

THE CORPORATION OF THE TOWN OF MIDLAND



**STANDARDS FOR BARRIER-FREE DESIGN
FOR MUNICIPAL FACILITIES**

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Purpose

These standards are intended to inform designers, contractors and government personnel, providing services to the Town of Midland of the minimum requirements for barrier-free design in Town owned and occupied facilities. The Standards represent the minimum requirements regarding government facility accessibility. Unless otherwise specified herein, the OBC referenced in this document is the 2006 Version.

Application

The Town of Midland shall ensure that the design of buildings, structures, and premises, or parts of buildings, structures and premises that it purchases, constructs or significantly renovates comply with these guidelines before occupation or regular use by its employees.

The Town of Midland will also have regard for these Standards when it enters into a new lease. The new Standards will be applied and implemented on a “go-forward” basis. Unless otherwise specified herein, the OBC referenced in this document is the 2006 edition.

Definition of Extensive Renovations

Except as provided in Part II – Division B of the Ontario Building Code, the proposed construction within an existing suite shall comply with the requirement of Section 3.8 where:

- a) The existing interior walls or floor assemblies within the suite are substantially removed in an existing building,
- b) New interior walls or floor assemblies are installed,
- c) The suite has an area greater than 300 m², and
- d) The suite is located on,
 - i. A floor area where the existing difference in elevation between the adjacent ground level and the floor level is not more than 200 mm, or
 - ii. A normally occupied floor area which is accessible by a passenger type elevator or other platform equipped passenger elevating device from an entrance storey where the existing difference in elevation between the adjacent ground level and the entrance storey level is not more than 200 mm.

Non-Application in Exceptional Circumstances

The Town of Midland contemplates different requirements for facilities where in exceptional circumstances and on a project-by-project assessment there may be a partial application or exclusion of the Standards. Any non-application of the Standards, in whole or part, shall only be done after the impact of the following criteria is considered:

- a) Whether a particular site offers services to the general public that warrant regular access;
- b) Whether the requirements and/or restrictions of other applicable legislation will impede the application of these Standards;
- c) Whether the use of the Standards would obstruct the structural integrity, quality or function of the structure, building or premises;
or,
- d) Whether health and safety requirements, or any outside sources of funding will render the application of the Standards unreasonable.

Any resulting non-application of the Standards under this section shall be recorded in writing, including the reason for the non-application, and form part of the project documents.

Additional Items to Consider

Maintenance

It is essential that barrier-free paths of travel and facilities be properly maintained in accordance with other applicable legislation or standard maintenance practices in order to reduce the creation of new barriers. Some examples of maintenance items include:

- Timely removal of snow and ice;
- Timely repair of uneven surfaces;
- Removal of furniture, fixtures and stores items that impede clearance spaces or corridor widths;
- Proper leveling of elevators;
- Adjustment of door closers and elevator doors to prescribed limits;
- Maintenance of prescribed lighting levels; and
- Proper maintenance of non-glare surfaces.

Emergency Evacuation Planning

Facility Emergency Evacuation Planning should address accessibility procedures for persons with disabilities. Person with disabilities who regularly occupy a facility should have access to Emergency Evacuation Plans in a range of formats, including large text and electronic formats. This will help to improve the understanding of evacuation methods and promote adequate training of persons with disabilities of the emergency measures.

1.0 **EXTERIOR AREAS**

1.1 **Parking and Drop-Off Areas**

1.1.1 Provide a minimum number of barrier-free car parking spaces in each parking area as follows:

Total Parking Spaces Provided	Minimum Barrier-Free Car Spaces Required
1-10	1
11-20	2
21-50	3
51-75	4
76-100	5
101-200	6
Over 200	1 additional for each additional 100 spaces or part thereof

1.1.2 Barrier free parking spaces shall have a minimum width of 3500 mm plus a 1500 mm wide access aisle to accommodate vans with built-in wheelchair lifts. The access aisle must be level. Length of the space shall be as required by local municipal by-laws. Two adjacent spaces may share the same access aisle (Appendix A, Figure 1).

1.1.3 Barrier free car and van parking spaces shall be located as close as possible to the main accessible entrance of the building. Provide a curb ramp per 1.2.9 (that will not be blocked by a parked vehicle) directly adjacent to the designated spaces.

1.1.4 The surface of all barrier-free parking spaces must be level (maximum slope in any direction 2%), firm (no gravel) and slip-resistant. Pavement markings must use non-slip paint. Do not paint the entire surface of the parking space.

1.1.5 Provide signage to designate the barrier-free spaces as reserved for permit-holders:

- .1 A vertical post-mounted sign in front of the space, with the centre of the sign between 1500 mm and 2000 mm above the ground. The sign shall be in accordance with the Ontario Highway Traffic Act, Ontario Reg. 581 (Appendix A, Figure 4); and
- .2 A painted pavement marking in the centre of the space, in contrasting colour to the pavement, 1000 mm in length, with the International Symbol of Access (Appendix A, Figure 1).

- 1.1.6 Provide a passenger pick-up area at or near the main accessible entrance. The access aisle on the passenger side shall be minimum 1500 mm wide by 6000 mm long (Appendix A, Figure 3).
- 1.1.7 Barrier-free parking spaces and passenger pick-up areas shall have a minimum clear height of 2850 mm, including along the vehicular access/egress route. See 3.8.2.2, Access to Parking Areas of the Ontario Building Code.
- 1.1.8 Where angled parking for one (1) handicapped spot to be a minimum of 5.0 m wide and curb to be depressed for the full 5.0 m.

1.2 Walkways and Ramps

- 1.2.1 Provide an accessible route from streets and parking areas to all accessible entrances. The accessible route shall be minimum 1600 mm wide. Surfaces shall be maximum 5% (1:20) running slope and maximum 2% (1:50) cross slope. Where running slope must exceed 5% (1:20), provide a ramp in accordance with 1.2.6.
- 1.2.2 Walkways and ramps shall have an even, hard, slip-resistant surface.
- 1.2.3 Where the accessible route is adjacent to a vehicular route, it shall be separated from it by a cane-detectable curb or a detectable warning surface (Appendix A, Figures 5, 6 and 13).
- 1.2.4 Accessible routes must be free from overhead protrusion hazards. Provide a cane-detectable railing, planter or bench anywhere that the overhead clearance is less than 1980mm, as according to the Ontario Building Code, Section 3.8.1.3 (5) (Appendix A, Figure 2).
- 1.2.5 Where possible, locate gratings out of the accessible route. Any gratings in accessible route walkways must be level and have a maximum 13 mm wide opening in the direction of travel.
- 1.2.6 Ramps located in a barrier-free path of travel shall (Appendix A, Figure 7):
 - .1 Have a minimum width of 900 mm between handrails,
 - .2 Have a maximum gradient of 1 in 12,
 - .3 Have a level area of at least 1670 mm by 1 670 mm at the top and bottom of a ramp and where a door is located in a ramp, so that the level area extends at least 600 mm beyond the latch side of the door opening, except that where the door opens away from the ramp, the area extending beyond the latch side of the door opening may be reduced to 300 mm.
 - .4 Have a level area at least 1670 mm long and at least the same width of the ramp:
 - a) at intervals of not more than 9 m along its length, and
 - b) where there is an abrupt change in the direction of the ramp,

- .5 Except as provided in Sentence (2), be equipped with handrails on both sides that shall:
 - a) Be continuously graspable along their entire length and have circular cross-section with an outside diameter not less than 30 mm and not more than 40 mm, or any non-circular shape with a graspable portion that has a perimeter not less than 100 mm and not more than 155 mm and whose largest cross-sectional dimension is not more than 57 mm,
 - b) Be not less than 865 mm and not more than 965 mm high, measured vertically from the surface of the ramp, except that handrails not meeting these requirements are permitted provided they are installed in addition to the required handrail,
 - c) Be terminated in a manner that will not obstruct pedestrian travel or create a hazard,
 - d) Extend horizontally not less than 300 mm beyond the top and bottom of ramp,
 - e) Be provided with a clearance of not less than 40 mm between the handrail and any wall to which it is attached, and
 - f) Be designed and constructed such that handrails and their supports will withstand the loading values obtained from the nonconcurrent application of a concentrated load not less than 0.9 kN/m applied at any point and in any direction for all handrails and a uniform load not less than 0.7 kN/m applied in any direction to the handrail,
- .6 Except as provided in Sentence (2), have a wall or a guard on both sides and where a guard is provided, the guard shall:
 - a) Be not less than 1070 mm measured vertically to the top of the guard from the ramp surface, and
 - b) Be designed so that no member, attachment or opening located between 140 mm and 900 mm above the ramp surface being protected by the guard will facilitate climbing, and
- .7 Be provided,
 - a) With a curb at least 50 mm high on any side of the ramp where no solid enclosure or solid guard is provided, and
 - b) With railings or other barriers that extend to within 50 mm of the finished ramp surface or have a curb not less than 50 mm high.

1.2.7 Ramps shall have a colour contrasting, textured, detectable warning surface in accordance with 3.7.2 at the top and bottom with a minimum of 920 mm from the start of the slope, extending the entire width of the stair or ramp.

1.2.8 Where the location of the ramp is not readily evident from the main access route, provide a sign incorporating the International Symbol of Accessibility and a directional arrow indicating the location.

- 1.2.9 Provide curb ramps at all level changes along barrier-free paths of travel. Curbs shall have:
- .1 Gradient to comply with 3.8.3.2. of the Ontario Building Code.
 - .2 Minimum width of 1200 mm (exclusive of flared sides);
 - .3 A surface (including flared sides) that is slip-resistant, colour and texture contrasted with adjacent surfaces,
 - .4 A smooth transition from the curb ramp to the adjacent surfaces, and
 - .5 Flared signs with a slope of not more than 10% (1:10) (Appendix A, Figures 5 and 6).
- 1.2.10 Provide a detectable hazard surface in accordance with 3.7.3 wherever a walkway adjoins a hazardous area such as an unprotected drop-off, edge of a pool or to separate a walkway from a drive aisle that is at the same level.

1.3 Entrances and Exits

- 1.3.1 For new buildings, all public entrances shall be barrier-free. For existing buildings, as many as feasible (but no less than one-half of all public entrances) shall be barrier-free. Provide signage incorporating the International Symbol of Accessibility to indicate the location of all barrier-free entrances. The barrier-free entrance must connect the exterior accessible route with the interior accessible route. Where an entrance consists of multiple doors beside each other, only one door in each set need be barrier-free.
- 1.3.2 Where feasible, all required exits from the ground level must be barrier-free. Signage incorporating the International Symbol of Accessibility shall indicate the location and direction of the barrier-free exits.
- 1.3.3 Two doors in series (such as in vestibules) shall have a minimum 1200 mm clearance between the open doors, plus the width of any door that swings into the space in the path of travel from one door to another (Appendix A, Figure 8).
- 1.3.4 Do not provide loose floor mats that can cause a tripping hazard or impede wheelchair use at entrances.
- 1.3.5 Entrance and exit doors shall be a minimum of 915 mm wide, such that frame stops, the door thickness and horizontal hardware such as panic bars shall not reduce the clear width of the doorway to less than 865 mm (Appendix A, Figure 9).
- 1.3.6 Provide a minimum clear level space on both sides of doors as follows (Appendix A, Figure 10):
- a) 1500 mm x 1500 mm on the pull side
 - b) 1200 mm x 1200 mm on the push side

- 1.3.7 At least one door in every barrier-free entrance and exit (including doors leading from parking areas to the building) shall be equipped with an automatic operator. If there are two doors in series (vestibules), both doors shall have an automatic operator. Doors shall remain open a minimum of 5 seconds and shall take a minimum of 3 seconds to close from a 70 degree position. Pushbuttons, key switches and card readers shall be located in conformance with 3.5 (Appendix A, Figure 11). If the automatic door is a swinging door, provide a cane-detectable guard rail with a horizontal member no more than 680 mm above the ground (Appendix A, Figure 12).
- 1.3.8 Doors shall have level hardware, push/pull plates or exit devices (panic hardware). Round knobs and thumb-latches are not acceptable.
- 1.3.9 Any exterior door not equipped with an automatic operator shall require a maximum force of 38N to open. Door closers shall take a minimum of 3 seconds to close from a 70 degree position.
- 1.3.10 Where a revolving door is used, an adjacent barrier-free swinging door shall be provided.

1.4 Exterior Amenities

- 1.4.1 Where exterior amenities such as outdoor seating, terraces, playgrounds, etc. are provided, ensure that they include accessible components. Tables and seating areas shall have clearances in accordance with 3.9.
- 1.4.2. Where picnic tables or outdoor seating are provided, ensure at least some are placed on a hard surface (meaning a firm surface, such as asphalt, concrete, pavers, well-compacted crushed stone, or lumber with the planks across the direction of travel, and have adequate drainage to avoid the accumulation of water) and are accessible from the barrier-free walkways. If only some are barrier-free, provide signage incorporating the International Symbol of Accessibility indicating the locations.
- 1.4.3 Where kiosks or pay booths are intended to be used by pedestrians, ensure that at least one window is located at a maximum of 860 mm above grade and has an even, level (maximum 2%) access clearance area of not less than 750 mm x 1200 mm.

2.0 INTERIOR AREAS

2.1 Stairs and Ramps

- 2.1.1 Interior stairs shall have:
- a) Closed risers,

- b) Maximum rake of 60%,
- c) Uniform riser height (180 mm high maximum) and tread depth (280 mm deep minimum),
- d) Maximum nosing projection of 38 mm, with a bevel or radius between 6 mm and 10 mm and no abrupt underside;
- e) Colour contrasting, slip-resistant nosings 40-60 mm deep;
- f) Minimum light level of 100 lux; and
- g) Detectable warning surface as per 3.7.2 at top of stairway (Appendix A, Figure 13).

2.1.2 The underside of all open stairs, escalators and other overhead features must be protected by cane-detectable railings or planters anywhere the overhead clearance is less than 2030 mm (Appendix A, Figure 2).

2.1.3 Handrails shall:

- a) Be provided on both sides of all stairs and ramps;
- b) Be continuous, except where other paths of travel intercept;
- c) Be mounted at a uniform height between 865 mm to 920 mm above the stair nosing or ramp level;
- d) Have an extension of 300 mm beyond the top riser and 300 mm plus the tread depth at the bottom riser where it does not constitute a hazard;
- e) Have returns (to a post, wall or floor) at all terminations;
- f) Have a continuous (without interruption by newel posts) graspable profile of 30-40 mm with a minimum clearance of 45 mm to the adjacent wall;
- g) Be free of sharp or abrasive elements; and
- h) Be colour-contrasted from the adjacent wall surface.

2.1.4 Slopes floors shall be designed as a ramp where the gradient exceeds 5% (1:20) and shall comply with 1.2.6 of this standard. Interior ramps shall have a minimum light level of 100 lux:

2.1.5 Ramps and stairs shall have a colour contrasting, textured detectable warning surface as per 3.7.2, extending the entire width at the top and bottom a minimum of 920 mm from the start of the slope of stairs (Appendix A, Figure 13).

2.1.6 Where the location of the ramp is not readily evident, provide a sign indicating the location.

2.2 Lobbies and Corridors

2.2.1 All floor levels above or below the main accessible level that are used by the public shall be accessible by ramps (in accordance with 2.1) or elevators (in accordance with 2.3).

2.2.2 Interior barrier-free routes shall be minimum 1100mm wide with a 1600mm by 1600mm turn-around space, a minimum of 30m apart.

- 2.2.3 Corridors shall be free from overhead and protrusion hazards. Any overhead obstruction shall be minimum 2030mm high. Any horizontal projection more than 100mm into the corridor that is less than 2030mm high shall have a cane-detectable warning no more than 680mm above the floor (Appendix A, Figure 14).
- 2.2.4 Wherever a turnstile is used, it shall have a gate directly adjacent with a clear width in compliance with section 1.3.5.
- 2.2.5 Any gratings or drains in floor shall comply with section 1.2.5.
- 2.2.6 Provide a detectable hazard surface in accordance with section 3.7.3 wherever a walkway adjoins a hazardous area such as an unprotected drop-off or the edge of a pool.

2.3 Elevators and Lifts

- 2.3.1 All passenger elevators shall comply with Appendix E of CSA Standard CAN/CSA-B44 "Safety Codes for Elevators".
- 2.3.2 Ensure that the emergency communication within the elevator is clearly audible. Do not permit the playing of any music in elevators.
- 2.3.3. Provide a mirror on the back wall of the elevator to assist people in wheelchairs and scooters in backing out of the elevator. However, mirrors on sidewalls should not be permitted due to visual distractions and confusion.
- 2.3.4 Loose mats and loose flooring are not permitted in elevators or lifts.
- 2.3.5 Platform lifts, unless approved by the Accessibility Committee, shall be permitted only if the persons using them can independently operate them. Lifts that require a key or assistance from another person are not acceptable.
- 2.3.6 Provide an LED-messaging system in each elevator to enable communication in the event of an emergency with persons who are deaf or hard of hearing.
- 2.3.7 Provide voice-activated speakers in all elevators.

2.4 Interior Doors and Doorways

- 2.4.1 Doors shall be a minimum of 915 mm wide, such that frame stops, the door thickness and horizontal hardware such as panic bars shall not reduce the clear width of the doorway to less than 865 mm. (Appendix A, Figure 9)

- 2.4.2 All doors shall have lever hardware, push/pull plates, exit devices (panic hardware) or automatic operators. Knobs and thumb-latches are not acceptable.
- 2.4.3 Unless the door is equipped with an automatic operator, provide clearance beside doors as follows:
- a) 300 mm clear beside latch at push side of door
 - b) 600 mm clear beside latch at pull side of door
- 2.4.4 Any interior door not equipped with an automatic operator shall be single hand operation and require a maximum force of 22 N to open. Door closers shall take a minimum of 3 seconds to close from a 70 degree position.
- 2.4.5 Thresholds shall be maximum 13 mm high. Where over 6 mm high, shall be beveled at a slope of not more than 1:2.
- 2.4.6 Doors shall have vision panels, either in the door or in a directly adjacent sidelight, except where privacy concerns and Building Code regulations make it unfeasible. Vision panels shall have the bottom edge no more than 900 mm above the floor and no more than 250 mm from the latch side of the door.
- 2.4.7 Clear glass doors and sidelights at the entrances shall have a 100 mm wide contrasting colour strip mounted continuously 1350 mm above the floor.
- 2.4.8 Two doors in series (such as in vestibules) shall have a minimum 1200 mm clear between the open doors. (Appendix A, Figure 8)
- 2.4.9 Provide a minimum clear level space on both sides of doors as follows:
- a) 1500 mm x 1500 mm on the pull side
 - b) 1200 mm x 1200 mm on the push side
- (Appendix A, Figure 10)
- 2.4.10 Where a revolving door is used, an adjacent barrier-free swinging door shall be provided.

3.0 FACILITIES

- 3.1.1 Every floor that is served by washrooms shall have either:
- .1 A barrier-free individual washroom as described in 3.1.2; or
 - .2 A barrier-free water closet stall, lavatory and accessories as described in 3.1.3.
- 3.1.2 Barrier-free individual washrooms shall have:
- .1 A door that complies with 2.4.1. through 2.4.5;
 - .2 An automatic operator with the ability to be locked from the inside;

- .3 A minimum area of 3.5 s.m., with minimum dimension between opposite walls of 1.7 m
- .4 A clear turning radius of 1500 mm (does not include space under lavatory);
- .5 A water closet that complies with 3.1.4;
- .6 A lavatory that complies with 3.1.6;
- .7 A shelf or counter at least 200 mm x 400 mm, mounted not more than 1000 mm above the floor;
- .8 A cook hook mounted not more than 1200 mm above the floor and projecting not more than 40 mm; and
- .9 Washroom accessories (such as soap dispensers, paper towel dispensers, hand dryers, vending machines, waste receptacles, etc.) that comply with 3.5.

3.1.3 Barrier-free facilities within a multi-fixture washroom shall have:

- .1 A door that complies with 2.4.1 through to 2.4.5 with an automatic operator, or be designed so that no door is necessary.
- .2 If there are two doors in series, there shall be at least 1200 mm clear between them when open;
- .3 At least 1500 mm x 1500 mm clear space in front of the barrier-free lavatory.
- .4 At least 750 mm x 750 mm clear space in front of each barrier-free lavatory;
- .5 At least one barrier-free water closet stall that complies with 3.1.8;
- .6 At least one lavatory that complies with 3.1.6 (in new buildings, all lavatories shall comply);
- .7 If urinals are provided, at least one urinal shall comply with 3.1.5.
- .8 A shelf or counter at least 200 mm x 400 mm, mounted not more than 1000 mm above the floor; and
- .9 Washroom accessories (such as soap dispensers, paper towel dispensers, hand dryers, vending machines, waste receptacles, etc.) shall comply with 3.5.

3.1.4 Barrier-free water closets shall have:

- .1 Be located between 460mm and 480mm from the adjacent side wall;
- .2 Have a transfer space at least 900mm wide clear on the open side;
- .3 Have a back support where there is no seat lid or tank;
- .4 Not have spring loaded seats;
- .5 Have a seat height of 430mm to 460mm above floor;
- .6 Have flush controls that are automatic, or are located on the transfer side of the water closet;
- .7 Have two grab bars that comply with 3.1.7:
 - a) One 600mm long, mounted horizontally, centred on the water closet at a height of 750mm to 850mm above the floor (or 150mm above the tank where there is one), and
 - b) One L-shaped, 760mm x 765mm, mounted with the horizontal portion at a height of 690mm to 730mm above the floor, and the

vertical component mounted 150mm in front of the water closet;
and

- .8 Have a non-regulating toilet tissue dispenser mounted in line with front of the water closet, between 600mm to 700mm above the floor.

3.1.5 Barrier-free urinals shall:

- .1 Have a clear space of at least 750mm wide by 1200mm deep (including under urinal);
- .2 The urinal rim no higher than 430mm above the floor;
- .3 Flush controls no higher than 120mm above the floor; and
- .4 Vertical grab bars that comply with 3.1.7 on both sides, minimum 600mm long, mounted with the bottom between 600mm – 650mm above the floor, maximum 380mm from the centerline of the urinal.

3.1.6 Barrier-free lavatories shall:

- .1 Have a centerline located at least 460mm from the adjacent side wall;
 - .2 Have the top of the counter or lavatory located no more than 840mm above the floor;
 - .3 Have a clear space of 750mm x 750mm in front of the lavatory;
 - .4 Have clearance beneath the lavatory of at least;
 - a) 760mm wide
 - b) 735mm high at the front edge
 - c) 685 high at a point 205mm back from the front edge
 - d) 230mm high over a distance from a point 280mm back from the front edge to 430mm back from the front edge;
 - .5 Be equipped with automatic faucets, or faucets with lever handle(s) at least 75mm long, that are located not more than 485mm from the front of the counter or front edge of lavatory, that are not spring-loaded;
 - .6 A mirror mounted with the bottom edge as low as possible, but not more than 1000mm above the floor;
 - .7 Temperature controlled water to not exceed 55 degrees Celsius;
- and
- .8 A soap dispenser mounted within 500mm of the lavatory, no higher than 1100mm, operable with one hand.

3.1.7 Grab Bars shall be:

- .1 Slip resistant;
- .2 Diameter of 30mm-40mm;
- .3 Have a clear space of 30mm-40mm from the wall; and
- .4 Be firmly mounted to resist a force of 1.3kN in any direction.

3.1.8 Barrier-free water closet stalls shall have:

- .1 A clear space inside of at least 1500mm x 1500mm, clear of the door swing;

- .2 A door which provides at least 860mm clear width which is capable of being locked from the inside using one hand, with a large thumbturn, with spring hinges to close automatically;
- .3 A water closet that complies with 3.1.4; and
- .4 A cook hook mounted not more than 1200mm above the floor and projecting not more than 40mm.

3.1.9 Unless the barrier-free washrooms are directly adjacent to the other washrooms, provide directional signage incorporating the International Symbol of Accessibility indicating the location.

3.1.10 Provide a motion detector control for lights in all barrier-free washrooms. In a multi-unit washroom, ensure that the sensor will detect motion within the barrier-free stall.

3.2 Shower Facilities

3.2.1 Whenever shower facilities are provided, provide at least one roll-in shower that has:

- .1 An interior clear area of at least 750mm x 1500mm;
- .2 A clear floor area in front of at least 900mm x 1200mm;
- .3 A roll-in threshold not exceeding 13mm high with a maximum bevel slop of 1:2;
- .4 A floor drain located outside the shower stall;
- .5 A horizontal grab bar on the side wall at least 600mm long, mounted between 700mm and 800mm above the floor;
- .6 A vertical grab bar on the opposite side wall at least 1000mm long, mounted with the lower end between 600, and 650mm above the floor and between 35mm and 65mm from the outside edge;
- .7 A horizontal grab bar on the back wall at least 1000mm long, mounted between 700mm and 800mm above the floor;
- .8 A vertical grab bar on the back wall at least 600mm long, mounted with the lower end between 750mm and 850mm above the floor and between 400mm and 500mm from the side wall with the other vertical bar;
- .9 A flip-up seat mounted on the side wall with the vertical bar;
- .10 A hand-held shower head on an adjustable pole;
- .11 Controls mounted no more than 1200mm above the floor; and
- .12 A slip-resistant floor.

3.3 Drinking Fountains

3.3.1 Drinking fountains shall have a spout that:

- .1 Is located near the front of the unit
- .2 Is between 750mm and 900mm above the floor;
- .3 Directs the water flow parallel to the front of the unit; and
- .4 Provides a water flow at least 100mm high.

- 3.3.2 Controls shall be automatic or operable with one hand using a force of not more than 22N.
- 3.3.3 Drinking fountains shall have a clear floor area of 750mm wide by 1200mm deep. All drinking fountains must be cane-detectable, recessed or otherwise located out of the route of travel.
- 3.3.4 Cantilevered foundations shall have:
 - .1 Knee clearance at least 750mm wide x 200mm deep x 680mm high; and
 - .2 Toe space at least 750mm wide x 230mm deep x 230mm.

3.4 Public Pay Telephones

- 3.4.1 All public pay telephones shall have:
 - .1 All operable parts (including coin slot) not more than 1200mm above the floor;
 - .2 A clear space of 750mm wide by 1200mm deep;
 - .3 A minimum of 680mm clear knee space;
 - .4 Illumination level of at least 200 lux; and
 - .5 A level shelf 450mm wide by 300mm deep, between 720mm to 800mm above the floor, with a clear space of 250mm above the shelf.
- 3.4.2 In every facility where public pay telephones are provided, at least one shall have graduated volume control and be identified by the symbol for persons who are hard of hearing.
- 3.4.3 In every facility where public pay telephones are provided, at least one shall be a TTY phone. All TTY locations shall be identified by the symbol for TTY telephones.

3.5 Controls

- 3.5.1 All manual controls (light switches, card readers, thermostats, coin slots, control handles, fire alarm pulls, bending machines, etc.) must be:
 - .1 Located between 900mm min and 1200mm max. above the floor;
 - .2 Located with a clear floor space of at least 750mm x 1200mm (clear of door swings);
 - .3 Operable with one hand, without tight grasping, pinching or twisting of the wrist, with a force not to exceed 22N; and
 - .4 Of contrasting colour to the background.
- 3.5.2 Controls such as push buttons for automatic doors shall have minimum dimensions of 100mm and shall be located such that the opening door does not block them.
- 3.5.3 Information on visual displays shall be supplemented by tactile and/or auditory information.

3.6 Signage

3.6.1 Signage indicating room uses, names or numbers shall:

- .1 Be consistently located, to the latch side of a door, 150mm from the frame;
- .2 Be mounted at a consistent height, between 1350mm to 1500mm high;
- .3 Have glare-free surface;
- .4 Have colour contrasted to background; and
- .5 Be lit to at least 200 lux.

3.6.2 Characters on signs shall:

- .1 Be sans serif with Arabic numerals;
- .2 Have a width to height ratio between 3:5 and 1:1 (using an upper case X for character measurement);
- .3 Have a stroke width to height ratio between 1:5 and 1:10;
- .4 Be at least 25mm high (for viewing distance of up to 750mm, higher for signs that are to read further away); and
- .5 Have colour contrasted from the background.

3.6.3 Signs that include tactile raised characters (0.8 – 1.5mm thickness) and Grade 1 Braille, or auditory information shall be provided at identification signs (including building directories, floor designations and room designations), regulatory signs (including identification of building exits and warning sign).

3.6.4 Signs incorporating the appropriate symbols for access shall be provided at all barrier-free facilities such as parking spaces, building entrances, washrooms, showers, elevators, telephones, meeting rooms etc.

3.6.5 Provide an audible sign at the main entrance to all buildings to provide information that will assist in way-finding through the building.

3.7 Tactile Warnings

3.7.1 Provide tactile warnings (textured surfaces, knurled lever handles etc.) at the following locations:

- .1 Doors to hazardous areas
- .2 Tops of all stairs and ramps
- .3 Where a barrier-free walkway crosses a vehicular way
- .4 The edges of flush pools, planters etc. that are not protected by curbs.

3.7.2 Detectable warning indicators for interior applications shall be composed of continuous ridges perpendicular to the route of travel, that:

- .1 Have a height between 3mm and 5mm;

- .2 Have a width between 4mm and 8mm;
- .3 Are spaced between 40mm to 60mm on centre;
- .4 Are slip-resistant; and,
- .5 Have contrasting colour to the surrounding surface.

3.7.3 Detectable warning indicators for exterior applications shall be composed of continuous depressions scribed into the surface on a diagonal to the route of travel, that:

- .1 Have a depth between 3mm and 5mm;
- .2 Have a width between 4mm and 8mm;
- .3 Are spaced between 40mm to 60mm on centre;
- .4 Are slip-resistant; and,
- .5 Have contrasting colour to the surrounding surface.

3.8 Counters and Line Up Guides

3.8.1 Provide a section at all service counters (reception, public service, coat checks etc.) with:

- .1 Clear floor space of 750mm wide by 1200mm deep in front;
- .2 Counter height maximum 860mm above the floor; and
- .3 Clear knee space 1000mm wide by 680mm high.

3.8.2 Where line-up guides are provided, they shall:

- .1 Provide a clear width of at least 1100mm;
- .2 Have a minimum space of 1500mm x 1500mm at changes in direction;
- .3 Be cane-detectable at or below 680mm above the floor; and
- .4 Be colour-contrasted from the floor.

3.9 Meeting Rooms, Boardrooms, Courtrooms, Assembly Areas, Cafeteria, coffee Shops, Etc.

3.9.1 Provide designated space for seating for persons in wheelchairs or scooters as follows:

Total seats provided	Minimum designated seating required
1-50	1

51-100	2
101-200	3
201-400	4
Over 400	1% of seating capacity

Designated spaces shall be on a level surface (maximum slope in any direction 1%), and at least 850mm wide by 1200mm deep (front or rear access) or 1525mm deep (side access). **“(maximum slope of 1% in any direction, or in the case of exterior areas a maximum slope of 2% in any direction)”**

Where the seating is fixed, at least one fixed seat directly adjacent to each barrier-free seating space shall be signed as reserved for companion seating.

3.9.2 Lines of sight must be comparable to other seating and must not be compromised by standing members of the audience.

3.9.3 Ensure that tables in areas such as meeting rooms, cafeterias and libraries are a maximum of 860mm high, and have a clear knee space of at least 750mm wide, 480mm deep and 680mm high.

3.9.4 Aisles such as cafeteria lines, spaces between tables and aisles between library stacks shall be minimum 915mm wide.

3.9.5 Anywhere that coat racks are provided, ensure that at least one section has a rod height no more than 1370mm above the floor.

3.10 Assisted Listening Devices

3.10.1 Provide an assisted listening device in any auditorium, assembly room, meeting room or theatre with an area greater than 100 s.m. and an occupant load more than 75 people. Such rooms shall be signed with the symbol for persons who are hard of hearing.

3.10.2 Any television set displaying information for the public shall include closed-captioning.

3.11 Visual and Audible Alarms

3.11.1 All building alert and alarm signals, including fire alarms and building entrance release hardware shall provide both an audible and a visual signal.

3.11.2 Visual alarms shall:

- .1 Have a light intensity of at least 75 Candelas;
- .2 Be located so that at least one is to be visible from any portion of a floor area;
- .3 Have a flash rate within the frequency range of 1-3 Hz; and

- .4 Be synchronized to flash in unison wherever multiple alarms may be visible at one time.

3.12 Life Safety

3.12.1 In an emergency all efforts to remove a person with a disability shall be undertaken immediately. Where the emergency evacuation planning of a facility necessitates that persons with disabilities away assistance in order to be evacuated (example: floor level above grade served by stairs), provide a safe Area of Refuge in a fire-separated room, equipped with two-way communication, emergency lighting and separate ventilation. This requirement is waived for fully sprinklered buildings.

3.12.2 Where a building has an emergency power supply, all automatic door operators will be provided with emergency power.

Appendix A

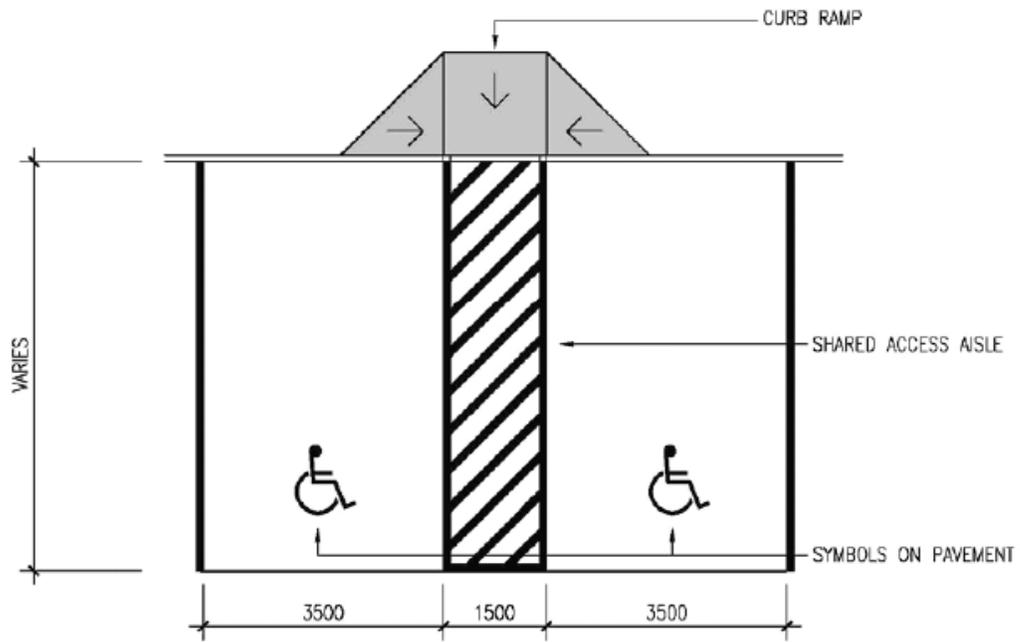


Figure 1

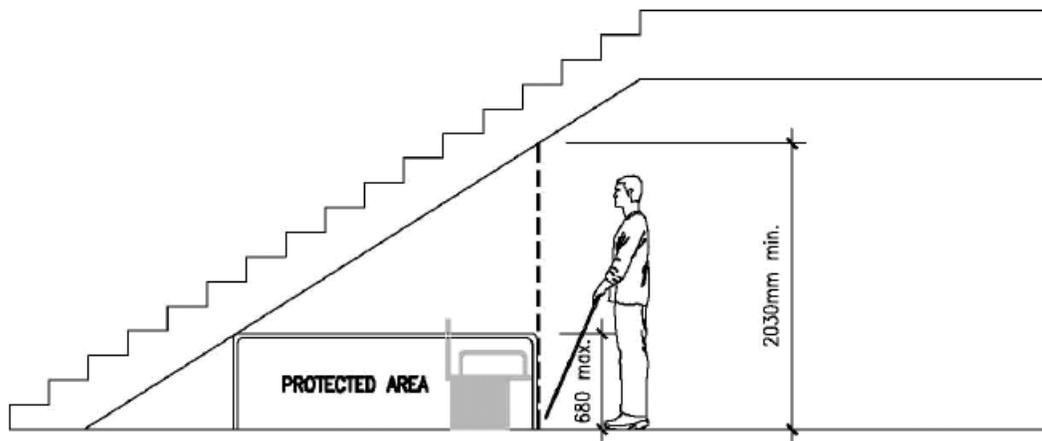
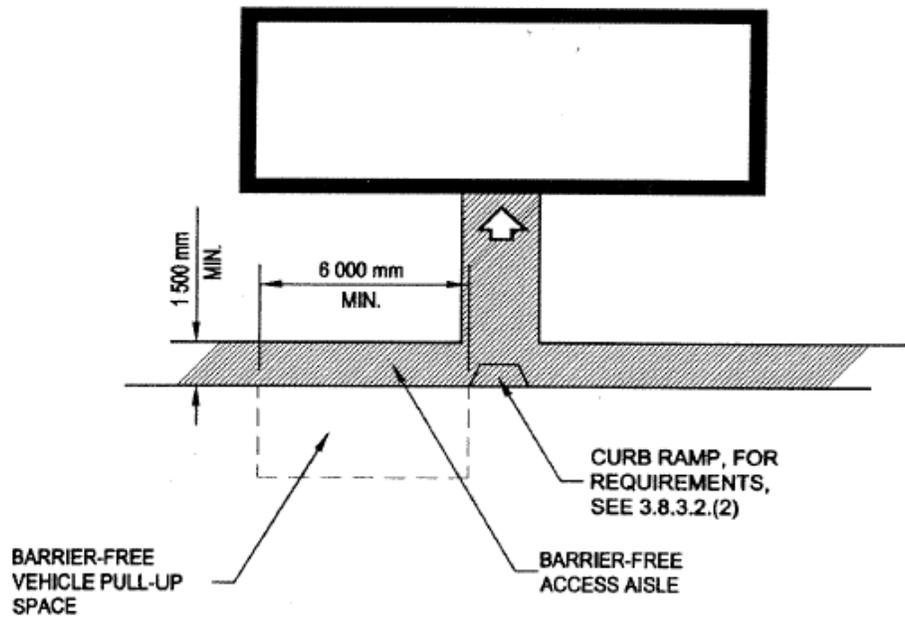


Figure 2



BARRIER-FREE PASSENGER LOADING ZONE

Figure 3

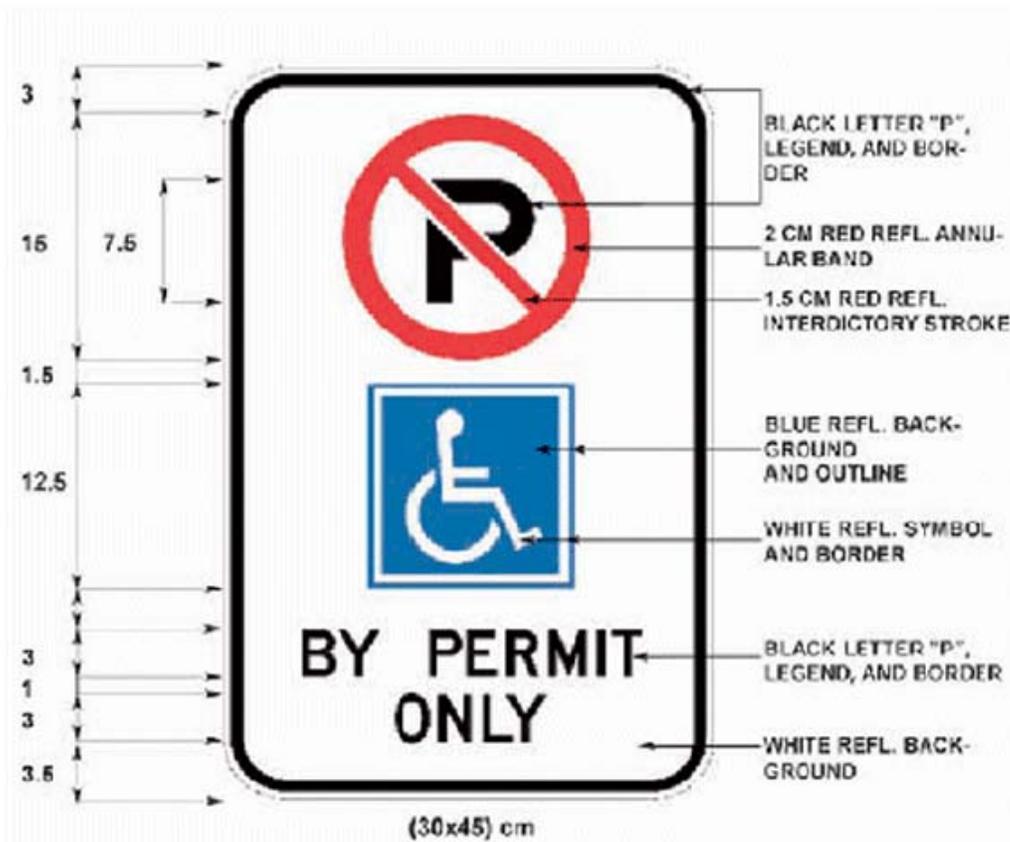


Figure 4

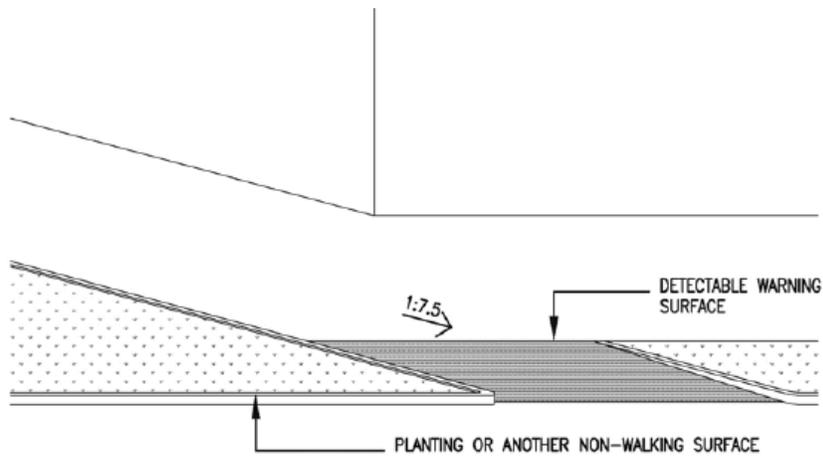


Figure 5

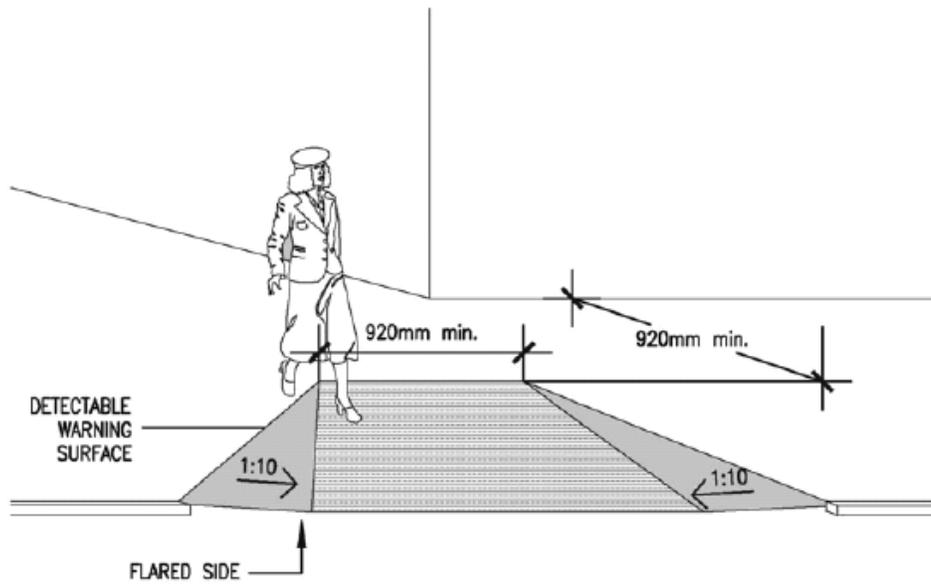


Figure 6

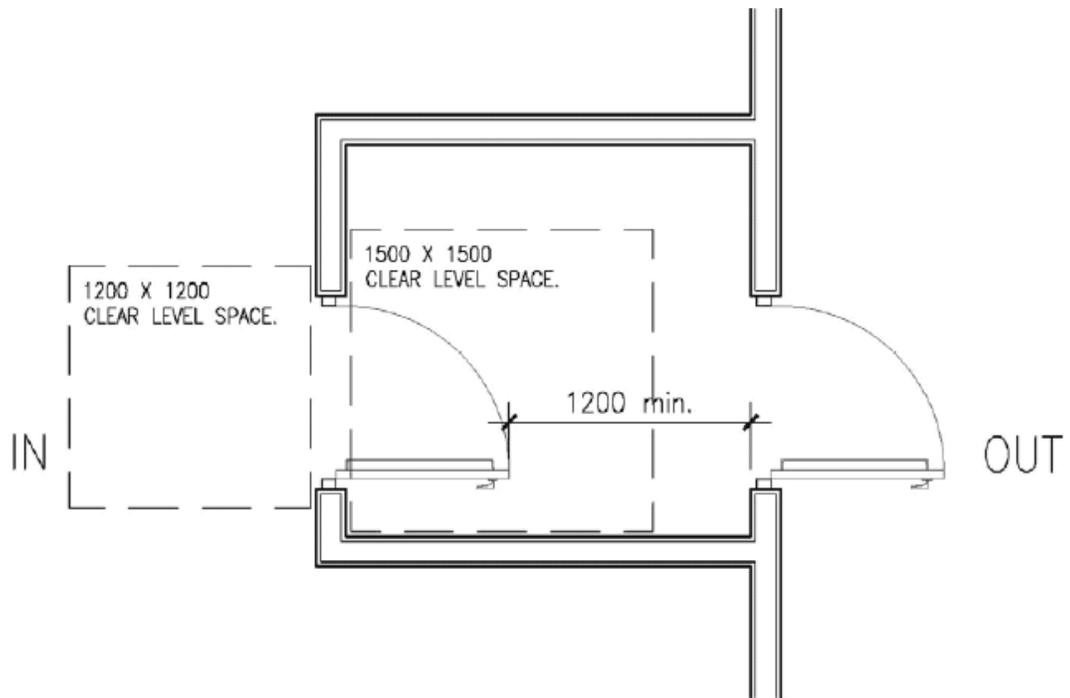


Figure 8

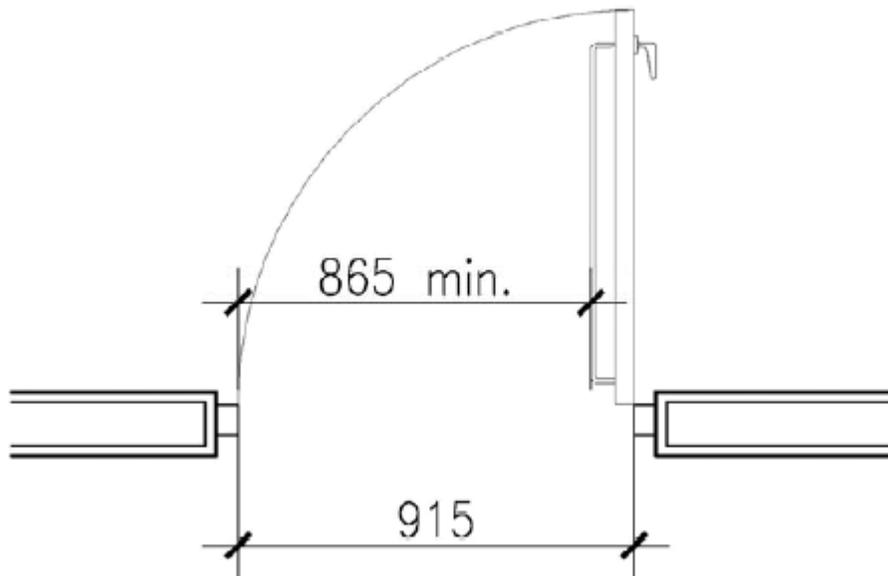


Figure 9

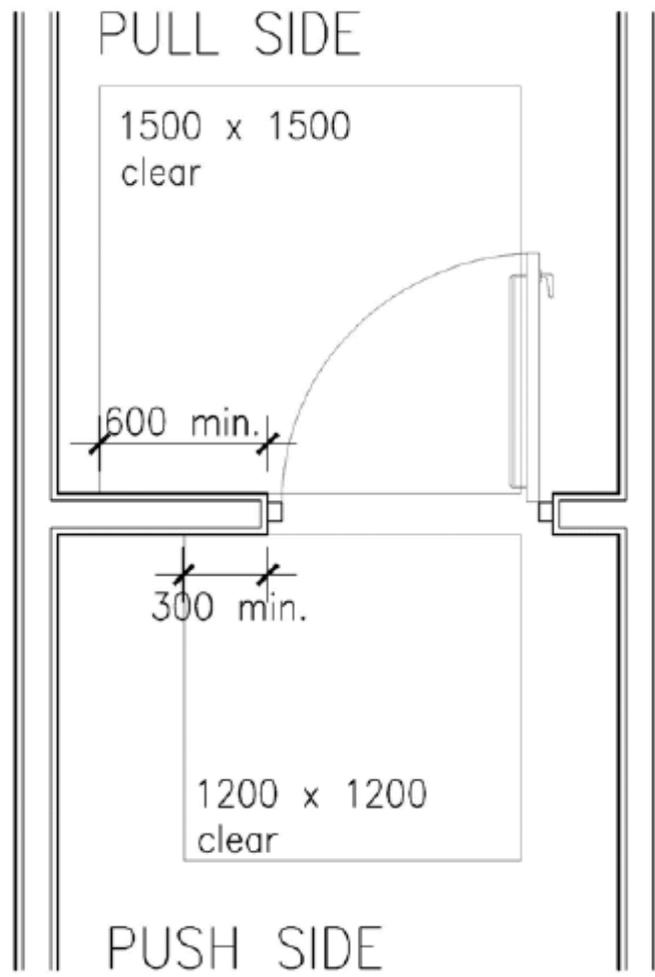


Figure 10

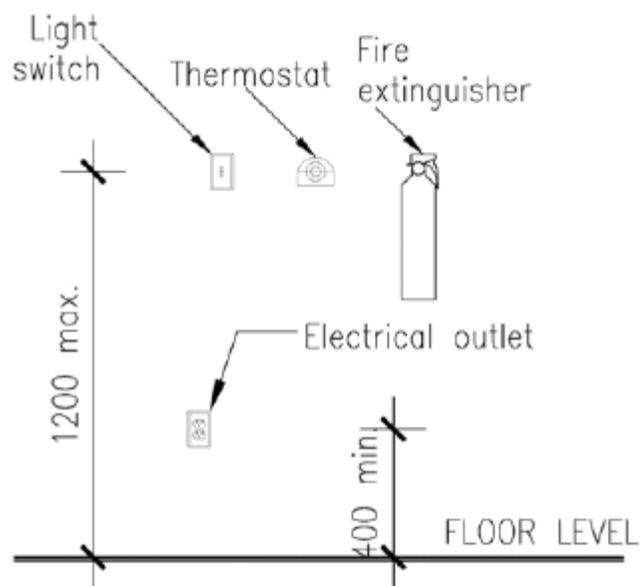


Figure 11

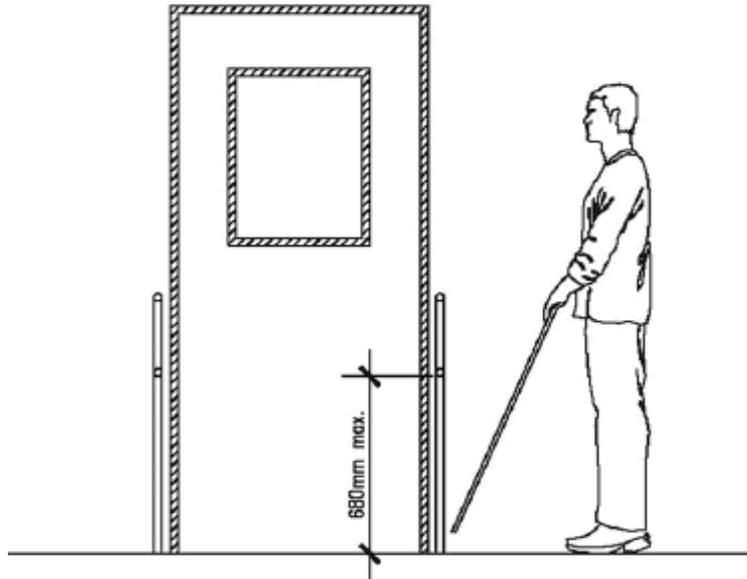


Figure 12

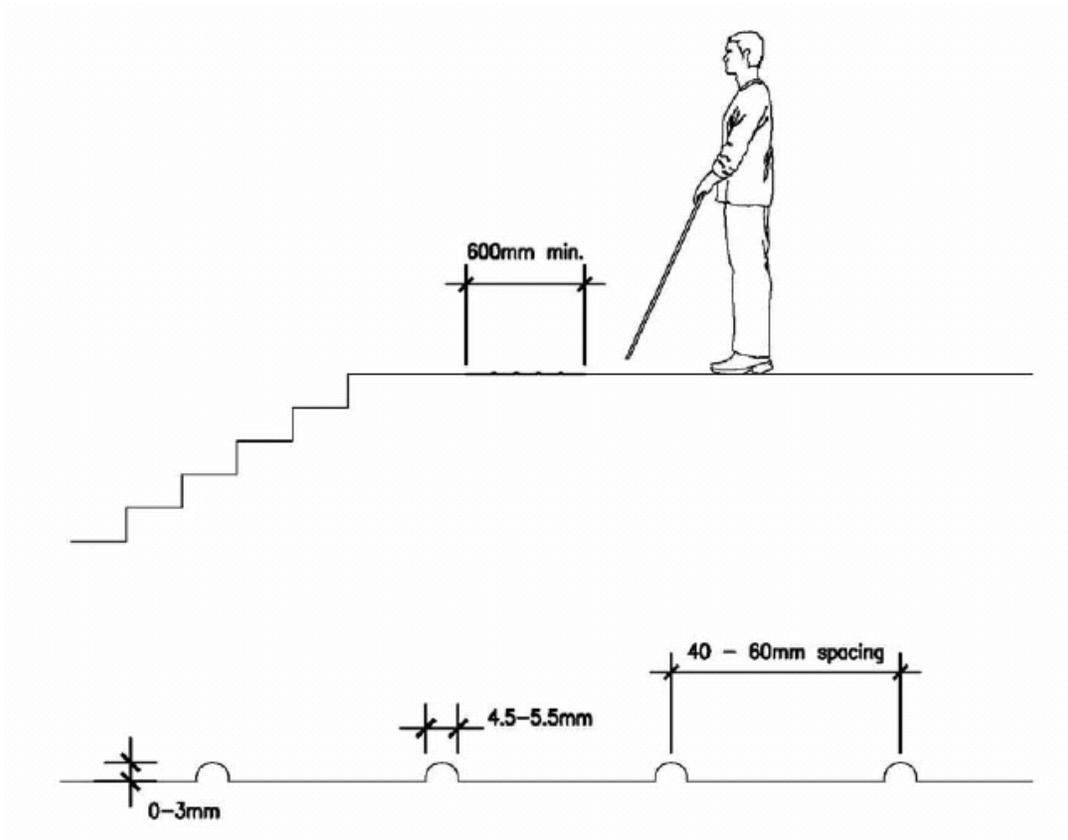


Figure 13 Notice: For Exterior applications, the ridges shown above shall be replaced by depressions scribed into the surface on a diagonal to the route of travel.

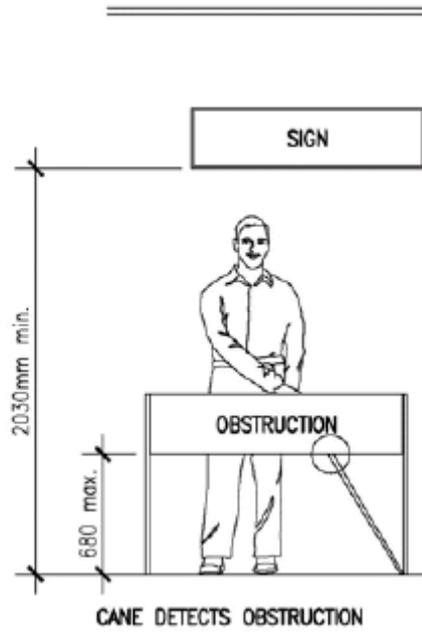
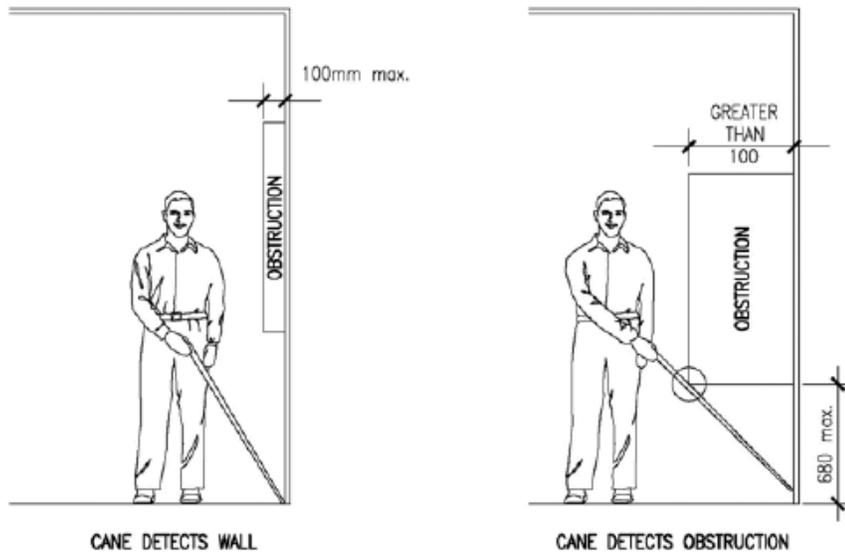


Figure 14

