Accessibility Standards

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Ramps

- The ramp must have a minimum clear width of 900 mm.
- The ramp must have a clear height that provides a minimum headroom clearance of 2,100 mm above the ramp.
- The surface of the ramp must be firm and stable.
- The ramp must have a maximum running slope of no more than 1:10.
- The ramp must be provided with landings that meet the following requirements:
- Landings must be provided:
- A. at the top and bottom of the ramp,
- B. where there is an abrupt change in the direction of the ramp, and
- C. at horizontal intervals not greater than nine metres apart.
- Landings must be a minimum of 1,670 mm by 1,670 mm at the top and bottom of the ramp and where there is an abrupt change in direction of the ramp.
- Landings must be a minimum of 1,670 mm in length and at least the same width of the ramp for an in-line ramp.
- Landings must have a cross slope that is not steeper that 1:50.
- The ramp must not have any openings in the surface that allow the passage of an object that has a diameter of more than 20 mm.

Running Slope Comparison

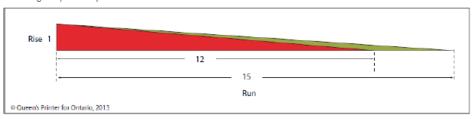


Figure 1 - Running slope comparison



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OBC Ammendments are related to the following accessibility standards:

- Tactile Attention Indicators
- Barrier-Free Entrances
- Barrier-Free Paths Of Travel
- The "Closed Fist"

3.8.3.4. Ramps

- (1) Ramps located in a barrier-free path of travel shall,
- (h) except as provided in Sentence (2), where the ramp is wider than 2 200 mm, have an intermediate handrail with a clear width of 900 mm between the intermediate handrail and one of the handrails described in Clause (e).

NO TOLERANCE PROVIDED
- 900 mm IS AN EXACT WIDTH
- NOT A MINIMUM WIDTH

New exception in Sentence (2):

If the ramp serves an aisle serving fixed seating:

- an intermediate handrail is not required
- walls or guards at the sides of the aisle are not required

Accessibility Standards

AODA Ramp Handrail

- The ramp must be equipped with handrails on both sides of the ramp and the handrails must:
- 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.
- 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 if they are installed in addition to the required handrail,
- terminate in a manner that will not obstruct pedestrian travel or create a hazard,
- extend horizontally not less than 300 mm beyond the top and bottom of the ramp, and
- be provided with a clearance of not less than 50 mm between the handrail and any wall to which it is attached.
- Where a ramp is more than 2,200 mm in width,
- one or more intermediate handrails which are continuous between landings must be provided and located so that there is no more than 1,650 mm between handrails,
- The ramp must have a wall or **guard** on both sides and where a guard is provided, it must,
- be not less than 1,070 mm measured vertically to the top of the guard from the ramp surface, and
- be designed so that no member, attachment or opening located

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Hand Rail "Closed Fist' Example:

Div. B, Sentence 3.8.1.5.(1):

.....controls for the operation of building services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located in a barrierfree path of travel shall be operable using a closed fist

Div. B, Sentence 3.8.3.3.(17):

.... the control for a power door operator shall be operable using a closed fist

Div. B, Sentence 3.8.3.8.(1):

Every barrier-free water closet stall in a washroom shall,

- (b) be equipped with a door that shall,
- (i) be capable of being latched from the inside with a mechanism that is operable using a closed fist,



Accessibility Standards

AODA

between 140 mm and 900 mm above the ramp surface being protected by the guard will facilitate climbing.

- The ramp must have **edge protection** that is provided, i. with a curb at least 50 mm high on any side of the ramp where no solid enclosure or solid guard is provided, or with railings or other barriers that extend to within 50 mm of the finished ramp surface.
- The outdoor public use eating areas consist of tables that are found in public areas, such as in public parks, on hospital grounds and on university campuses and are specifically intended for use by the public as a place to consume food.

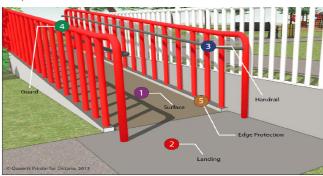
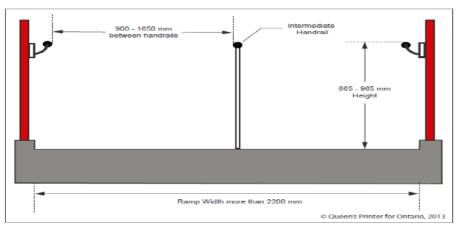


Figure 6 - Ramp features





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General Rule for Barrier Free path of travel:

A barrier-free path of travel is required by:

Div. B, Clause 3.8.2.1.(1)(a):

- throughout the entrance storey [existing]

Div. B, Clause 3.8.2.1.(1)(b):

- throughout all normally occupied floor areas and rooftop amenity spaces [elevators req'd -new]

Div. B, Clause 3.8.2.1.(1)(c):

- throughout any other normally occupied floor areas and rooftop amenity spaces, if they are served by a passenger elevator, escalator, inclined moving walk, or other platform equipped passenger elevating device [voluntary elevator installations - new]

Section 3.8. Barrier-Free Design

3.8.1. General

3.8.1.1. Application

- (1) The requirements of this Section apply to all buildings except,
- (a) houses, including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding or rooming houses with fewer than 8 boarders or roomers,
- (b) buildings of Group F, Division 1 major occupancy,
- (c) buildings that are not intended to be occupied on a daily or full time basis, including automatic telephone exchanges, pumphouses and substations, and
- (d) <u>camps for housing of workers</u>

3.8.1.2. Entrances

(3) In addition to the brarier-free entrances required by Sentence (1), a suite of assembly occupancy, business and personal services occupancy or mercantile occupancy that is located in the first storey of a building or in a storey to which a barrier-free path of travel is provided, and that is separated from the remainder of the building, so that there is no access to the remainder of the building, shall have at least one barrier-free entrance.

- (4) A barrier-free entrance required by Sentences (1) or (2) shall,
- (a) be designed in accordance with Article 3.8.3.3. [DOORS & DOORWAYS], and
- (b) lead from
 - (i) the outdoors at sidewalk level, or
 - (ii) a ramp that conforms to Article 3.8.3.4. and leads from a sidewalk.

Accessibility Standards

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Outdoor Eating Areas:

- A minimum of 20 per cent of the tables that are provided must be accessible to persons using mobility aids by having knee and toe clearance underneath the table and in no case shall there be fewer than one table in an outdoor public use eating area that meets this requirement.
- The ground surface leading to and under tables that are accessible to persons using mobility aids must be level, firm and stable, with no noticeable slope.
- Tables that are accessible to persons using mobility aids must have clear ground space around them that allows for a forward approach

Number of fixed seats in seating area	Minimum number of accessible spaces
Up 100	2
101 to 150	3
151 to 200	6
201 to 250	7
Over 250	Not less than 3%of the seating capacity, rounded up to next whole number.

Outdoor Play Spaces

When constructing new or redeveloping existing play spaces that they intend to maintain, obligated organizations, other than small organizations, shall:

- incorporate accessibility features, such as sensory and active play components, for children and caregivers with various disabilities into the design of outdoor play spaces; and
- ensure that outdoor play spaces have a ground surface that is firm, stable and has 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



Accessibility Standards

AODA

outdoor play space.

Exterior Path of Travel

- Ramps
- Stairs
- Curb ramps
- Depressed curbs
- Accessible pedestrian signals
- Rest areas
- This Part does not apply to paths of travel regulated under Ontario Regulation 350/06 (Building Code) made under the Building Code Act, 1992.

Exterior Path

 The exterior path must have a minimum clear width of 1,500 mm, but this clear width can be reduced to 1,200 mm to serve as a turning space where the exterior path connects with a curb ramp.



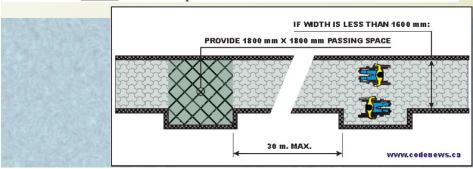
Figure 8 - Minimum head room clearance



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3.8.1.3. Barrier-Free Path of Travel

- (4) Every barrier-free path of travel less than $1\,600$ mm in width shall be provided with an unobstructed space not less than $\frac{1\,600}{1\,800}$ mm in width and $\frac{1\,600}{1\,800}$ mm in length located not more than 30 m apart.
- (5) Where the headroom of an area in a *barrier-free* path of travel is reduced to less than 1 980 mm, a guardrail or other barrier with its leading edge at or below 680 mm from the <u>finished</u> floor shall be provided.



3.8.3.2. Exterior Walks

- (1) Except as provided in Sentence (2), exterior walks that form part of a *barrier-free* path of travel shall,
- (h) have a tactile attention indicator conforming to Article 3.8.3.18. that is located to identify an entry into a vehicular route or area where no curbs or any other element separate the vehicular route or area from a pedestrian route.

Accessibility Standards

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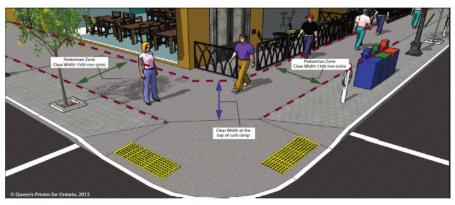
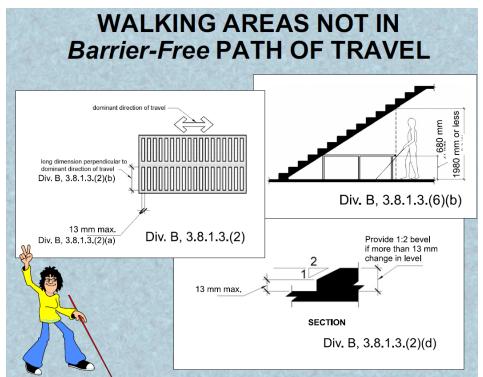


Figure 7 - Clear width on a sidewalk

- Where the head room clearance is less than 2,100 mm over a portion of the exterior path, a rail or other barrier with a leading edge that is cane detectable must be provided around the object that is obstructing the head room clearance.
- The surface must be firm and stable.
- The surface must be slip resistant.
- Where an exterior path has openings in its surface, i. the openings must not allow passage of an object that has a diameter of more than 20 mm, and
- any elongated openings must be oriented approximately perpendicular to the direction of travel.
- The maximum running slope of the exterior path must be no more than 1:20, but where the exterior path is a sidewalk, it can have a slope of greater than 1:20, but it cannot be steeper than the slope of the adjacent roadway.
- The maximum cross slope of the exterior path must be no more that 1:20, where the surface is asphalt, concrete or some other hard surface, or no more that 1:10 in all other cases.
- The exterior path must meet the following requirements: It must

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- (6) A normally occupied floor area that is not required by Article 3.8.2.1. [AREAS REQUIRING BARRIER-FREE PATH OF TRAVEL] to have a barrier-free path of travel shall meet the following requirements:
- (a) interior walking surfaces throughout the normally occupied *floor area* shall comply with Clauses (2)(a) to (e)*, and
- (b) where the headroom of an area in a conidor or aisle in the normally occupied floor area is reduced to less than 1 980 mm, a guardrail or other barrier with its leading edge at or below 680 mm from the finished floor shall be provided.
- (2) Interior and exterior walking surfaces that are within a barrier-free path of travel shall,
- (a) have no opening that will permit the passage of a sphere more than 13 mm in diam.
- have any elongated openings oriented approximately perpendicular to the direction of travel,
- (c) be stable, firm and slip-resistant,
- (d) be bevelled at a maximum slope of 1 in 2 at changes in level not more than 13 mm, and
 - be provided with sloped floors or ramps at changes in level more than 13 mm.

Accessibility Standards

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have a 1:2 bevel at changes in level between 6 mm and 13 mm.

- It must have a maximum running slope of 1:8 or a curb ramp that meets the requirement of section 80.26 at changes in level of greater than 13 mm and less than 75 mm.
- It must have a maximum running slope of 1:10 or a curb ramp that meets the requirement of section 80.26 at changes in level of 75 mm or greater and 200 mm or less.
- It must have a ramp that meets the requirements of section 80.24 and changes in level of greater than 200 mm.
- The entrance to the exterior path of travel must provide a minimum clear opening of 850 mm, whether the entrance includes a gate, bollard or other entrance design.

Ramps

Where an exterior path of travel is equipped with a ramp, the ramp must meet the following requirements:

- The ramp must have a minimum clear width of 900 mm.
- The surface of the ramp must be firm and stable.
- The surface of the ramp must be slip resistant.
- The ramp must have a maximum running slope of no more than 1:15.
- The ramp must be provided with landings that meet the following requirements: Landings must be provided. At the top and bottom of the ramp,
- Where there is an abrupt change in direction of the ramp, and
- At horizontal intervals not greater than nine metres apart.
- Landings must be a minimum of 1,670 mm by 1,670 mm at the top and bottom of the ramp and where there is an abrupt change in direction of the ramp.
- Landings must be a minimum of 1,670 mm in length and at least the same width of the ramp for an in-line ramp.



Accessibility Standards

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- Landings must have a cross slope that is not steeper than 1:50.
- Where a ramp has openings in its surface, i. the openings must not allow passage of an object that has a diameter of more than 20 mm,
- any elongated openings must be oriented approximately perpendicular to the direction of travel.
- A ramp must be equipped with handrails on both sides of the ramp and the handrails must, i. 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,
- 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,
- terminate in a manner that will not obstruct pedestrian travel or create a hazard,
- extend horizontally not less than 300 mm beyond the top and bottom of the ramp,
- be provided with a clearance of not less than 50 mm between the handrail and any wall to which it is attached, and
- be designed and constructed such that handrails and their supports
 will withstand the loading values obtained from the non-concurrent
 application of a concentrated load not less than 0.9 kN applied at
 any point and in any direction for all handrails and a uniform load
 not less than 0.7 kN/metre applied in any direction to the handrail.
- Where the ramp is more than 2,200 mm in width, i. one or more intermediate handrails which are continuous between landings shall be provided and located so that there is no more than 1,650 mm



Accessibility Standards

AODA OBC 2015

between handrails, and

- The ramp must have a wall or guard on both sides and where a guard is provided, it must, i. be not less than 1,070 mm measured vertically to the top of the guard from the ramp surface, and
- 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.
- The ramp must have edge protection that is provided, i. with a curb at least 50 mm high on any side of the ramp where no solid enclosure or solid guard is provided, or
- with railings or other barriers that extend to within 50 mm of the finished ramp surface.

Stairs

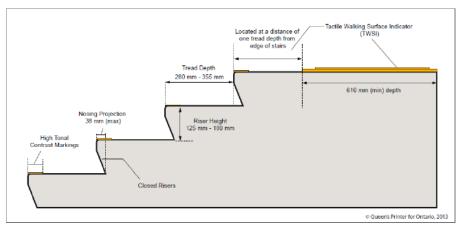
Requirements as Stated in the Regulation Exterior path of travel, stairs

- Where stairs connect to exterior paths of travel, the stairs must meet the following requirements:
- The surface of the treads must have a finish that is slip resistant.
- · Stairs must have uniform risers and runs in any one flight.
- The rise between successive treads must be between 125 mm and 180 mm.
- The run between successive steps must be between 280 mm and 355 mm.
- Stairs must have closed risers.
- The maximum nosing projection on a tread must be no more than 38 mm, with no abrupt undersides.
- Stairs must have high tonal contrast markings that extend the full tread width of the leading edge of each step.
- Stairs must be equipped with tactile walking surface indicators that are built in or applied to the walking surface, and the tactile walking



Accessibility Standards

AODA OBC 2015



surface indicators must, i. have raised tactile profiles,

- · have a high tonal contrast with the adjacent surface,
- be located at the top of all flights of stairs, and
- extend the full tread width to a minimum depth of 610 mm commencing one tread depth from the edge of the stair.
- **Handrails** must be included on both sides of stairs and must satisfy the requirements set out in paragraph 7 of subsection 80.24 (1).
- A guard must be provided that is not less than 920 mm, measured vertically to the top of the guard from a line drawn through the outside edges of the stair nosings and 1,070 mm around the landings and is required on each side of a stairway where the difference in elevation between ground level and the top of the stair is more than 600 mm but, where there is a wall, a guard is not required on that side.
- Where stairs are more than 2,200 mm in width,
- one or more intermediate handrails that are continuous between landings must be provided and located so there is no more than 1,650 mm between handrails, and
- the handrails must satisfy the requirements the same as handrails on



Accessibility Standards

AODA

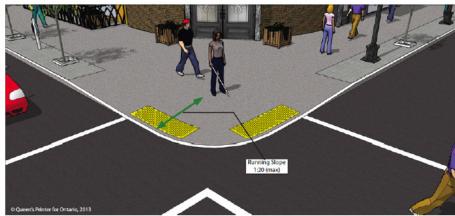


Figure 10 - Running slope

Curb Ramps

In this section, "curb ramp" means a ramp that is cut through a curb or that is built up to a curb. Exterior paths of travel, curb ramps:

Where a curb ramp is provided on an exterior path of travel, the curb ramp must align with the direction of travel and meet the following requirements:

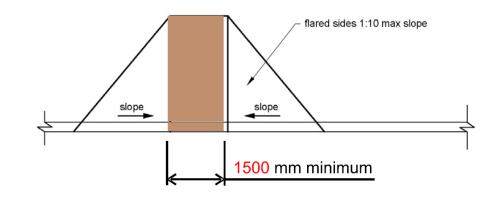
- The curb ramp must have a minimum clear width of 1,200 mm, exclusive of any flared sides.
- The running slope of the curb ramp must, be a maximum of 1:8, where elevation is less than 75 mm, and be a maximum of 1:10, where elevation is 75 mm or greater and 200 mm or less.
- The maximum cross slope of the curb ramp must be no more than 1:50.
- The maximum slope on the flared side of the curb ramp must be no more than 1:10.
- Where the curb ramp is provided at a pedestrian crossing, it must have tactile walking surface indicators that, i. have raised tactile

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OBC 2015

3.8.3.2. Exterior Walks

- (3) The curb ramp permitted by Sentence (2) shall,
- (b) have a width of not less than 4-200 1 500 mm exclusive of flared sides,



Accessibility Standards

AODA

profiles, have a high tonal contrast with the adjacent surface, are located at the bottom of the curb ramp, are set back between 150 mm and 200 mm from the curb edge, extend the full width of the curb ramp, and are a minimum of 610 mm in depth.

Depressed Curbs

Where a depressed curb is provided on an exterior path of travel, the depressed curb must meet the following requirements:

- The depressed curb must have a maximum running slope of 1:20.
- The depressed curb must be aligned with the direction of travel.
- Where the depressed curb is provided at a pedestrian crossing, it must have tactile walking surface indicators that, i. have raised tactile profiles,
- have high tonal contrast with the adjacent surface,
- are located at the bottom portion of the depressed curb that is flush with the roadway,
- set back between 150 mm and 200 mm from the curb edge, and
- a minimum of 610 mm in depth.

Pedestrian Signal

- They must have a locator tone that is distinct from a walk indicator tone.
- They must be installed within 1,500 mm of the edge of the curb.
- They must be mounted at a maximum of 1,100 mm above ground level.
- They must have tactile arrows that align with the direction of crossing.
- They must include both manual and automatic activation features.
- They must include both audible and vibro-tactile walk indicators.

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Exterior Walks

Tactile Indicators

Applies where the pedestrian route is not separated from vehicular traffic by a curb or similar element.

3.8.3.17. Platforms

- (1) A tactile attention indicator conforming to Article 3.8.3.18. shall be installed along any edge of a platform that is,
- (a) not protected by a guard, and
- (b) higher than 250 mm above the finished floor or ground or sloped steeper

than 1 in 3.

(2) Sentence (1) does not apply to the front edges of stages.

Accessibility Standards

AODA

- Where two accessible pedestrian signal assemblies are installed on the same corner, they must be a minimum of 3,000 mm apart.
- Where the requirements in subsection (3) cannot be met because of site constraints or existing infrastructure, two accessible pedestrian signal assemblies can be installed on a single post, and when this occurs, a verbal announcement must clearly state which crossing is active.

Requirements for accessible pedestrian signals in the Standard include:

- a locator tone
- proximity to edge of curb
- tactile push-button arrows
- mounting height distance
- capacity for both manual and automatic activation, and
- audible and vibro-tactile walk indicators.

Exterior paths of travel & rest areas Accessible Parking Off Street Parking

- Off-street parking facilities must provide the following two types of parking spaces for the use of persons with disabilities:
- Type A, a wider parking space which has a minimum width of 3,400 mm and signage that identifies the space as "van accessible". Type A spaces are for people who use mobility devices and need more space for the deployment of ramps
- Type B, a standard parking space which has a minimum width of 2,400 mm. Type B spaces are for people who use canes, crutches or walkers and do not need this extra space.
- The regulation does not prescribe where an organization should install the two types of accessible parking spaces in relation to each

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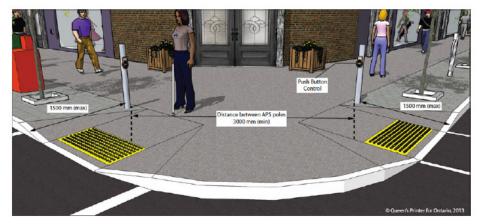




Figure 12 - Type A and B parking spaces and van-accessible signage

Accessibility Standards

AODA

other. For example, an organization may locate Type B spaces closer to an entrance for users of canes, crutches or walkers, who may have limited stamina compared with users of wheeled mobility devices such as scooters.

Access Aisles

- Access aisles may be shared by two parking spaces for the use of persons with disabilities in an off-street parking facility and must meet the following requirements: They must have a minimum width of 1,500 mm.
- They must extend the full length of the parking space.
- They must be marked with high tonal contrast diagonal lines, which discourages parking in them, where the surface is asphalt, concrete or some other hard surface.

Signage

Accessible parking spaces created under this regulation must be identified with signage consistent with the requirements outlined in section 11 of Regulation 581 (Accessible Parking for Persons with Disabilities) under the Highway Traffic Act. Obligated organizations shall ensure that parking spaces for the use of persons with disabilities as required under section 80.36 are distinctly indicated by erecting an accessible permit parking sign in accordance with section 11 of Regulation 581 of the Revised Regulations of Ontario, 1990 (Accessible Parking for Persons with Disabilities) made under the Highway Traffic Act.

On Street Parking Spaces

The requirements for accessible on-street parking only apply to public sector organizations likely to have responsibility for constructing and redeveloping roadways:

Municipalities



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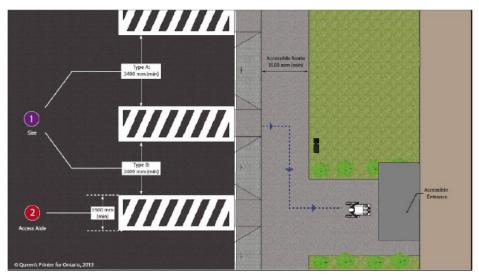


Figure 13 - Accessible parking features

Total number of parking spaces in parking facility for public use	Total number of accessible parking spaces required (rounded up to nearest whole number)	Type A spaces	Type B spaces
1	1	1	0
25	1	1	0
75	3	1	2
150	6	3	3
200	7	3	4
500	12	6	6
750	17	8	9
1000	22	11	11
2500	36	18	18

Table 21 - Minimum numbers of accessible parking established in regulation

Total number of parking spaces in parking facility for public use	Total number of accessible parking spaces required	Type A spaces	Type B spaces
1-12	1	1	0
13-100	4%	For lots with an even number of accessible parking spaces – provide an equal number of Type A and Type B	
101-200	3% + 1		
201-1000	2% + 2		
1001 +	1% + 11	spaces.	
		For lots with an odd number of total accessible parking spaces – provide an equal number of Type A and Type B spaces. The additional space may be a Type B space.	

Accessibility Standards

AODA

- District school boards
- Hospitals
- Colleges of Applied Arts and Technology
- Universities that receive annual operating grants from the Government of Ontario
- Public transportation organizations
- Consultation requirements local traffic patterns

Service Counters

- all new service counters and fixed queuing guides and
- all new and redeveloped waiting areas with fixed seating
- The countertop height must be such that it is usable by a person seated in a mobility aid.
- There must be sufficient knee clearance for a person seated in a mobility aid, where a forward approach to the counter is required.
- The floor space in front of the counter must be sufficiently clear so as to accommodate a mobility aid.

Fixed Queuing Guides

When constructing new fixed queuing guides, the following requirements must be met:

- The fixed queuing guides must provide sufficient width to allow for the passage of mobility aids and mobility assistive devices.
- The fixed queuing guides must have sufficiently clear floor area to permit mobility aids to turn where queuing lines change direction.
- The fixed queuing guides must be cane detectable.

Waiting Areas

When constructing a new waiting area or redeveloping an existing



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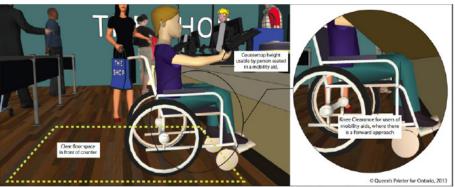


Figure 15 - Knee clearance and clear floor space in front of service counters



Figure 14 - Accessible service counters

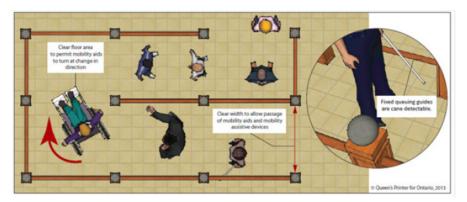


Figure 16 - Accessible fixed queuing guides

Accessibility Standards

AODA

waiting area, where the seating is fixed to the floor, a minimum of three per cent of the new seating must be accessible, but in no case shall there be fewer than one accessible seating space.

 Waiting areas with fixed seating must include dedicated spaces for people who use mobility devices, such as wheelchairs. The number of spaces must equal 3% of the total number of seats, with one space being the minimum required. Dedicated spaces should be in the same area as the rest of the fixed seating to allow customers with and without disabilities to wait together.

Maintenance of accessible elements:

- In addition to the accessibility plan requirements set out in section 4, obligated organizations, other than small organizations, shall ensure that their multi-year accessibility plans include the following:
- Procedures for preventative and emergency maintenance of the accessible elements in public spaces as required under this Part.
- Procedures for dealing with temporary disruptions when accessible elements required under this Part are not in working order.
- Organizations required to have multi-year accessibility plans must document their procedures for:
- preventative and emergency maintenance of the accessible elements in public spaces required by the standard
- temporary disruptions to accessible public spaces when accessible elements in public spaces required by the standard are not working space.

They must be marked with high tonal contrast diagonal lines, which discourages parking in them, where the surface is asphalt, concrete or some other hard surface.

