

Accessibility In Ontario

Prepared by Breaking Down Barriers
Independent Living Resource Centre



Breaking Down Barriers
Independent Living Resource Centre
Promoting a new perspective on disability

“the realization of accessibility will demonstrate our shared commitment to each other – and reinforce the values of decency, fairness and respect for individual dignity that bind Ontarians together”



– *Charles Beer, Independent reviewer of the Accessibility for Ontarians with Disabilities Act, 2005*

AODA

- Accessibility for Ontarians with Disabilities Act, 2005
- Passed unanimously in May 2005 by Ontario's Legislative Assembly, it became law June 13, 2005
- First legislation in Canada to develop, implement and enforce mandatory accessibility standards
- Aims to break down barriers to accessibility, allowing for an inclusive Ontario by 2025

Why do we have it?

- More than 1.85 million Ontarians, or 15.5% of the population, were reported as having a disability in 2006
- Although the rights of persons with disabilities is protected under the Canadian charter of rights and freedoms and the Ontario human rights code, this act provides a way to remove and prevent existing barriers that impede on those rights

“Accessibility turns legal rights into practical, everyday realities” – Charles Beer



Goals of the AODA

- Remove barriers that prevent access for persons with disabilities to
 - Jobs
 - Education
 - Information
 - Transportation
 - Use of goods, services, and facilities
- Create an inclusive society that allows persons of all abilities to participate to their full potential

Standards

- The AODA has identified five key areas in which accessibility standards will be set
- Each of these areas has a Standards development committee, made up of people from the disability, government, and business communities
- The five areas in which standards will be set are
 1. Customer Service
 2. Transportation
 3. Information and Communications
 4. Employment
 5. Built Environment



Customer Service

- States what businesses/organizations must do to provide their goods and services in an accessible way to people with disabilities
- First standard that has been set; became law January 1, 2008
- Government and broad public sector must comply by January 1, 2010
- Private and not-for-profit sectors must comply by January 1, 2012



Transportation

- Increase access to public transportation, such as cabs, buses, trains etc., to persons with disabilities
- Final proposed standard was submitted to the Minister of Community and Social Services for consideration as law in November 2008
- Still pending regulation



Information and Communications

- Aims to improve how businesses and organizations create, provide and receive information and communications in order to create ways that are accessible for people with disabilities
- Final proposed standard was submitted to the Minister of Community and Social Services for consideration as law in June 2009
- Still under consideration



Employment

- Goal is to create equal employment opportunities for people with disabilities
- Sets out specific requirements for the recruitment, retention and accommodation of people with disabilities
- Final proposed standard was submitted to the Minister of Community and Social Services for consideration as law in September 2009
- Still pending regulation

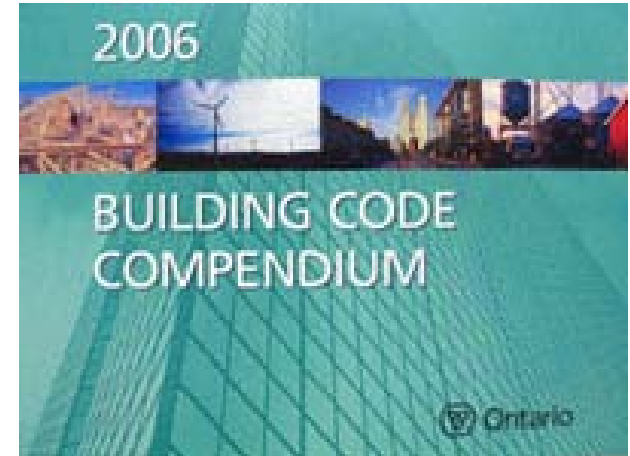


Accessible Built Environment

- Built environment focuses on the physical features of a building, room, or public space
- Aims to break down barriers in buildings and other structures for people with disabilities
- Standards Development Committee is now revising the proposed standard; it will then submit a final proposed standard to the government for consideration as law

The Ontario Building Code

- The Ontario Building Code
- Current building code in effect is the 2006 Ontario Building Code
- Barrier-free design: section 3.8, pages 169-179
- Has limited barrier-free information
- Will be amended when the Built Environment standard becomes law



Canadian Standards

- Accessible design for the built environment 2006; CAN/CSA-B651-04
- Standards Council of Canada approved document
- 200+ pages about accessible built environment
- More detail and higher standards of accessibility than Ontario Building Code
- Preferred over Ontario Building Code for accessible building designs



Accessible Built Environment – Specifications for Accessible Buildings



Parking – Size of Accessible Spaces

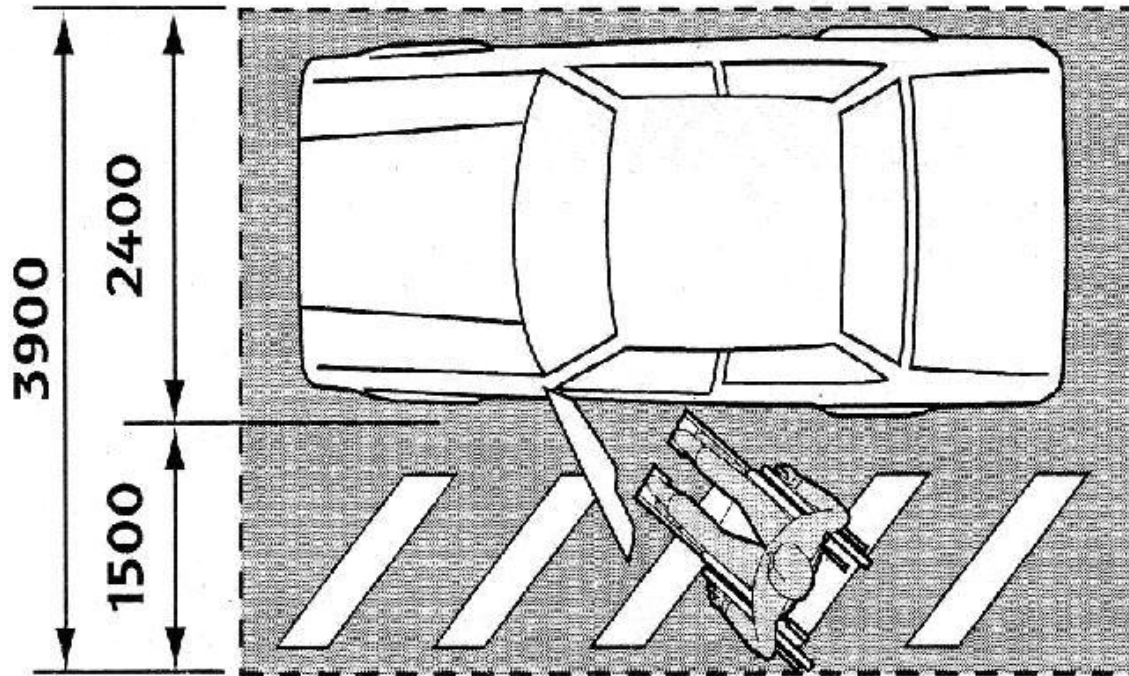
Ontario Building Code

- No specifications provided for width of accessible spaces
- Access aisles at least 1500 mm wide adjacent to accessible parking spaces

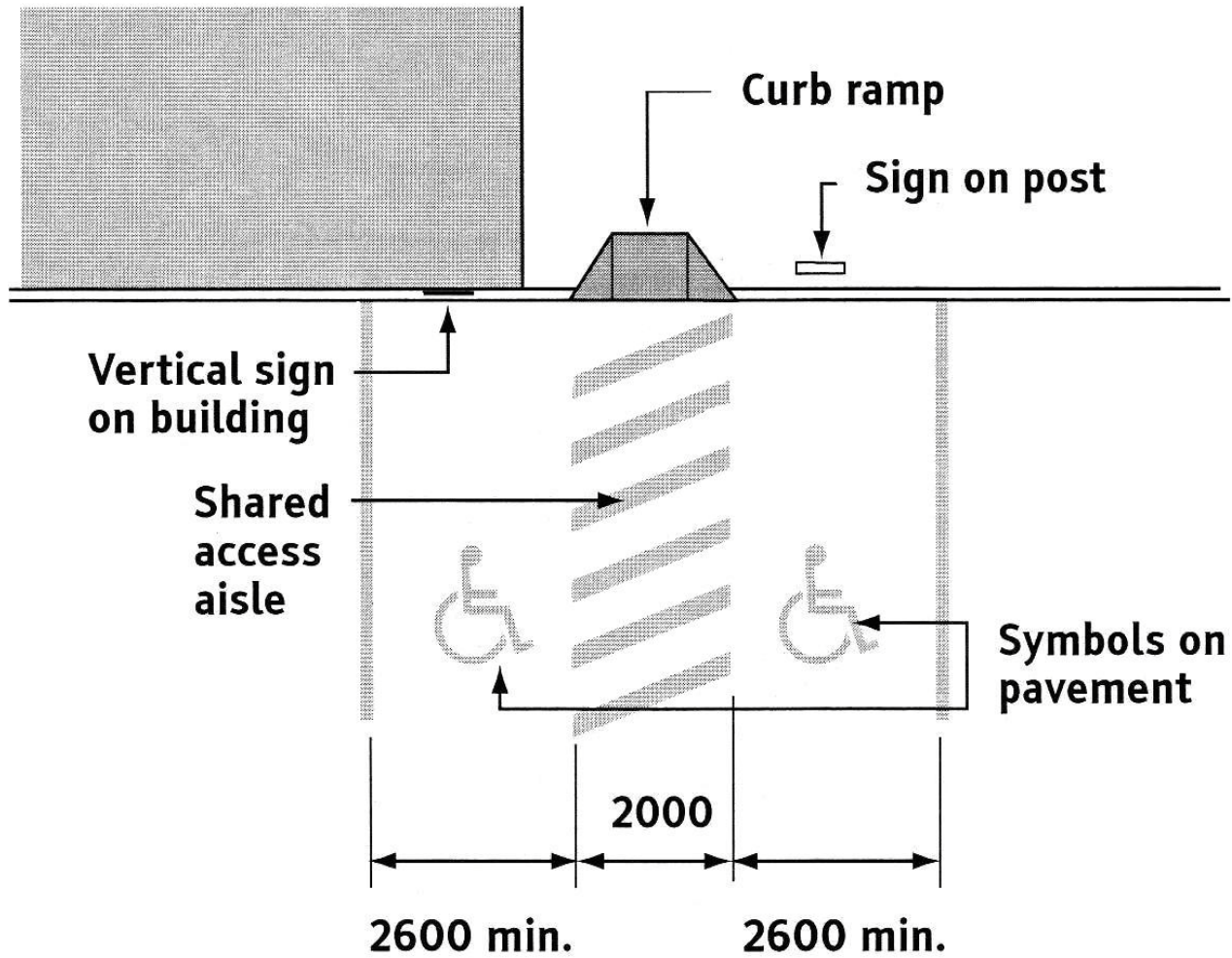
Canadian Standards

- Car spaces: be at least 2400 mm wide with an adjacent access aisle at least 1500 mm wide
- Van spaces: be at least 2600 mm wide with an adjacent access aisle at least 2000 mm wide

Canadian Standards Parking Spaces



Car parking space



Perpendicular van parking space

Parking Signage

Ontario Building Code

- Marked by sign incorporating International Symbol of Accessibility
- No pavement marking required, no height requirements for mounted signs

Canadian Standards

- Marked by a vertical mounted sign as well as on pavement
- Vertical sign at least 300mm wide by 450 mm high, mounted 1500 mm to 2500 mm from ground
- Pavement marking at least 1000 mm in length, color contrasted to background

Doors and Doorways

Ontario Building Code

- Clear width of at least 850 mm
- Door hardware: not require tight grasping and twisting of the wrist
- Operation: for exterior doors, open with a force of not more than 22 N (5 lb), or 38 N (8.5 lb) for exterior doors

Canadian Standards

- Clear width of at least 810 mm
- Door hardware: mounted 800 to 1200 mm from the floor and not require tight grasping and twisting of the wrist
- Operation: a force of more than 22 N (5 lb) for interior doors to open and 38 N (8.5 lb) for exterior doors

Doors and Doorways

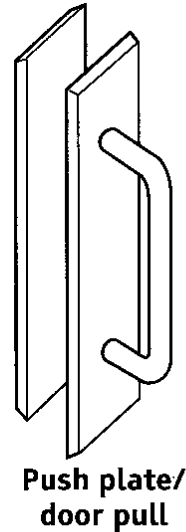
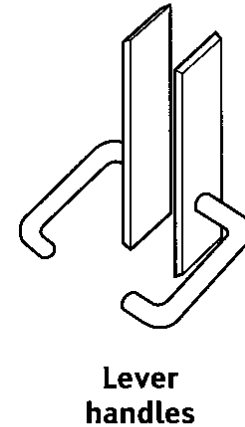
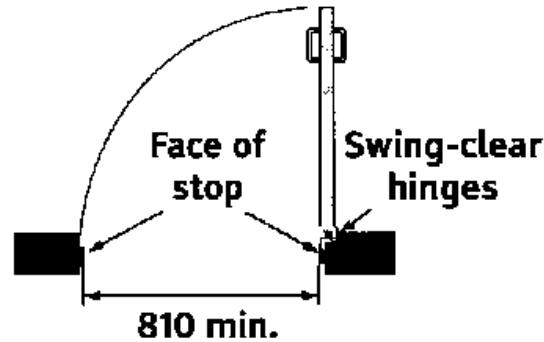
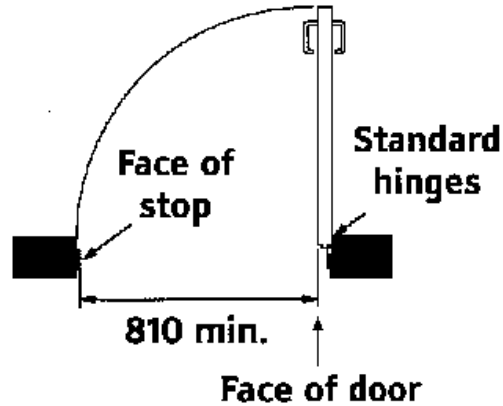
Ontario Building Code

- Power door controls
 - No face dimension less than 100 mm wide
 - Located between 1000 mm - 1100 mm from ground
 - At least 600 mm beyond door swing

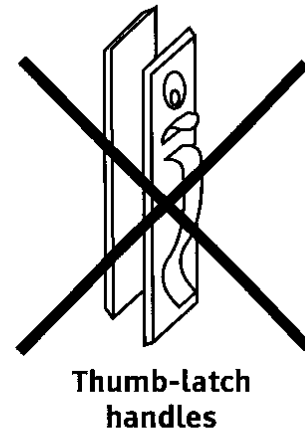
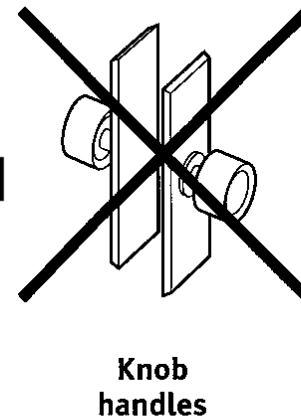
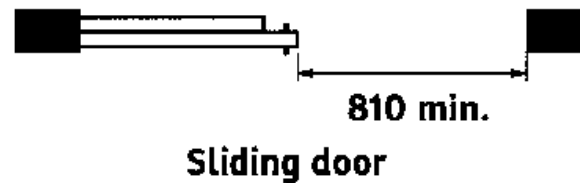
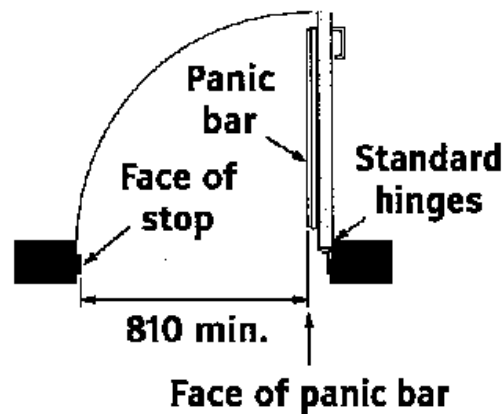
Canadian Standards

- Power door controls
 - Be located along route of travel
 - Clear of door swing
 - Be at a height of 800 to 1200 mm from ground
 - A clear floor space of 750 X 1200 mm in front
 - Dimensions at least 22 X 75 mm

Canadian Standards Doorways



(a) Acceptable



(b) Not acceptable

Clear opening width of doorway

Handles

Maneuvering Area at Doors

Ontario Building Code

- Unless equipped with a power door operator, clear space on latch side at least 600 mm beyond edge of door opening if the door swings towards approach side, and at least 300 mm if door swings away from approach side

Canadian Standards

- Much more detailed—*See Table 2*
- *Table 2* is for manual wheelchairs. Larger areas may be required for larger mobility devices (scooter, power wheelchairs)

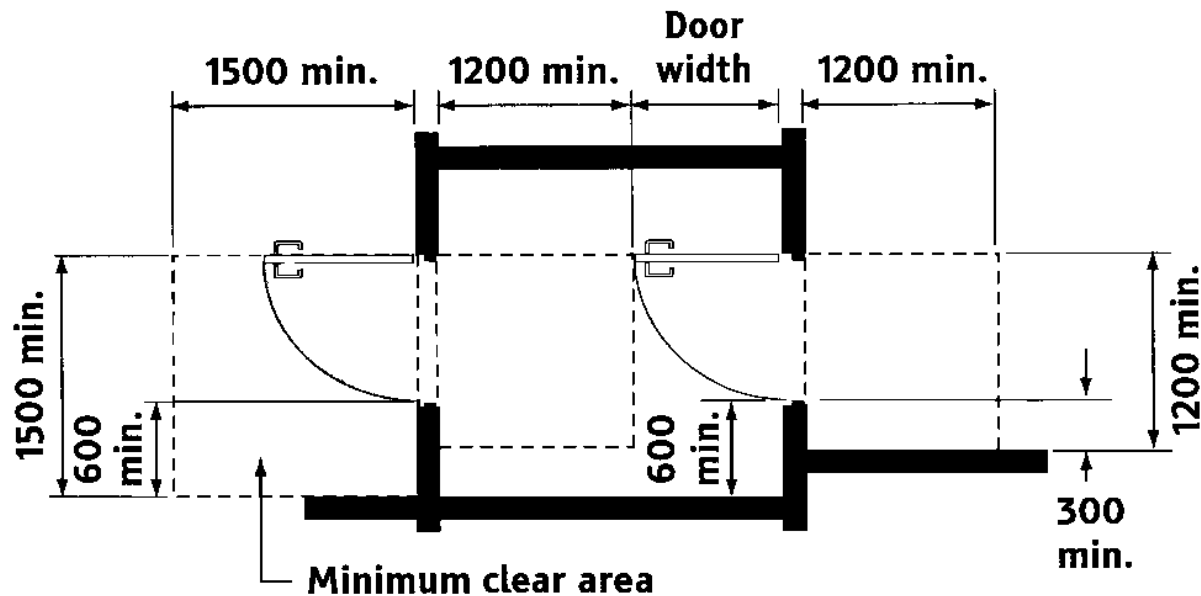
Table 2
Manoeuvring area at doors

Context	Clear floor area required, mm		Distance from door opening measured at the latch edge, mm
	Depth	Width	
Swinging door			
Front approach (Figure 15(a))			
Pull side	1500	1500	600
Push side	1200	1200	300
Latch edge approach (Figure 15(b))			
Pull side	1200	1500	600
Push side	1050	1500	600
Hinge edge approach (Figure 15(c))			
Pull side	1500	1500	600
Push side	1050	1350	450
Sliding door (Figure 15(d))			
Front approach	1200	900	50
Side approach	1050	1350	540

Two Doors in a Series

Both the Ontario Building Code and the Canadian Standards recommend the following:

- The distance between two swinging doors in a series shall be at least 1200 mm plus the width of any door swinging into the space



Manoeuvring area at doors in series

Glass Doors

Ontario Building Code

- Continuous opaque strip, color and brightness contrasted to background of door
- At least 50 mm wide
- Located across the width of the door at a height of 1350 to 1500 mm above floor

Canadian Standards

- Color contrast strip around the perimeter of the door and around the perimeter of the surrounding opening at least 50 mm wide, and/or;
- Contrasting horizontal strip at least 50 mm wide at a height of 1350 mm from floor

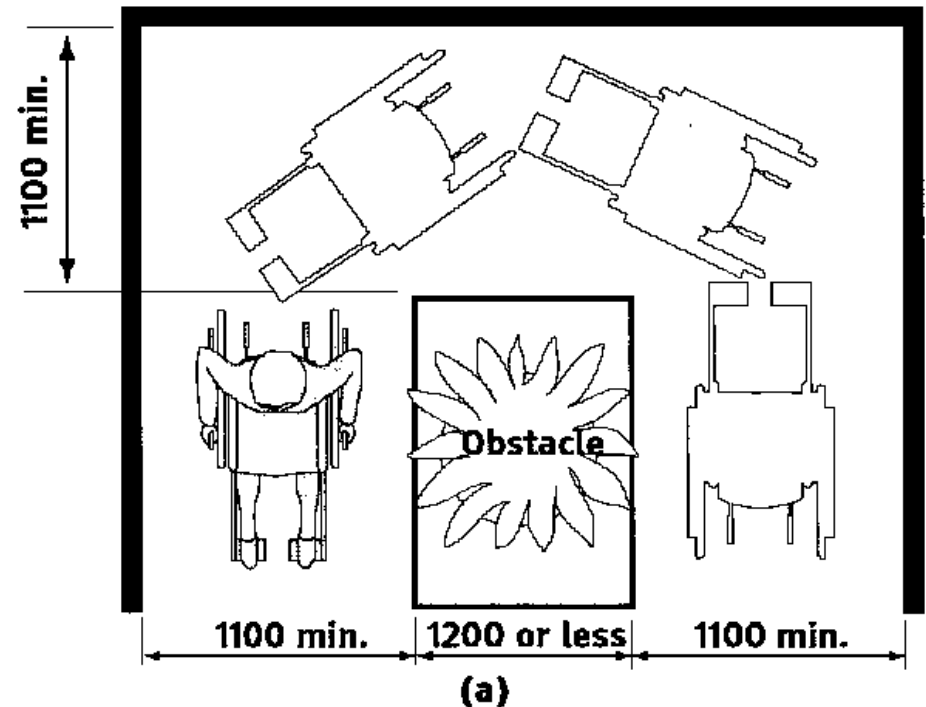
Interior Paths of Travel

Ontario Building Code

- Have a clear width at least 1100 mm wide

Canadian Standards

- Have a clear width at least 920 mm wide
- In high traffic areas, it shall be at least 1500 mm
- U-turns around an obstacle less than 1200 mm wide, shall be at least 1100 mm



Width of accessible route around an obstacle



Operating Controls

Ontario Building Code

- Building services or safety devices, including electrical switches, thermostats and intercom switches
- Operable with one hand

Canadian Standards

- Include, but not limited to door handles and locks, windows openers and locks, faucets, electrical outlets and switches, thermostats, fire alarm pull stations and activation devices
- Operable with one hand without tight grasping, pinching, or twisting of the wrist

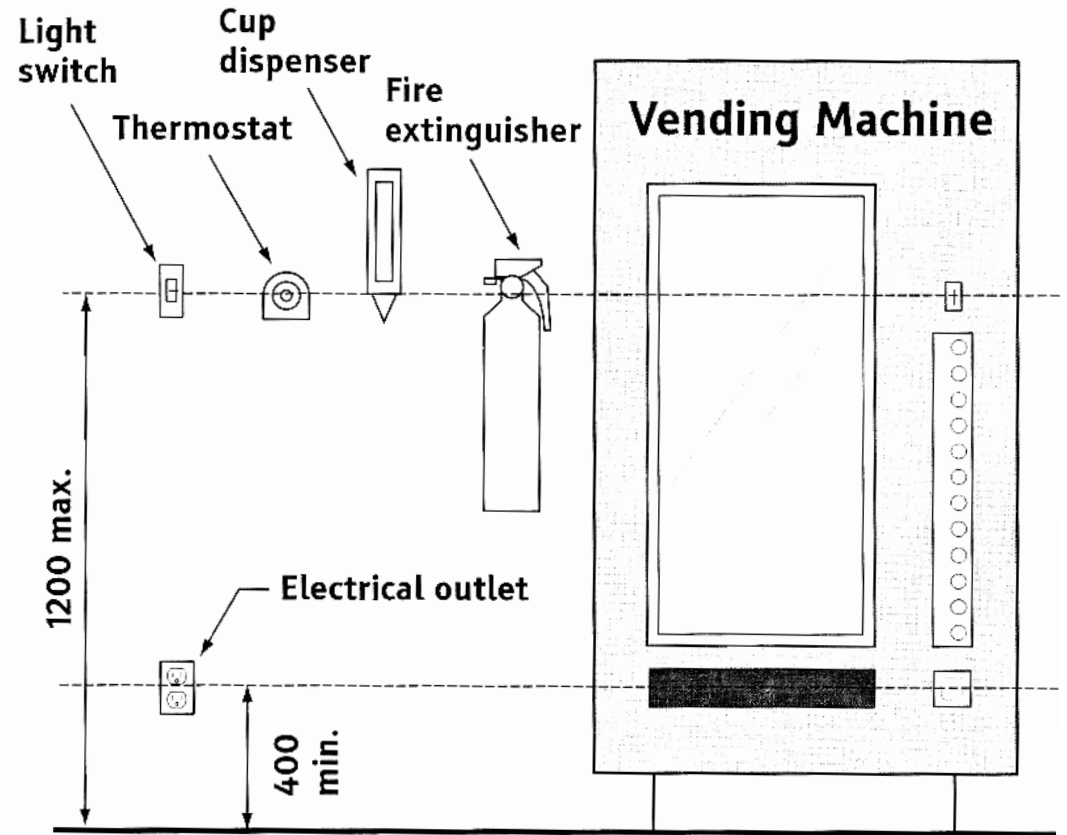
Operating Controls

Ontario Building Code

- Mounted between 900 and 1200 mm above floor

Canadian Standards

- Centerline shall be located 400 to 1200 mm from floor
- Picture shown →



Height of operating controls

Lavatories

The Ontario Building Code and Canadian Standards agree on the following requirements for lavatories:

- Be mounted with the centerline at least 460 mm from a side wall
- Faucets are of lever handle type
- Hot water pipes wrapped if they would otherwise present a burn hazard
- Towel dispensers or other hand drying equipment that located so the dispensing height is not more than 1200 mm from floor, and operable with one hand

Lavatories

Ontario Building Code

- Top located not more than 840 mm above the floor
- Soap dispenser less than 1200 mm from floor
- Mirror mounted with its lower edge not more than 1000 mm from floor or inclined to the vertical

Canadian Standards

- Have the top located 810 to 860 mm from the floor
- Soap dispenser located within a 500 mm reach of lavatory and no higher than 1100 mm
- Mirror mounted with its bottom edge not more than 1000 mm from floor; tilted mirror not recommended

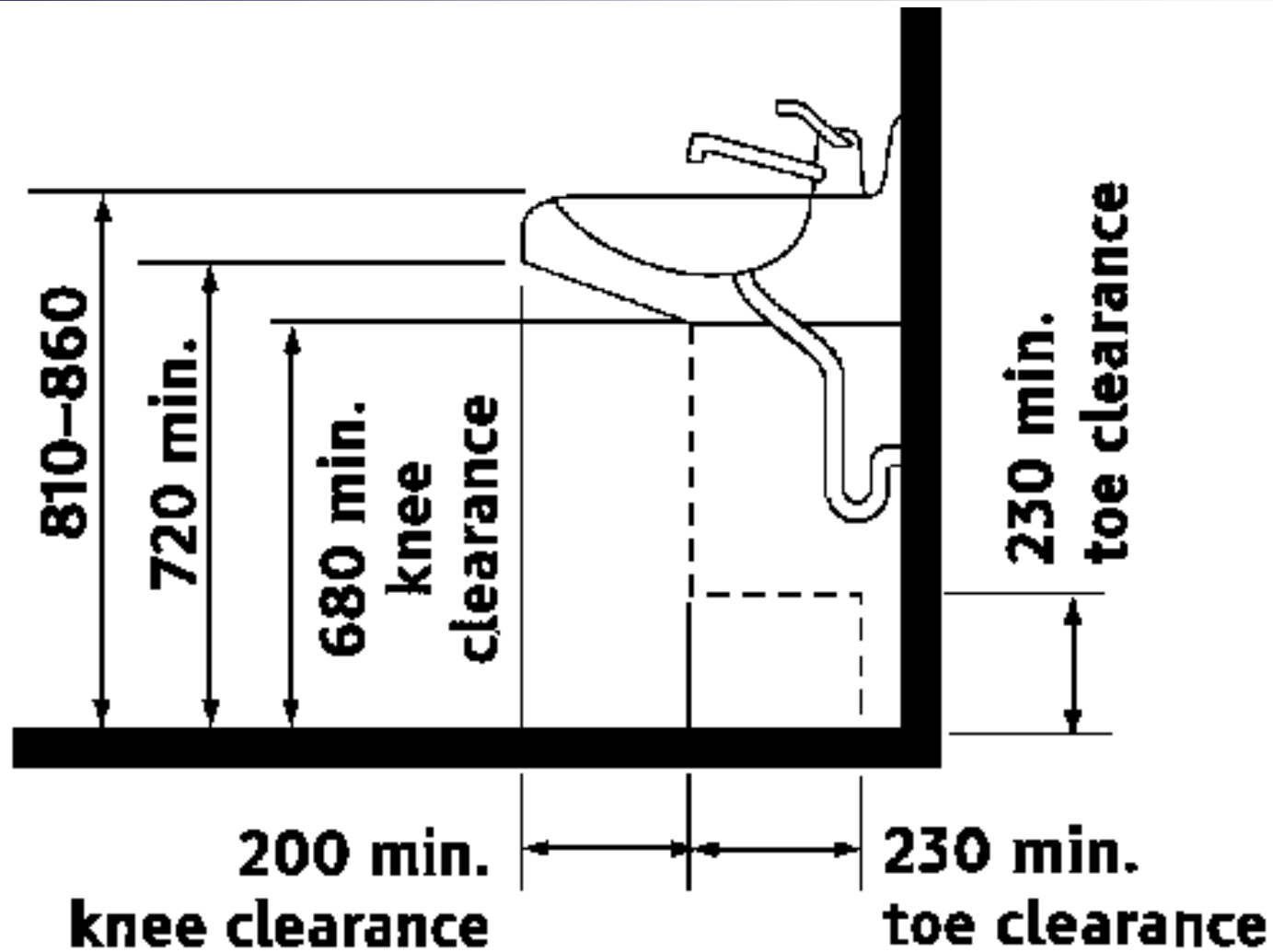
Lavatories – knee clearance

Ontario Building Code

- 760 mm wide
- 735 mm high at front edge
- 685 mm high at a point 205 mm back from the front edge
- 230 mm high over the distance from a point 280 mm to a point 430 mm back from the front edge

Canadian Standards

- 750 mm wide X 200 mm deep X 680 mm high
- Additional toe clearance 750 mm wide X 230 mm deep X 230 mm high
- A counter with a front apron shall be 750 mm wide X 720 mm high



Lavatory clearances

Toilets

The Ontario Building Code and Canadian Standards agree on the following requirements for toilets:

- Be located so centreline of toilet is between 460 mm and 480 mm from an adjacent side wall
- The top of the seat shall be 400 to 460 mm from floor
- No spring-activated seat
- A back support where there is no seat lid or tank

Grab Bars – wall beside toilet

Ontario Building Code

- At least 760 mm long, mounted at a 30° to 50° angle sloping upwards
- Lower end mounted 750 mm to 900 mm above floor and 50 mm in front of the toilet bowl, or
- L-shaped with each section 760 mm long, horizontal section mounted 750-900 mm above the floor and vertical section 150 mm in front of the toilet bowl

Canadian Standards

- Mounted horizontally 750-850 mm from the floor
- Extend not more than 300 mm from the rear wall and at least 450 mm in front of toilet seat

Grab Bars – wall behind toilet

Ontario Building Code

- At least 600 mm in length mounted horizontally
- 840 mm to 920 mm above floor
- Where toilet has a tank, be mounted 150 mm above tank

Canadian Standards

- At least 600 mm long mounted horizontally
- 750 to 850 mm above floor
- Centred with the toilet

Toilet Stall

Ontario Building Code

- At least 1500 mm wide X 1500 mm deep
- Door swings outward with a clear opening width of at least 810 mm
- Be capable of being latched from the inside with a mechanism that is operable with one hand

Canadian Standards

- At least 1600 mm wide X 1500 mm deep
- Door swings outward with a clear opening width of at least 810 mm
- Be capable of being latched from the inside with one hand, not requiring tight grasping, pinching, or twisting of the wrist
- At least 900 mm clear transfer space

Toilet Stalls – Toilet Paper Dispenser

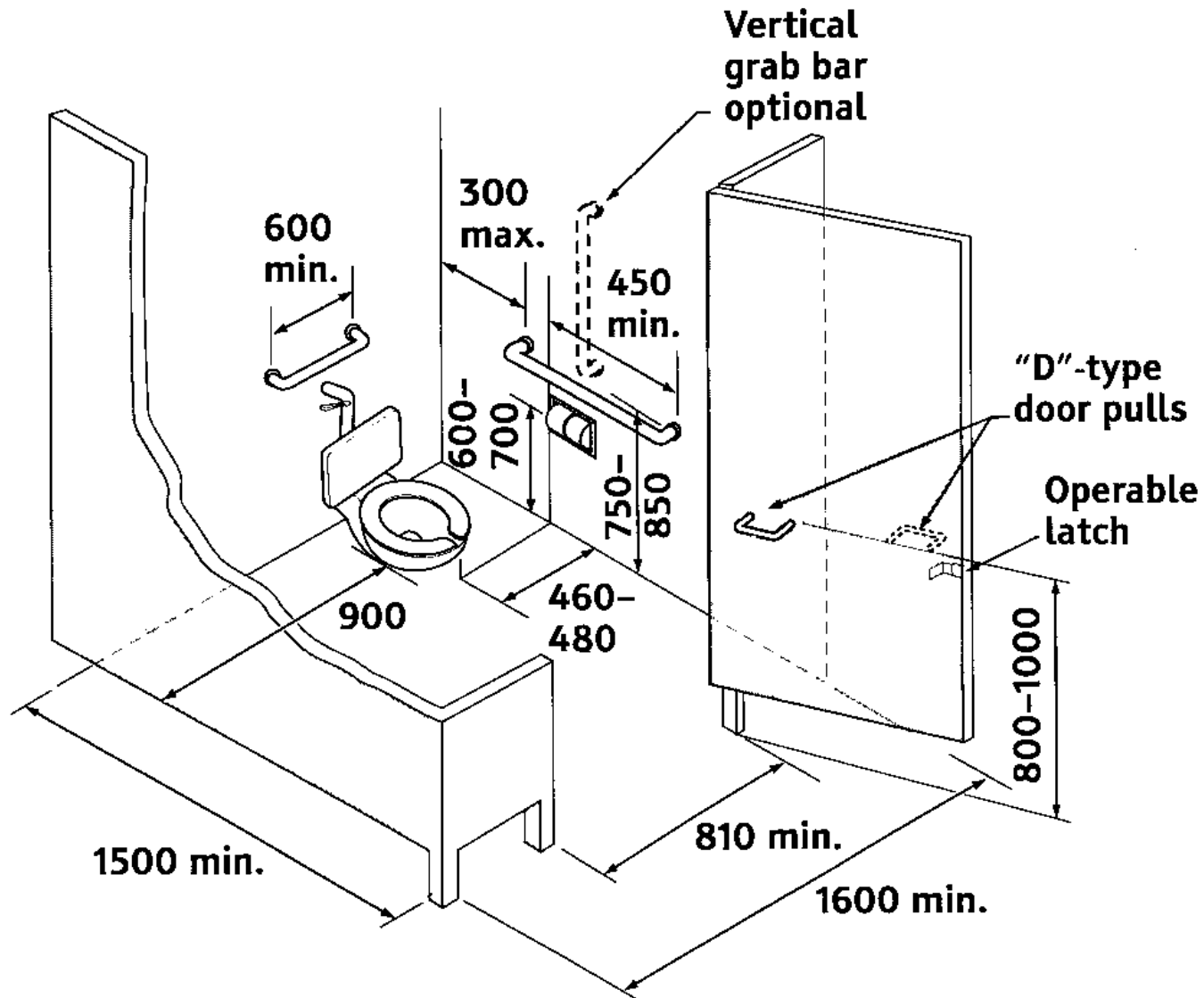
Ontario Building Code

- wall mounted
- located below the grab bar
- in line with or not more than 300 mm in front of the toilet seat
- Not less than 600 mm above the floor

Canadian Standards

- The dispensing of the paper shall be in line with the toilet seat
- At a height of 600 to 700 mm from the floor

Canadian Standards - Toilet Stall



Toilet stall

Urinals

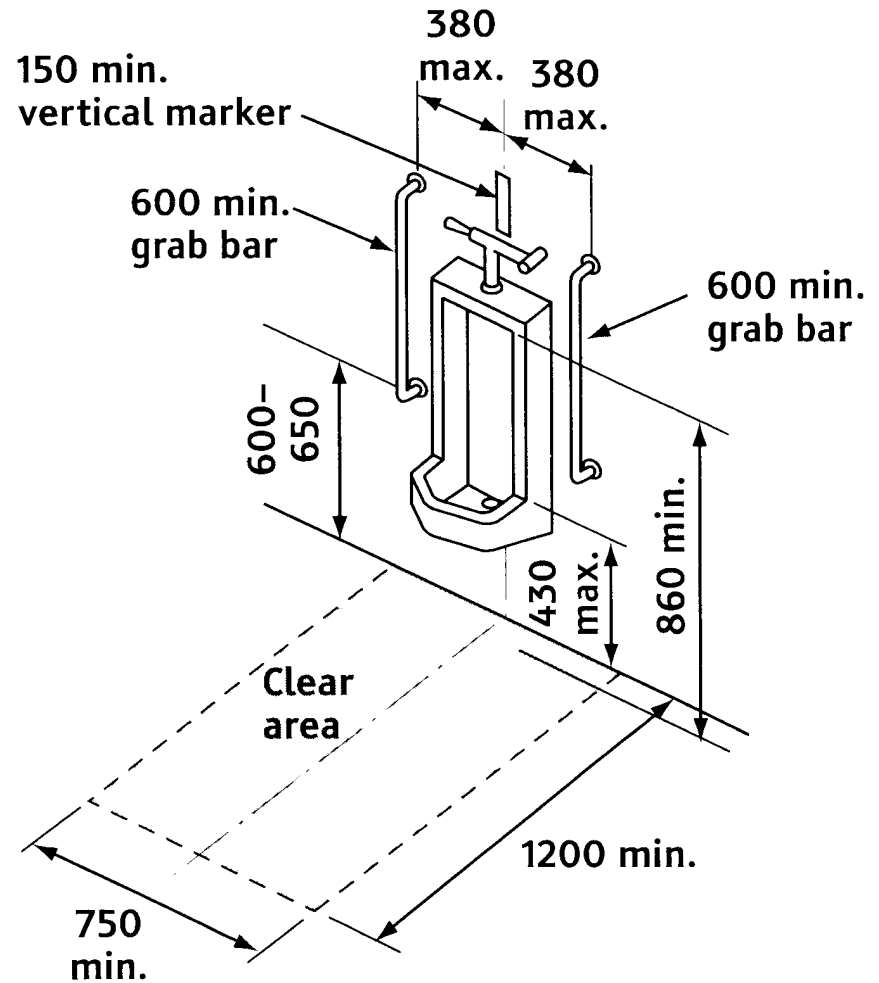
The Building Code has no requirements for accessible urinals. The following is from the Canadian Standards:

- Be stall or wall-hung type with lower rim no higher than 430 mm from the floor and upper rim no lower than 860 mm from the floor
- Have a clear floor area in front of the urinal that is 750 mm wide by 1200 mm deep
- Lever handle or automatic flush controls
- Grab Bars mounted vertically on the back wall, at least 600 mm in length, and mounted on each side of the urinal not more than 380 mm from the centre and with lower end 600 to 650 mm from the floor

Urinals

Vertical Markers

- Centred on the urinal, colour contrasted no less than 70% with the back wall
- Extend no less than 150 mm above the top of the urinal, or where applicable, extend from the top of the urinal to at least 1300 mm from the floor
- No less than 50 mm wide and raised at least 3 mm above the wall surface



Urinal

Universal Toilet Rooms

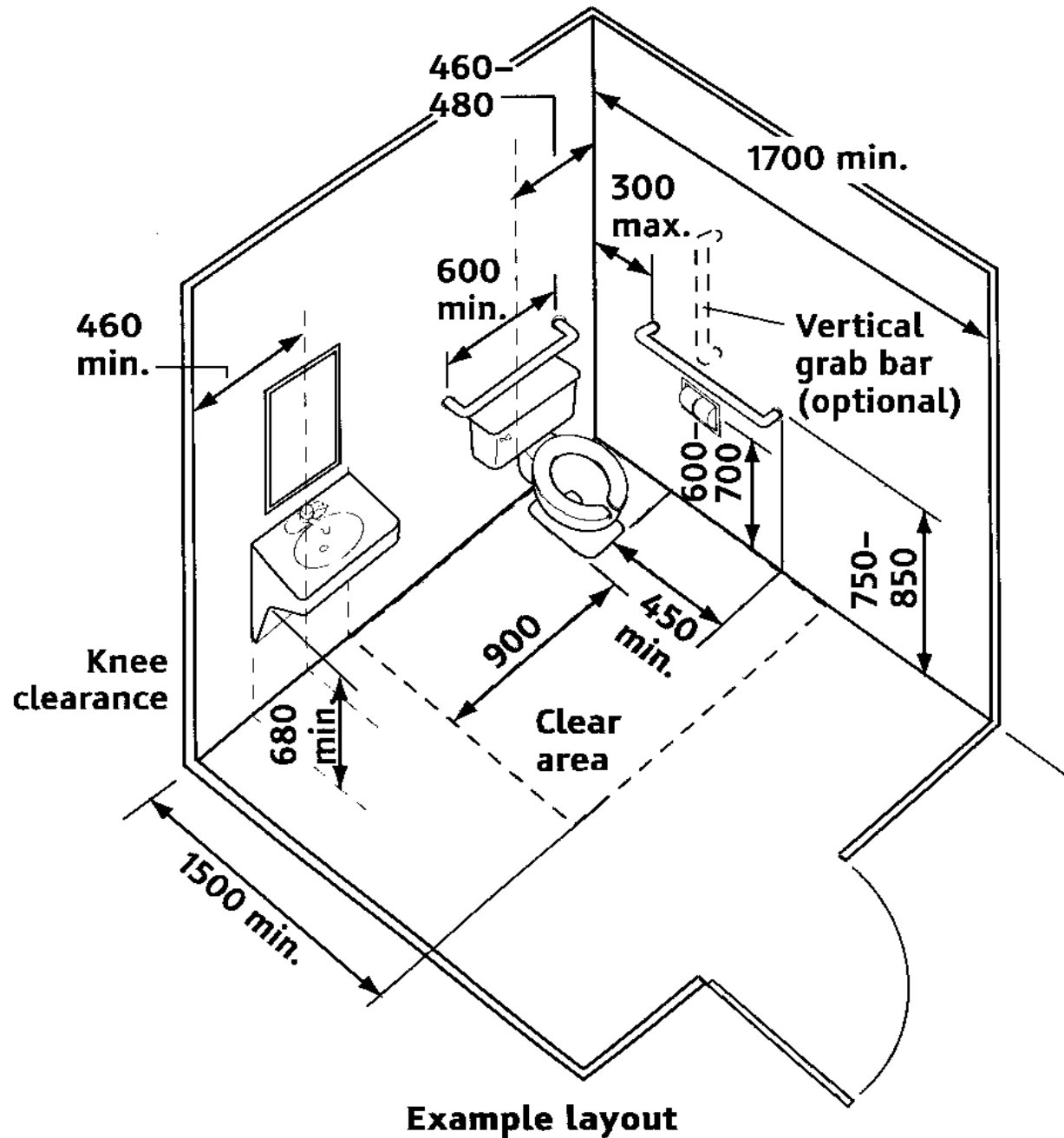
Ontario Building Code

- Have toilet, grab bars, lavatory, and doors as previously described
- Have a door that unlocks from the outside in case of emergency
- Have no internal dimensions between walls less than 1700 mm

Canadian Standards

- Have toilet/toilet accessories, lavatory, and door as previously described
- Have a door that unlocks from the outside in case of emergency
- A floor area not less than 3.5 m² with no dimension between opposite walls less than 1700 mm

Canadian Standards – Universal Toilet Room



Signage

Ontario Building Code

Signs incorporating the International Symbol of Accessibility (ISA) and such other graphic, tactile, or written directions as needed to indicate clearly the type of facility available, shall be installed where a washroom, elevator, telephone, parking area, or means of egress is required to accommodate disabled persons

Canadian Standards

Where facilities or their elements are required to be identified as accessible, the International Symbol of Access (ISA) shall be used

Signage – Tactile Signs

Ontario Building Code

- signs shall, if wall mounted, be located between 1200 mm and 1500 mm above the floor

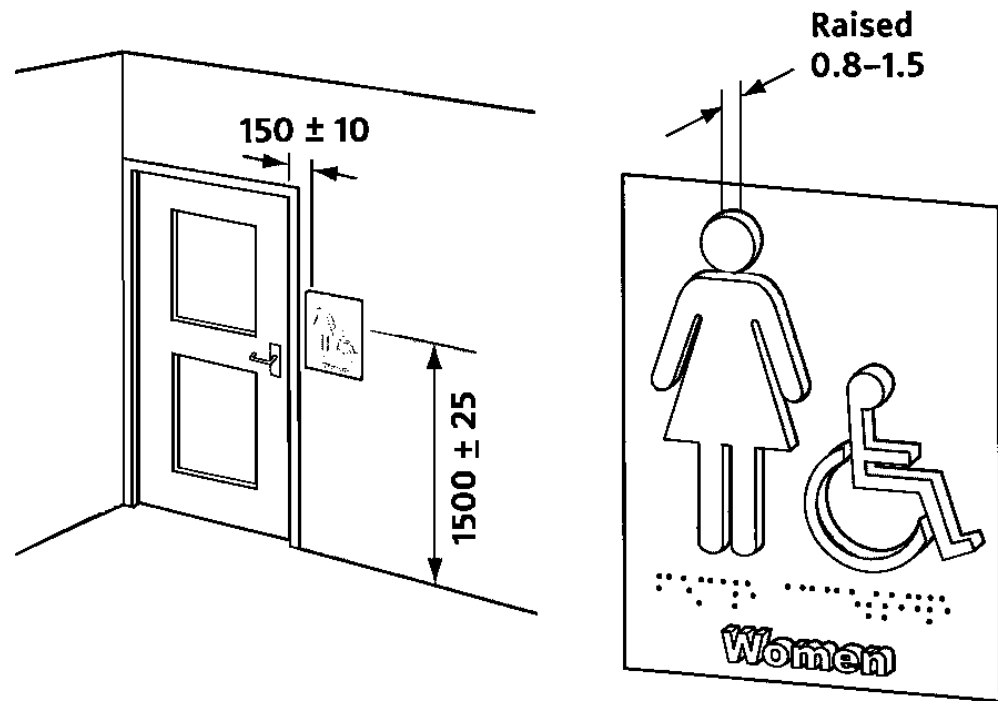
Canadian Standards

- If used to identify a door, be mounted on the wall beside the door
- Have the leading vertical edge 150 ± 10 mm from the door jamb
- Be mounted with the horizontal centerline 1500 ± 25 mm from the floor
- Clear wall area around the sign at least 75 mm wide
- Allow approach to the sign to within 100 mm without encountering protruding objects, including a door swing

Tactile Characters/Pictograms

Canadian Standards

- Raised 0.8 to 1.5 mm above the surface
- San serif font
- 16 to 50 mm in height
- Accompanied by Grade 1 Braille near the bottom edge of the sign
- Pictograms and symbols placed on a sign at least 150 mm in height



Location and size of tactile signs

Configuration of Signage

The remainder of the information on accessible signage is provided by the Canadian Standards (these specifications are not covered in the Ontario Building Code).

- Have a glare-free surface
- Be of uniform design
- When used to give the same information within the same facility, be consistently shaped, colored, and positioned
- Be consistently located
- Be positioned to avoid shadow areas and glare

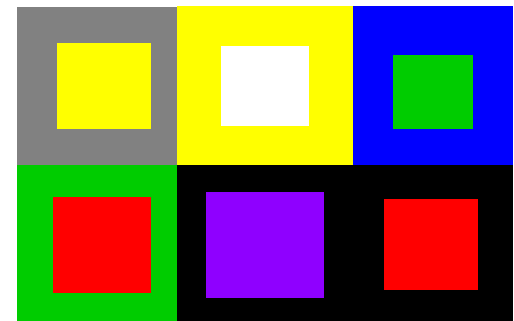
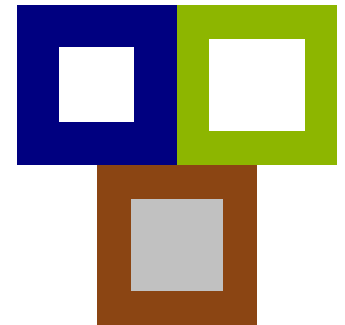
Characters on Signs

- Use an upper case X for character measurement
- Have the character height relative to the intended viewing distance
comply with Table 3
- Be sans serif
- Have Arabic numbers

Minimum character height, mm	Maximum viewing distance, mm
25	750
50	1500
75	2250
100	3000
150	4500
200	6000
250	7500
300	9000

Colour-Contrast

- All characters be color-contrasted by at least 70% with their background
- Where the background of a sign does not contrast significantly with the surrounding surface, a contrasting border around the sign is recommended
- Examples of colours that contrast more than 70% are navy blue with matte white (95%), apple green with white (72%), and silver with saddle brown (70%)
- Colour combinations to avoid: yellow/grey, yellow/white, blue/green, red/green, black/violet, and red/black



Ramps – Exterior and Interior

Ontario Building Code

- Maximum gradient of 1 in 12
- Minimum width of 900 mm between handrails

Canadian Standards

- Running slope between 1:12 to 1:20
- Clear width of at least 920 mm
- A colour contrasting strip 50 ± 10 mm wide at the top and bottom of the ramp
- Cross slope not steeper than 1:50

Ramps – Level Landings

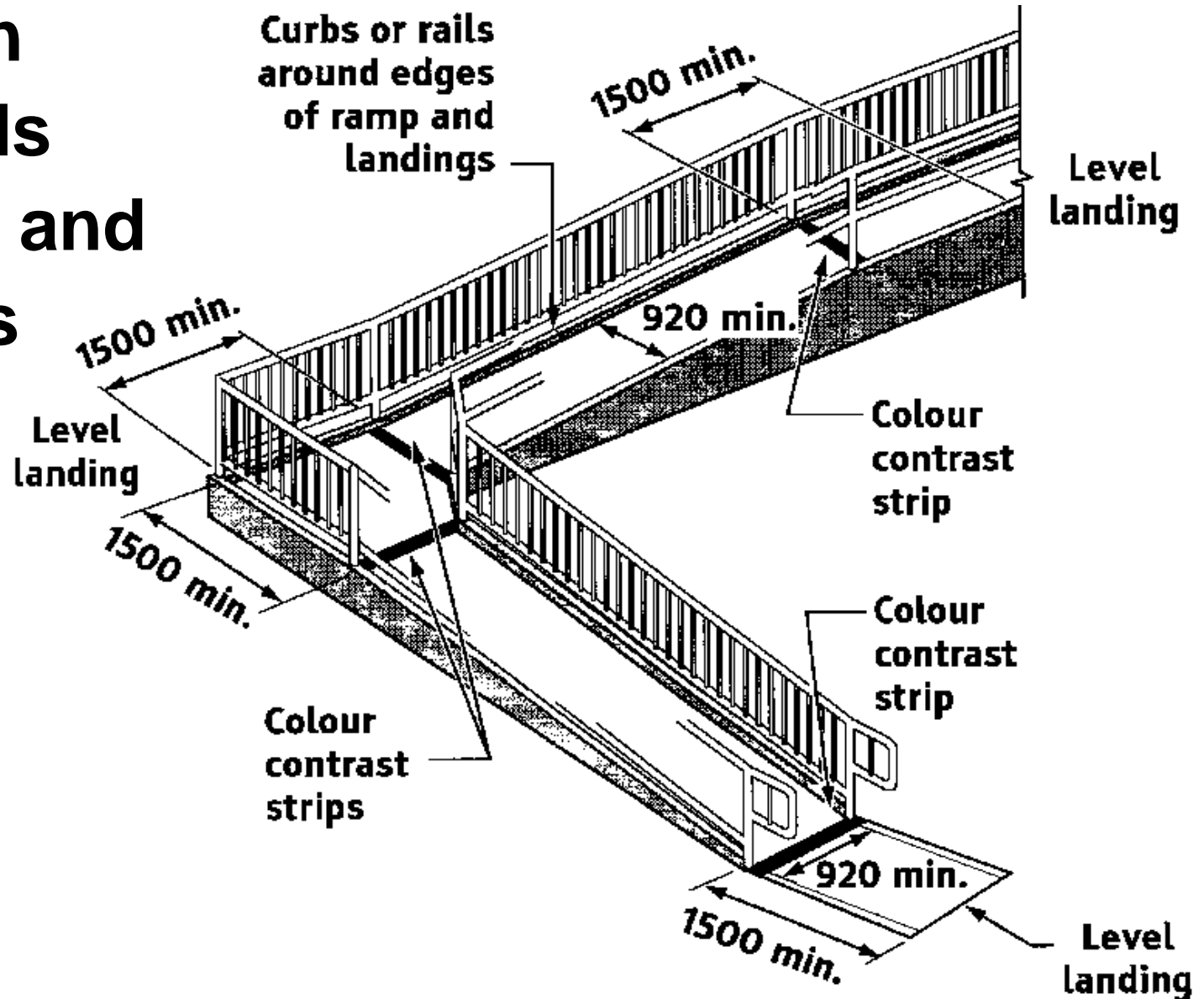
Ontario Building Code

- At least 1670 mm x 1670 mm at the top and bottom of the ramp
- At least 1670 mm long and at least the same width of the ramp at intervals of not more than 9 m
- Be provided where there is a door or an abrupt change in direction of the ramp

Canadian Standards

- Not less than 1500 mm long at the top and bottom of each ramp
- Where it meets a slope change, have a 50 ± 10 mm wide colour-contrasted strip equal to the width of the ramp
- Not less than every 9 m, be at least as wide as the ramp and 1500 mm long
- Be provided at doors and changes in ramp direction

Canadian Standards – Ramps and Landings



Note: Handrails have been partially omitted for clarity.

Ramps - Handrails

Ontario Building Code

- Be 865-965 mm high from ramp surface
- Be continuously graspable along their entire length on both sides of the ramp
- Extend horizontally not less than 300 mm beyond the top and bottom of the ramp and terminate so that it will not obstruct pedestrian travel/create a hazard

Canadian Standards

- Be 860-920 mm high from ramp surface
- Be continuous on the inside of ramps and around landings on both sides of the ramp
- Extend horizontally beyond the top and bottom of the ramp at least 300 mm and have the horizontal rail extensions return to the post, floor, or wall

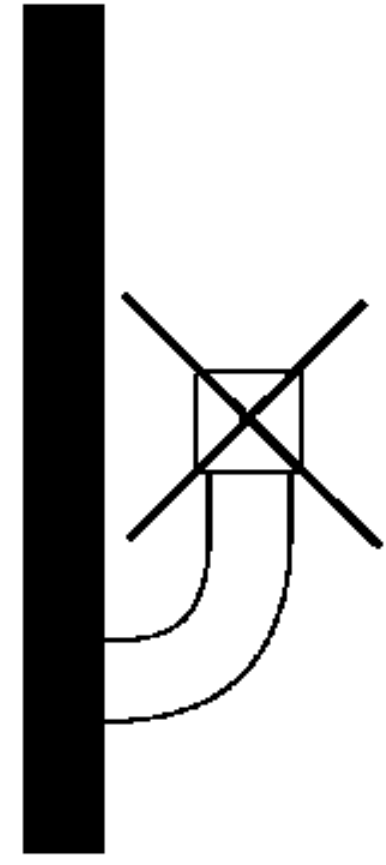
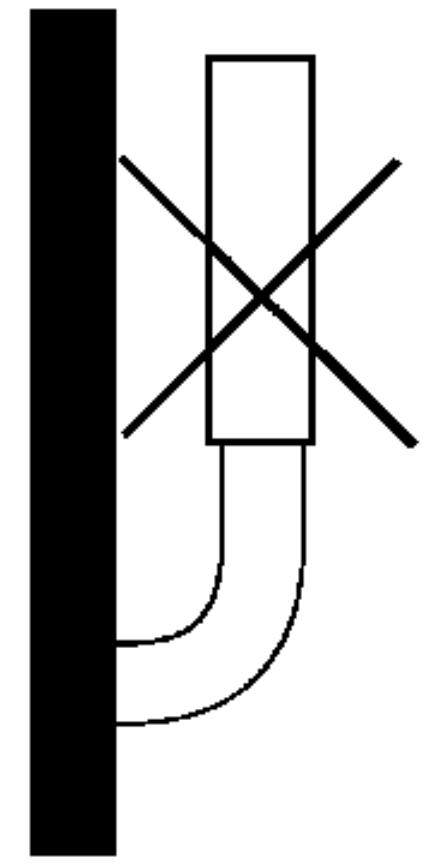
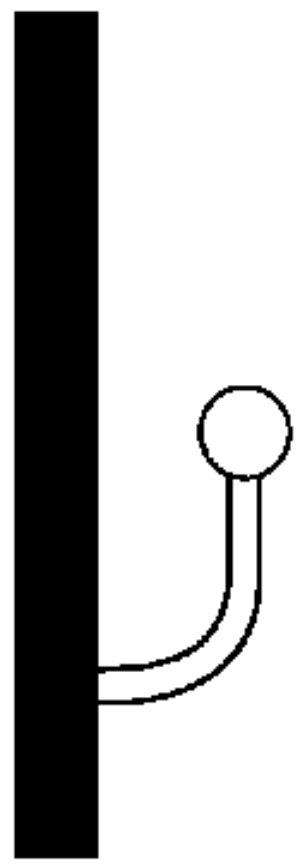
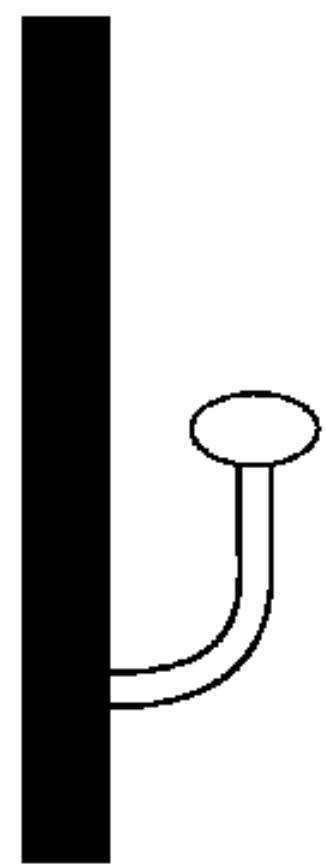
Ramps - Handrails

Ontario Building Code

- Clearance of at least 40 mm between the handrail and any wall to which it is attached
- Circular cross-section with an outside diameter 30-40 mm, or any non-circular shape that has a perimeter 100-155 mm and whose largest cross-sectional dimension is not more than 57 mm

Canadian Standards

- Clear space of 35-45 mm underneath the handrail and between the handrail and the wall
- Be colour contrasted with their surroundings
- Circular section with an outside diameter of 30-40 mm or an equivalent graspable shape



Acceptable

Preferred

Not acceptable

Handrail shapes

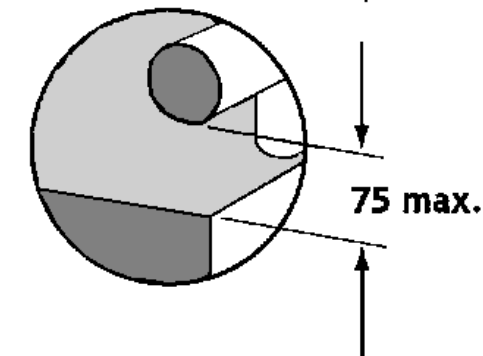
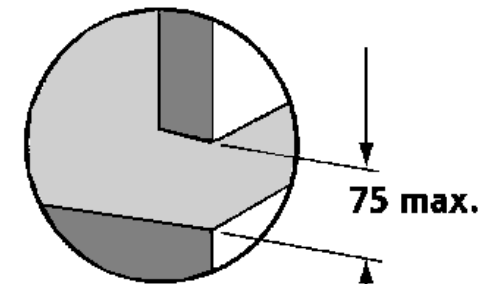
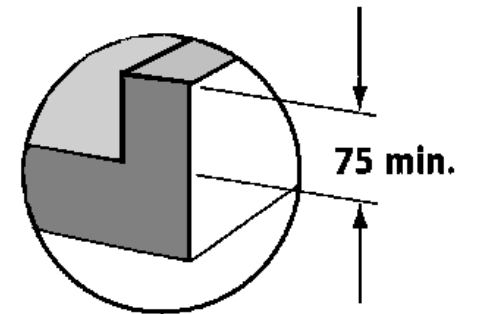
Ramps – Edge Protection

Ontario Building Code

- Have a wall/guard on both sides not less than 1070 mm high from the ramp surface, or
- Have a curb at least 50 mm high, and
- Have railings or other barriers that extend to within 50 mm of the ramp surface

Canadian Standards

- If ramp is not adjacent to a wall, a curb at least 75 mm high should be provided, or a raised barrier/rail with its lower edge not more than 75 mm from the ramp/landing surface



Ramp edge protection

Stairs

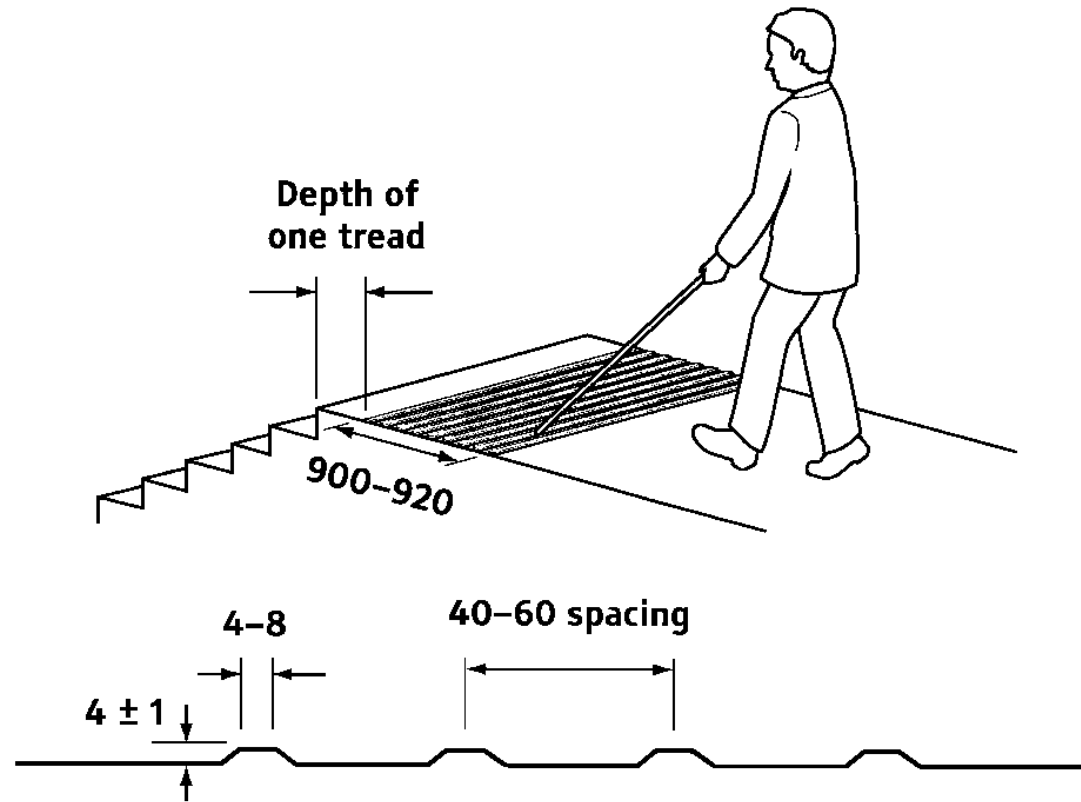
The Ontario Building Code does not address stairs in its Barrier Free Design section. The following is from the Canadian Standards:

- Uniform riser heights and tread depths
- Risers not more than 180 mm high
- Treads not less than 280 mm deep
- No open risers
- Horizontal strip at edge of tread that is 50 ± 10 mm deep, colour-contrasted with tread and riser, extends the width of the tread and is slip resistant
- Nosing project no more than 38 mm

Stairs – Detectable warning indicator

Be provided:

- when the stairs are not enclosed
- at each landing incorporating an entrance into a stair system
- where the regular pattern of the stairway is broken
- where the run of a landing not having continuous handrail is greater than 2100 mm



Note: Raised strips are perpendicular to the direction of travel.

Detectable warning indicator surface

Stairs - Handrails

Follow the same requirements as handrails for ramps, plus

- At the bottom of the stairs, continue to slope for the distance equal to the depth of one tread and then extend at least 300 mm parallel to the floor surface
- Be continuous around landings less than 2100 mm in length, except where the landing is intersected by an alternative path of travel or has an entry door leading to it



Questions