

## DOOR INFORMATION SHEET

**NOTE:** Specifications and figures are provided from Accessible Design for the Built Environment, Registered trade-mark of Canadian Standards Association, 2004; Canadian Standards Association, 5060 Spectrum Way, Suite 100 Mississauga, Ontario L4W 5N6. Measurement Scale used: 25.4 mm = 2.54 cm = 1 inch

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### Door Specifications

- Any narrow doorway is a barrier for persons in wheelchairs.
- The CSA standard for the clear opening of a door is a minimum of 810 mm (32 inches). This measurement is between the face of the door and when the door is extended 90 degrees. Please note that it is increasingly recommended that the minimum clear opening of doorways should be between 864 mm (34 inches) and 920 mm (36 inches) for easier access. (Due to increasing technology we are seeing many mobility devices with a wider wheel base.) Wider clear openings will allow for easier access for a larger part of the disabled population.
- In existing buildings, swing-clear hinges are an option that will increase the clear opening without having to change the doorframe.

**See Figure 1 on following page.**

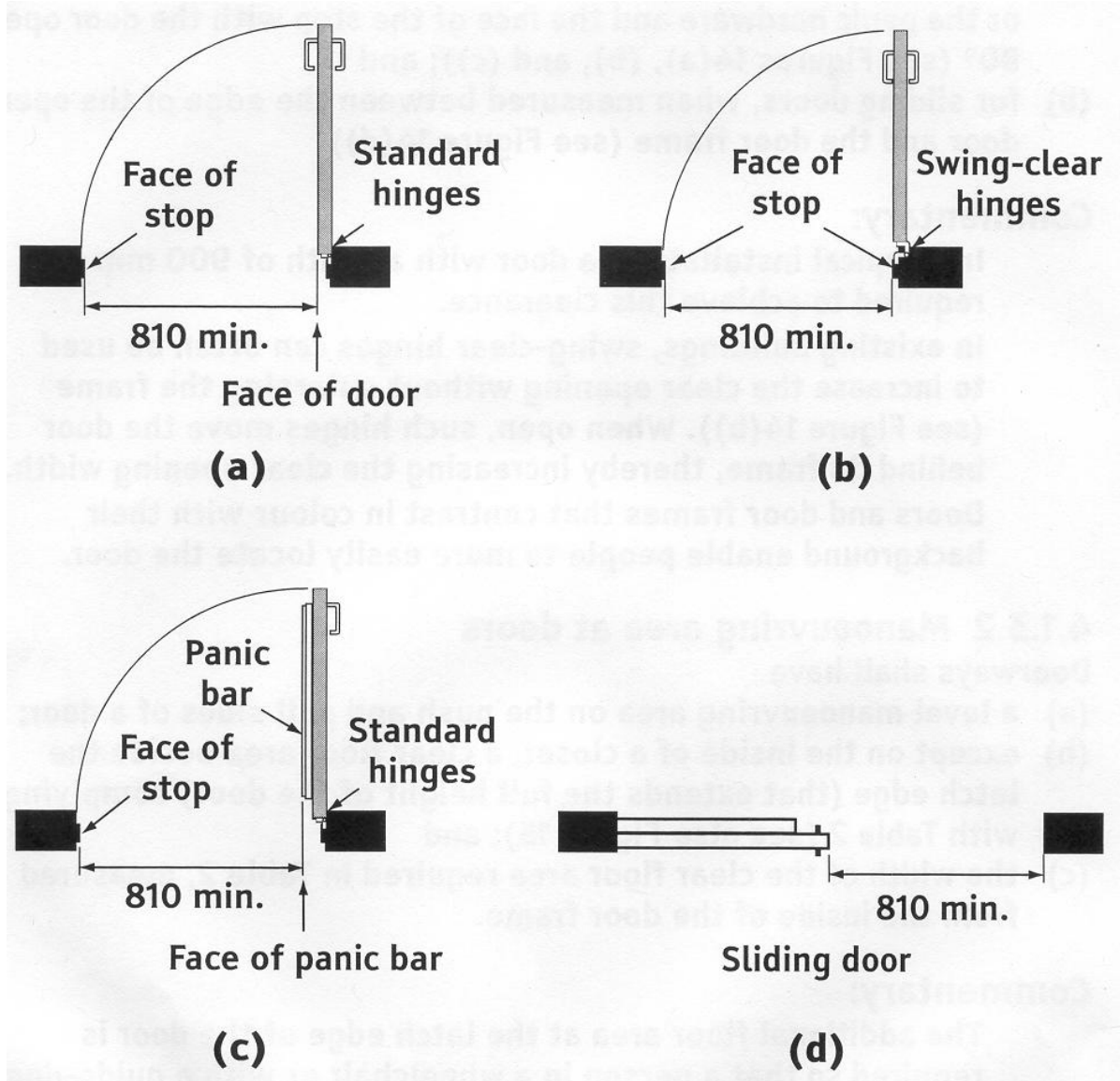


Figure 1 - Clear opening width of doorway

### Frontal Approach

The minimum doorway maneuvering space for a frontal approach at a hinged door is providing the following floor space:

- On the pull side of the door, a depth of 1500 mm (59 inches), a width of 1500 mm (59 inches), and 600 mm (24 inches) beside the latch.
- On the push side of the door a depth of 1200 mm (47 inches), a width of 1200 mm (47 inches), and 300 mm (12 inches) beside the latch

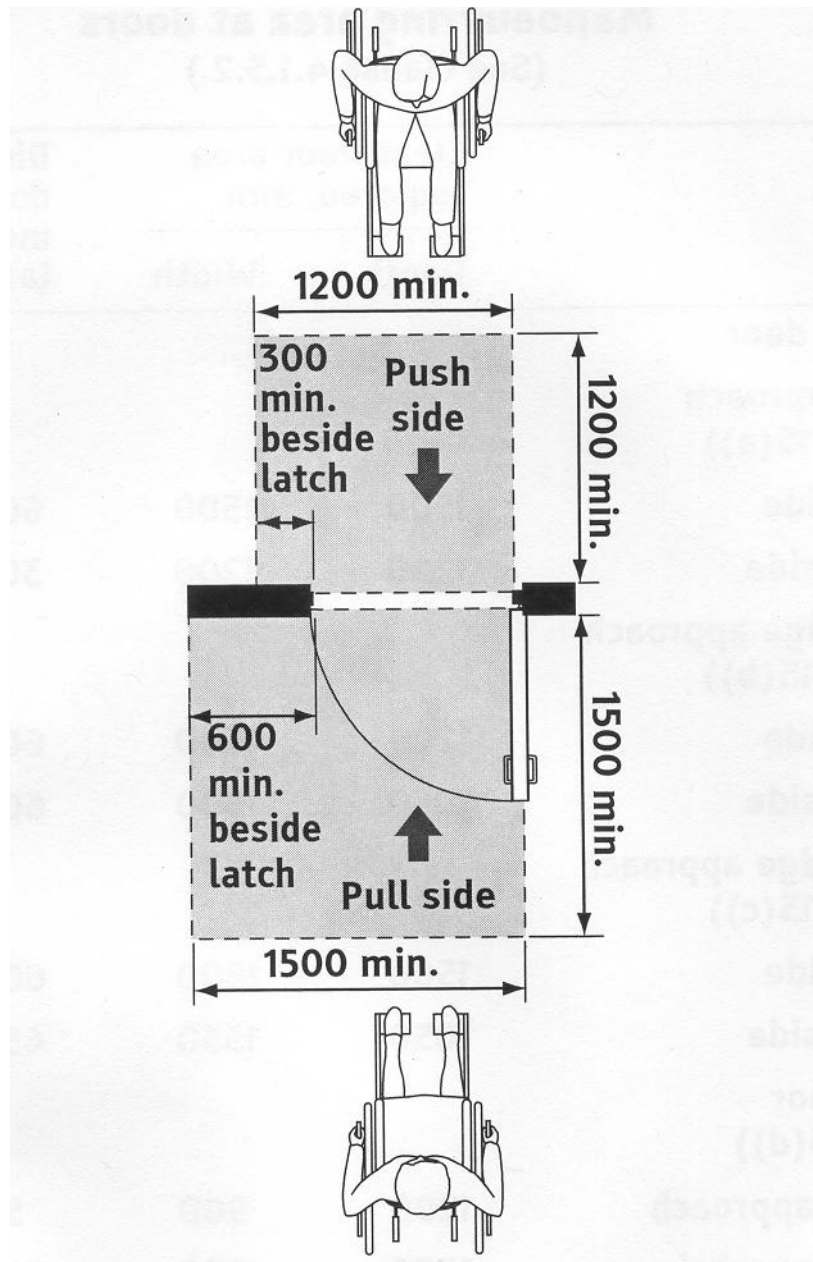
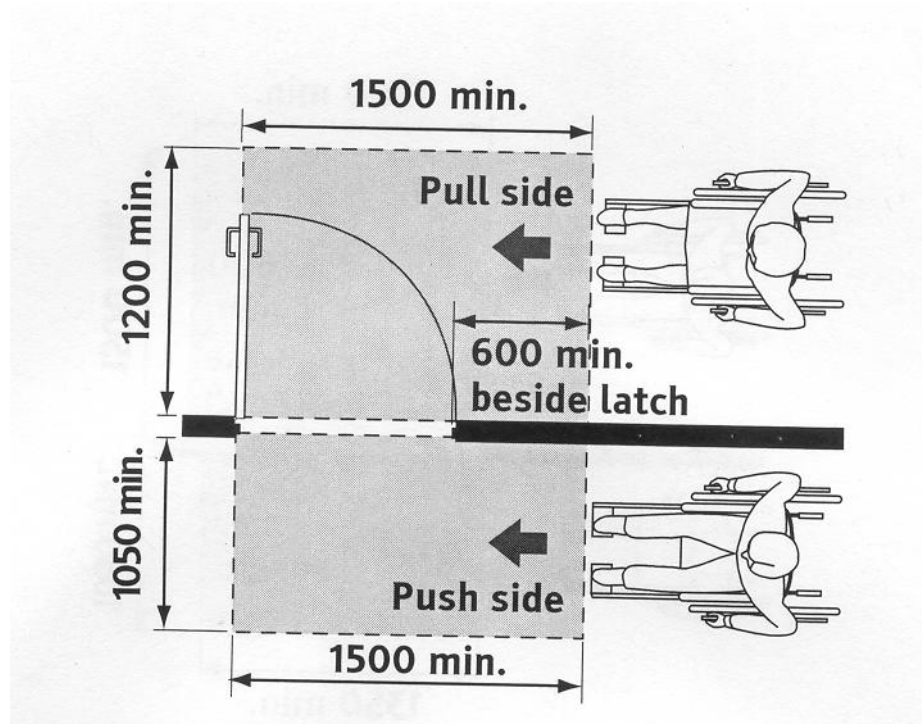


Figure 2 - Front Approach Swinging Door

### **Latch Side Approach**

The minimum doorway manoeuvring space for a latch side approach at a hinged door is providing the following floor space:

- On the pull side of the door, a depth of 1200 mm (47 inches), a width of 1500 mm (59 inches), and 600 mm (24 inches) beside the latch.
- On the push side of the door a depth of 1050 mm (41 inches), a width of 1500 mm (59 inches), and 600 mm (24 inches) beside the latch.

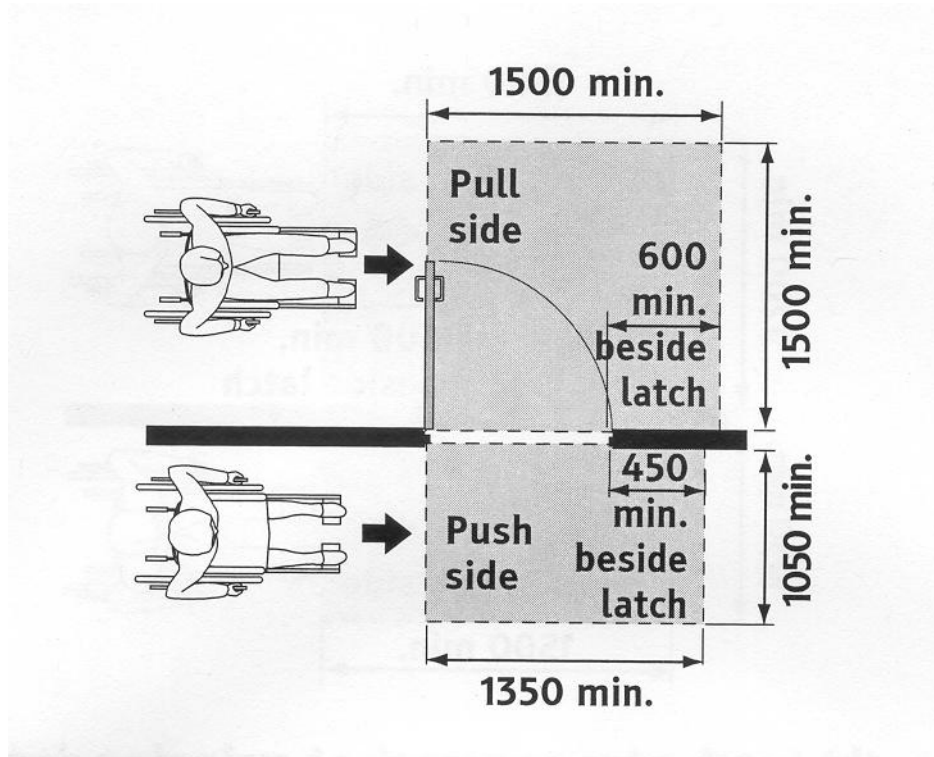


**Figure 3 - Latch Side Approach Swinging Door**

### **Hinge Side Approach**

The minimum doorway manoeuvring space for a hinge side approach at a hinged door is providing the following floor space:

- On the pull side of the door, a depth of 1500 mm (59 inches), a width of 1500 mm (59 inches), and 600 mm (24 inches) beside the latch.
- On the push side of the door a depth of 1050 mm (41 inches), a width of 1350 mm (53 inches), and 450 mm (18 inches) beside the latch.

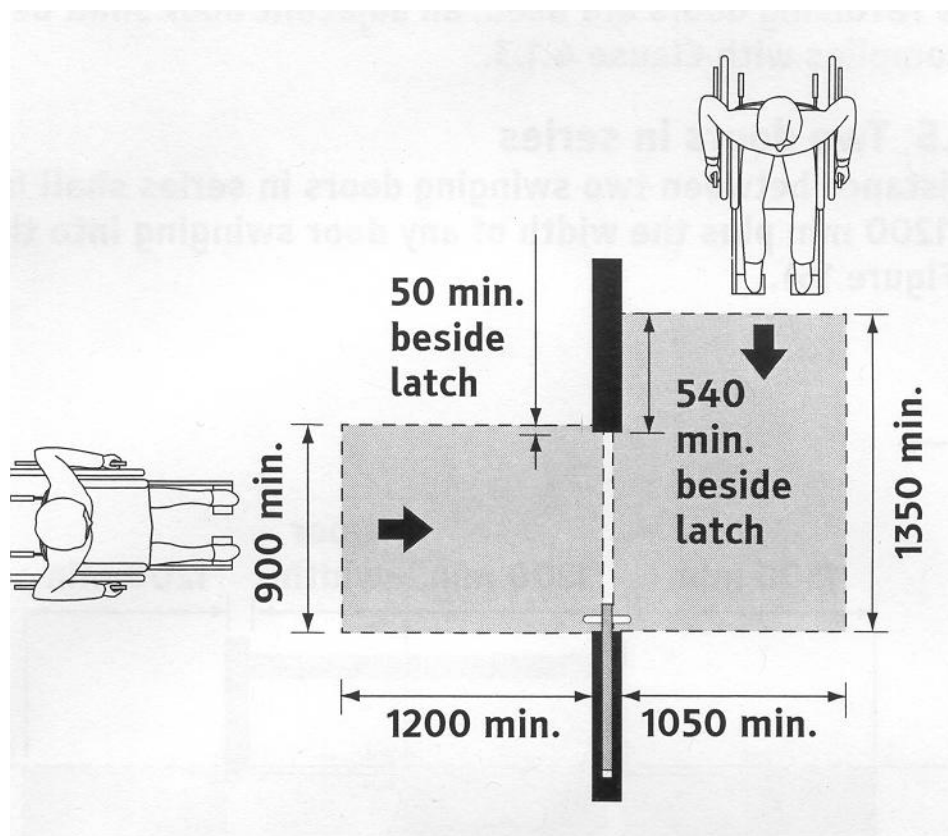


**Figure 4 - Hinge Edge Approach Swinging Door**

## **Sliding Door**

The minimum doorway manoeuvring space for the approach of a sliding door is providing the following floor space:

- On the pull side of the door, a depth of 1200 mm (47 inches), a width of 900 mm (35 inches), and 50 mm (2 inches) beside the latch.
- On the push side of the door a depth of 1050 mm (41 inches), a width of 1350 mm (53 inches), and 540 mm (21 inches) beside the latch.



**Figure 5 - Approach At Sliding Door**

## **Thresholds**

The recommended threshold for any door, interior balcony door etc., should not be more than 13 mm (1/2 inch) in height.

The recommended threshold for an exterior sliding door should not be more than 19 mm (3/4 inch) in height.

### **Door Hardware**

- Knob handles do not provide for an adequate grip for persons with impaired hand functions.
- A lever style door handle is recommended for all doors to allow a person with poor dexterity the ability to maneuver and open the door independently.
- Any operating devices such as handles, pulls, latches and locks should be:
  - Operable with one hand.
  - Not require any fine finger control, tight pinching, or twisting of the wrist to operate.
  - Be mounted between 400 mm (16 inches) and 1200 mm (48 inches) from the floor.
  - Door hardware should also contrast with the colour of the background.
- Use panic hardware that does not interfere with the clear passage through a doorway.

**See Figure 6 on following page.**

### **Door Closers**

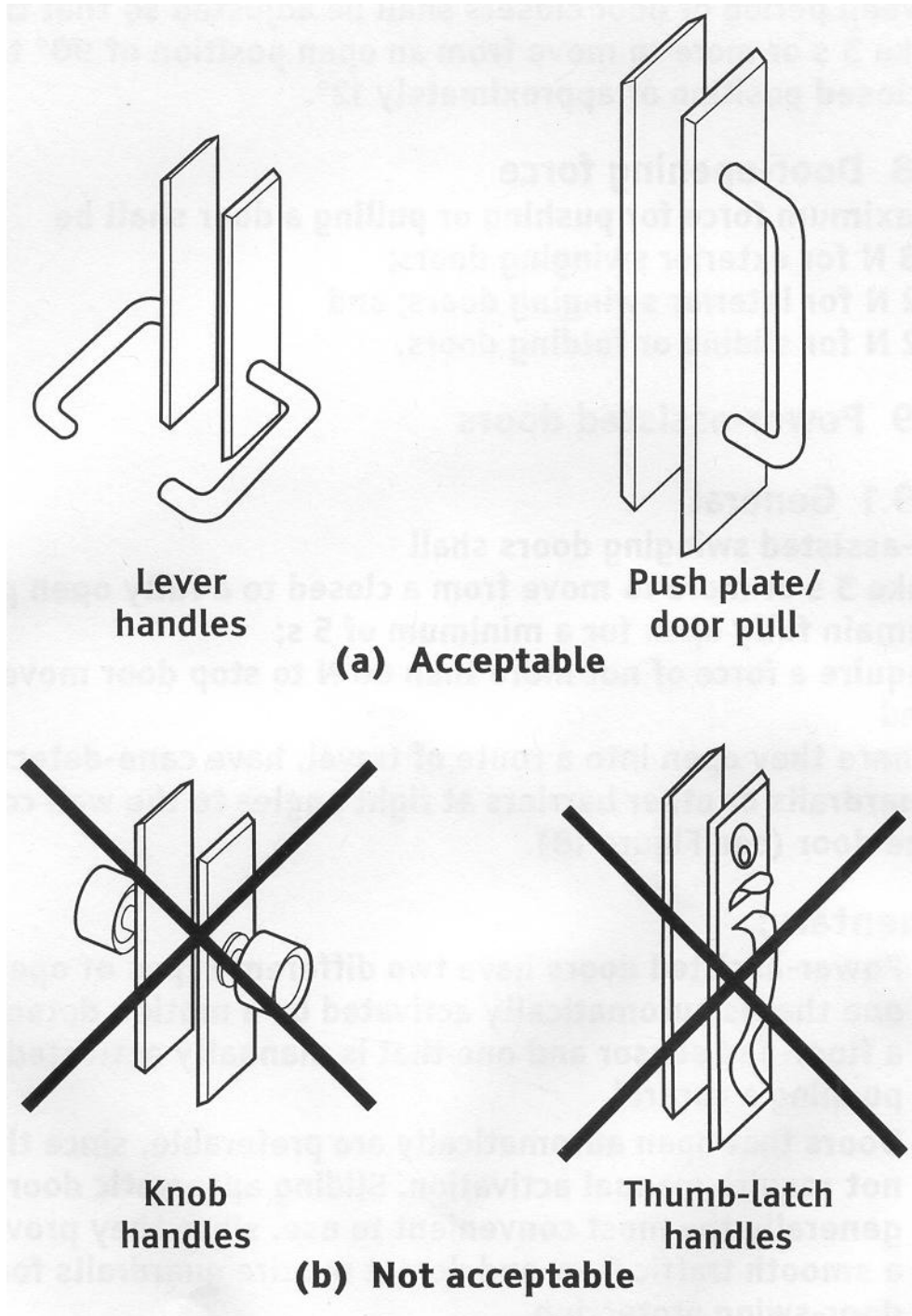
The sweep period for a door to close should be adjusted to not less than 3 seconds. This is the period from the open position of the door to a semiclosed position for approximately 12°.

### **Door Opening Force**

The maximum force for pushing, or pulling open a door should be:

- 38 N for exterior hinged doors;
- 22 N for interior hinged doors;
- 22 N for sliding or folding doors.

Figure 6 - Door Hardware



### **Power Assisted Swinging Doors**

Power assisted swinging doors should not take less than 3 seconds to move from the closed to the fully open position, and should require a force of not more than 66 N to stop door movement.

Where doors swing into the path of travel, it is recommended to have guardrails provided at a cane-detectable height extending at right angles to the wall containing the door.

Buttons or pads to open automatic doors must be visible, and easily operable. Visibility is enhanced by size, colour contrast, and ample lighting.

The best location should:

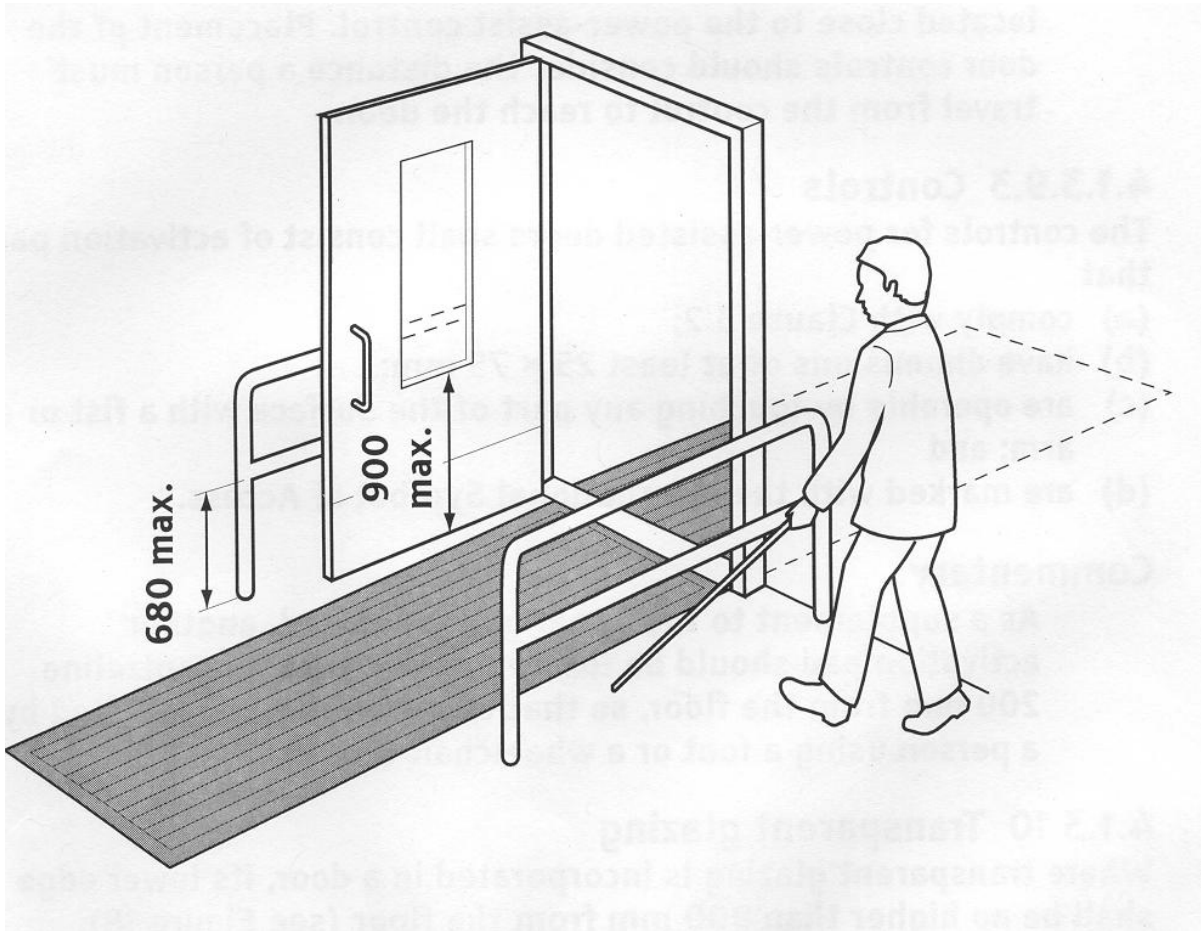
- Be seen clearly before reaching the door;
- Be at a height that can be operated from a standing or seated position;
- Be clear of the door swing and any other fixtures.

Buttons or pads are easily operable when they:

- Are operable by touch on any part of its surface;
- Require little force to activate the door;
- Can be opened by touching with a closed fist or arm, if an individual has limited use of their hands.

Kick plates should be incorporated in any high traffic areas. They should be mounted 250 mm (10 inches) from the base of the door. Kick plates will prevent door damage caused by wheelchair footrests and also make it easier for persons in wheelchairs to open doors.

**See Figure 7 on following page.**



**Figure 7 - Power Assisted Swinging Door**

**Updated: June 2009**