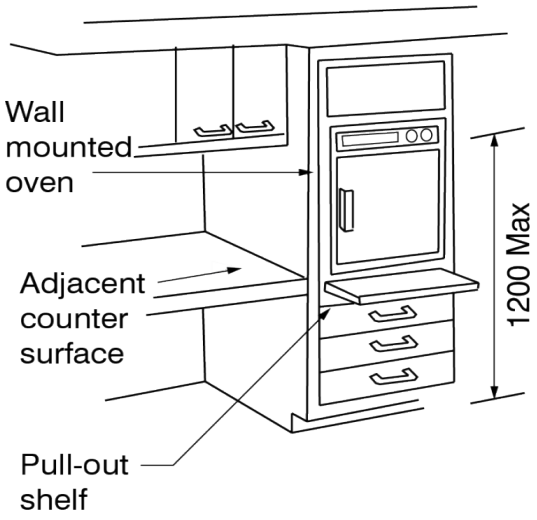


Diagram 30.H Ovens

A Parallel approach to the countertop is accepted where there is no cook top provided.

30.8 Refrigerators and Freezers

1. Refrigerators and freezers in accessible kitchens must be configured with a min of 50% of shelving max 1200 mm AFF. This is typically accommodated by a side- by-side fridge / freezer or a fridge with a freezer drawer located on the bottom.
2. An 860 mm x 1480 mm clear floor space must be provided for parallel approach offset 600 mm from the front face of the refrigerator [Diagram 30.I].

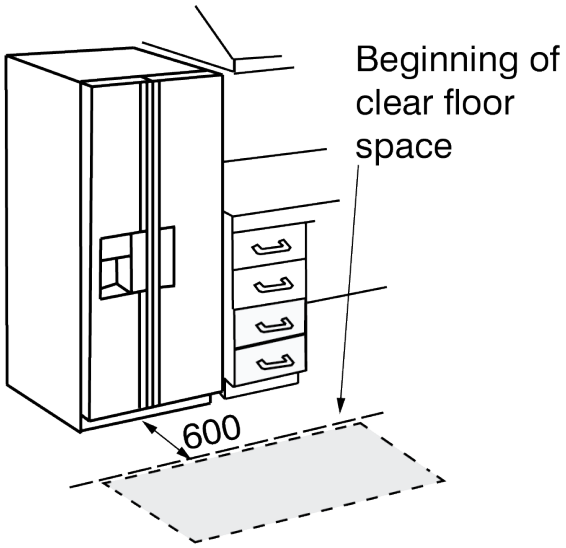


Diagram 30.I Clearances Infront of Refrigerator or Freezer

30.9 Additional Requirements

Kitchens must also comply to the following:

a. Section 1 [Space and Reach Requirements],
b. Section 3 [Ground and Floor Surfaces],
c. Section 9 [Operable Controls and Mechanisms],
d. Section 11 [Lighting, Light Sources and Glare], and
e. Section 13 [Materials and Finishes].

31. Drinking Fountains and Bottle Filling Stations

Contents in Section

31.1 Amount

There must be at least one accessible drinking fountain and bottle filling station in every building. Automatic filling stations are preferred over other designs.

31.2 Drinking Fountains or Bottle Filling Locations

When non-recessed drinking fountains project into the accessible path more than 100mm, cane detection must be provided to a max of 680mm AFF.

31.3 Clear Floor Space

1. Clear floor space of 680mm x 1480mm must be provided centered on the drinking fountain and bottle filling stations.
2. Clear floor space must not overlap with the minimum space requirements of the accessible path and must be:

    a. Min 1480mm wide x 680mm long with one unobstructed side adjoining an accessible path for side approach [Diagram 31.A], or

    b. Min 680m wide x 1480 mm long for forward approach [Diagram 31.B].

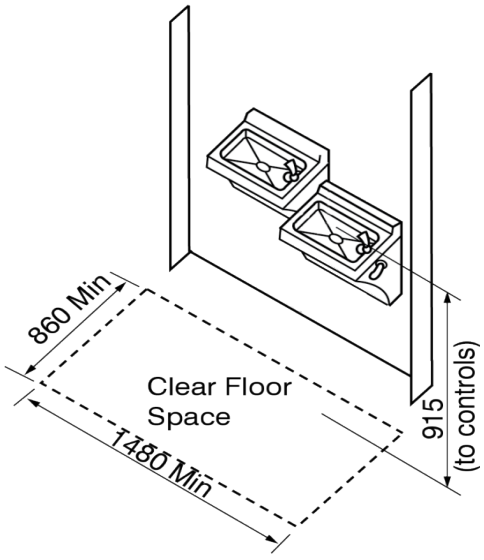


Diagram 31.A Clear Floor Space for a Water Fountain (side approach)

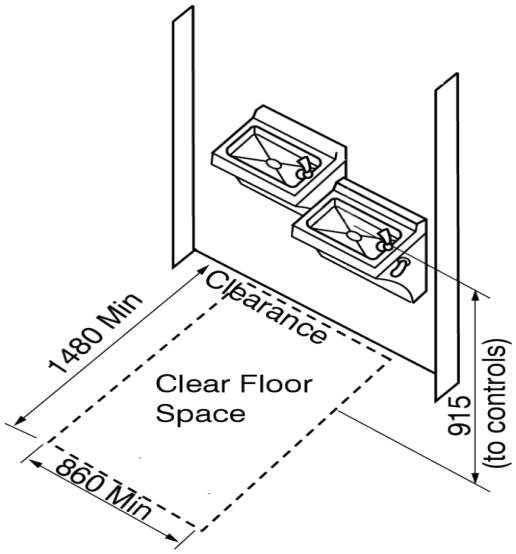


Diagram 31.B Clear Floor Space for a Water Fountain (forward approach)

31.4 Knee and Toe Clearance

1. Drinking found are required to be provided with clear knee space. Bottle filling stations do not require clear knee space, provided the max reach required to access the bottle filling station is not more than 600mm knee and toe clearances for drinking fountains must be:
    a. Min 735mm AFF and 900mm wide x 500mm deep below the fountain [Diagram 31.C, Diagram 31.D],
    b. Have knee space that is min 735mm AFF, 205mm from the front edge of the fountain [Diagram 31.C],
    c. Have toe space that is min 350mm high at min 300mm from the knee clearance.
2. The clear floor space requirements can overlap with knee and toe clearance below a drinking fountain.

31.5 Water Spout

1. The water spout must be,
    a. Max 915mm AFF,
    b. Max 125mm from front of fountain,
    c. Project water min 100mm high.
2. Water stream must be provided at either an angle of 30 degrees max where water spouts are located less than 75mm from the front or 15 degrees max where water spouts 75mm to 125mm from the front edge.

31.6 Contrast

The water found must have a 70% colour/tonal contrast from the background.

31.7 Controls

1. Controls must be:
    a. Max 915mm AFF,

b. Located in from of the fountain,

c. Not foot operated,

d. Automatic or require max force of 22N to activate.

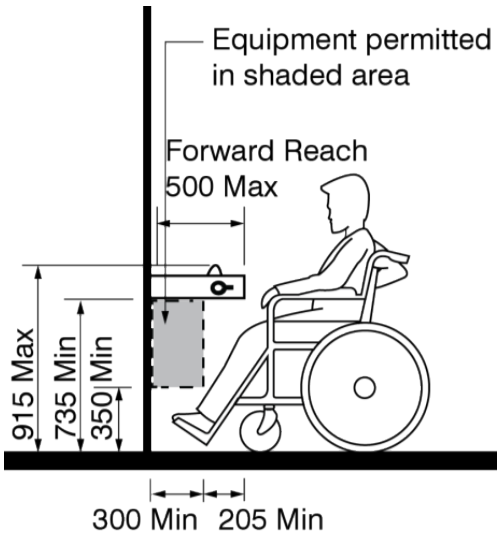


Diagram 31.C Knee and Toe Clearance (elevation)

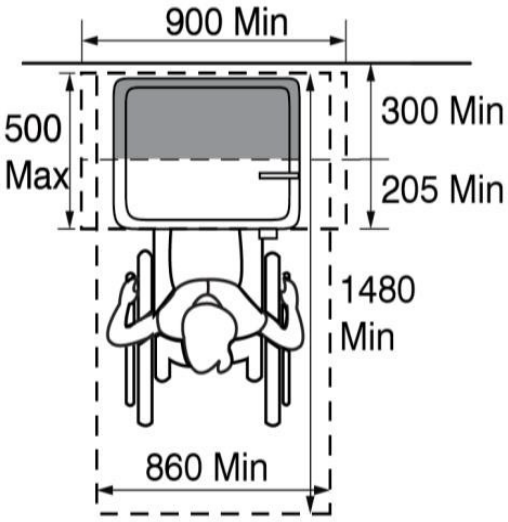


Diagram 31.D Knee and Toe Clearance (plan)

32. Public Telephones

Contents in Section

Application

Public telephones, including phone booths, should be designed to be usable by all individuals. Despite the prevalence of mobile phones, the provision of public telephones helps to ensure that those without mobile phones can make phone calls in public spaces. Although most of the population owns a mobile phone, there are a percentage of people who do not own a mobile phone.

Tele typewriters (TTYs) are used by people who are Deaf, deafened, or hard of hearing. TTYs are equipment that uses text-based communication through the transmission of coded signals across the standard telephone network.

32.1 Amount of Public Telephones

A minimum of one accessible phone is required where more than one is provided. Where only one provided, it is required to be accessible.

32.2 Design

Accessible public telephones [Diagram 32.A] must meet the following requirements:

1. Are located along an accessible path of travel in compliance with Section 2 [Interior Accessible Paths] or Section 40 [Exterior Paths].
2. Provide clear floor space that:
    a. Is centered on the telephone, and
    b. Is 900mm by 1500mm min for a front approach.
3. Have a shelf that is:
    a. Level,
    b. Is 500mm wide and 350mm deep min, and
    c. Has, for each telephone provided, a clear space that has no obstruction within 250mm above the surface.
4. Have the top surface of a section of the shelf or counter that:

a. Is mounded between 775mm to 875mm AFF, and

b. Have knee and toe clearance that is 740mm min high AFF at the front edge, 500mm min deep, and 900mm min wide.

5. Accessible public telephones should be equipped with a TTY connection and shelf for persons to place their portable TTY [Diagram 32.A].

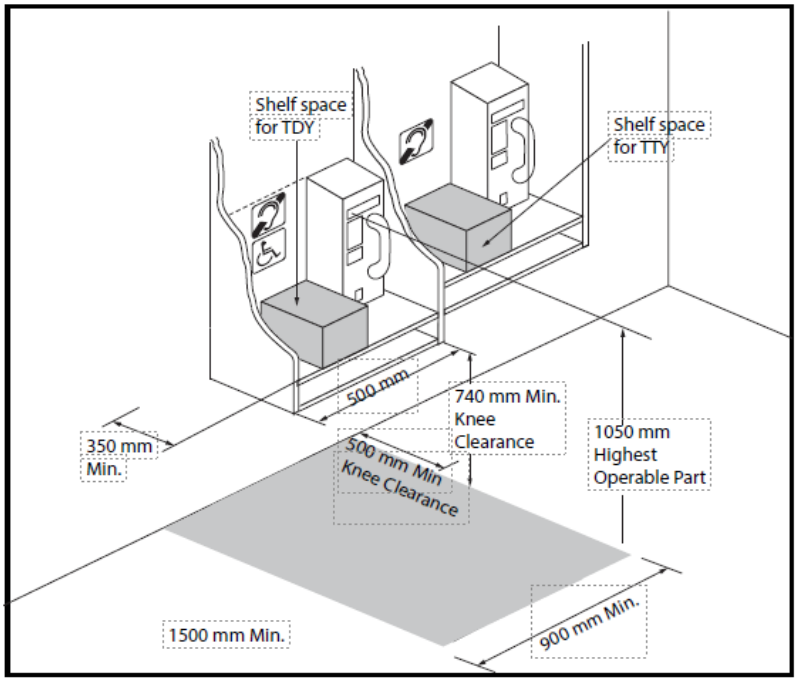


Diagram 32.A Accessible Public Telephones

32.3 Signage

Accessible public telephones should provide signage that:

1. Indicates a TTY device can be used by displaying the International Symbol of Access for Hearing Loss,

2. Indicates the telephone is accessibly by displaying the International Symbol for Accessibility, and

3. Meets the criteria in Section 12 [Signage and Wayfinding]

32.4 Signals and Controls

1. Accessible public telephones should provide signals and controls that:
    a. Are mounted at 1050mm max AFF.
    b. Have controls and operating mechanisms that:
        i. Include coin slots,
        ii. Have a TTY device,
        iii. Have an acoustic coupler, and
        iv. Have operable portions or controls that meet the criteria in Section 9 [Operable Controls and Mechanisms].

33. Interior Elevated Platforms

Contents in Section

Application

All interior elevated platform areas must be accessible and meet the requirements below.

33.1 Design

Elevated platforms must:

1. Be located on an accessible path,
2. Illumination must meet requirements in Section 11 [Lighting, Light Sources and Glare],
3. Be sized to safely accommodate mobility devices in compliance with Section 1 [Space and Reach Requirements],
4. Have TAI, as specified in Section 10 [Tactile Walking Surface Indicators] along the perimeter of the open platform edges [Diagram 34.A]

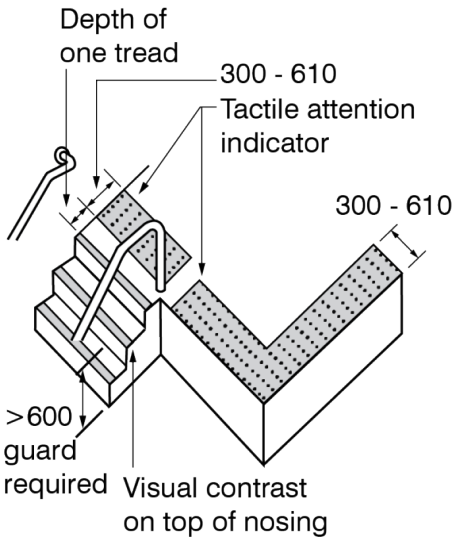


Diagram 33.A Elevated Platform Requirements

33.2 Temporary Platforms

Where possible, temporary platforms must meet the requirements in Subsection 33.1.

34. Accessible and Adaptable Fixed Seating

Contents in Section

Application

Adaptable seating is designed to accommodate persons who require flexibility within a fixed seat, along a barrier-free path of travel. Accessible seating is a clear floor space capable of accommodating a mobility device.

34.1 Number of Adaptable and Accessible Seating

Areas with fixed seating must provide the number of accessible and adaptable seating identified in Table 34.1.1.

Table 34.1.1 Number of Adaptable and Accessible Seating

Number of Fixed Seats in Seating Area	Min Number of Accessible Spaces	Min number of Adaptable Spaces
Up to 20	2	1
21-40	2	2
41-60	2	3
61-80	2	4
81-100	3	5
Over 100	3% of the seating capacity	5 seats or 5% of the aisle seating capacity

34.2 Location

1. Adaptable and accessible spaces must be located on an accessible path without infringing on the egress of other seating spaces.
2. Adaptable and accessible spaces must be provided at the front, middle and top of public seating areas to allow for a choice of admission prices and sight lines.

34.3 Signage

Signage must be located at the ticket office (where applicable) to notify patrons of the availability of accessible and adaptable seating and must be criteria in Section 12 [Signage and Wayfinding].

34.4 Adaptable Seating

1. Adaptable Seating must consist of a fixed aisle seat with no armrest on the aisle side or must have a removable or folding armrest on the aisle side and the ability to remove the seat adjacent to the adaptable fixed seat.
2. At least two storage spaces that are min 860mm x 1480mm are required near the accessible seating spaces. This can be achieved by providing an alcove outside the path of travel or by the provision of a separate storage room that is close to the seating area.

34.5 Accessible Seating

1. Accessible seating must have the following:
    a. Min 920mm wide x 1525mm long for side approach entry [Diagram 34.A], or
    b. Min 920 wide x 1480mm long for front or rear entry [Diagram 34.B].
2. For front or rear entry accessible seating, a 2500mm diameter clear floor space must be provided in front or behind the accessible seat.
3. At least one companion seat must be provided adjacent to every accessible space.

Note: The companion seating is to be calculated **in addition** to the required number of accessible seating spaces.

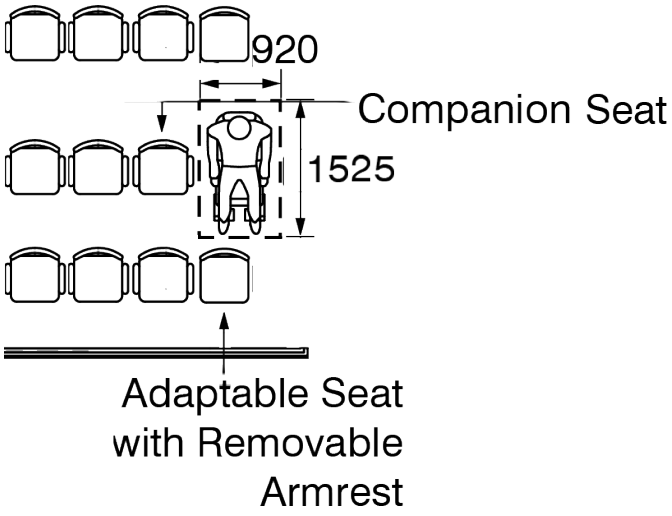


Diagram 34.A Side Entry Accessible Seating

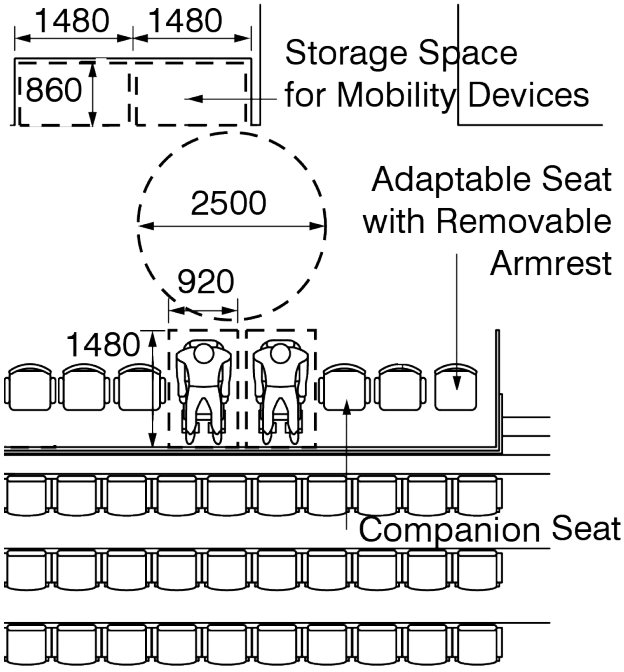


Diagram 34.B Rear Entry Accessible Seating

35. Office Area and Meeting Rooms

Contents in Section

Application

A quiet acoustic environment would benefit all persons but particularly those with a hearing impairment. Background noise from mechanical equipment such as fan should be minimized with sound absorbing wall or ceiling tiles. Office and works areas should provide materials and finishes that have colour/brightness contrast that's define boundaries. Walls, floors, and doorways are all examples of places that require colour contrast.

35.1 Circulation and Clear Floor Space

1. An accessible path must be provided throughout the office area.
2. A primary and secondary accessible path must be provided throughout the office areas. Refer to Section 2 [Interior Accessible Paths]
3. A min 1100mm accessible path is required between workstations and meeting access requirements as specified in:
    - Section 2 [Interior Accessible Paths],
    - Section 4 [Headroom – Overhanding and Protruding Objects] and
    - Section 15 [Doors].
4. A 2500mm x 2500mm clear floor space must be provided at main access points.

35.2 Office Furniture & Equipment

In addition to the requirements in Clarington's Office Planning Guidelines, the following requirements must be met:

1. Office and work area furniture must be flexible and adjustable.
2. Offer knee and toe space for a front approach that is 735mm AFF at the front edge, provide 900mm wide and 500mm deep knee clearance.
3. An 860mm x 1480mm clear for space must be centered and in front of all equipment, such as photocopiers.
4. Storage and shelves must be accessible and meet criteria in Section 20 [Millwork, Storage and Shelving].

35.3 Meeting Rooms

Meeting rooms must comply with Clarington's Office Space Guidelines.

All meeting rooms should be accessible and feature adjustable/adaptable furniture.

1. 10% of all meeting rooms but not less than 1 per floor or building must be accessible.
2. A min 1100mm accessible path around the perimeter of the accessible meeting room is required.
3. A 2500mm x 2500mm clear floor space must be provided at the main access point of the meeting room.
4. In all meeting rooms, use wall or ceiling finishes that dampen the sound and aid the reduction of ambient noise.
5. Have power door operators in large and frequently used rooms and meet criteria in Section 15 [Doors] and Section 16 [Power Door Operators]

36. Fire and Life Safety Systems

Contents in Section

Application

Fire safety elements and systems must be useable by any individuals with disabilities in emergency situations. Signals intended to notify the public must consist of both visual and audible components.

36.1 Locations of Visual and Audible Fire Alarm Devices

1. This section applies to buildings required by the OBC to have a fire alarm system.
2. Locate visual and audible fire alarm devices in:
    a. A building or portion of a building intended for use primarily by persons with hearing loss,
    b. Public corridors and all general use areas such as lobbies, offices, meeting rooms and all washrooms including single use washrooms, and
    c. Mechanical rooms where there is a concern with noise levels.

36.2 Mounting of Visual Fire Alarm Strobes

1. Visual fire alarm strobes must be placed so that the signal from at least one device is visible throughout the floor area or compartment where they are installed.
2. Mounting heights of fire alarms must meet the requirements of the OBC and the Ontario Fire Code, as amended.

36.3 Signal Requirements of Visual Fire Alarm Strobes

1. Visual signaling components must conform to the requirements in the OBC.
2. Signals must meet the requirements in the latest edition of the OBC and the Ontario Fire Code, as amended.

36.4 Eye Wash Stations

1. Where eye wash stations are provided, they must be accessible and located at a max height of 850mm AFF.
2. Eye wash stations must meet the requirements found in Section 1 [Space and Reach Requirements].

36.5 Fire Safety Plan and Emergency Evacuation Maps

1. Fire safety plans must meet the requirements of the Ontario Fire Code and must be:
    a. Provided at the annunciator panel,
    b. Identify all areas of refuge, and
    c. List persons who have identified themselves as requiring assistance for first responders.
2. Emergency evacuation maps must meet the requirements in the Ontario Fire Code and must be:
    a. Located max 1100mm AFF,
    b. Provided at accessible entrances and on each floor area in an easily accessible and prominent area,
    c. Identify the accessible evacuation path of accessible exists and areas of refuge, and
    d. Consideration should be provided to supplementing emergency evacuation maps with raised tactile profiles, characters and Grade 2 Braille that met the requirements in Section 12 [Signage and Wayfinding].
3. Directional signage must be provided along the main accessible path to direct occupants to the nearest exist of area of refuge.

36.6 Areas of Refuge

1. Within a sprinklered or non-sprinklered building, and where there is an accessible path of travel above or below the first-floor entrance level, areas of refuge must be provided on the following floors:
    a. Floor levels above and below the entrance level served by an accessible path, and
    b. At the entrance level without accessible exists connecting to an exterior accessible path.
2. On floors that require areas of refuge, they must be:
    c. Located on an accessible path,
    d. Equal to the number of exists, and

e. Meet one of the following:
    i. Have direct connection to an exist stair [Diagram 36.A], or
    ii. Located in a room immediately adjacent to an exist stair, with a door connecting to the corridor and a door connecting to the exist stair, incorporating a vision panel and sidelight of Georgian wire glass and must meet the requirements in the latest edition of the OBC [Diagram 36.B and Diagram 36.C] or
    iii. Have a direct connection to a fire fighter elevator.

3. Each area of refuge must meet the following requirements:
    a. Have doors equipped with a fire-rated self-closing device matching to that required for an exist,
    b. Min clear floor space of 860mm x 1480mm per non-ambulatory occupant on the floor, but no less than two [Diagram 36.A]
    c. Must be separated from the floor area by a fire separation having a fire-resistance rating at least equal to that required for an exist,
    d. Incorporate a 2-way voice communication system, mounted between 900-1100mm AFF connected to a central monitoring location (e.g. occupied reception or security),
    e. Designated as an area of refuge for persons with disabilities on the facility fire safety plan,
    f. Provide signage indicating the location of the area of refuge,
    g. Identified with signage that must meet criteria in Section 12 [Signage Wayfinding], and
    h. If the area of refuge is in a room immediately adjacent to an exist stair, provide signage that contain the words “This room is an Area of Refuge and must not be repurposed for storage”.

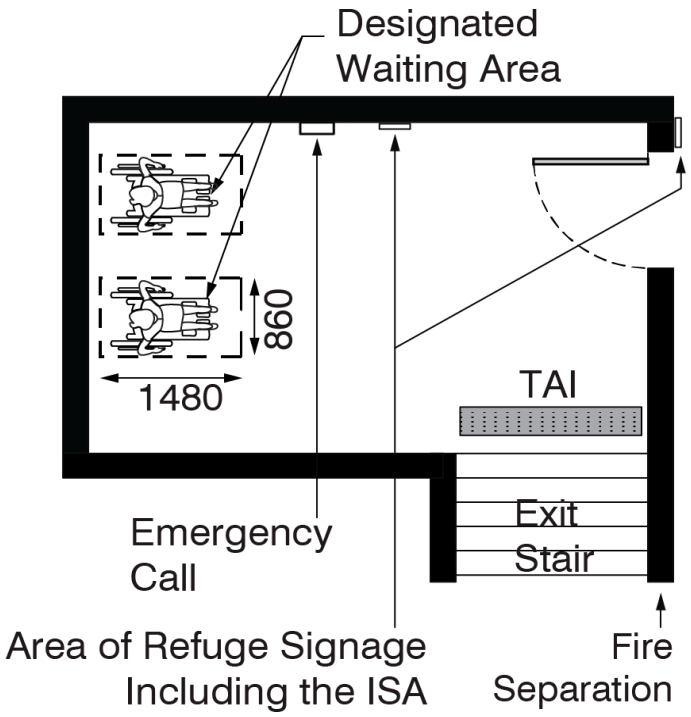


Diagram 36.A Area of Refuge with Direct Connection to Exit Stair

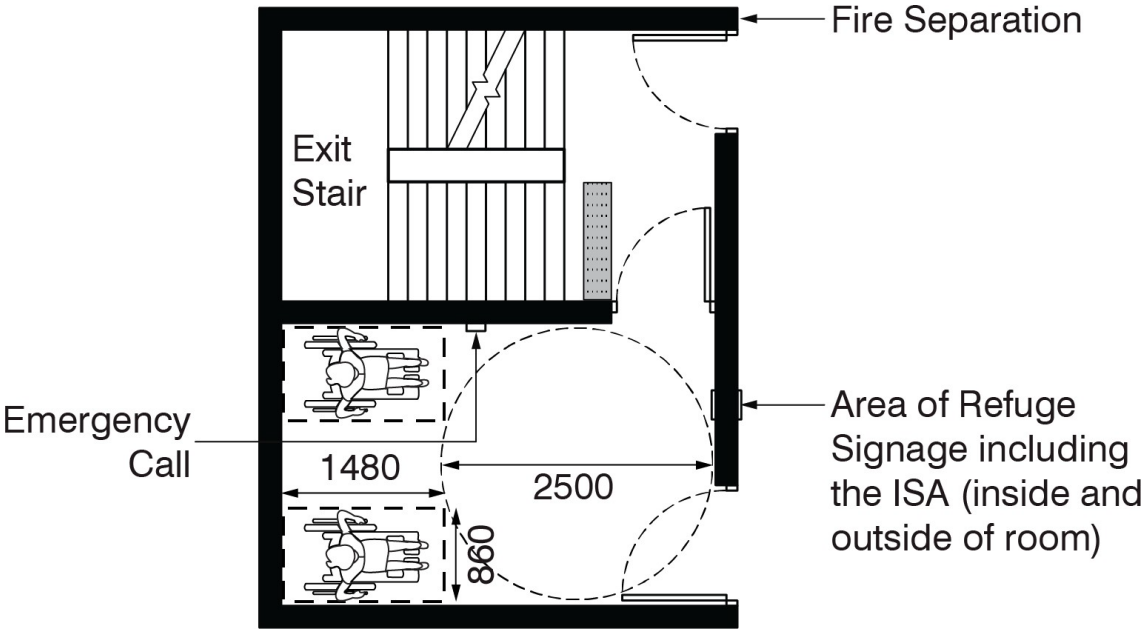


Diagram 36.B Area of Refuge in Room Adjacent to Exit Stair (option 1)

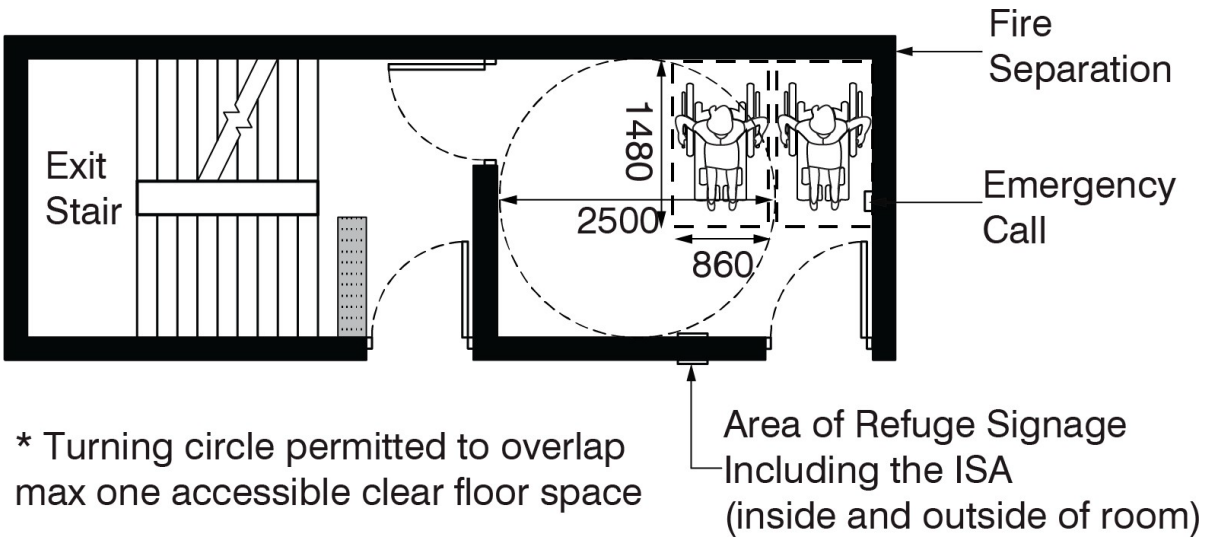


Diagram 36.C Area of Refuge in Room Adjacent to Exit Stair (option 2)

37. Assistive Listening Devices

Contents in Section

Application

Assistive Listening Devices (ALDs) are an important design feature in areas where audible communication is integral to the use of the space.

37.1 Assembly Areas

For areas where audible communication is integral to the use of space, provide assistive listening devices (ALDs). Concert theatres, meeting rooms, classrooms and auditoriums are examples of rooms where ALDs are required.

37.2 Locations

1. Permanently installed listening systems/ALDs must be included for:
    a. Rooms that accommodate at least 50 persons,
    b. Rooms that have audio amplification systems, greater than 100 square metres, or
    c. Rooms that have fixed seating.

37.3 Portable Assistive Listening Systems

1. Rooms must provide access to electrical outlets or supplementary wiring to support a portable device.
2. A min of 4% of the total number of seats, but no less than two, shall have receivers.

37.4 Types of Assistive Listening Systems

Audio induction loop, infrared systems, and FM radio frequency systems are all acceptable types of ALDs. Audio induction loop system is preferred.

37.5 Design Requirements

1. Where an FM loop system or other ALDs exist, portable headsets that are compatible with personal hearing aids must be made available.
2. Where an audio induction loop system is utilized, 100% of the seating area shall be encompassed.

3. Where ALDs serve individual seats, these seats must be within 15m viewing distance from the stage.
4. Signage incorporating the International Symbol of Access for Hearing Loss with the addition of text/symbol indicating the type of service provided, must be provided and comply with Section 12 [Signage and Wayfinding].

37.6 Interference with Assistive Listening Systems

1. Please note the following:
    a. Dimmer switches or any controls where transformer coils can interfere with the audio induction loop, and
    b. Overhead incandescent lights can cancel out the infrared signal at the receiver.
2. These items should be located where they cannot interfere with the transmission of sound of the ALDs.

38. Public Address Systems

Contents in Section

Application

Public address systems must be easy to hear above the ambient background noise and there must be no distortion or feedback.

38.1 Location

1. Public address systems must be mounted meeting the requirements in Section 4 [Headroom – Overhanging and Protruding Objects].
2. Mount in common areas such as: corridors, offices, assembly and meeting rooms, training areas, washrooms and any other common area.

38.2 Controlled Broadcast

1. Public address systems must be zoned to allow for targeted broadcast and serve the entire facility.
2. Paging systems for staff or other key persons must be discreet and low volume.
3. Paging must be targeted to devices or locations where such persons might be expected to be located.

39. Multi-Faith Rooms

Contents in Section

Application

Multi-faith worship spaces serve an important spiritual role and foster a culturally safe and respectful environment. Multi-faith spaces may include indoor smudging facilities, however indoor smudging is not limited to these spaces.

Accommodating ritual smudging ceremonies supports inclusion and the spiritual wellbeing of First Nation, Inuit, and Métis people.

Multi-faith spaces can also be used by people who require a quiet space or a sensory break.

General Requirements

Each facility shall have a minimum of one multi-faith room that complies with the following sections:

- Section 1 [Space and Reach Requirements]
- Section 3 [Ground and Floor Surfaces]
- Section 20 [Millwork, Storage and Shelving]
- Section 35 [Office and Meeting Rooms]

Additionally, multi-faith spaces shall have appropriate exhaust fans and ventilation to accommodate smudging.

39.1 Ablution Rooms

New buildings shall include an ablution room located adjacent and with direct access to multi-faith room. Ablution rooms must include at least one ablution station located on accessible path of travel, with electronic or sensor faucets, two horizontal grab bars, accessible bidet system, accessible accessories, and clear floor space of 915mm x 1370mm min.

39.2 Indoor Smudging:

The provision of smudging facilities within a building contributes to an inclusive environment for all users who use it for cultural and religious purposes. Smudging is done for a variety of reasons. From cleansing to healing to prayer and more. During a smudge, individuals place plant leaves or stems in a container (bowl, dish, etc.) and ignited (preferably with a wooden

match). The flames are then gently blown out and the smoke, which heals the mind, heart, and body, is wafted over the person, either by hand or with an eagle feather.

Smudging is permitted in municipal buildings. In spaces where indoor smudging is typically to be practiced, the following requirements must be met:

a. Suitable exhaust fans and ventilation systems must be in place and operational;
b. A cast iron (or other suitable material) pan or vessel is to be provided by the user or renter and used for all smudging materials;
c. The exhaust fan must be turned on prior to the smudging and is to be left on when exiting the room.

When smudging is included as an activity in the booking, Facility Staff must be notified so that they can ensure the exhaust system is on and fully operational.

Clarington

Exterior Elements

3

40. Exterior Paths

Contents in Section

Application

This section applies to exterior paths of travel, which typically include, but are not limited to:

- Pedestrian circulation routes that serve facility entrances, exits, elements or amenities.
- Pedestrian circulation routes that serve as connections between a site boundary and access into or from a facility.
- Public rights-of-way (e.g., sidewalks and footpaths).
- Ramps; and
- Curb ramps and depressed curbs.

Where stairs are located on accessible exterior routes or walkways, an alternative accessible route is to be provided immediately adjacent to the stairs and may include a ramp or another accessible means of negotiating elevation change. This section applies to sidewalks used for pedestrian travel and does not include recreational trails or other paths of travel related to parks and the natural environment or private residential areas.

Exception

Compliance would not be required where it would:

- Cause substantial harm to cultural, historic, religious, or significant natural features/characteristics.
- Substantially change the intended experience provided by the facility.
- Be impractical due to physical terrain; and
- Require construction methods or materials that are prohibited by federal, provincial, or local laws.

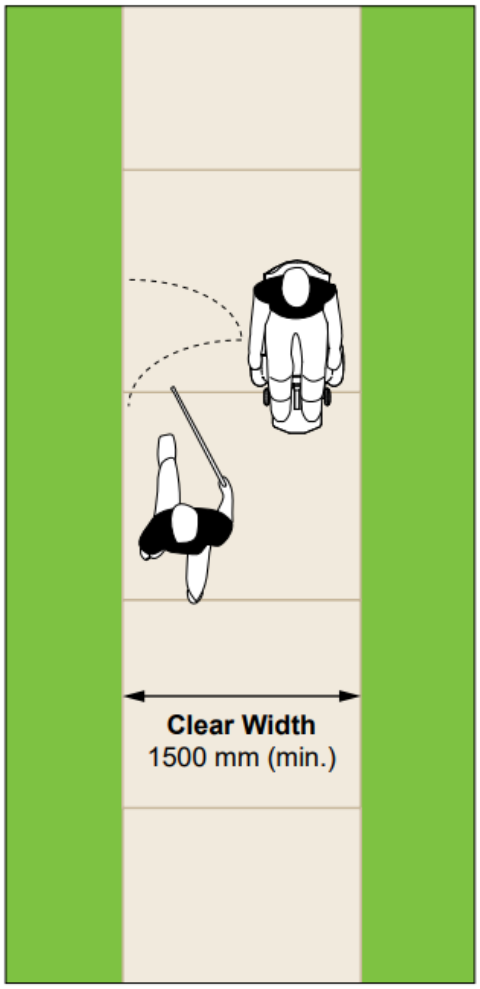
Design Features

1. Ensure ground surfaces are firm, stable and slip-resistant;
2. Provide adequate drainage to prevent water accumulation;
3. Ensure headroom clearance is not less than 2100 mm;

4. Ensure components along a pedestrian route (e.g., stairs, ramps and rest areas) provide lighting level of 50 lux (5 foot-candles) (min);
5. Provide a color contrast of 70% (min) to distinguish the edges of exterior paths of travel and assist with wayfinding; and
6. Where a pedestrian route crosses or joins a vehicular route and the walking surfaces are not separated by curbs, railings, or other elements between the pedestrian and vehicular areas, provide tactile walking surface indicators (TWSI), continuous along the full length of the crossing boundary.

40.1 Clear Path Width

1. Provide clear width of 1500 mm min [Diagram 40.A];
2. Where the clear width of exterior paths of travel is less than 1500 mm min, provide a passing area, 1800 mm wide by 1800 mm long min, at intervals of 30 meters or less [Diagram 41.B];
3. Where passing areas are provided, ensure they are not considered to be part of any rest area that may also be provided; and
4. Ensure the entrance to exterior paths of travel provide a clear opening of 850 mm min, whether the entrance includes a gate, bollard or other entrance design feature that is used (e.g., decorative boulders used for landscaping).



Best Practice

Provide a clear width of 2000mm for exterior paths of travel, where possible.

Diagram 40.A Min Clear Width of Exterior Path of Travel

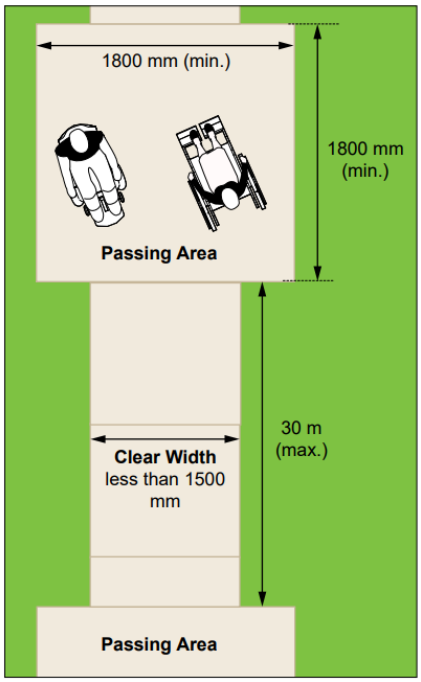


Diagram 40.B Reduced Clear Width and Required Passing Area

40.2 Exterior Edge Protection

1. Exterior edge protection is required at changes in grade between 200 mm and 600 mm, except at stairs [Diagram 40.C].
2. Exterior edge protection is not required where there is no change in adjacent ground level for a min of 1500 mm wide [Diagram 40.D].
3. Must be min 75 mm high and 50 mm wide. Ensure width does not allow for someone to walk along edge protection.
4. Must have min 70% colour / tonal contrast from the walkway surface. Contrast must be on the edge and not on the walkway surface.
5. The path surface must be designed to allow drainage.
6. A change in level greater than 600 mm on exterior paths must be protected by a guard meeting criteria in the latest edition of the OBC.
7. Exterior gates must maintain a clear width of 900 mm and meet the requirements in Subsection 14.4 [Gates].

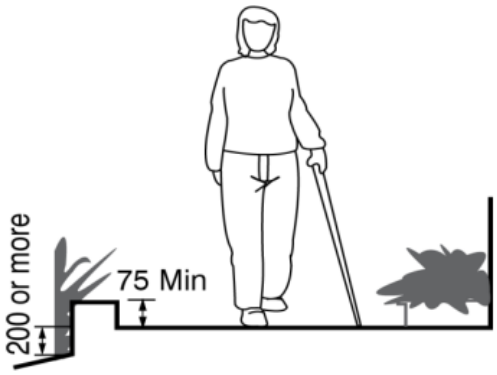


Diagram 40.C Exterior Edge Protection

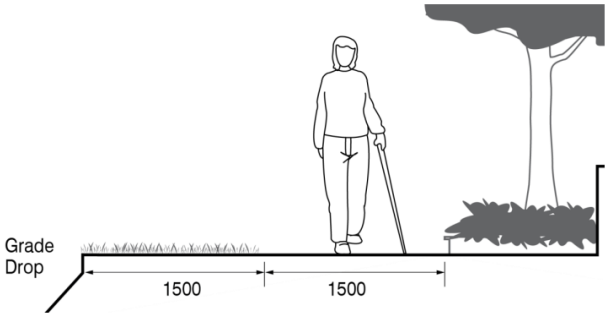


Diagram 40.D Edge Protection Not Required

40.3 Alternative Accessible Paths

Where stairs are located on exterior paths, an alternative accessible path must be provided immediately adjacent to the stairs. This may include either a ramp or another accessible means of negotiating an elevation change.

40.4 Path Slope

1. The running slope must be max 1 in 20 (5%)
2. The cross slope must be min 1 in 50 (2%) but need not exceed the running slope.

41. Curb Ramps and Depressed Curb Ramps

Contents in Section

Application

Curb ramps and depressed curbs help people with disabilities safely and independently negotiate level changes on public sidewalks and other pedestrian routes. They are required when there is a change in level between exterior path of travel and adjacent vehicular route.

The provision of curb ramps and depressed curbs ensures a continuous accessible path of travel between vehicular and pedestrian routes, for the following typical locations:

- Pedestrian crossings at intersections.
- Parking spaces, passenger loading zones and related access aisles; and
- Any other exterior route where there are elevation changes.

41.1 Clear Width

1. Exclusive of flared sides, the min width of a curb ramp is 1500 mm [Diagram 41.B].
2. Depressed curbs do not have a min width.

41.2 Running Slope

1. Slope of curb ramps must be:
   a. Max 1 in 8 (12.5%) where elevation is less than 75 mm, and
   b. Max 1 in 10 (10%) where elevation is 75 mm to 200 mm [Diagram 41.C].
2. Slope of depressed curb must be max 1 in 20 (5%) [Diagram 41.D].

41.3 Cross Slope

1. Min slope required for drainage must not exceed the ratio of 1 in 50 (2%) on paved surface or 1 in 20 (5%) on unpaved surfaces.
2. Max difference between a curb ramp or depressed curb and all surrounding surfaces must not be more than 10%.

41.4 Slope

1. Slope of flared sides of a curb ramp must be max 1 in 10 (10%) [Diagram 41.B].

2. Counter slope of gutters and road surfaces immediately adjacent to the bottom of the curb ramp or depressed curb max 1 in 20 (5%).

3. Min 70% color / tonal contrast must be used on the outside of the return curbs.

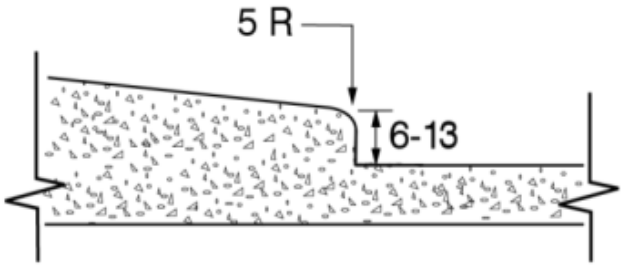


Diagram 41.A Curb Ramp Transition at Pavement

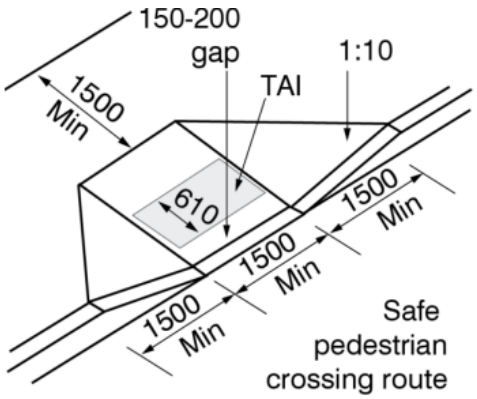


Diagram 41.B Curb Ramp at Mid-Block Crossing

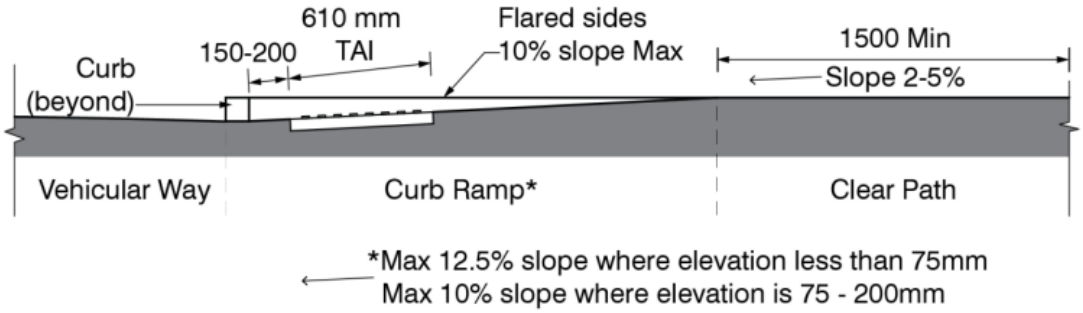


Diagram 41.C Curb Ramp (Section)

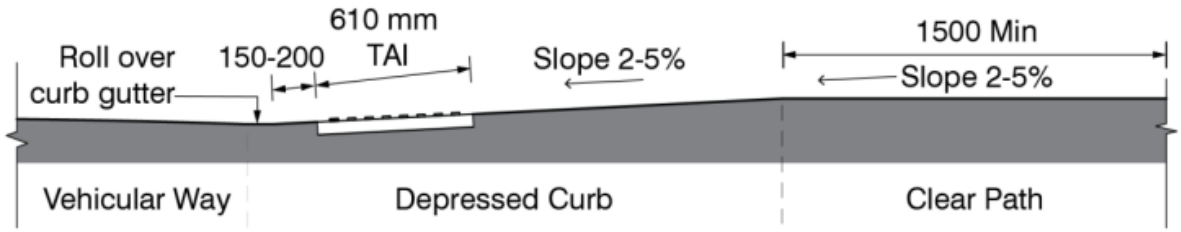


Diagram 41.D Depressed Curb (Section)

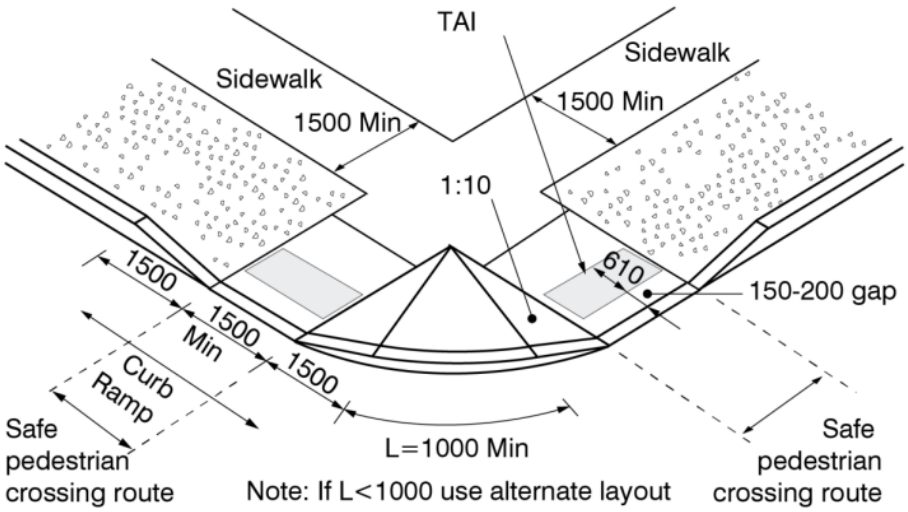


Diagram 41.E Standard Curb Ramp

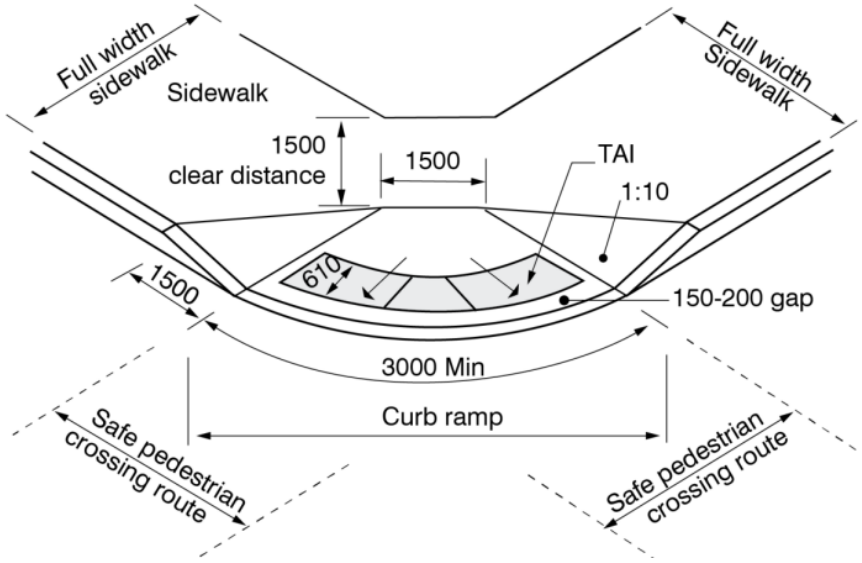


Diagram 41.F Alternate Curb Ramp

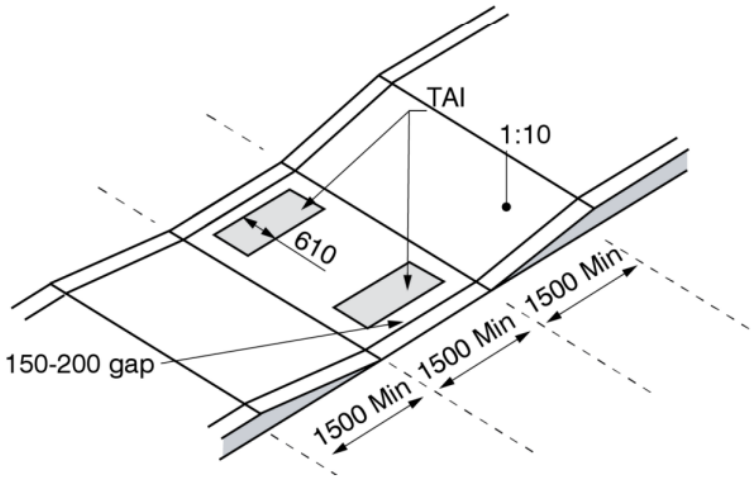


Diagram 41.G Curb Ramp at Narrow Sidewalk

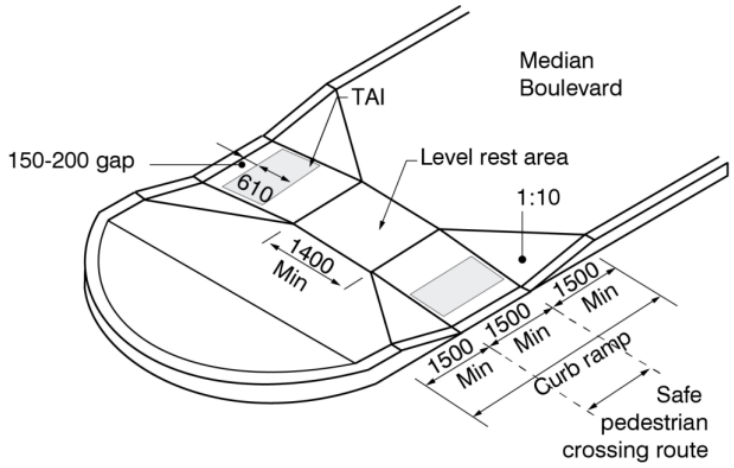


Diagram 41.H Curb Ramp at Wide Median Sidewalk Crossing

42. Passenger Loading Zone

Contents in Section

Application

This section applies to exterior passenger loading and drop-off zones where passengers transfer from vehicles to a pedestrian area which provides an accessible route to a facility. Passenger loading and drop-off zones are important features for:

- people who have difficulty walking long distances or have limited stamina.
- users of mobility aids; and
- people who travel with companions or caregivers (e.g., person with vision loss or cognitive disability, the very young, and seniors).

Note: Transit stops, shelters and related amenities are not classified as part of passenger loading zones and are not covered within the scope of these Guidelines.

42.1 Location of Passenger Loading Zones

Passenger Loading Zones must be:

1. Located on an accessible path,
2. Designed with a depressed curb that meets the criteria in Section 41 [Curb Ramps and Depressed Curbs], and
3. As close as possible to the main entrance.

42.2 Vehicle Pull Up Space

1. Vehicle pull up space must:
   a. Be min 3200 mm wide x 5700 mm long [Diagram 42.A],
   b. Not overlap vehicular route / flow of traffic, and
   c. Have a sign indicating “Passenger Pick-up/ Drop-off only” and must also meet the requirements in Section 12 [Signage and Wayfinding].

42.3 Access Aisle

1. Access aisle must be marked with yellow diagonal hatching.
2. A min 2440 mm wide x 7400 mm long access aisle must be provided adjacent and parallel to the vehicle pull up space [Diagram 42.A].

3. A clear path of travel min 1500 mm wide must connect to an accessible exterior path that meets the criteria in Section 40 [Exterior Paths] adjacent to the access aisle [Diagram 42.A].

42.4 Height Clearance

A min vertical clearance of 3600 mm is required for the passenger loading zone and the vehicle access path leading to it.

42.5 Additional requirements

Passenger Loading Zones must also meet the requirements in the following:

1. Section 3 [Ground and Floor Surfaces],
2. Section 4 [Headroom - Overhanging and Protruding Objects],
3. Section 10 [Tactile Walking Surface Indicators – Attention and Direction],
4. Section 11 [Lighting, Light Sources and Glare],
5. Section 12 [Signage and Wayfinding],
6. Section 13 [Materials and Finishes],
7. Section 40 [Exterior Paths], and
8. Section 41 [Curb Ramps and Depressed Curbs].

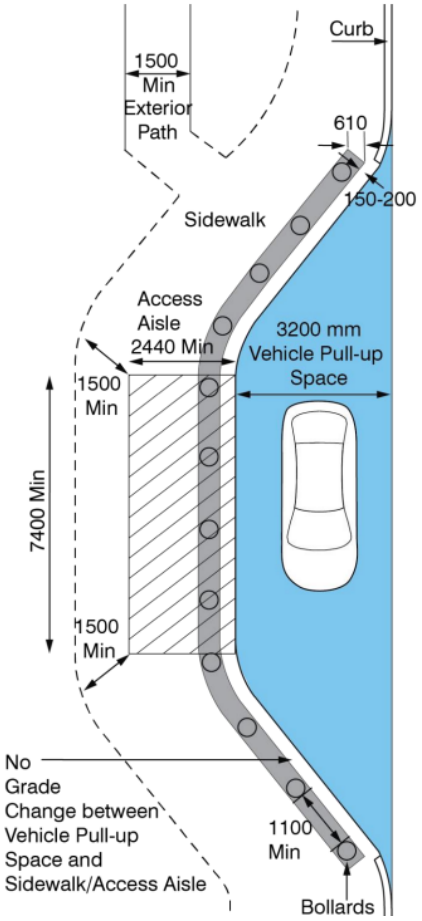


Diagram 42.A Passenger Loading Zone

43. Accessible Parking

Contents in Section

Application

This section applies to accessible parking spaces provided for the following types of exterior or interior parking facilities:

- Parking garages or related structures (e.g., above or below grade);
- Surface parking; and
- On-street parking.

Note: There are three types of accessible parking spaces:

- Type A Parking: Van Accessible
- Type B Parking: Car Accessible
- Type C Parking: Courtesy/Limited Mobility and Caregiver Parking (Optional)

Exception

Off-street parking facilities that are used exclusively to park the following types of vehicles:

- Buses.
- Delivery vehicles.
- Law enforcement vehicles.
- Medical transportation vehicles, such as ambulances; and
- Impounded vehicles.

The requirements in respect of off-street parking facilities do not apply to off street parking facilities if:

- The off-street parking facilities are not located on a barrier-free path of travel, regulated under Ontario's Building Code.
- The facility is one of multiple off street parking facilities on a single site that serve a building or facility, where appropriate accessible parking facilities are provided elsewhere on the same site.

Best Practice

Accessible parking spaces and adjacent access aisles should be regularly maintained, kept clear of debris and snow, and where possible, have overhead protection for users from the elements (e.g., such as direct sun, rain, or snow).

Avoid having the accessible route cross through a drive aisle. Pedestrians should not have to travel behind parked vehicles or move along roadways. Ensure any pedestrian crossing or travel area is clearly marked so it is visible to drivers and pedestrians.

Where spaces are configured such that the front or rear of parked vehicles is immediately adjacent to a pedestrian walkway, consider a design that prevents vehicle overhangs which could reduce the width of the walkway.

Alternatively, provide enhanced clear width of the walkway with protective barriers for pedestrians, to prevent potential bumping or tripping hazards.

43.1 Dimensions

Accessible parking spaces must be:

1. Type A min width 3650 mm [Diagram 43.A]
2. Type B min width 2700 mm [Diagram 43.A]
3. Type C min width 3200 mm [Diagram 43.A],
4. Min height clearance 2750 mm for exterior and 2590 mm for interior, and
5. Min length of 5700 mm.

43.2 Accessible Parking Routes

1. Accessible parking must be provided as close to the accessible entrance a possible with a direct view of the entrance. Where a direct view is not provided, provide signage to direct to the accessible entrance.
2. Accessible paths must be provided from the accessible building entrance to the accessible parking.
3. The path must not enter vehicle traffic and should be as short as possible.

4. Curb ramps or depressed curb must be provided if there is a change in level to the sidewalk or accessible path and must meet the requirements in Section 41 [Curb Ramps and Depressed Curbs].

43.3 Amount

1. The amount of accessible parking must be 50% Type A and 50% Type B. Wherever an uneven amount of parking is required, the remaining spot is permitted to be a Type B parking space. The required number of accessible parking spaces are identified in [Table 43.3.1].
2. Type C - Courtesy/Limited Mobility and Caregiver parking must also be provided as outlined in [Table 43.3.1].
3. Ensure parking meets the Municipality's Zoning By-law requirements.

Table 43.3.1 Required Number of Type A, B and C Parking Spaces

Total Number of Parking Spaces	Amount of Accessible Parking Spaces Required Type A and B	Amount of Courtesy/ Limited Mobility and Caregiver Parking Type C
Less than 12	**1** Type A	**1**
13 to 100	**4%** of total	**2**
101 to 200	**3%** of total plus **1**	**2**
201 to 1000	**2%** of total plus **2**	**4 plus 1** (for each 100 over 201)
Greater than 1000	**1%** of total plus **11**	**4 plus 1** (for each 100 over 201)

43.4 Access Aisle Design

1. Access aisles must be:
   a. A min width 2000 mm [Diagram 43.A and Diagram 43.B],
   b. A min width of 2000 mm for parallel spaces plus a 2000 mm access aisle,

c. Connected to an accessible path and must be clearly marked,

d. A full-length extension of the parking space it serves, and

e. Must not cross a vehicular route.

2. Access aisles are not required for Type C Parking [Diagram 43.A and Diagram 43.B].

43.5 Parking Surface

1. Accessible parking spaces, access aisles and the accessible path to the building must:

    a. Be on a firm, stable and slip resistant surfaces and must meet criteria in Section 3 [Ground and Floor Surfaces] as applicable.

    b. Have a running slope max 1 in 20 (5.0%), and

    c. Have a cross slope max 1 in 50 (2.0%).

2. The ground surface of Type A and Type B parking spaces must:

    a. Have the entire parking space painted blue,

    b. Have the International Symbol of Access painted in white measuring min 1560 mm tall by 1290 mm wide [Diagram 43.C], and

    c. Have access aisles painted with yellow diagonal hatching.

3. Paint used on ground surfaces must be slip-resistant.

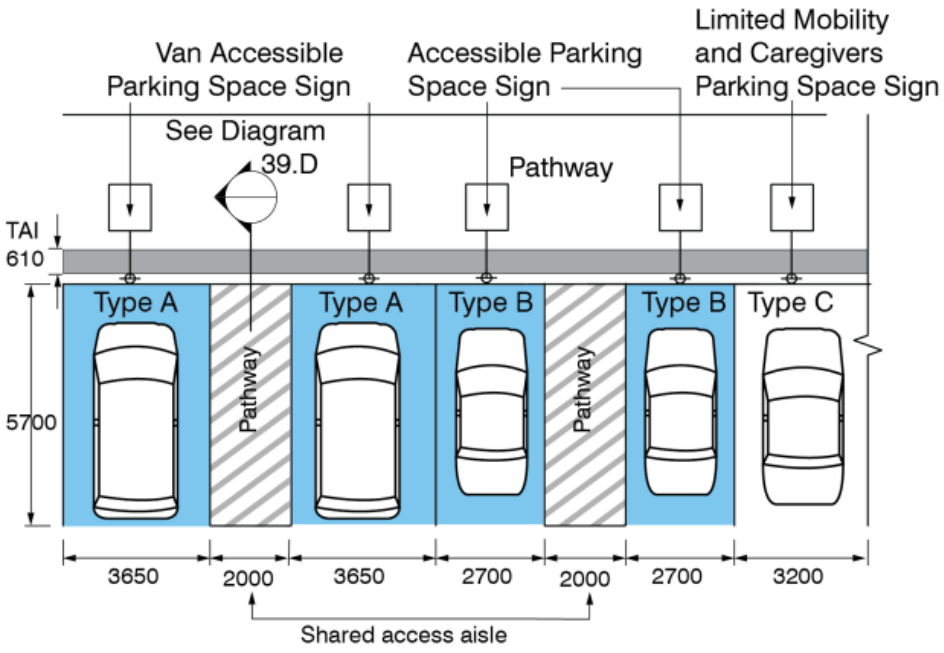


Diagram 43.A Accessible Parking with Depressed Curb

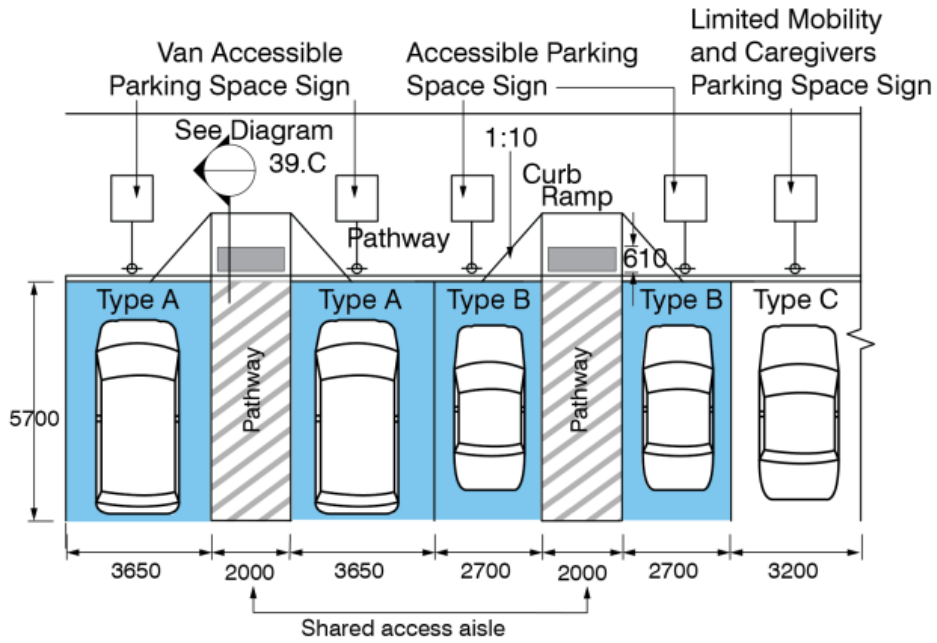


Diagram 43.B Accessible Parking with Curb Ramps

Note: In a renovation where a depressed curb is technically infeasible, provide curb ramp at shared access aisle. Where there is a curb directly in front of the Type “A”

and “B” barrier-free parking spots, a curb ramp will be required at the shared access aisle.

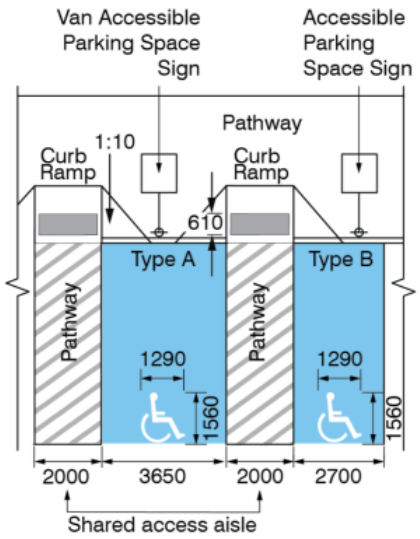


Diagram 43.C Type A and B Parking Size Requirements

43.6 Accessible Parking Signage

1. Signage must be mounted 2000 mm from the top of sign to ground surface and in front of each accessible parking space and meet the requirements in Section 12 [Signage and Wayfinding].
2. Type C parking spaces must include parking signage indicating Limited Mobility and Caregivers [Diagram 43.D].
3. Type A parking spaces must include 2 parking signages, one indicating by Permit Only and the second indicating Van Accessible [Diagram 43.E].
4. Type B parking spaces must include parking signage indicating by Permit Only [Diagram 43.F].

43.7 Additional Requirements

Parking lots must also meet the requirements in the following:

1. Section 3 [Ground and Floor Surfaces],
2. Section 4 [Headroom - Overhanging and Protruding Objects],
3. Section 10 [Tactile Walking Surface Indicators],

4. Section 11 [Lighting, Light Sources and Glare],
5. Section 13 [Materials and Finishes],
6. Section 40 [Exterior Paths], and
7. Section 41 [Curb Ramps and Depressed Curbs].

Diagram 43.D Courtesy Parking/Limited Mobility and Caregivers Parking Signage

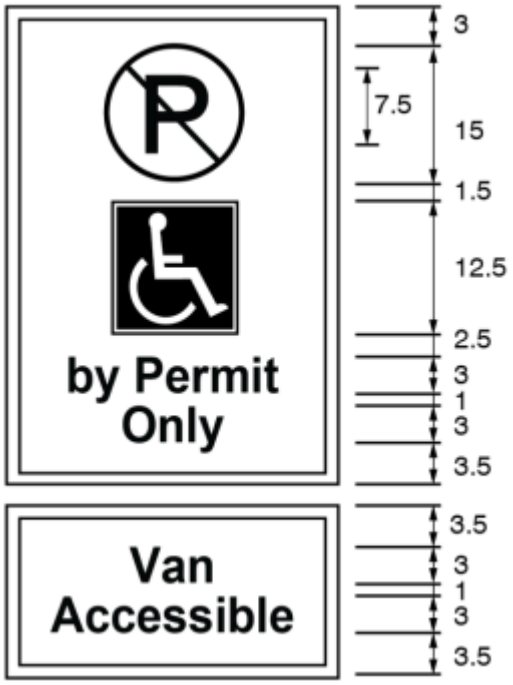


Diagram 43.E Type A Parking Signage

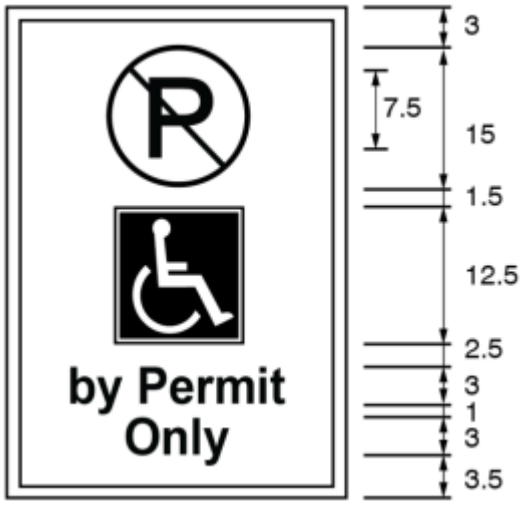


Diagram 43.F Type B Parking Signage

44. Accessible EV Charging Stations

Application

Where Elective Vehicle (EV) charging stations are provided they shall meet the requirements of the Design Recommendations for Accessible Electric Vehicle Charging Stations guide.

The number of accessible EV charging stations per site will vary depending on the number of charging stations offered, but at a minimum one accessible charging station will be offered.

45. Site Furniture

Contents in Section

Application

Site furniture includes, but is not limited to, waste receptables, light standards, vending machines, signs, planters, seating (e.g. benches), tables or picnic tables and any furniture that is located outside of facilities.

Best Practice

Where multiple benches are provided, consider option of some benches oriented to face each other where possible. This arrangement allows people to see each other, which is beneficial for people with hearing and communication disabilities to interact. Also consider different configurations for armrests and backrests.

45.1 General

1. Site furniture must be cane-detectable and have min 70% color / tonal contrast from the surrounding environment.
2. Furniture must be securely mounted to firm, stable ground and must meet criteria in Section 2 [Interior Accessible Paths].
3. Furniture must not reduce the width of an accessible path and must meet criteria in Section 2 [Interior Accessible Paths] and Section 4 [Headroom - Overhanging and Protruding Objects].
4. Any operable controls must meet criteria in Section 9 [Operable Controls and Mechanisms].

45.2 Benches

1. All benches along an accessible path of travel should be accessible, unless there are extenuating circumstances that prevent their use.
2. Accessible benches must be located adjacent to an accessible path and must meet the criteria in Section 40 [Exterior Paths].
3. Accessible benches must have a clear floor space of 860 mm x 1480 mm for a mobility device to rest adjacent to the bench. For accessibility, the armless side of the bench must be adjacent to the clear floor space [Diagram 45.A].
4. The seat of a bench must be 450 mm to 500 mm from the ground and have a seat dimension between 460 and 510 mm deep by min 500 mm wide [Diagram 45.B].

5. Accessible benches must have a back and must vary between having arm rests and being armless.
6. Accessible benches must have min 70% color / tonal contrast from the adjacent ground surface.

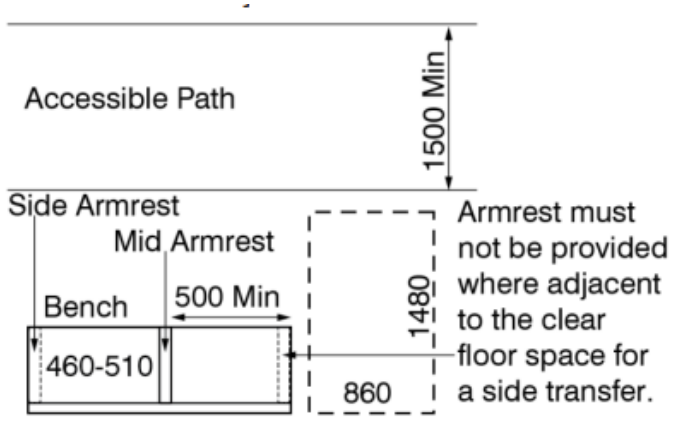


Diagram 45.A Bench and Adjacent Clear Floor Space (plan)

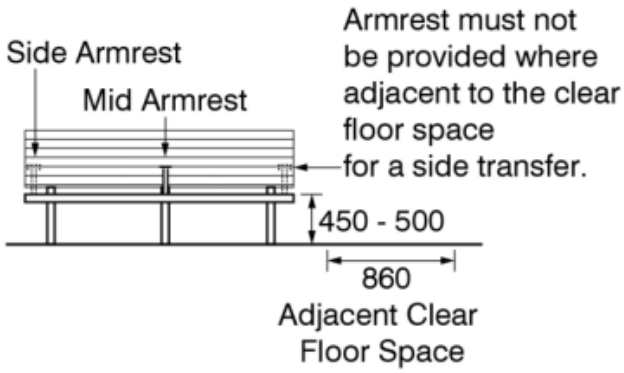


Diagram 45.B Accessible Bench

45.3 Picnic Tables

1. At least 20% of picnic tables must be accessible, but not less than one for each group of picnic tables.
2. Accessible picnic tables must be located on an accessible path and must meet the criteria in Section 40 [Exterior Paths].
3. Knee space must be provided under the accessible picnic table and must be min 900 mm wide, 500 mm deep and 700 mm high [Diagram 45.C and Diagram 45.D].

4. The picnic tabletop surface must be located between 710 mm to 865 mm above the ground surface.
5. Accessible picnic tables must have min 70% color / tonal contrast from the adjacent ground surface.
6. The ground floor surface should extend a min 2000 mm where accessible space is provided at the picnic table and must meet criteria in Section 3 [Ground and Floor Surfaces] [Diagram 45.D].

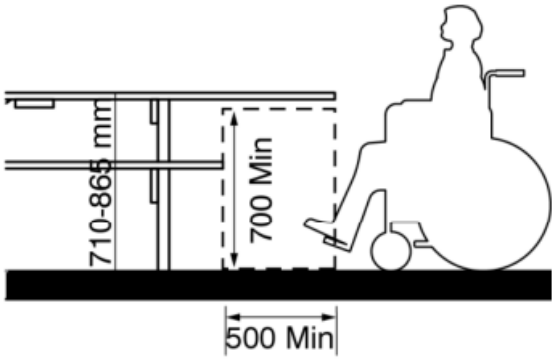


Diagram 45.C Accessible Picnic Table

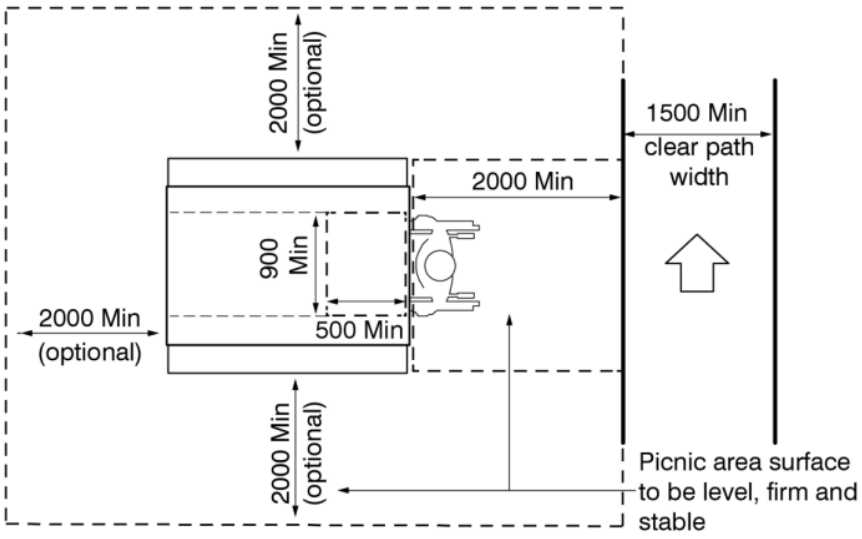


Diagram 45.D Clear Floor Surface for an Accessible Picnic Table

46. Exterior Elevated Platforms

Contents in Section

Application

Exterior Elevated platforms include, but are not limited to, stage areas, speaker podiums and other raised areas.

46.1 Design

1. Elevated platforms must:
    a. Be located on an accessible path,
    b. Illumination must meet requirements in Section 11 [Lighting, Light Sources and Glare],
    c. Be sized to safely accommodate mobility devices in compliance with Section 1 [Space and Reach Requirements], and
    d. Have TWSI as specified in Section 10 [Tactile Walking Surface Indicators] along the perimeter of open platform edges [Diagram 46.A].
2. Where possible, temporary elevated platforms must meet the requirements above.

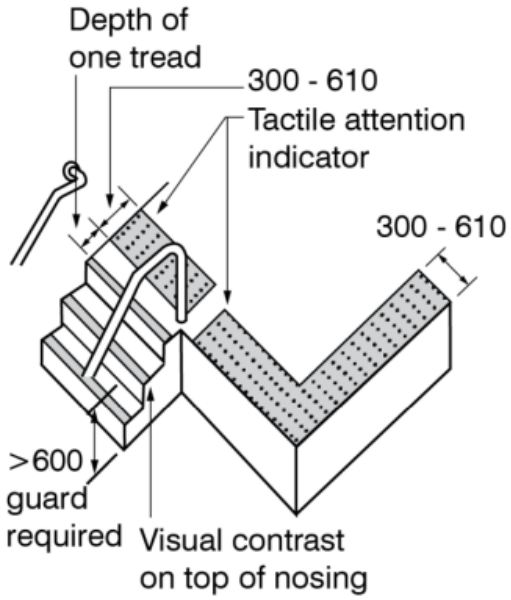


Diagram 46.A Elevated Platform Requirements

47. Porches, Balconies, Terraces, and Patios

Contents in Section

Application

Porches, balconies, and terraces must be designed to be accessible to all.

47.1 Design Porches, Balconies, Terraces, and Patios

1. Porches, balconies, terraces, and patios must be located on an accessible path and have a min depth of 2500 mm.
2. Publicly used porches, balconies, and terraces should also be equipped with power door operators to improve access to the space.
3. Porches, balconies, terraces, and patios must meet the requirements in:
    - Section 3 [Ground and Floor Surfaces],
    - Section 14 [Entrances], and
    - Section 40 [Exterior Paths].

47.2 Railings and Guards

1. Guardrails protecting occupants from heights greater than 600 mm above grade must meet criteria in the OBC. The railing must have min 70% color/tonal contrast with the adjacent floor/ground surface.

47.3 Exterior Seating

1. Any site furniture used must meet criteria in Section 45 [Site Furniture].

48. Playgrounds and Play Spaces

Contents in Section

Application

This section applies to play spaces designed for children with varying abilities. Play spaces can be in a variety of public settings (e.g., parks, schools, childcare facilities, or community/recreation facilities). Play spaces typically require consideration for accessibility features related to:

- The number and types of play structures, equipment, elements and features provided;
- Designed play areas surrounding the play structures; and
- Site amenities and features surrounding the play space.

Criteria provided in this section is intended to summarize key features for inclusive play spaces and reference to applicable standards. Detailed planning and design are required for provision of inclusive play spaces.

Additional Resources:

- Rick Hansen Foundation's: A Guide to Creating Accessible Play Spaces
- Inclusive Play Design Guide – Playworld
- Creating Inclusive Playgrounds: A Playbook of Considerations and Strategies

Note: Inclusive play spaces ensure that children with disabilities have equal opportunities for peer interaction and development of socialization skills. They also provide an opportunity for parents and grandparents with disabilities to interact with their children/grandchildren.

The scope of this section does not address requirements related to the area surrounding or beyond the play space, including, but not limited to, parking lots washrooms, drinking fountains and recreation facilities.

48.1 Consultation Requirements

When constructing new or redeveloping existing outdoor play spaces, consultation on the needs of children and caregivers with disabilities must occur with:

1. The public and persons with disabilities,
2. The Clarington Accessibility Advisory Committee, and
3. Diverse representation of people including ages and abilities.

48.2 Design Requirements

1. Incorporate accessibility features such as, sensory, and active play components for children and care givers with various disabilities into the design of outdoor play spaces.
2. Ensure that outdoor play spaces have ground surface that is firm, stable and as impact attenuating properties for injury prevention and sufficient clearance to provide children and caregivers with various disabilities the ability to move through, in and around the outdoor play space.
3. Ensure the design of inclusive space spaces and features meet the requirements of CAN/CSA Z614-14, Annex H, including:
    a. H.1 Scope
    b. H.2. Reference Publications
    c. H.3 Reference Definitions
    d. H. 4 Play spaces (ground level and elevated play components, accessible routes, transfer systems, play components and ground surfaces)
    e. Other applicable sections of these Standard, as required.

48.3 Summary of Key Design Considerations

The information in the follow sub-sections is intended to highlight key considerations only, not detailed specifications. Refer to requirements of the Canadian Standards Association (CAN/CSA Z614-14, Annex H). This information is not intended to duplicate existing standards but is focused on presented best practices for accessibility.

48.4 Entry and Exit Points

Provide a minimum of two accessible ingress/egress points:

a. Locate as part of an adjacent accessible route.

b. Ensure accessible connections provided to play space surfaces are firm, stable, and slip-resistant, as well as providing direct connections to individual play components.

c. Provide clear with of 1500mm.

48.5 Accessible Routes

1. Provide at least one accessible route within the boundary of the play space, connecting ground-level play components and elevated play components, including entry and exit points of play components [Diagram 48.A].
2. Ensure clear width of accessible route is 1500mm min.
3. Ensure the max slope gradient for an accessible route connecting ground-level play components within the boundary of play space is 1:20 (5%).

Diagram 48.A Example of accessible entry/exist point and accessible route leading to elevate play components.

48.6 Play Space Ground Surface

1. Provide accessible surface materials for play spaces including:
    a. Poured in place rubber

b. Accessible turf
c. Rubber mats and tiles
d. Bonded and engineered wood fibers
e. Shredded rubber

Examples of inclusive play space ground surfaces. From left to right: poured in place rubber, engineered wood fiber, and shredded rubber.

48.7 Play Components

Provide colour/tonal contrast of at least 70% between a play component and its surroundings.

48.8 Elevated Play Components

An elevated play component is a play component reached from above or below grade and is part of a composite play structure.

1. Ensure at least 50% of elevated play components are connected to a ramp or transfer system, as identified in Table 48.8.1.

Table 48.8.1 Number of Accessible Elevated Play Components

Total Number of Elevated Play Components	Total Percentage of Elevated Play Components Requiring a Ramp or Transfer System
20 or more	50% min (25% ramp and 25% ramp and transfer)
Less than 20	50% min (ramp or transfer)

48.9 Transfer Systems

1. Provide transfer systems to connect elevated or ground-level play components.
2. Ensure transfer steps are used where movement is intended from a transfer platform to a level that provides elevated play components on an accessible route.
3. Provide a min clear floor space of 915mm wide by 1370mm long adjacent to all transfer locations onto play components [Diagram 48.B]

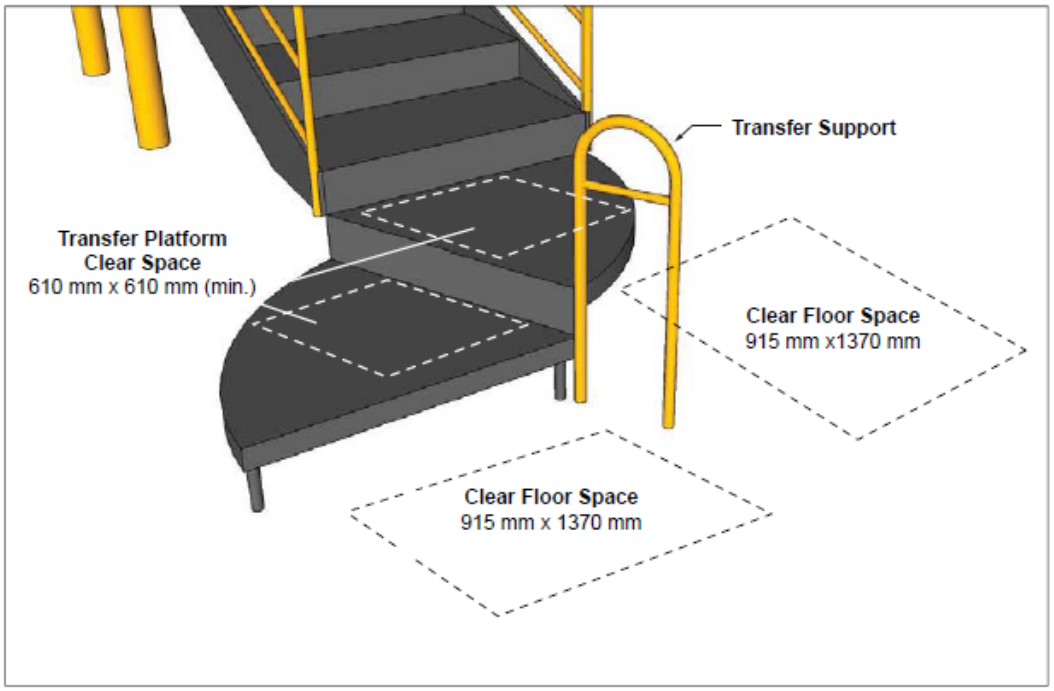


Diagram 48.B Transfer Systems

48.10 Turning Space

Provide a clear turning space of 1500mm (min) or 1675 (preferred) in diameter for mobility aids, on the same level as play components [Diagram 48.C]

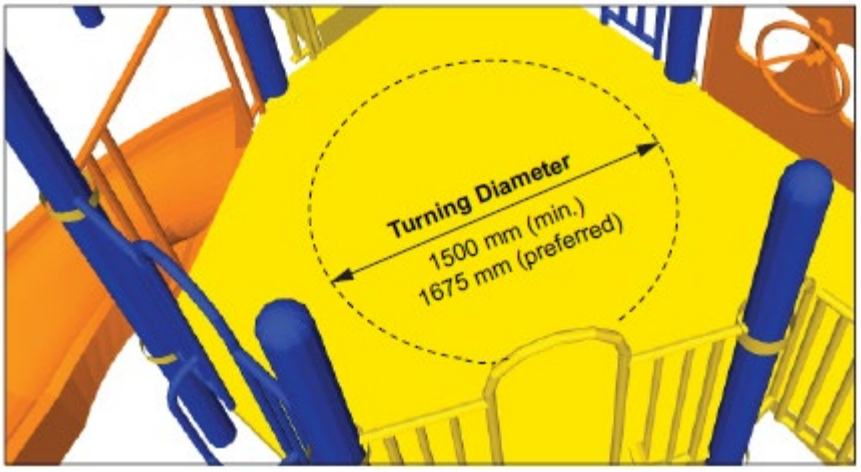


Diagram 48.C Turning Space

48.11 Ground-Level Play Components

A ground-level play component is a play component that is approached and exited at the ground level.

1. Provide the ratio of ground-level play component alternatives, compared to elevated play components, as indicated in [Table 48.11.1].

Table 48.11.1 Ratio of Ground-Level Play Components Compared to Elevated Play Components

Number of Elevated Play Components Provided	Minimum Number of Ground-Level Play Components Required to be on an Accessible Route	Minimum Number of Different Types of Ground-Level Play Components Required to be on an Accessible Route
1	n/a	n/a
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 24	8	4
More than 25	8 plus 1 for each additional 3 over 25, or fraction thereof	5



Examples of Ground-Level Play Components

48.12 Inclusive Play Spaces

Creating inclusive play spaces is an important part of building an accessible, inclusive, and welcoming community. This section further identifies key design features for planning and designing inclusive play spaces. There is a special focus on the accessible features that are required for meeting the diverse needs of people with disabilities, including children and adults.

Additional design considerations are also required for the broader play space context and environment, including requirements for the site and park where the play space is located (e.g. seating and viewing areas, shade structures, washrooms, etc.).

There are five key parts to a truly inclusive play space.

1. **Accessible routes**

   Accessible route(s) connecting the play space boundary from the parking lot, sidewalk and other adjacent routes and buildings are essential for easy access to the play space.

   Key considerations: Is there at least one accessible route leading to the play space?

2. **Entry/exist points**

   Entry/exit points from an accessible route along the boundary of the play space for users of mobility aids to access play components, where there is a change in level.

   Key considerations: Is there at least one try/exit point (2 or more preferred) into the play space?

3. **Ground surfaces**

   Surfacing is a key component in designing safe and accessible play spaces. Accessible surfaces include poured-in place rubber, shredded rubber, rubber tiles and engineered wood fiber.

   Rubberized surfaces are the preferred surface by adults and children with disabilities and should be utilized as often as possible.

   Key considerations: Is the play space ground surface accessible? Are there any other nearby playgrounds with rubberized floor surfaces or are they mostly engineered wood fiber?

4. **Elevated play components**

   An elevated play component is a play component reached from above or below grade, and is part of a composite play structure.

   Note: ramps, transfer systems, steps, stand-alone slide, decks and roofs are not considered elevated play components.

   Two common methods for providing access to elevated play components are ramps and transfer systems.

   Key consideration: Are at least 50% of elevated play components located on an accessible route and connected by a ramp or transfer system?

5. **Ground-level play Components**

   A ground-level play component is a play component that is approached and existed at ground level.

   When designing an inclusive play space, one of the design features is the provision of play components along the accessible routes for users who may not be able to access components located on elevated platforms. The number and variety of ground level play components required to be on an accessible route is determined by the number of elevated play components provided in the play space.

   Key consideration: Are the minimum number and variety of ground-level play components required to be along an accessible route provided?

   Note: A calculator to determine the required number and variety of ground-level and elevated play components required in an inclusive play space is provided courtesy of the Canadian Playground Safety Institute (cpsionline.ca). The calculator is based on CAN/CSA Z614-14 (Annex H) and can be adapted.

49. Landscaping and Community Gardens

Contents in Section

Application

Landscape materials must be selected with a variety of users in mind. A variety of fragrances and contrasting colors provide cues to an individual with visual impairment. Low landscaping must be utilized in parking lots and corners.

49.1 Landscaping

1. Shrubs and thorns and sharp edges must be planted min 920 mm away from the accessible path and seating areas.
2. Tree branches along an accessible path must be cut to a min height of 2100 mm from the ground [Diagram 49.A].
3. Trees that drop large seed pods must not overhang or be positioned near accessible paths.
4. Any paths circulating landscaping must meet the requirements in Section 40 [Exterior Paths].
5. Low landscaping must be used in parking lots and on corners. This is to ensure sightlines are maintained for people in seated positions/people with children, etc.

49.2 Accessible Plant Beds at Community Gardens

1. 10% of community garden plots in an area, but not less than one must be accessible.
2. Accessible plant beds must be 1000 mm wide and 400 mm AFF [Diagram 49.B and Diagram 49.C] and follow the guidelines in Section 1 [Space and Reach Requirements] and Section 40 [Exterior Paths].

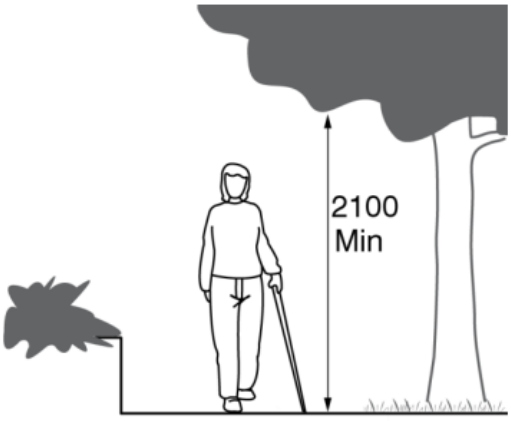


Diagram 49.A Clearance Height for Branches

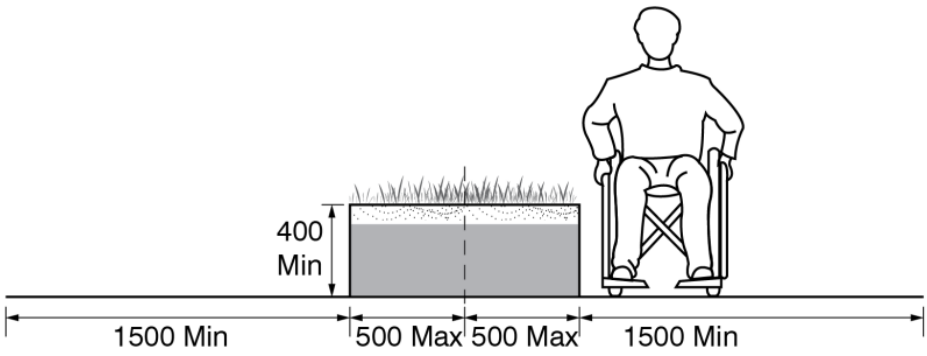


Diagram 49.B Accessible Plant Bed (Elevation)

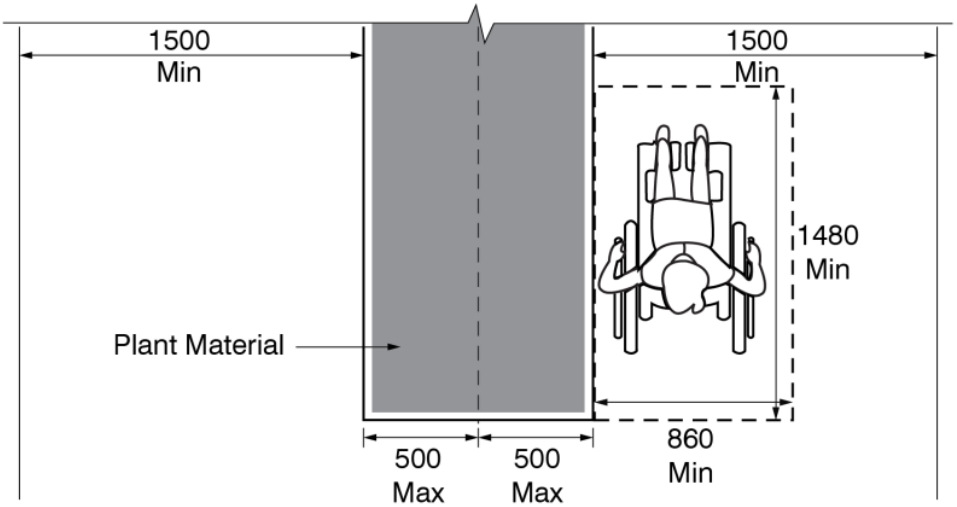


Diagram 49.C Accessible Plant Bed (plan)

50. Dog Parks

Contents in Section

Application

Note: Off-Leash Dog Areas provide an enclosed or fully fenced exterior space where owners can bring their dogs to play with other off-leash dogs. These should be designed to engage both dogs and their owners including persons using mobility devices and persons who are blind or have low vision, and persons using service animals (guide dogs).

50.1 Accessible Path of Travel

These areas should provide an exterior accessible path of travel. Please refer to Section 40 [Exterior Paths].

50.2 Accessible Control Gates

These areas should provide accessible control gates [Diagram 50.A] that:

1. Are equipped with pretensioned self-closing hinging mechanism to allow the gate to self-close gently.

2. Should provide a clear width of 950 mm min [Diagram 50.B]

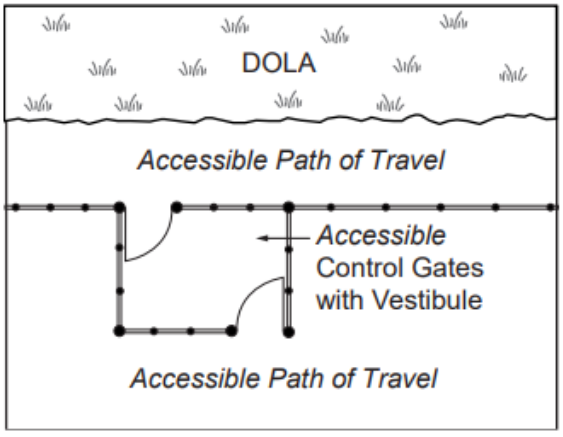


Diagram 50.A Dogs Off-Leash Area with Accessible Control Gates

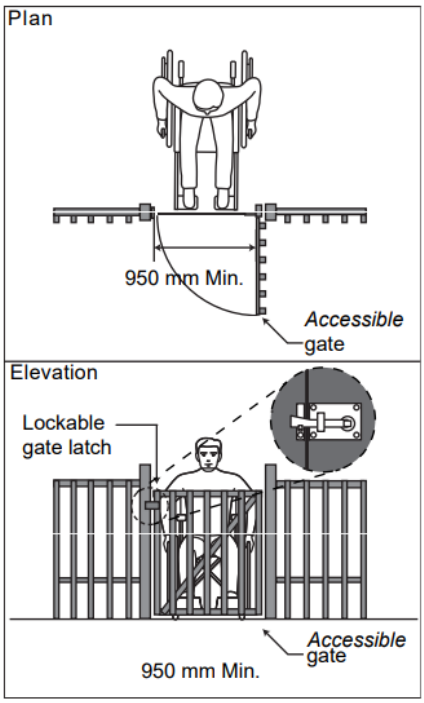


Diagram 50.B Clear Width of Accessible Control Gate (plan)

Clarington

Facility & Specific

4

51. Libraries

Contents in Section

Best Practices

This section applies to libraries or a designated room in a facility that is used for the same purpose.

It is recognized that libraries have unique space requirements to accommodate book stacks and reference materials at both high and low shelving heights. Shelving heights in collection areas with book stacks is unrestricted where Municipal Staff are available to assist users when requested. Ensure Staff availability is coordinated as part of a formal Accessible Customer Service policy, practice or procedure that is in place for all Library facilities as required.

51.1 Design and Layout

1. Provide a consistent accessible path of travel at least 1100mm wide throughout spaces for circulation [Diagram 51.A]
2. Provide turning diameter of 1800-2500mm to allow users with mobility aids to make a 180° turn [Diagram 51.A].
3. Where provided, ensure security gates have a clear width of 900mm [Diagram 51.B and Diagram 51.C]
4. Provide at least one accessible service counter at circulation, information, or self-service checkout areas.
5. Where online catalogues or other workstations are provided, ensure at least 50% are accessible.
6. Provide at least one assistive listening device to access all multi-media resources,
7. Ensure lighting level is at least 200 lux, measured at the floor level.
8. Ensure acoustic quality is free of unnecessary background noise.
9. Provide informational and directional signage where any services or amenities for users with disabilities are available on different floor levels (e.g., information or customer service desks).
10. Ensure library staff are provided with disability awareness/sensitivity training.

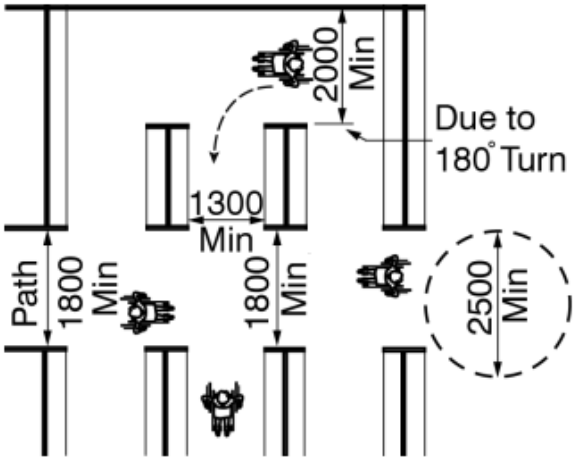


Diagram 51.A Accessible Paths in Libraries

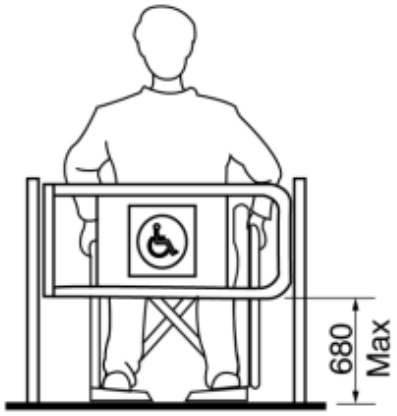


Diagram 51.B Accessible Gate in Elevation

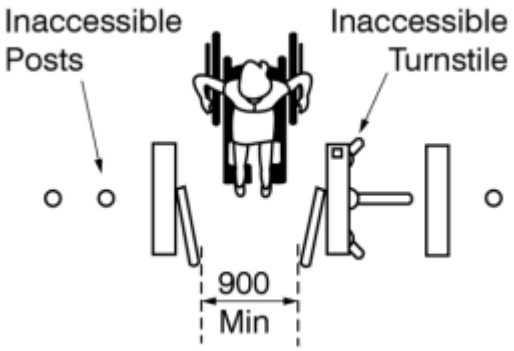


Diagram 51.C Accessible Gate in Floor Plan

51.2 Book Drop Slots

1. Located on an accessible path of travel.
2. Provide clear floor space in front of drop slot as required in Section 1 [Space and Reach Requirements].
3. Ensure drop slot is colour contrasted with mounting surface.
4. Locate slot between 900-1100mm FFS.
5. Ensure slot controls are usable with closed fists and operable with one hand.

51.3 Book Stacks and Carousels

1. Ensure accessible path of travel of at least 1100mm between aisles.
2. 50% of shelving must be located 400 mm to 1200 mm AFF [Diagram 51.D].
3. Ensure library policy is in place to help users to access items that are too high or too low.
4. Ensure large print collection and heavier materials are placed on lower shelves for easier access.

51.4 Reading Lounges and Study Areas

1. Provide a variety of seating options (e.g., flexible) for all users.
2. Ensure furniture provided is colour contrasted with surroundings.
3. Where study tables/carrels are provided, ensure at least 20% are accessible.
4. Ensure study carrels and work surfaces provide suitable knee and toe clearances.
5. Incorporate an electric outlet.

51.5 Assistive Technology

Provide assistive technology for library users with varying disabilities including but not limited to:

1. Accessible touch screens at an accessible height and within an accessible reach range, where provided.
2. Adaptive technology such as options for flexible mouse controls, scrolling features, and on-screen keyboards.

3. Specialized equipment for users with vision loss, including screen reading software (e.g., JAWS), scanner, and CCTV magnifiers.
4. Headphones or standard audio jack within an accessible reach range.
5. Voice recognition software.
6. Wireless internet connections and download centres that are accessible.

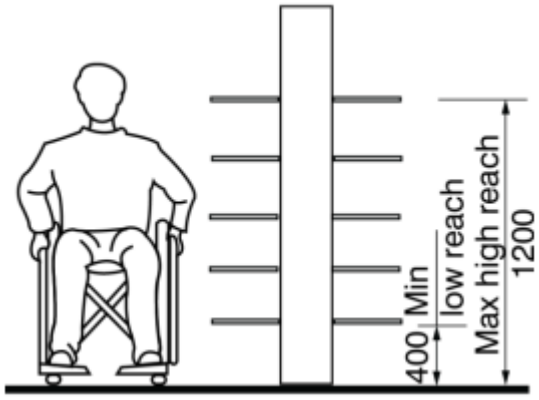


Diagram 51.D Accessible Shelving in Libraries

52. Public Swimming Pools, Spas and Saunas

Contents in Section

52.1 Access

1. Access to the public pool deck and public spa must be provided by means of a primary accessible path through the change rooms and onto to the pool deck. The path must meet requirements of Section 2 [Interior Accessible Paths].
2. Accessible access into a public pool must be provided either by a ramp or a pool lift meeting the requirements in the latest edition of the *Ontario Building Code*.
3. Accessible access into a public spa must be provided by a transfer wall, a ramp or a pool lift meeting the requirements in the latest edition of the *Ontario Building Code*.

52.2 Pool Deck

1. The pool perimeter must be clearly delineated by a tactile attention indicator that meet the requirements of Section 10 [Tactile Walking Surface Indicators].
2. Any headroom protrusions greater than 2100 mm above floor must meet criteria in Section 4 [Headroom - Overhanging and Protruding Objects].
3. The pool deck surface must be firm and slip resistant.
4. Diving boards, pool and lane markers, signage, starting blocks, lifeguard chairs, slides and other pool related structures must have min 70% color / tonal contrast from their surrounding environment and not create a tripping hazard.

52.3 Pool / Spa Lifts

1. The clear deck space located parallel with the seat and on the side of the seat opposite the water must be at least 915 mm wide and extend forward min 1500 mm from a line located 305 mm behind the edge of the seat.

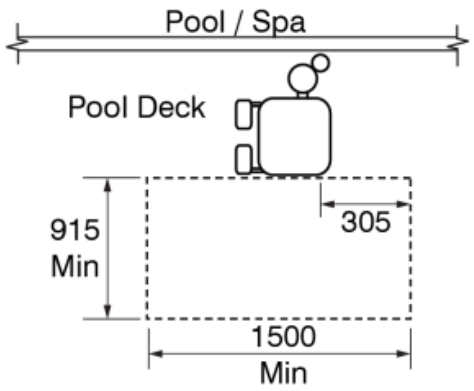


Diagram 52.A Pool/Spa Lift Clear Floor Space

52.4 Wading Pools

Wading pools must be safe and gradual with a slope of 1 in 20 so that a child with a disability can be assisted into the water easily and/or use a mobility device to enter.

52.5 Public Spas

Public spas must meet all the requirements for emergency provisions as set out in the latest edition of the OBC under subsection 3.12.5. Emergency Provisions for All Public Spas.

52.6 Transfer Wall

1. A transfer wall from the pool deck into the spa must have two grab bars that are perpendicular to the spa [Diagram 52.B and Diagram 52.C].
2. The transfer grab bars must be:
    a. Located 100 mm to 150 mm above the transfer wall,
    b. Min 610 mm clearance between the grab bars and on each side,
    c. Extend the full width of the transfer wall,
    d. 35 mm to 40 mm in diameter, and
    e. Installed in strict accordance with the manufacturer recommended installation guidelines.
3. A min 900 mm x 2200 mm clear deck space to make a lateral transfer, that is outside and adjacent to the accessible path, must be provided with a max 1 in 50 (2%) slope at the base of the transfer wall surface [Diagram 52.C].

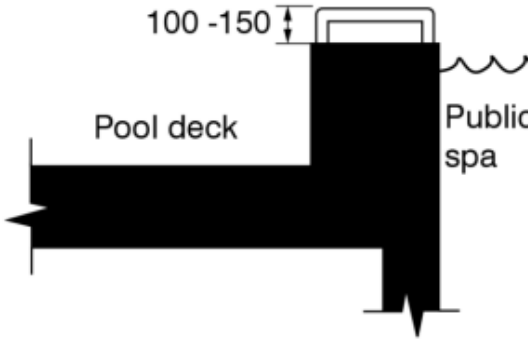


Diagram 52.B Transfer Wall Sectional View for a Public Spa

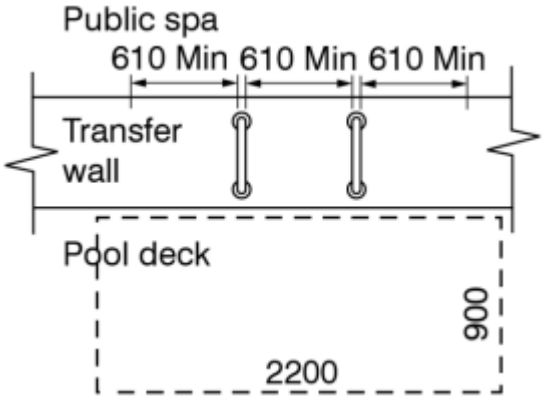


Diagram 52.C Transfer Wall Plan View for a Public Spa

52.7 Saunas

Saunas must:

1. Be connected to an accessible path and meet the requirements of Section 2 [Interior Accessible Paths],
    a. Have a door that swings outwards meeting the requirements in Section 15 [Doors],
    b. Have a threshold at the door that is flush with the remainder of the floor,
    c. Have a min 2500 mm turning circle within the sauna,
    d. Provide a clear floor space of 860 mm by 1480 mm within the seating area,
    e. Have benches with smooth edges that have min 70% colour / tonal contrast to the adjacent surroundings,
    f. Have an emergency call system located on the interior of the sauna that meet the requirements of Subsection 25.6 [Emergency Call System], and
    g. Have min 70% color / tonal contrast between the walls and floor.
2. At least one bench within the sauna must be accessible and:
    a. Be between 610 mm to 762 mm deep,
    b. Be a min 1100 mm wide,
    c. Be 430 mm to 482 mm AFF,

d. Have a backrest,
e. Have an armrest within the middle of the bench, and
f. Have an adjacent clear floor space of 860 mm by 1480 mm.

53. Arenas and Recreation Facilities

Contents in Section

Application

Arenas and recreation facilities, such as specialized areas for fitness, sport and wellness should be designed to be usable by all individuals. Where ice rinks, gymnasiums, exercise studios and weight rooms are provided they should be designed to allow individuals to participate in a range of activities. Every person should have equal access to participate in recreational sporting activities.

53.1 Accessible Paths

1. Arenas and recreational facilities must be provided with an accessible primary path to all main activities with a min clear width of 1800mm.

53.2 Ice Rinks

1. Provide equipment that is accessible, flexible, and adaptable,
2. Have at least one access point, in addition to the ice resurfacers access point, leading to the ice surface that:
    a. Has a clear width of 2100mm min where a single overhead gate is used,
    b. Has a clear width that is 3600mm min where a single, swing gate is used, and
    c. Can also be access by ice resurfacers.
3. The threshold between the rink and the arena floor surface can be max 13mm beveled at a slope of 1 in 2.
4. Have an automated external defibrillator (AED).

53.3 Additional Requirements

1. 10% of change rooms but no less than 1 type of each change room (team change room, family change room, and referee change room) must be accessible and meet the requirements in Subsection 29.3 [Accessible Dressing Stalls].
2. At least one universal change room must be provided in every arena building near the team/gender specific change rooms and meet the requirements in Section 28 [Universal Change Room].
3. Arenas must meet the requirements in:
    a. Section 1 [Space and Reach Requirements],

b. Section 2 [Interior Accessible Paths],
c. Section 3 [Ground and Floor Surfaces],
d. Section 4 [Headroom - Overhanging and Protruding Objects],
e. Section 5 [Ramps],
f. Section 6 [Stairs],
g. Section 9 [Operable Controls and Mechanisms],
h. Section 10 [Tactile Walking Surface Indicators],
i. Section 11 [Lighting, Light Sources and Glare],
j. Section 12 [Signage and Wayfinding]
k. Section 13 [Materials and Finishes],
l. Section 14 [Entrances],
m. Section 17 [Windows and Glazing],
n. Section 19 [Service Counters and Related Areas], and
o. Section 34 [Accessible and Adaptable Fixed Seating]

53.4 Gymnasiums

Gymnasiums should be multi-purposed. They should allow all individuals to participate in recreational and competitive fitness and sport such as running, basketball, volleyball, soccer, gymnastics, squash, etc. All individuals should have access to equipment that is *accessible*, flexible and adaptable.

1. Provide equipment that is accessible, flexible and adaptable.
2. Have an automated external defibrillator (AED).

53.5 Spectator Areas

Must meet the requirements of Section 34 [Accessible and Adaptable Fixed Seating].

53.6 Exercise Studios and Weight Rooms

1. Have equipment and machines that:

a. Are accessible, flexible and adaptable to allow persons with a range of abilities to use them,
b. Have tactile characters, including free weights,
c. Have colour/brightness contrast from adjacent surfaces and between operatable portions and controls,
d. Have high visibility and clear sight lines between individuals using equipment and machines and the facility staff and service counter, where provided.

2. Where electronic equipment and machines are provided, they should:
    a. Have a visual display,
    b. Audible descriptions or the visual display,
    c. Be designed to plug in headphones or earbuds into.
3. Have emergency call systems to signal immediate assistance with equipment and machines,
4. Have a map of the equipment and machine plan that has tactile characters, and
5. Have an automated external defibrillator (AED).





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