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The Gazette of the Democratic Socialist Republic of Sri Lanka
EXTRAORDINARY

අංක 1,467/15 - 2006 ඔක්තෝබර් 17 වැනි අඟහරුවාදා - 2006.10.17
No. 1,467/15 - TUESDAY, OCTOBER 17, 2006

(Published by Authority)

PART I : SECTION (I) — GENERAL

Government Notifications

L. D. B 9/96

PROTECTION OF THE RIGHTS OF PERSONS WITH DISABILITIES ACT, No. 28 OF 1996

REGULATIONS made by the Minister of Social Services and Social Welfare under Section 25 read with Section 23 of the Protection of the Rights of Persons with Disabilities Act, No. 28 of 1996.

A. P. JAGATH PUSHPAKUMARA,
Acting Minister of Social Services and
Social Welfare.

Colombo,
20th September, 2006.

Regulations

1. These regulations may be cited as the Disabled Persons (Accessibility) Regulations, No. 1 of 2006.

2. (1) The provisions of these regulations shall be applicable to all public buildings, public places and to places where common services are available, to which buildings, places and services persons with disabilities have access

Provided that all existing public buildings, public places and places where common services are available, shall within a period of three years from the coming into operation of these regulations, be made accessible to persons with disabilities in compliance with the provisions of these regulations.

(2) These regulations shall not apply to temporary buildings or sheds of contractors which are a part of any public buildings, public place or places, where common services are available.

3. (1) No person shall construct any public building or structure in any public place or re-construct or renovate any public building or structure in any public place unless any plan which relates to such building or structure conforms.

(a) to the performance specifications as set out in Part I of Schedule I to these regulations ; and

(b) to the designs as set out in Part II of Schedule I to these regulations.

(2) No certificate of conformity shall be issued by any “relevant authority” in respect of any building, construction, reconstruction or renovation of a public building, unless the relevant authority is satisfied that the plan referred to in subsection (1) conforms.

(a) to the performance specifications as set out in Part I of Schedule I to these regulations ; and

(b) to the designs as set out in part II of Schedule I to these regulations.

4. (1) Adequate space as specified in Part IIA of the schedule I to these regulations shall be allocated for persons using mobility devices such as wheel chairs, crutches and walkers, in any public building, public place or place where common services are available.

(2) A minimum of five percentum (5%) of the houses in all housing schemes having a minimum of twenty (20) units shall be constructed in accordance with the designs relating to the different parts as specified in part IIB of Schedule I to these regulations.

5. In order to provide persons using mobility devices such as wheel chairs, crutches and walkers and for the persons moving with the assistance of another person with easy access to any public building, public place or place where common services are available, the following part of any public building, public place or place where common services are available, shall be designed in accordance with the design requirements specified in part IIB of schedule I to these regulations.

1. Parking areas ;
2. Pathways and corridors ;
3. Ground and floor surfaces ;
4. Pavements, public roads and pedestrian crossings (kerb ramps) ;
5. Hand rails and grab bars ;
6. Steps and stairs ;
7. Ramps ;
8. Lifts and elevators ;
9. Doorways and entrances to any public buildings ;
10. Toilets
11. Parks, zoos and other places of recreation ;
12. Bus stops ;
13. Railways stations ;
14. Windows, bed rooms, basins, kitchens, storage space, tables, switches and outlets, lighting and communication system.

6. Where the accessibility of a person with any disability is to be temporarily disrupted due to any repairs, additions, alternations, improvements or renovation as the case may be, being carried out in any public building, public place and place where common services are available, alternative accessibility arrangement shall be provided until such renovations are over.

7. The State shall provide a minimum ten percentum (10%) of public transportation accessible to people who have disabilities in accordance with the specifications as set out in part I of Schedule II and with the design requirements as set out in Part II of Schedule II.

8. (1) Audible traffic signals and other audible information systems shall be provided for the benefit of the persons with impaired vision and the safety measures set out in Schedule III to these regulations shall also be provided.

(2) Automatic visual indicator systems shall be provided for the benefit of the persons with impaired hearing. Assisitive listening devices shall be provided in Assembly areas, conference and meeting rooms for persons with impaired hearing as set out in Part IIB of the Schedule I.

9. The Access to common places and services by persons with disabilities Regulations No. 1 of 2005 published in Gazette Extraordinary No. 1419/7 of November 14, 2005 is hereby rescinded.

10. In These regulations, unless the context otherwise requires.

“access” means the ability of a person to enter into, approach, pass to and from and have use of any public building or public place, and the facilities and services provided therein, or any place where common services are available, without the assistance of any other person ;

“common services” means-

- (a) public transportations services and facilities connected to such public transportation services and shall include passenger buses, passenger trains, bus stops, depots and terminals, railways stations, air crafts, airport terminals buildings and airports and water transport ;
- (b) public communication services and facilities connected to such communication services and shall include post offices, communication centres and telephone booths.

“impaired” means a temporary or permanent loss or abnormality of psychological, physiological or anatomical structure or functions and includes the existence or occurrence of an anomaly, defect or loss of limb, organ, tissue of the body including the system of mental function ;

“persons with disability” shall have the same meaning assigned to that expression under the Protection of the Rights of the Persons with Disabilities Act, No. 28 of 1996 ;

“public building” means a building used for

- (i) residential purposes, including staff residences located within multiple dwellings and high rise residential units and tenements ;
- (ii) for commercial purposes, including office buildings, hotels, motels, inns, guest houses and other public lodgings, shopping centres, super markets, restaurants, general wholesale and retail stores and car parks ;
- (iii) industrial purposes, including factories and work shops and ware houses ;
- (iv) community, social and educational purposes including educational institutions, schools, hospitals, nursing homes, medical center dispensaries, home for elderly persons, temples, churches and mosques and other religious places, police stations, courthouses, assembly halls, village halls, community centres, auditoriums, conventions halls, libraries, museums, exhibition halls, public toilets and such other buildings ; and
- (v) recreational purposes, including cinema halls, theatres, concert halls, opera houses, art galleries, stadiums, sport complexes, sports venues and other places of recreation.

“public places” includes pedestrian crossings, walkways, pavements, roads, streets, off-street and on-street parking spaces, out door staircases, steps, lifts, traffic signals and sign parks, botanical gardens, zoological gardens and places of tourist interest and attraction ;

“relevant authority” means any local authority or any officer, persons or body of persons appointed for the purpose of granting approval for any construction or reconstruction of any public building or for the purpose of issuing the required licences or permits in connection with vehicles providing public transportation under any written law.

SCHEDULE I

PART I

BUILDINGS

<i>Type of Building</i>	<i>Performance Specifications</i>
1. Staff housing, multiple dwelling and highrise residential units and tenements	(a) A minimum of 01 unit for every 25 plus 01 additional unit for every 100 units thereafter to be constructed with barrier-free features (b) Entrances and exits to be accessible by ramp
2. Post offices, banks and financial service institutions	A minimum of 01 lowered service counter on the premises
3. Shop houses and single-story shops	Shopping area shall be accessible by ramp
4. Hotels	At least one guestroom in every 25 guestrooms or part thereof shall be accessible and usable and one accessible toilet in the common area.
5. Food centres	(a) A minimum of 01 table for every 10 tables to be attached to the floor without stools or seats. (b) A minimum of 02 tables for the whole premises to be attached to the floor without stools or seats.
6. Community centres, village halls, auditoriums, concert halls, assembly halls, cinemas, theatres and other places of public assembly	(a) Entrance, exist aisles, and main community or public gathering areas shall be accessible. (b) Accessible toilets facilities shall be provided. (c) Seating for persons with disabilities to be accessible from main entrance and lobbies. (d) Seating and viewing choices to be provided for persons in wheel chairs throughout the main seating area. (e) A minimum of 02 wheel chair spaces for seating capacity from over 100 to 400 seats (f) A minimum of one percent (1%) of the total seating capacity, where the total number of seats exceed 400 seats, shall be reserved for wheel chair users. (g) Easily removable seats shall be installed in wheel chair spaces. (h) Audio loop systems shall be provided.

PARKING AREAS

Every Parking Area shall have Designated Parking Spaces for disabled drivers and passengers and such spaces shall be located as close as possible to main entrances and exists of buildings. The minimum number of assessible spaces to be provided shall be as follows :	
<i>Total No. of parking spaces in open car parks or car park buildings</i>	<i>Required minimum No. of assessible spaces</i>
01 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
Over 500	2% of the total

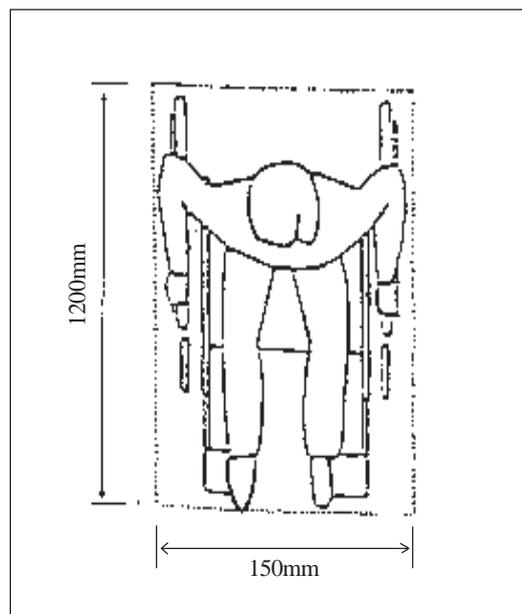
SCHEDULE I

PART II A

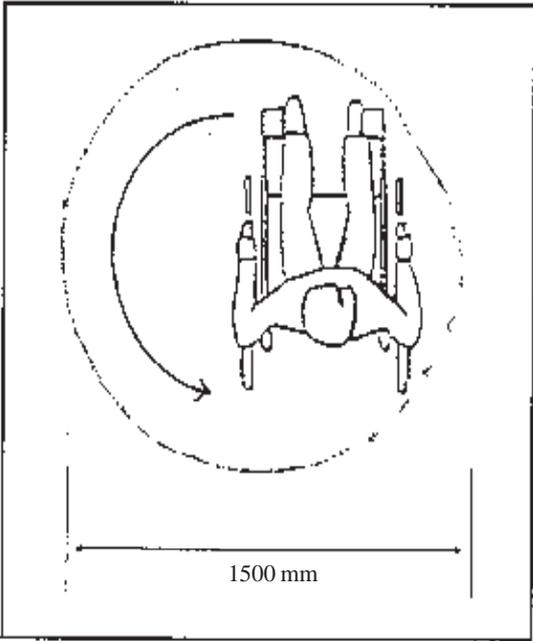
SPACE REQUIREMENT FOR PERSONS USING MOBILITY DEVICES

(Regulation 9)

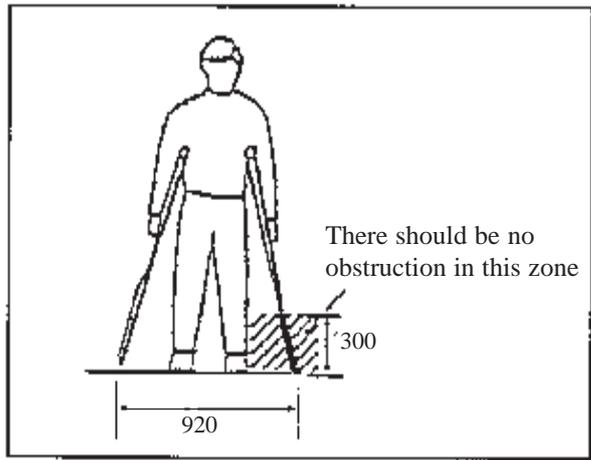
- (1) Adequate space shall be allocated for persons using mobility devices such as wheel chairs, crutches and walkers, as well as those walking with the assistance of other persons (Figure 1, 2 and 3)
 (Attention shall be given to dimensions of wheel chairs, used locally)



(Figure 1 : Space Allowance)

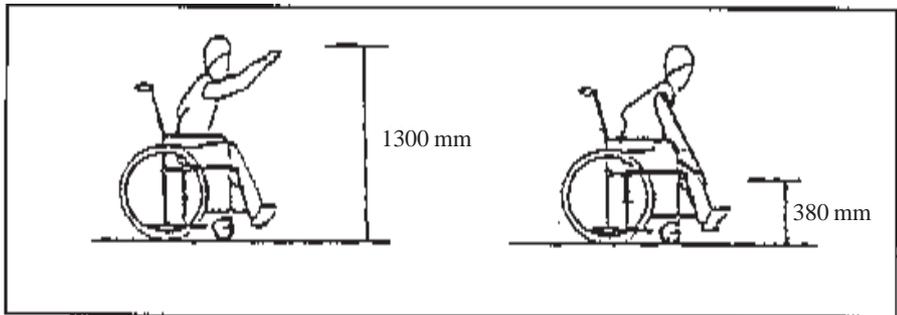


(Figure 2 : Space Allowance)

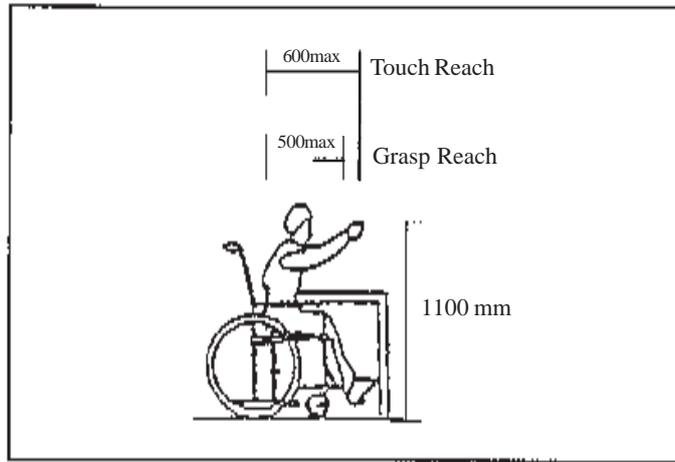


(Figure 3 : Space Allowance)

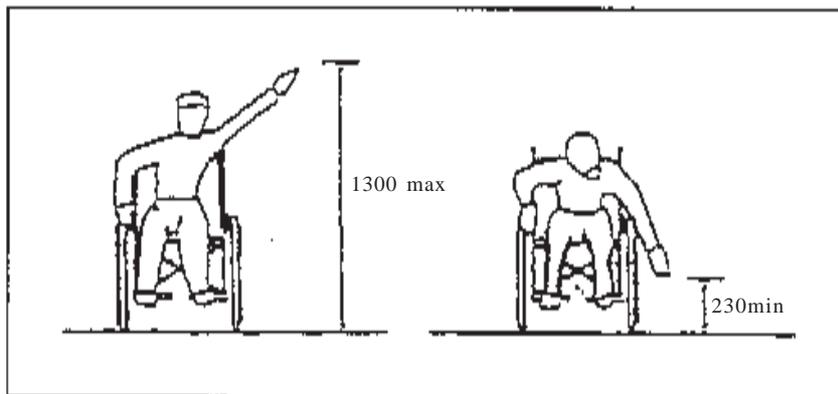
(2) The range of reach (forward and side, with or without obstruction) of a person in a wheel chair shall be taken into consideration (Figures 4, 5, 6 and 7)



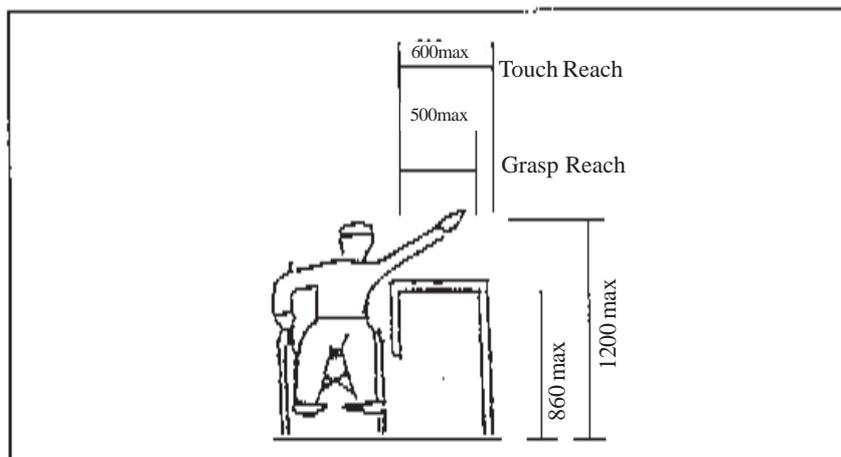
(Figure 4 : Forward reach without obstruction)



(Figure 5 : Forward Reach over obstruction)

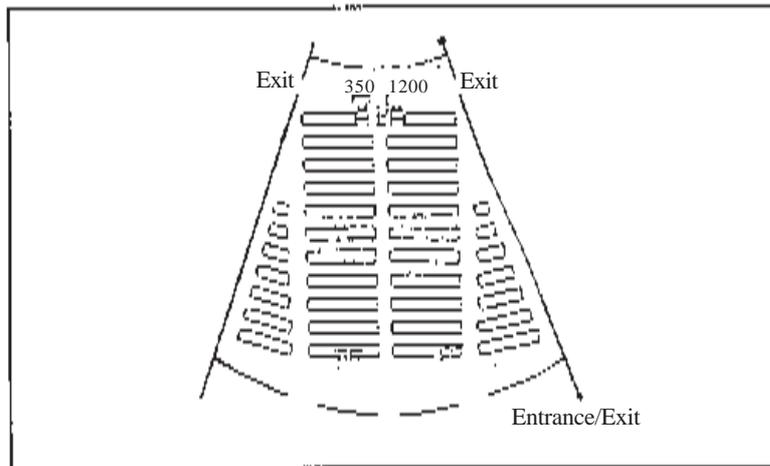


(Figure 6 : Side reach without obstruction)

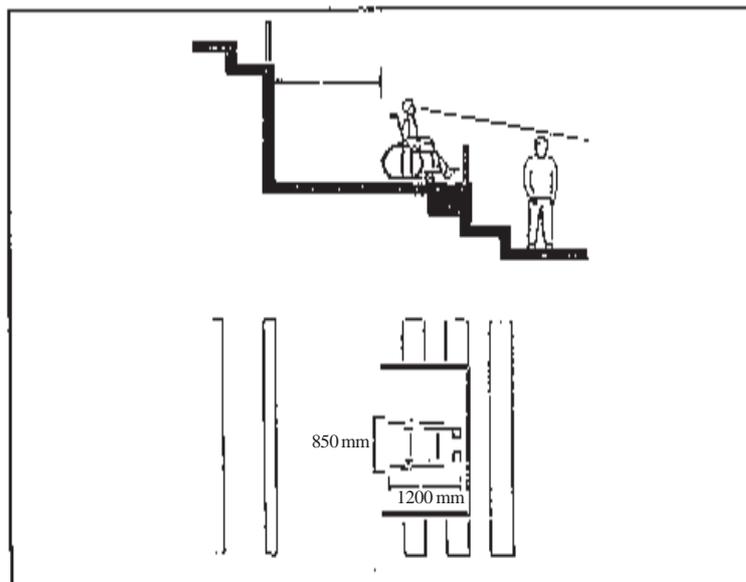


(Figure 7 : Side reach over obstruction)

- (3) Wheel chair spaces in auditoriums, assembly halls, theatres and similar facilities. Accessible seating spaces shall be provided in a various locations at varying prices to enable the persons with physical disabilities to select seats according to their choices. (Figures 8 and 9)



(Figure 8 : Wheelchair space in auditorium)



(Figure 9 : Space allowance in auditorium and theatre)

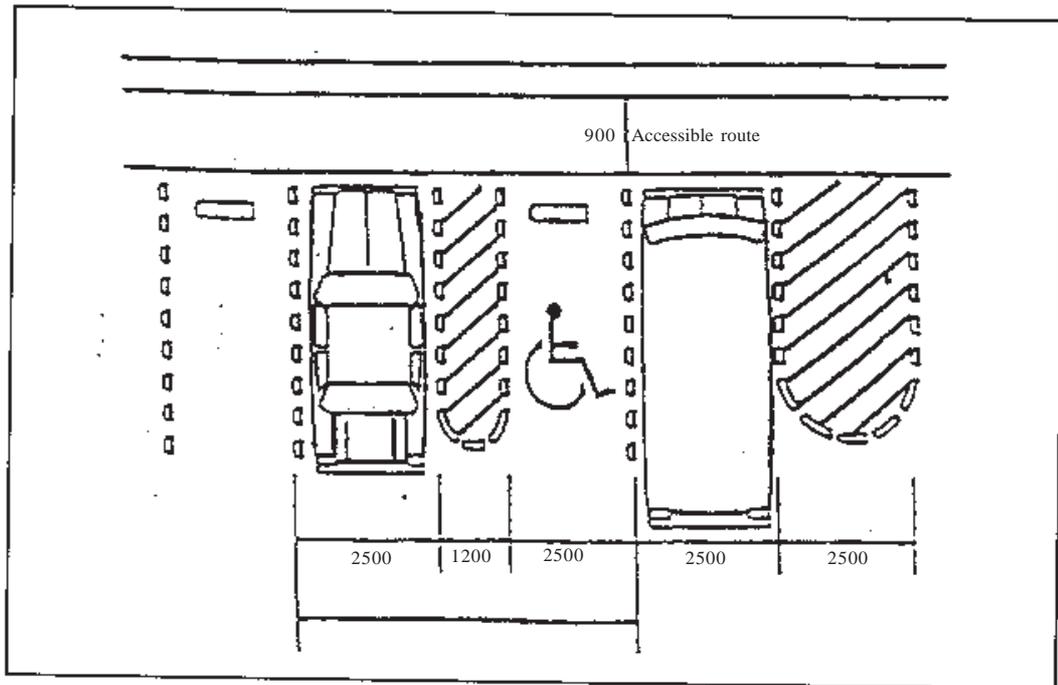
SCHEDULE I

PART II B

DESIGN REQUIREMENTS TO BE ADOPTED IN PUBLIC BUILDINGS,
PUBLIC PLACES OR PLACES WHERE COMMON SERVICES ARE AVAILABLE

1. Parking space :

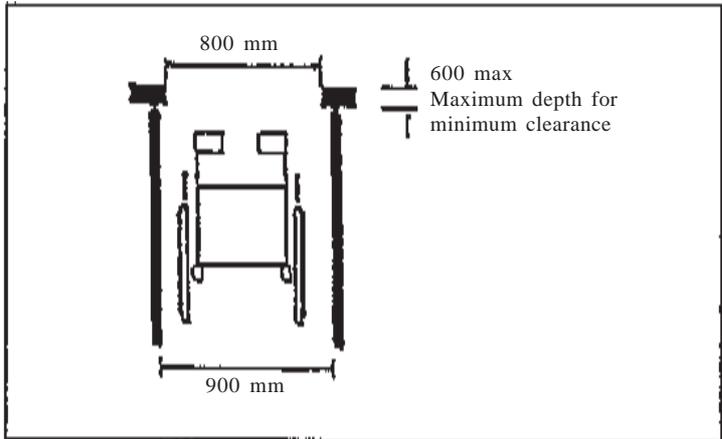
- (a) Accessible parking spaces should be located on the shortest accessible route into a building or facility, and should be roofed wherever possible.
- (b) Parking areas should have enough clear space around them so that disabled persons can get into and out of a car (fig. 10 zebra zone).
- (c) Reserved parking spaces for vehicles carrying persons with disabilities should be provided, indicated by the universally accepted symbol.



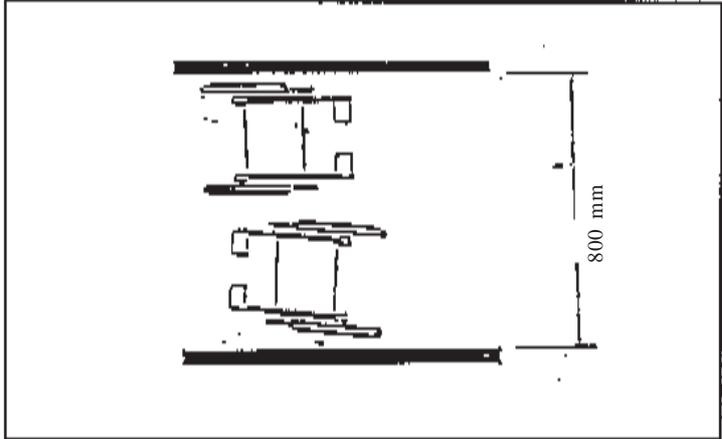
(Figure 10 : Parking)

2. Pathways and Corridors

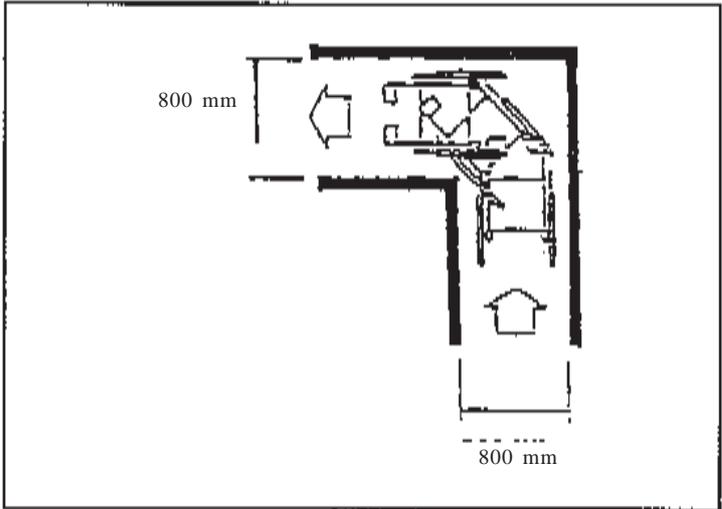
- (a) Pathways and corridors shall be wide enough for wheel chair users (figure 11)
- (b) if a corridor is less than 1500 mm. (minimum clear turning space) turning space shall be located at reasonable intervals (figure 12-16)
- (c) The surface of pathways or corridors shall comply with the design for "Ground and Floor Surfaces".



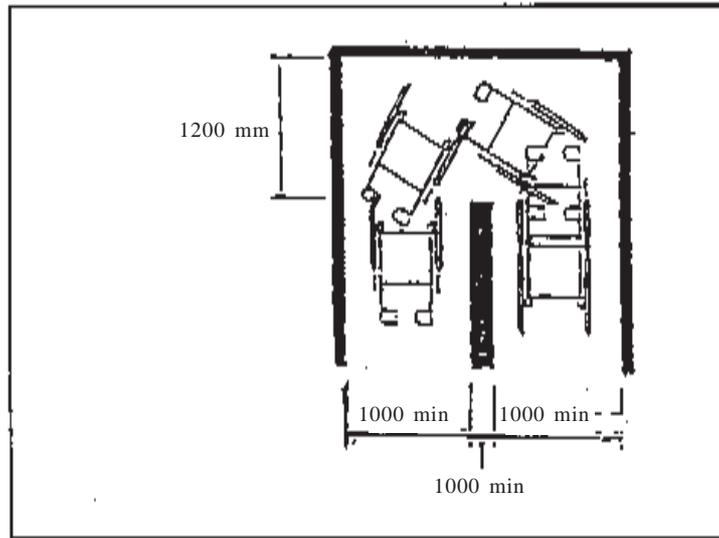
(Figure 11 : Minimum clear width for single wheelchair)



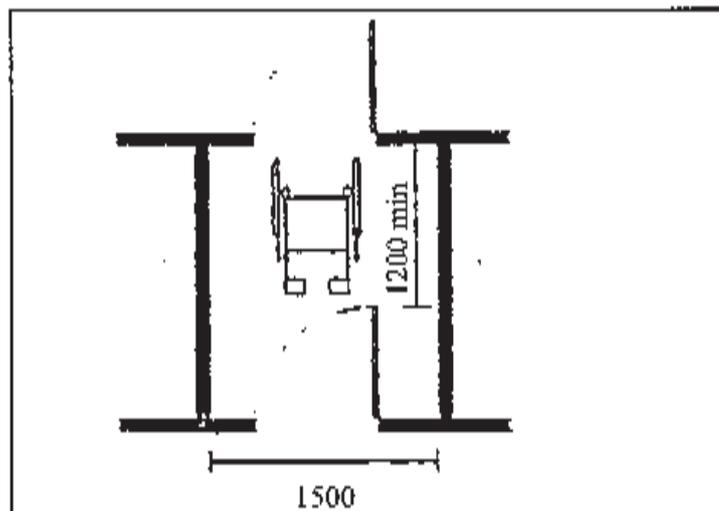
(Figure 12 : Minimum clear width for two wheelchairs)



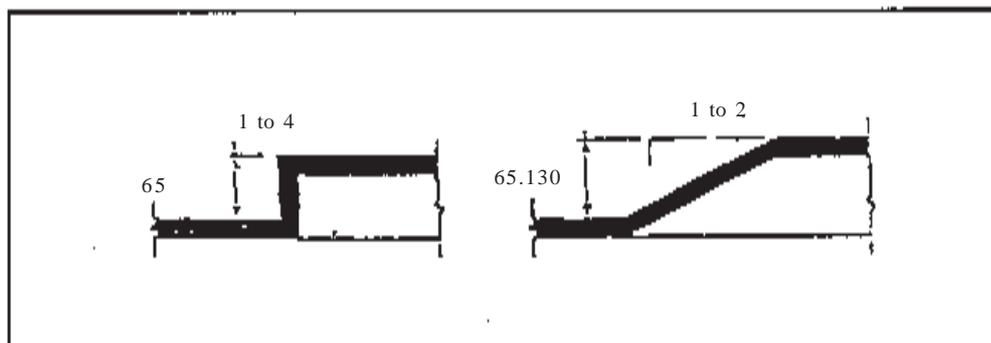
(Figure 13 : Minimum clearance for 90° Turn)



(Figure 14 : Turn around an obstruction)



(Figure 15 : Internal lobbies)



(Figure 16 : Change in level of accessible route)

3. Ground and Floor Surface

- (a) Ground and floor surfaces (along accessible routes and in accessible rooms and spaces, including floors, walks, ramps, stairs, and kerb ramps) shall be stable, firm and slip-resistant
- (b) Vertical level changes up to 6 mm may not need edge treatment. Changes in level between 6 mm and 13 mm shall be leveled off with a slope not more than 1 : 2
- (c) If gratings are placed in pathways, they shall have spaces not more than a wheel chair's wheels (e. g. 13 mm)
- (d) If carpets or carpet tiles are used on a floor surface, they shall be securely attached to it. Long, thick rugs shall not be laid in areas likely to be frequented by persons with mobility and sight impairments.
- (e) Edges of paths can be clearly defined by using different colours and textures.
- (f) Street furniture, trees, lighting and dustbins shall be located on one side of pathways. The surface texture and colour surrounding may be changed to indicate the approach to those items.

4. Pavements public roads and pedestrian crossings ; (kerb ramps)

- (a) Kerb ramps shall be provided wherever an accessible route crosses a kerb (figure 17)
- (b) Slopes of kerb ramps shall be gentle (e. g. less than 1 : 12) (figure 18)
- (c) The surface of kerb ramps shall comply with the designs for "Ground and Floor Surfaces"

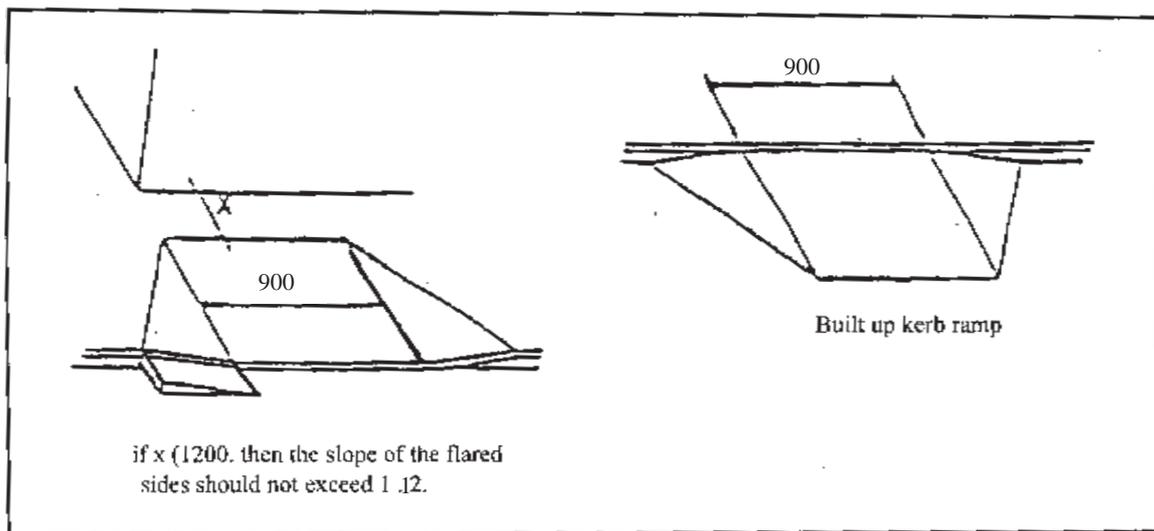


Figure 17. kerb ramps

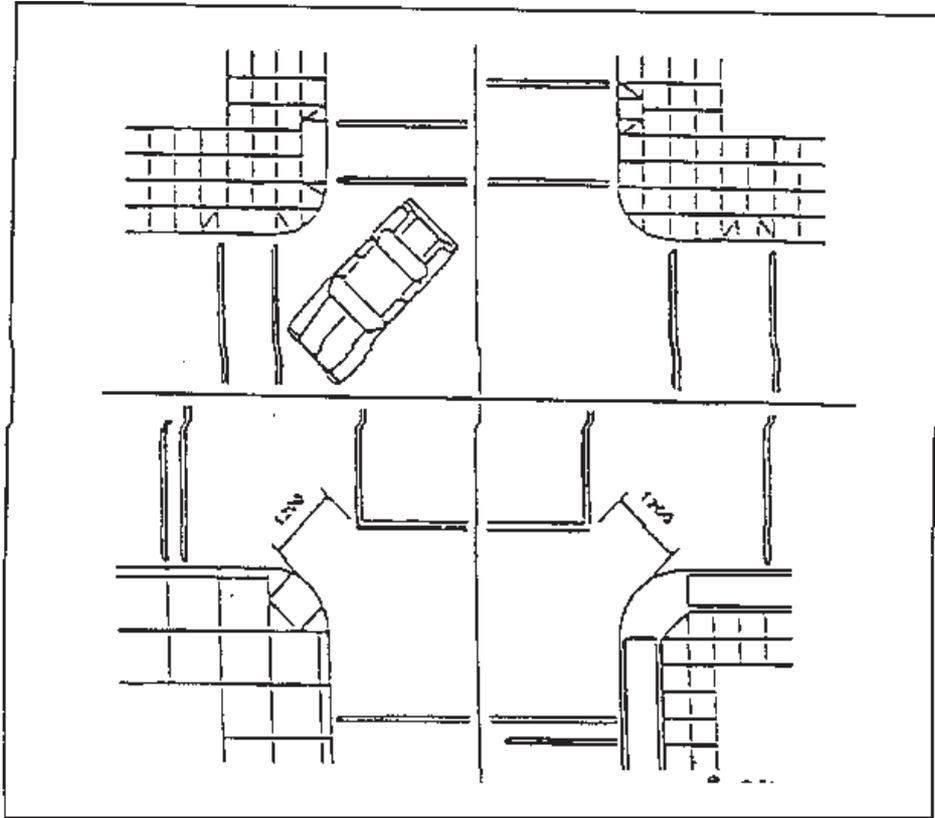


Figure 18. Kerb ramps at marked crossings

5. Handrail and Grab Bars

- (a) A handrail or grab bar should be of a diameter or width and strength so that it may easily be grabbed and used as a support (Fig. 19)
- (b) If handrails or grab bars are mounted adjacent to a wall, clearance space between the walls and the grab bar should be provided
- (c) If handrails or grab bars are mounted in recess, the maximum depth and minimum height of the recess must be considered (Fig. 19)
- (d) A small plate in Braille shall be provided at the beginning and at the end of each handrail or grab bar to indicate its position to persons with visual impairments.
- (e) Handrails or grab bars shall be in a colour that contrasts sharply with the surrounding area.

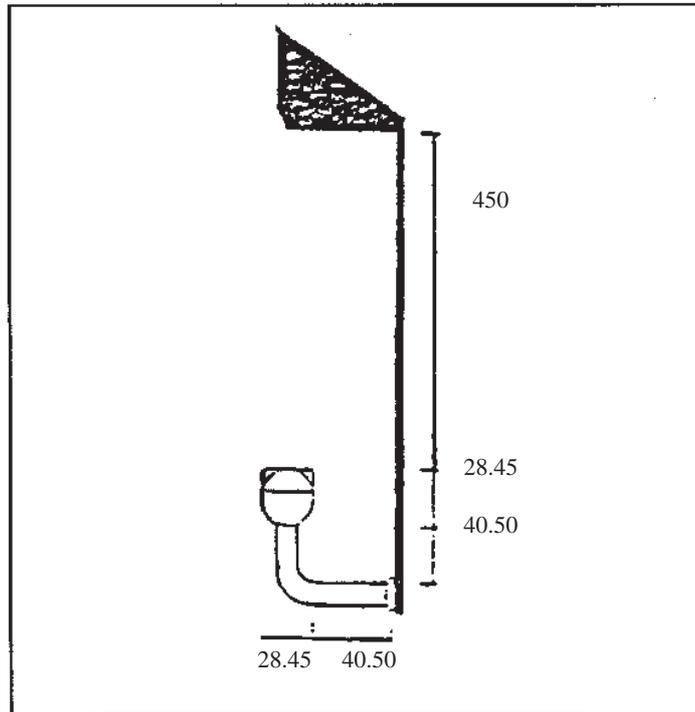


Figure 19. Handrails or Grab bars

6. Steps and Stairs (Figure 20)

- (a) A flight of stairs shall have uniform risers and goings
- (b) A flight of stairs shall be of gentle gradient.
- (c) A flight of stairs shall have no open risers
- (d) No sills of stairs shall project as little as possible
- (e) Handrails for stairs shall be installed on both sides
- (f) Handrails for stairs shall be easily gripped at a suitable height from the stair going
- (g) Handrails for stairs shall extend beyond the top and bottom of the stairs
- (h) The rise of flight between landing shall be of an appropriate height
- (i) An intermediate landing shall have a width and depth of at least the width of the flight.
- (j) Other requirements for handrails shall comply with the designs for “Handrails”
- (k) Treads of stairs shall comply with the designs for “Ground and Floor Surfaces”
- (l) Stair edges shall be in bright contrasting colours
- (m) Stairs shall be adequately illuminated

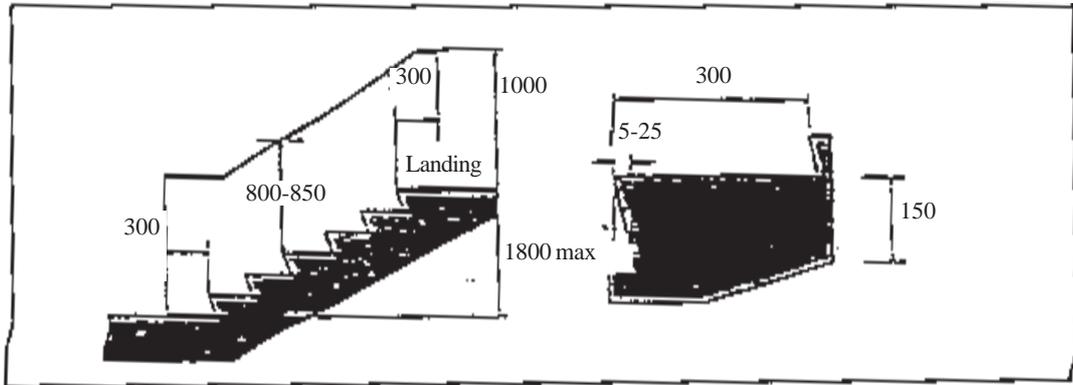


Figure 20. Stairs

7. Ramps (figure 21)

- (a) A ramp shall be of gentle gradient, with a landing every 10 metres.
- (b) A ramp shall be wide enough for a wheelchair.
- (c) A ramped approach shall have handrails on both sides and raised kerbs on open edges.
- (d) Handrails attached to ramps shall be of a correct height, which enables wheelchair users, and crutch users to hold easily
- (e) Handrails shall extend horizontally beyond the top and bottom of the ramp
- (f) Ramp and landing surfaces shall be slip-resistant
- (g) Other requirements of handrails shall comply with the designs for “Handrails or Grab Bars”
- (h) Ramps and landing surfaces shall comply with the designs for “Ground and floor Surfaces”

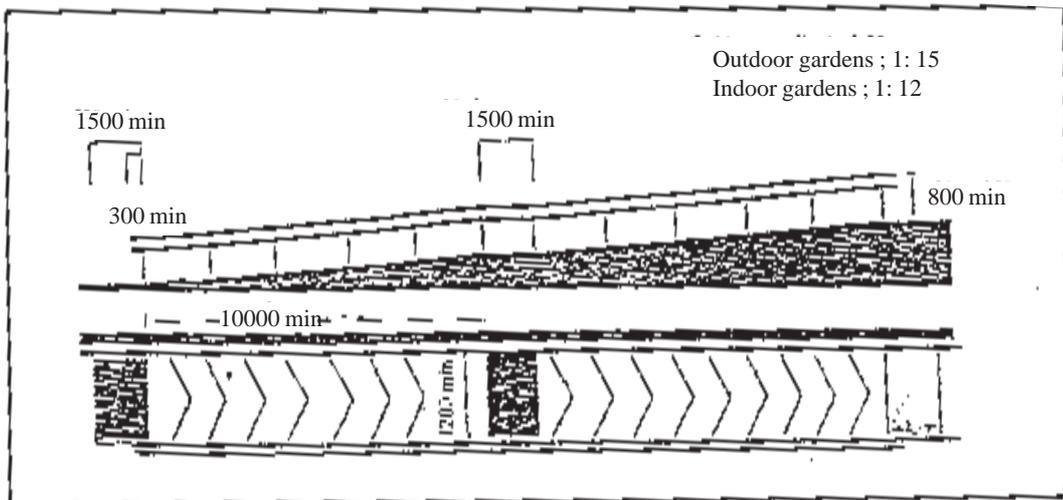


Figure 21. Ramps

8. Lifts and elevators

- (a) The floor space of lifts shall be sufficient for wheelchair users to enter the lifts, manoeuvre within reach of the controls, and to exit (fig. 22 and 23)
- (b) Lift doors shall be wide enough for wheelchair users (Fig. 23)
- (c) Lift door closing mechanisms shall be adjustable to give adequate entry time for people with disabilities. The installation of a photoelectric sensor may be provided for controlling the closing of the lift door.
- (d) In elevator halls, access and manoeuvring space for wheelchair users shall be provided
- (e) Call buttons in elevator halls shall be at a height that is within easy reach of wheelchair users (fig. 23)
- (f) All control buttons shall have Braille, raised numbers and symbols to indicate “Open” and “Close”
- (g) A visual lift position indicator shall be provided above the control panel or over the door
- (h) A voice indicator may be installed to announce floor levels
- (i) Agreement shall be sought with the fire authority to allow the use of fire protected lifts for the evacuation of people with mobility disabilities in case of fire.

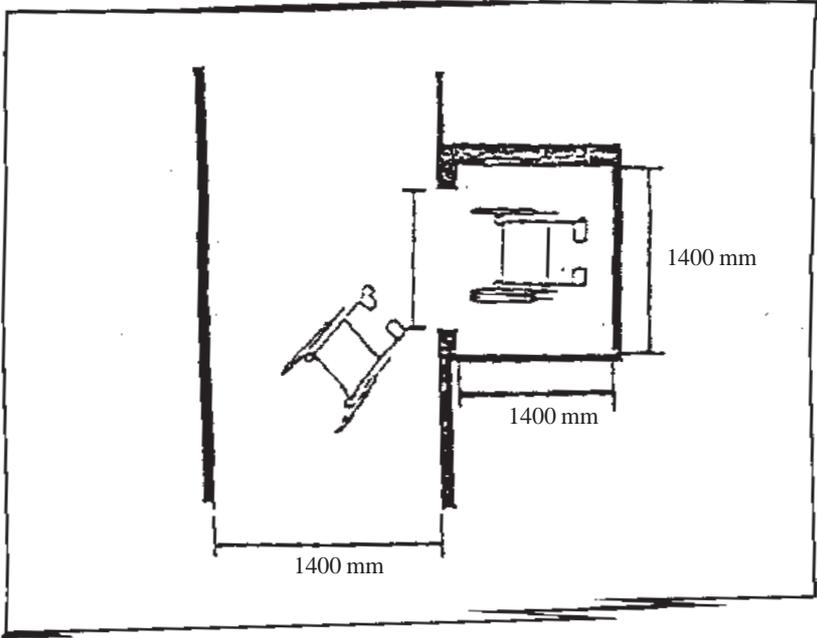


Figure 22. Space allowance in lifts

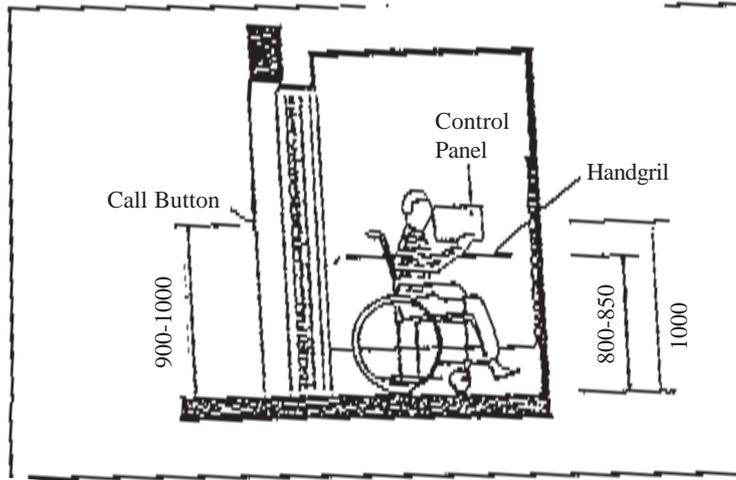


Figure 23 : Height of control panel and handrail in lifts

9. Doorways and entrances to any public buildings

- (a) Doorways shall be wide enough for wheelchair users (900 mm. Minimum) (Figure 24)
- (b) Space to manoeuvre shall be provided in front of doors, including sufficient space for moving past door handles (figure 25)
- (c) Thresholds of doorways shall not exceed 20 mm. Raised threshold and floor level changes at doorways should be levelled off with a slope on each side of a threshold. The slope may be a simple, movable ramp
- (d) Handles, pulls and other opening devices are to have a shape and height that is easy for a person with reduced strength and dexterity to control (figure 26)
- (e) Lever handles and push type mechanisms are recommended. When a sliding door is fully open, handles shall be usable from both sides.
- (f) The use of colour to distinguish door from surrounding walls is very useful for people with visual impairments.
- (g) Glass doors must have a bright, coloured motif at every level
- (h) Where revolving doors or turnstiles are used, an alternative wheelchair-accessible entrance must also be provided

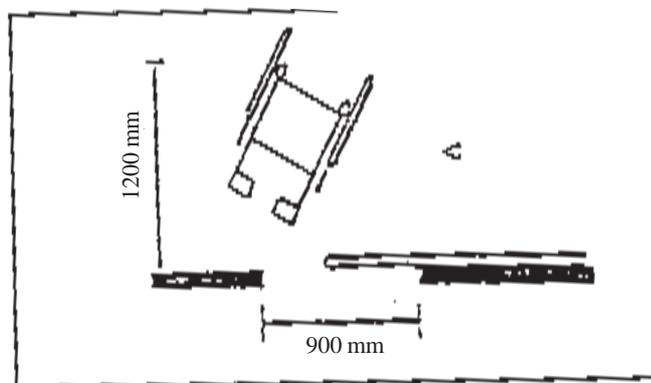


Figure 22 : Sliding door

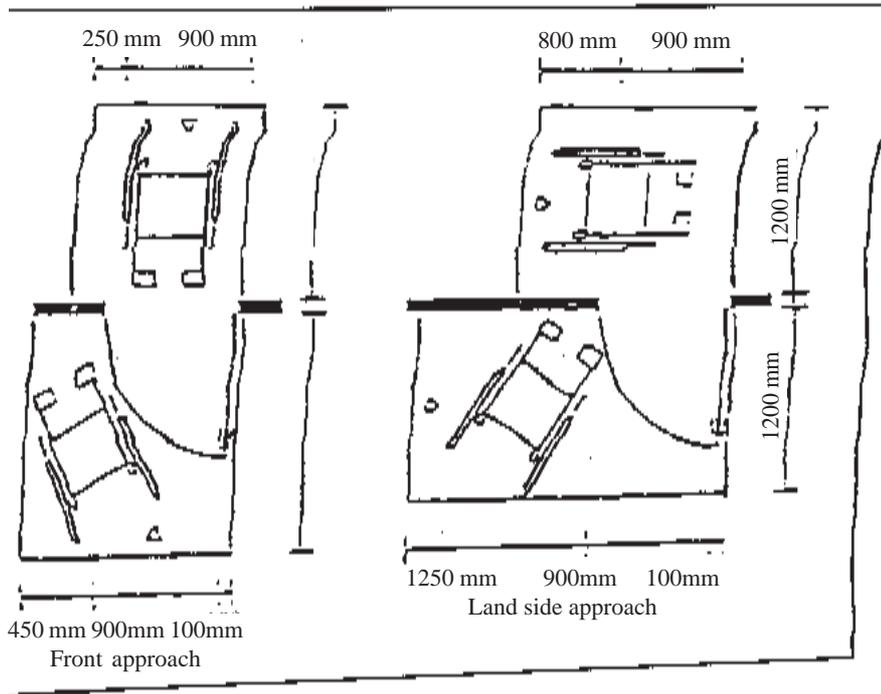


Figure 25 : Doorways

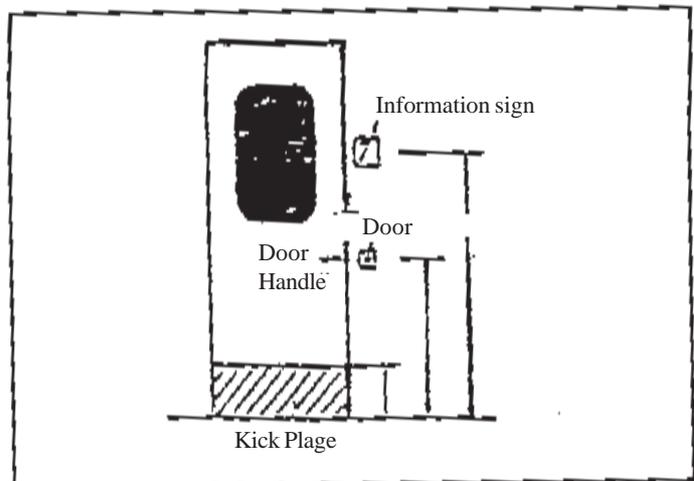
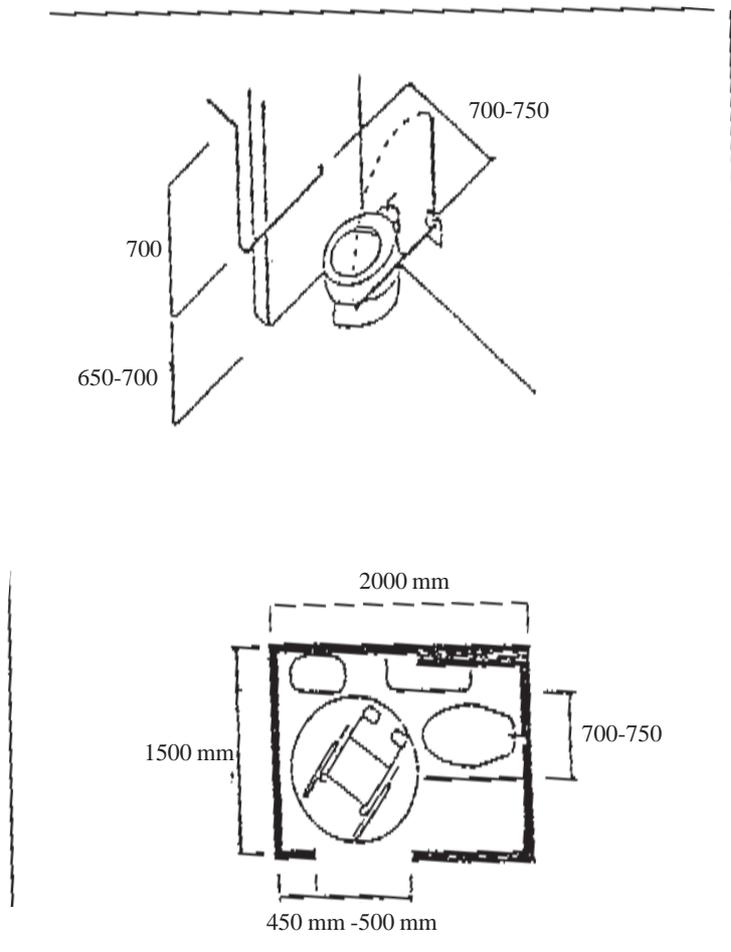


Figure 26 : Outside of door

10. Public toilets (figure 27)

- (a) Public toilets shall have the universally accepted symbol for wheelchair access, displayed outside
- (b) Toilet compartments or washing cubicles shall have enough floor space for wheelchair users to enter and exit.
- (c) The toilet bowl shall be of a type (e. g. wall-hung) and in such a position as to permit easy approach by wheelchair users.

- (d) The seat of the toilet bowl shall be at the correct height for wheelchair users
- (e) Toilet compartments shall have support rails at a position and height suitable for wheelchair users and other persons with physical disabilities. Upward-folding support bars are recommended to allow lateral transfer from a wheelchair.
- (f) A toilet paper dispenser shall be so installed as to be easily used by a person with physical impairments sitting on the toilet
- (g) Fittings, such as soap dispenser, electric hand dryer and mirror, shall be low enough for a wheelchair user to use comfortably.
- (h) The wash basin shall be at a height that is easily accessible for wheelchair users.
- (i) Lever-type taps shall be installed to wash basins
- (j) Floor finishes shall be of non-slip material
- (k) Door shall be either of the sliding or outward-opening type
- (l) Lock to toilet doors or cubicles shall be a type that can be opened from outside in case of emergency.



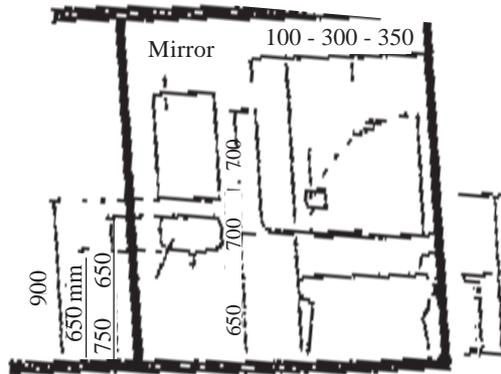


Figure 27 : Public Toilet

11. Places of Recreation : (Parks, Zoos and other places of recreation)

- (a) There shall be no difference in level around an approach to a park or park roads. If a level difference is unavoidable, a ramp or a staircase plus a ramp is needed.
- (b) Paved surfaces shall be made of non-slip material
- (c) At locations where there is a difference in level, such as stairs, the surface material shall be changed using a colour contrast scheme and guiding blocks.
- (d) Approaches and pathways shall be wide enough for wheelchair users with regular passing places.
- (e) Drainage ditches shall not be constructed in park road areas. If a drainage ditch has to be constructed, a ditch cover should be provided
- (f) Slots in ditch or drain covers must be narrow enough so as not to risk crutches or the tyres of wheelchairs being stuck
- (g) An information board relating to facilities shall be provided, The board should be designed to be easily legible by using sufficiently large text size, distinct contrast and illumination. The information should also be in Braille.
- (h) Benches, dustbins and drinking fountains shall be installed with adequate space around them for wheelchair users to manoeuvre. (figure 28)
- (i) Benches shall be installed along the side of park roads
- (j) Guiding blocks shall be provided for persons with a visual impairment
- (k) Handrails shall be provided in places of recreation, where necessary (see the designs for “Handrails”)
- (l) For parking in places of recreation, see the designs for “Parking Space”

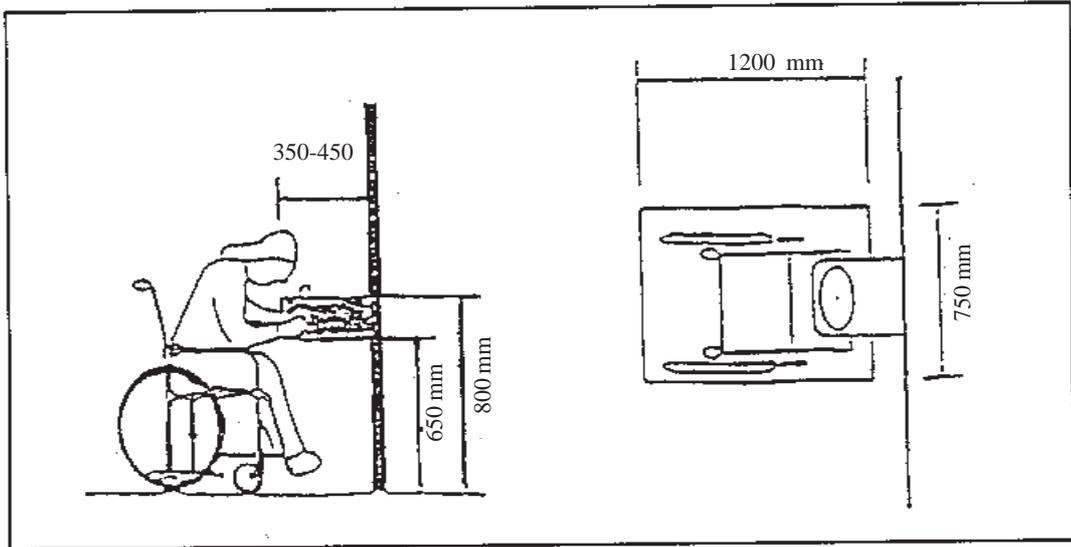


Figure 28 : Drinking fountain

12. Bus Stops

- (a) Two rows of guiding blocks for persons with impaired vision shall be provided 300 mm away from the bus stop pole on the sidewalk.
- (b) The bus stop pole shall be clearly visible after dark.
- (c) The bus stop area shall be equipped with a roof and bench (fig. 29)

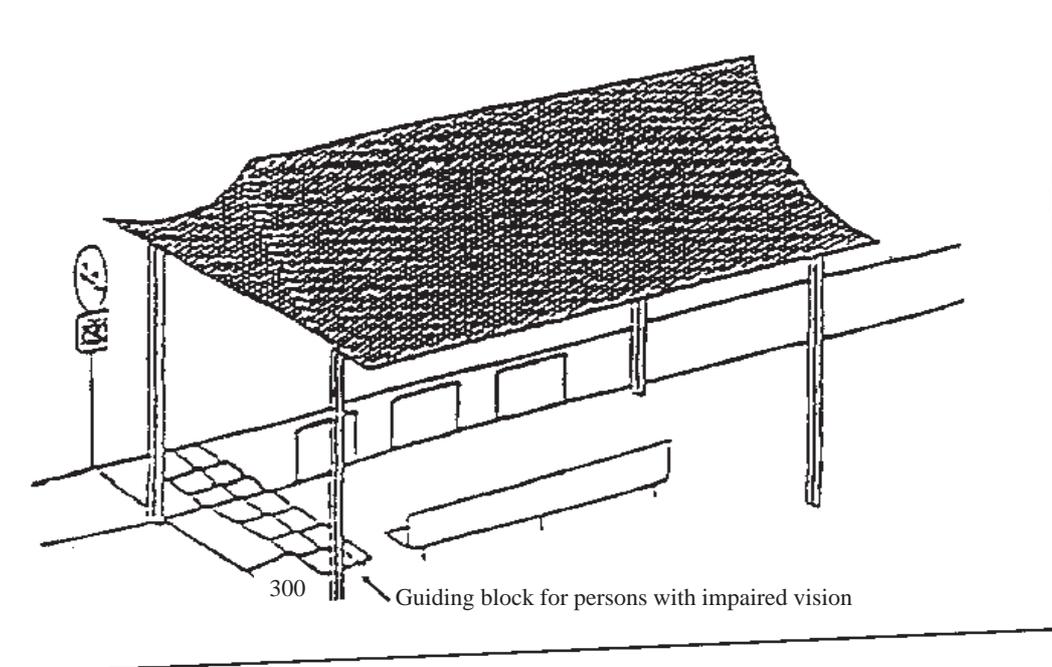


Figure 29 : Bus stops

13. Railway Stations

(1) *Approach to Station :*

- (a) The approach shall not have a difference in level. If a level difference is unavoidable, install a ramp or a ramp plus staircase.
- (b) The ramp should comply with the designs for “Ram” and the stair should comply with the designs for Steps and Stairs.

(2) *Paved Surface*

- (a) Pathways shall be constructed of non-slip material. At places where there is a difference in level, such as where staircases meet floor, it is desirable that the appearance of the surface material be changed using colour contrast both immediately before and after that area.
- (b) The approach pathway shall have guiding blocks for persons with impaired vision (see designs for “Guiding Blocks”)
- (c) If the approach pathway is parallel to a road for vehicles, enhance the safety of pedestrians by installing guard rails.

(3) *Station Entrances and Exits*

- (a) The station entrance or exit shall not have a difference in level. If a level difference is unavoidable, install a ramp or a ramp plus staircase.
- (b) It is desirable that space be marked out near the entrance and exit for vehicles carrying wheelchair users. (For other details about parking lots, see designs for “Parking Space”)

(4) *Entrance for disabled persons (figure 30)*

- (a) The width of the entrance shall be at least 1800 mm.
- (b) The entrance shall not have a difference in level, If a level difference is unavoidable, install a ramp or a ramp plus staircase. (The ramp should comply with the designs for “Rams” and the stairs should comply with designs for “Steps and Stairs”)
- (c) The floor surface of an entrance shall be made of non-slip material. At places where there is a difference in level such as stairs, it is desirable that the appearance of the surface material be changed using colour contrast.
- (d) Ensure that columns, signboards, and other fixtures do not protrude from wall surfaces (see “Protruding Objects”).
- (e) Install guiding blocks on the concourse for persons with impaired vision (see designs for “Guiding Blocks”)

(5) *Stairs*

For details see the Guidelines for “Steps and Stairs”.

(6) *Lifts (Elevators)*

- (a) Install a lift (elevator) as a means to enable passengers with disabilities to move between floors.
- (b) For the lift (elevator) install two guiding blocks for persons with impaired vision 300 mm. away from the call button.
- (c) For other details, see designs for "Lifts".

(7) *Toilets*

- (a) Install a toilet and washstand suitable for use by wheelchair users and other passengers.
- (b) For more details, see designs for "Public toilets".

(8) *Reservation or Information Counters*

- (a) Reservation or information counters shall have unobstructed approaches for wheelchair users.
- (b) Counter heights shall not be in excess of 850 mm.

(9) *Ticket Gates*

- (a) At least one of the ticket gates shall be wide enough to allow wheelchair users to pass through easily.
- (b) One of the ticket gates shall have a continuous line of guiding blocks for persons with impaired vision.
- (c) For other details, see designs for "Guiding Blocks".

(10) *Ticket Vending Machines (figure 31)*

- (a) The coin slot shall be at a suitable height for easy insertion of coins by wheelchair users (fig. 31)
- (b) A knee recess beneath the ticket vending machines shall be provided.
- (c) Install guiding blocks for persons with impaired vision 300 mm. away from the ticket vending machine.
- (d) The fare buttons, cancel buttons and other information buttons shall be written in Braille or in a distinct relief pattern.

(11) *Information*

- (a) The information board shall be made easily readable by using sufficiently large text size, distinct contrast and illumination.
- (b) It is desirable that in addition to a printed version of train schedule, table of fares and other travel information also be in Braille.
- (c) Information on train arrivals and departures must be visually indicated by, for example, using an electronic or electronic signboard, in addition to broadcast announcements.

12. Platforms

- (a) The platform shall have one row of dotted guiding blocks for persons with impaired vision 800 mm. or more from the edge.
- (b) A fence shall be installed at both ends of the platform to protect sight-impaired passengers from falling off.
- (c) The paved surface of the platform must be made with a non-slip material
- (d) Stairs, kiosks and dustbins on the platform must not hinder the clear passable of persons with impaired vision and wheelchair users.
- (e) A bench shall be installed on the platform

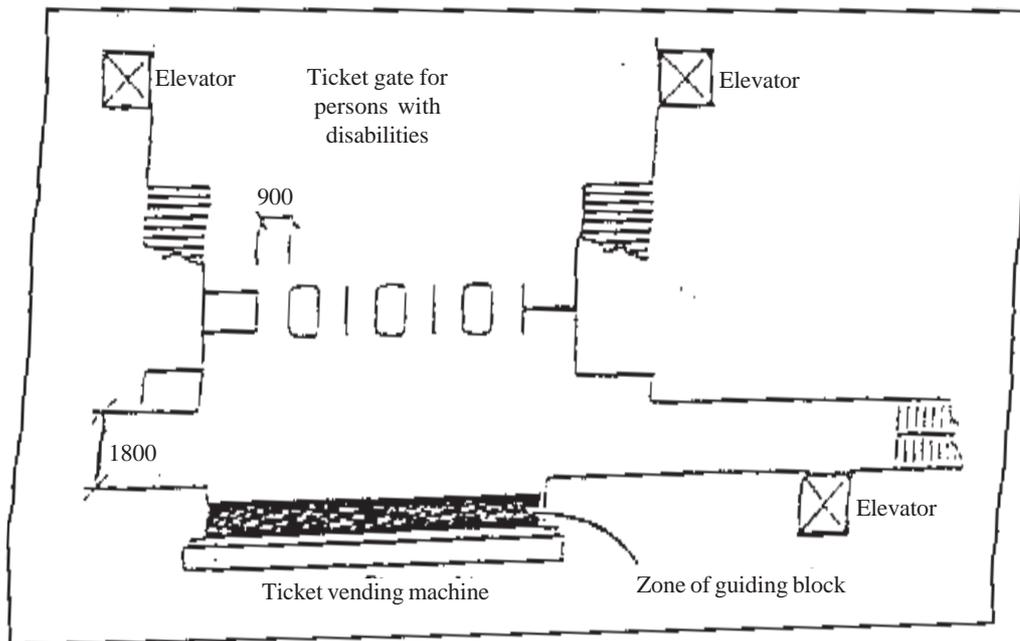


Figure 30 : Railway station entrance

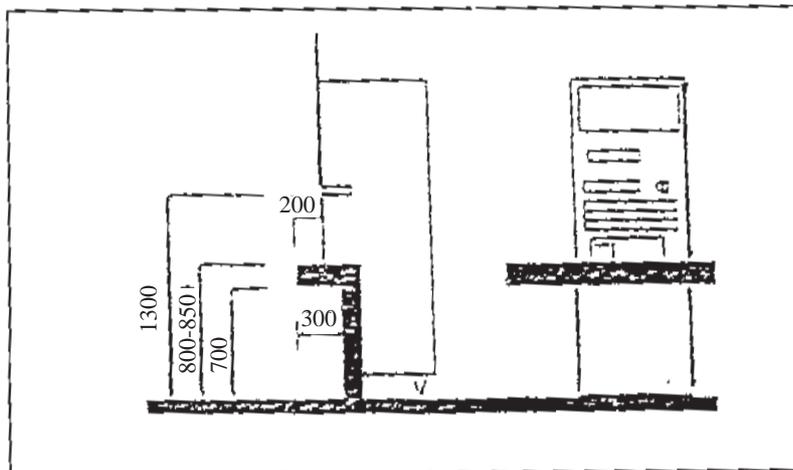
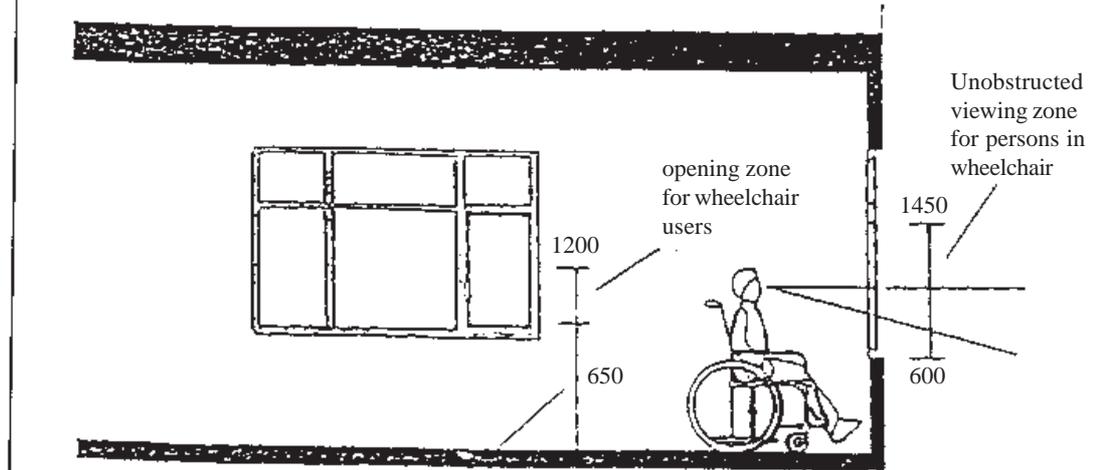


Figure 31 : Ticket vending machine

14. Design plans to be adopted in planning public buildings

(1) Windows

- (a) A window shall have handles/controls at a height that permits use from wheelchairs
- (b) A window shall have an unobstructed viewing zone for wheelchair users.
- (c) Curtain or Venetian blind controls/ropes shall be accessible for wheelchair



Glazing below this height and above floor level should be non opening

Figure 32 : Windows

(2) Bed room

- (a) The space around the bed shall be adequate for access by wheelchair user.
- (b) The space around the bed shall be large enough for transfer by a wheelchair user helper to assist in the transfer.
- (c) The bed shall be at a height from the ground that permits wheelchair users to transfer easily
- (d) There shall be a bed-side table at a suitable height and position that lying on the bed to reach it easily.

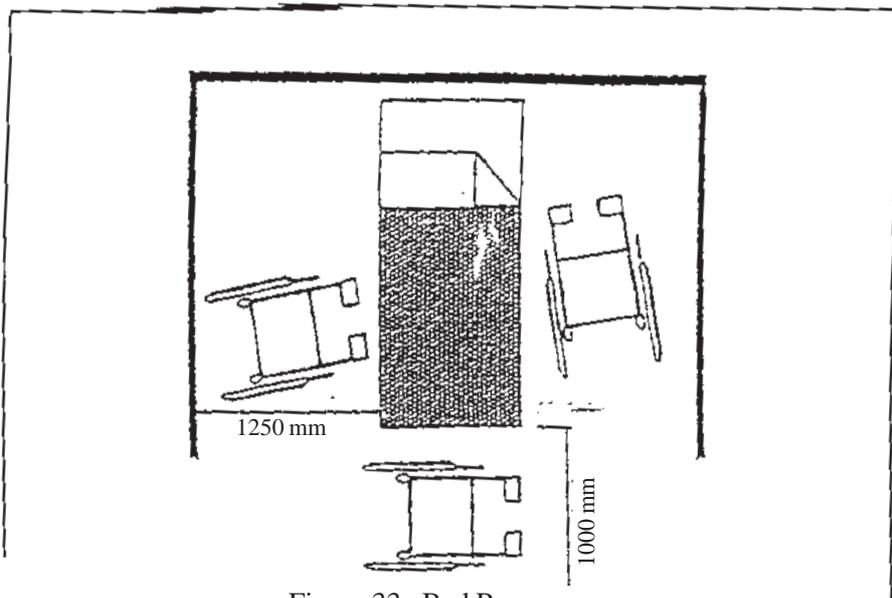


Figure 33 : Bed Room

(3) Basin (figure 34)

- (a) The basin shall be installed at a height and position for convenient access by wheelchair users.
- (b) The basin shall have appropriate knee clearance and foot clearance space for wheelchair users.
- (c) Sufficient clear space for wheelchair users shall be provided in front of the basin.
- (d) The mirror shall be so installed as to permit its use by wheelchair users.

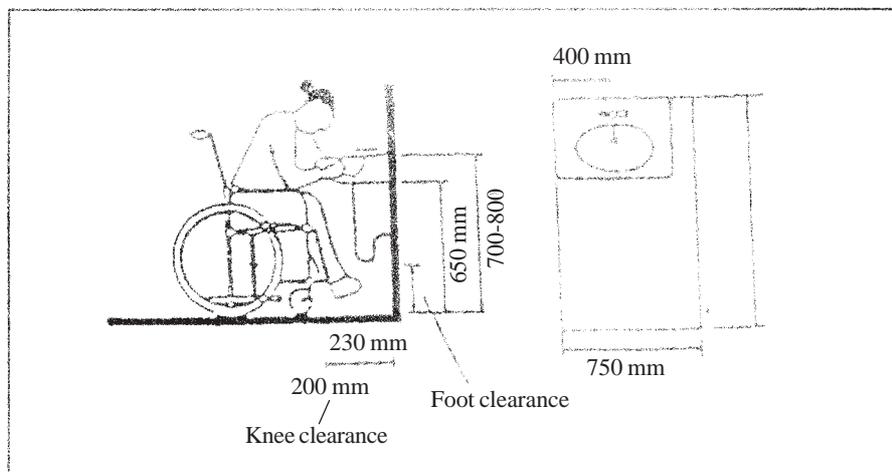


Figure : 34 Basin

(4) Kitchen (figure 35)

- (a) Floor surfaces shall be of a slip resistant material.
- (b) Workshops, sinks and cooking hobs shall be at the same level and at a height suitable for wheelchair users.
- (c) Adequate knee room shall be provided beneath worktops and sink (figure 36).
- (d) Floor space shall allow easy wheelchair movement between worktop, sink and cooking hob or stove.
- (e) Taps preferably shall be of the mixer type, with lever handles.
- (f) Where cooking facilities have control taps or knobs, there shall be at the front of the appliance and be easily and safely operated by people with diverse disabilities.
- (g) Where appropriate oven doors shall hinge downwards.
- (h) Where solid fuel stoves are used, the needs of people using wheelchairs or crutches and of blind people shall be considered in designing for adequate operating space and safety.

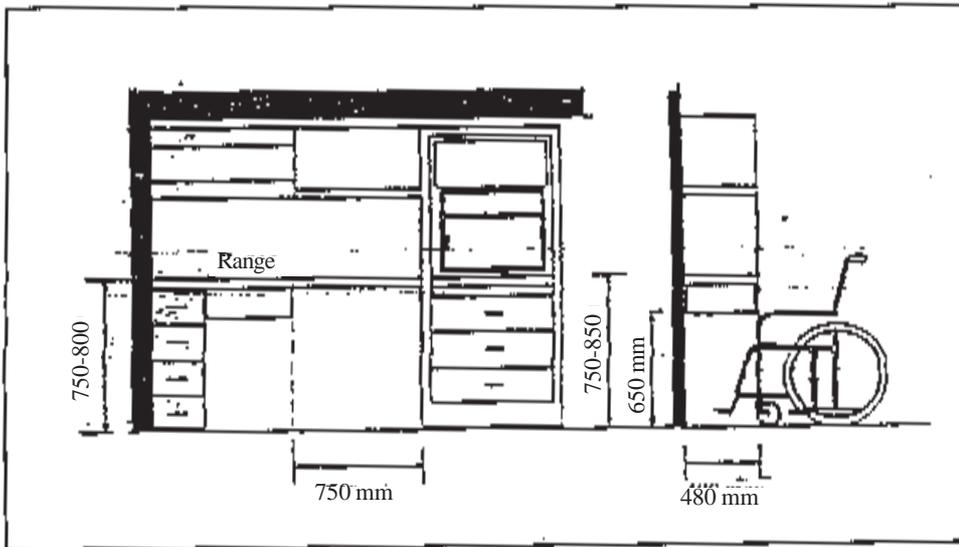


Figure 35 : Kitchen

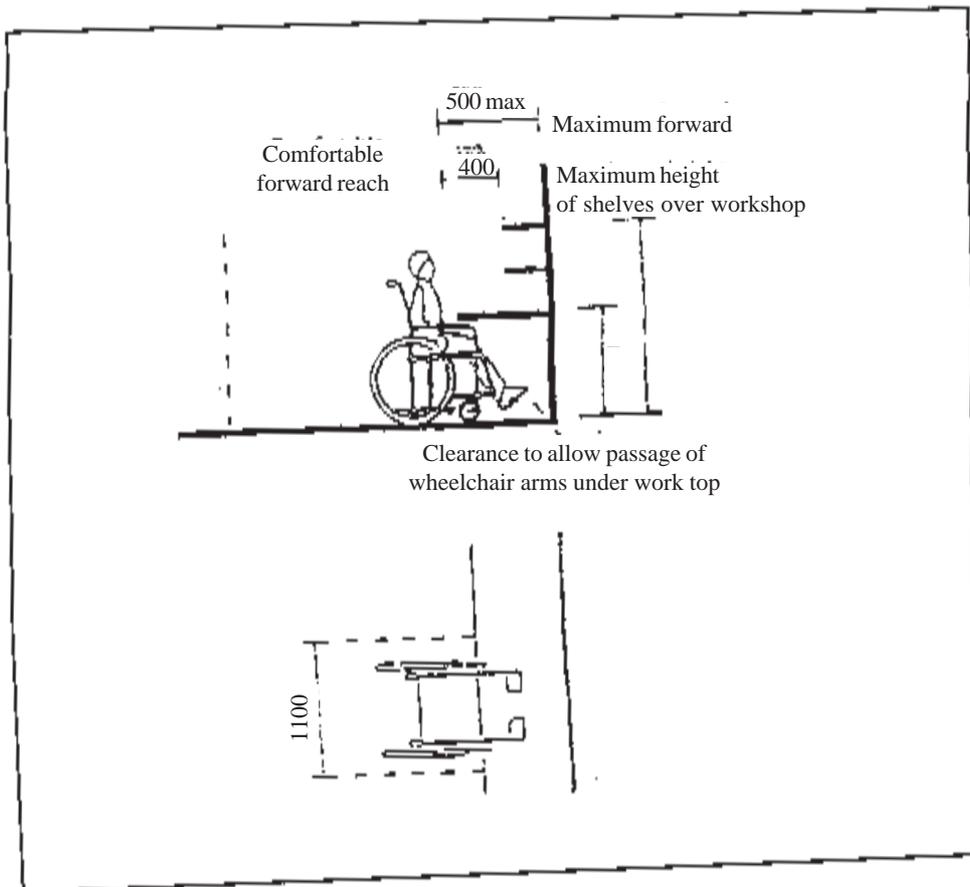


Figure 36 : Worktop bench

(5) Storage Space

- (a) Space for a wheelchair to be stored (folded or unfolded) shall be provided near doors
- (b) Storage space of various kinds (shelves, wardrobe rails, cupboards and drawers) shall be within appropriate height and depth range and be reachable by people in wheelchairs (figure 37 and 38)
- (c) A recessed plinth shall be provided under storage units to accommodate the footrests of a wheelchair
- (d) Cupboard and drawer handles shall be a shape, which may be easily grasped by a person with limited gripping or pulling strength
- (e) Lockable drawers shall be provided for each occupant in residential institutions.
- (f) The refrigerator shall be at a suitable height and depth for easy reach by wheelchair users
- (g) Sufficient floor space shall be provided for wheelchair users to manoeuvre around open doors of cupboards and refrigerators

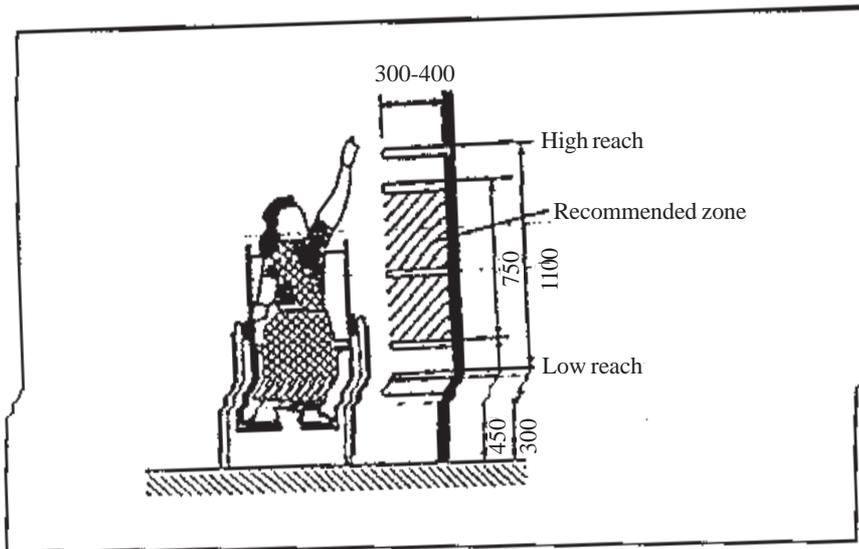


Figure 37 : Storage space

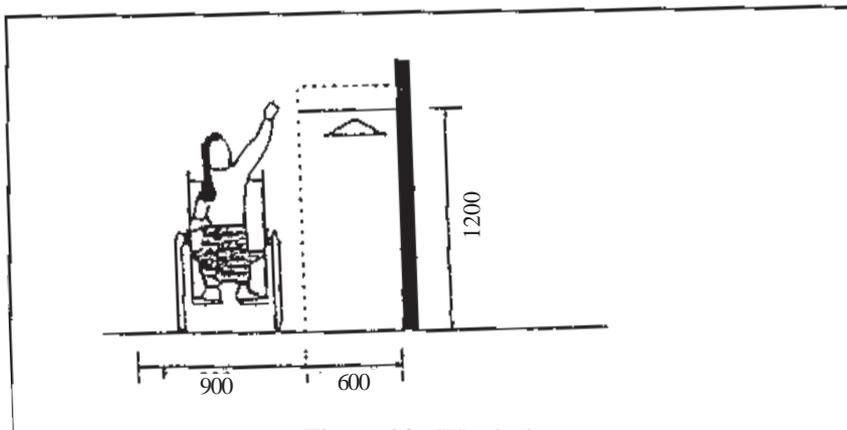


Figure 38 : Wardrobe

(6) Tables

- (a) A space shall be provided for wheelchair users at tables
- (b) A space shall be provided for wheelchair user access to and from tables (figure 39 and 40)

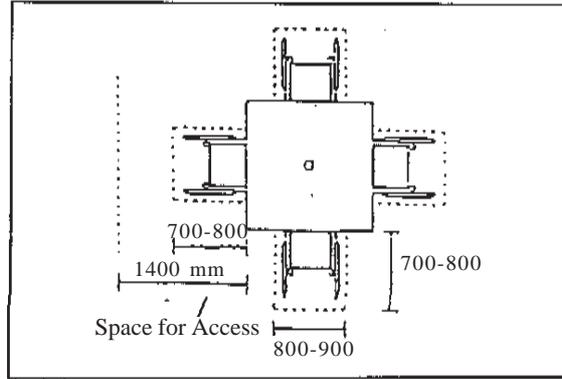


Figure 39 : Access to table

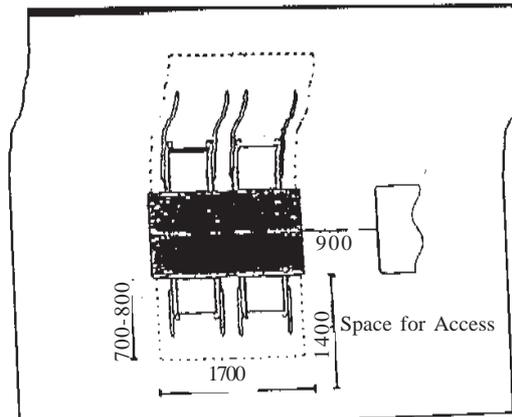


Figure 40 : Access to table

(7) Switches and outlets

Switches and outlets shall be mounted at an appropriate height and position for easy reach by wheelchair users

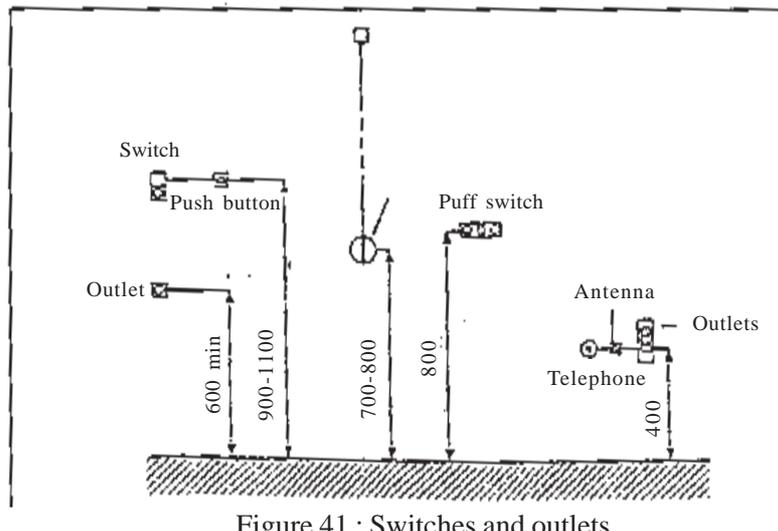


Figure 41 : Switches and outlets

(8) Lighting

- (a) Adequate and well distributed lighting shall be installed. Glare from excessively bright lights shall be avoided.
- (b) Staircases shall have adequate lighting.

9. Public Telephones

- (a) Sufficient floor or ground space for a forward or parallel approach by a wheelchair user shall be provided near telephone booths (figure 42)

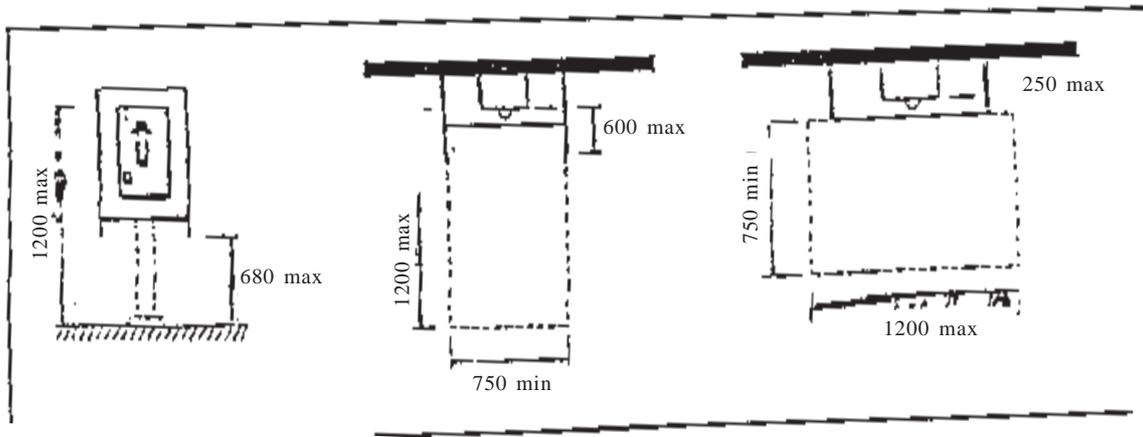


Figure 42 : Telephones

- (b) Cubicle doors and fixed seats shall not block approaches to and from telephones for people who use wheelchairs. As an alternative to fixed seats, folding seats may be provided in telephone booths.
- (c) The highest part of a telephone shall be within reach of seated person.
- (d) Knee space shall be provided under telephones.
- (e) Telephones shall have push button controls.
- (f) A long cord from the telephone to the handset shall be provided.
- (g) Telecommunication devices for deaf persons (TDD) shall be installed adjacent to payphone booths mainly with SMS facilities.
- (h) TDD shall be identified by the “TDD” symbol.
- (i) Pay-phones shall be hearing-aid compatible and also with SMS facilities available for the deaf.
- (j) Pay-phones shall have volume controls.
- (k) Visual Notification Devices shall be provided in offices, workplaces, hotel rooms and homes to alert hearing-impaired persons to incoming telephone calls

10. Assistive Listening Devices

- (a) Assembly areas, conference and meeting rooms shall provide assistive listening devices for persons with hearing impairments.
- (b) Various types of assistive listening systems are available on the market. They include audio-induction loops, radio frequency systems and infrared transmission devices.
- (c) Assistive listening devices shall be available for use in :
 - * Theatres, concert halls, auditoriums, stadiums and other places of cultural activity ;
 - * Museums, galleries and other places for public display ;
 - * Zoos and amusement parks.

11. Facsimile

Facsimile machines are a valuable communication tool for persons with hearing impairments and shall be readily available to them in post offices, commercial areas, public places and in their homes.

12. Sign Language Interpretation

Adequate lighting, raised platforms and headphone sets shall be provided for sign language interpreters.

13. Braille

- (a) Braille symbols or text in raised format shall be provided in places frequented by persons with visual impairments.
- (b) Texts/symbols and the background of all signs shall have a non-glove finish. They need to be in sharp contrast to their background.
- (c) "Talking signs" shall be installed.

14. Alarm systems

Concerning vocal alarms, vibrating alarms and instructions for escape from danger-

- * If emergency warning systems, eg. vibrating alarms or vocal alarms are installed, they shall include a means of warning for visually impaired persons.
- * Visual alarm devices shall be provided for persons with hearing impairments
- * Sockets shall be provided near beds to allow alarm systems, including vibrating under-pillow devices to be connected easily.

SCHEDULE II

(Regulation 7)

PART I

PUBLIC TRANSPORT

<i>Type of Transport</i>	<i>Performance Specifications</i>
(1) Road Transport	(a) Public vehicles shall comply with the designs set out in part ii of schedule II hereto. (b) Existing vehicles shall be modified wherever possible in compliance with the designs set out in part ii of schedule II hereto. (c) A minimum of two (02) seats in all buses shall be reserved at the entrance or exit doors for disabled persons. (d) The bus halts shall be constructed in accordance with the specifications as set out in Part IIB of Schedule I hereto.
(2) Rail Transport (2) Air Transport (3) Walkways, Roads and Highways	(a) One compartment per existing train is required to be modified to in order to be accessible by disabled persons. (b) A minimum of four seats per compartment shall be a reserved for persons with disabilities and shall be near entrance or exit doors. (c) A minimum of one accessible toilet shall be available near the seats for disabled persons (d) All major railway stations shall be modified in accordance with the designs specified in Part IIB of schedule I hereto. (e) A minimum of two seats near the entrance or exit doors in all domestic passenger aircraft shall be available for persons with disabilities (f) A minimum of one accessible toilet shall be made available for disabled persons. (g) A comprehensive pedestrian system shall be provided to fulfill the needs of the persons with disabilities

SCHEDULE II

PART II

1. Passenger Buses

(1) *Doors*

- (a) Bus doors need to be wide enough for wheelchair users (minimum 900 mm.)
- (b) A low-level step shall be installed
- (c) In the doorway, a handrail, footlight and floor of non-slip material shall be provided
- (d) Apparatus such as a lift or ramp shall be installed in the doorway for use by wheelchair users (figure 43)
- (e) Space for a wheelchair shall be provided in an appropriate position, without obstructing other passengers getting on and off.

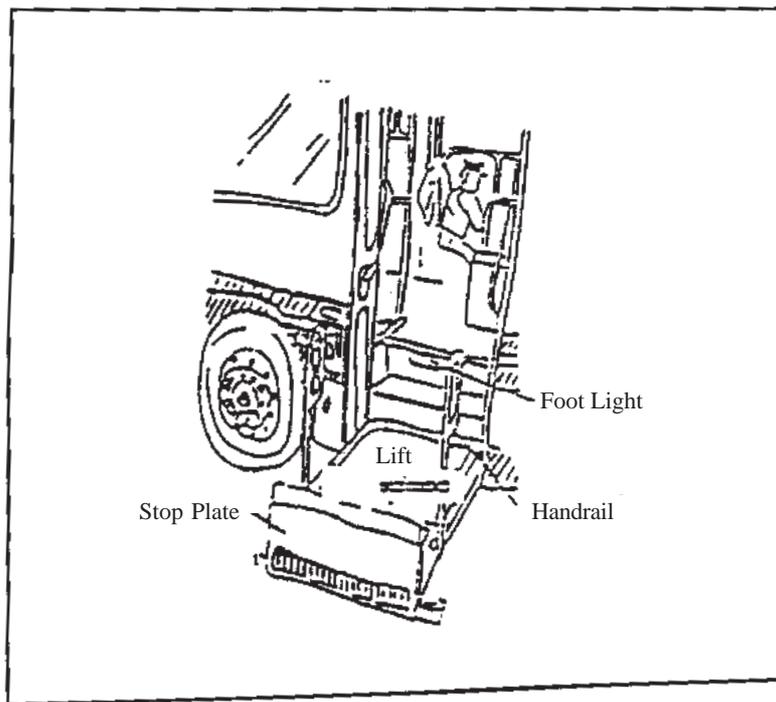


Figure 43 : Bus Lift

(2) *Wheelchair space (Figure 44)*

- (a) The position of that space shall be indicated, inside and outside the bus, using the standard symbol for wheelchair accessibility.
- (b) Wheel stoppers and wheelchair safety belts should be provided (figure 44)

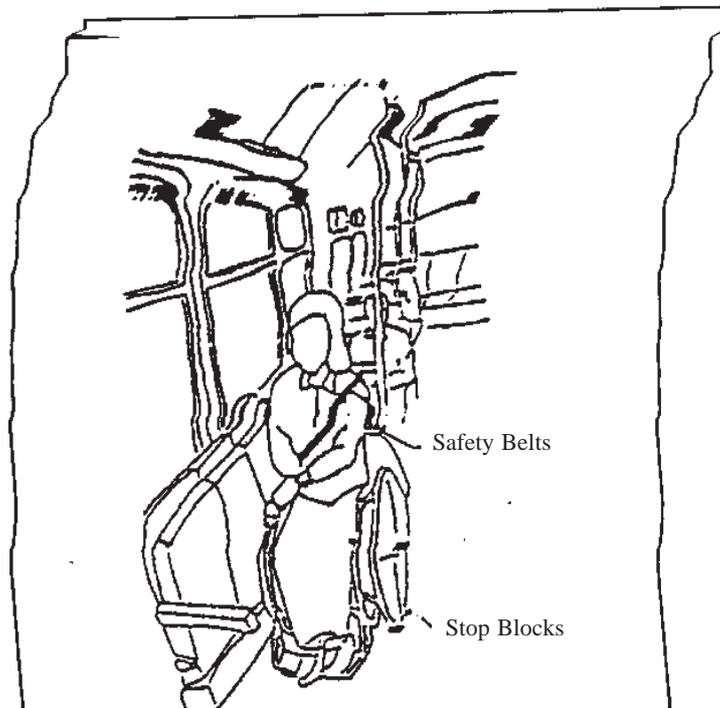


Figure 44 : Wheel Chair space inside bus

(3) *Seats*

Two seats closer to the entrance shall be reserved for persons with disabilities or elderly persons.

(4) *Alighting Buzzers*

- (a) An appropriate number of alighting buzzers shall be provided at position, which are easily accessible for seated or standing passengers.
- (b) The push button of an alighting buzzer shall be clearly visible and of adequate size.

(5) *Information Signs*

- (a) Information on the names of all stops along a bus route shall be indicated inside the bus by displaying text in a suitable position. Preferably, this information shall also be announced verbally.
- (b) Information on a route and its final destination shall be displayed outside the bus in large text, especially on its front and side. This information shall be illuminated by an internal light to make it readable in the dark.

(6) *Hand Rails*

Standard hand rails shall be fixed at entrance and exit.

(2) Passenger trains

(1) Railway Compartment doors.

- (a) Compartment doors shall be wide enough for wheelchair users (minimum 900 mm.)
- (b) The gap between compartment door and the platform shall be reduced to an absolute minimum (Figure 45)

(2) Aisles

Aisles shall be wide enough for the passage of wheelchair users.

(3) Wheelchair Space

- (a) A space for a wheelchair shall be made available at the side of the door.
- (b) The space shall be indicated inside and outside the compartment by using the universally recognized symbol for wheelchair accessibility.
- (c) Install a ring-strap or other appropriate safety grip for wheelchair users to hold on to.

(4) Seats

An appropriate number of designated seats for passengers with disabilities shall be provided near doors.

(5) Information signs and announcements

- (a) Install a map of train routes.
- (b) Announce and provide in each compartment a visual display of the names of stations en route.

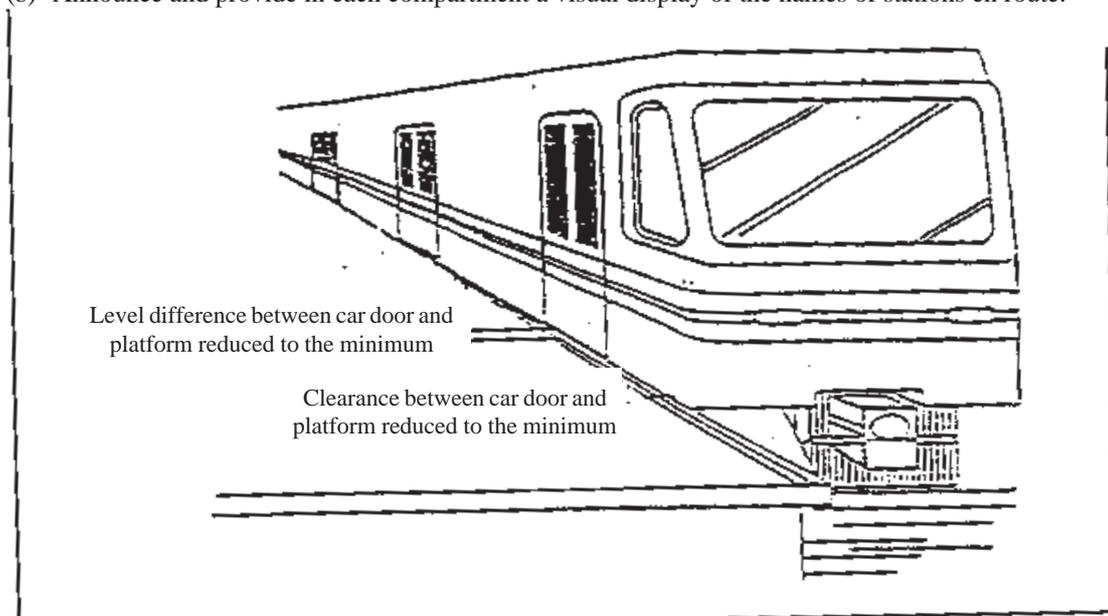


Figure 45 : Railway compartment. Level difference and clearance between compartment door and platform.

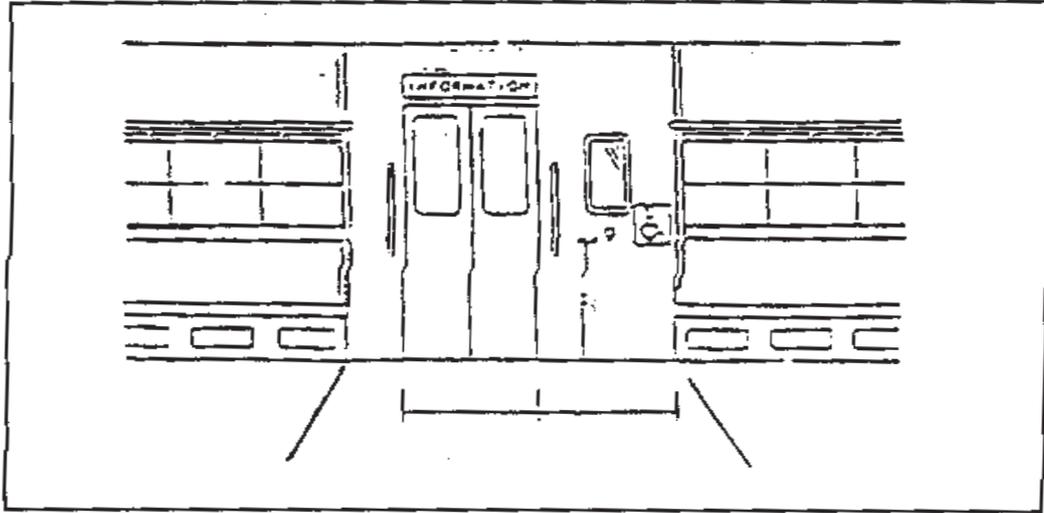


Figure 46 : Wheelchair space inside the train compartment

(3) Other public transport systems

(1) Taxi Stand

- (a) Two rows of guiding blocks for persons with impaired vision shall be provided 300 mm. away from the taxi stand pole on the sidewalk.
- (b) The taxi stand pole shall be visible after dark.
- (c) For wheelchair users to be able to approach a taxi easily, sudden level differences from the taxi stand to the road need to be eliminated.

(2) Taxi Interior

Taxis shall be adapted to allow passengers get in and out of them while remaining seated in their wheelchairs.

(3) Airport

For details see designs for “Railway Station”.

(4) Aircraft Interior

- (a) Doors need to be of a suitable width for wheelchair users.
- (b) Aisles must be wide enough for wheelchair users.
- (c) Toilets on board aircrafts for details see designs for “Public Toilets”.
- (d) Plugs shall be accessible for passengers requiring their respirators to be plugged into electricity outlets.

(5) Piers and Jetties

Terminal building - similar to "Railways Station" except for the platform.

(6) Ship and Ferry Interior.

- (a) Doors shall be wide enough for wheelchair users.
- (b) Aisles shall be wide enough for wheelchair users.
- (c) Toilets on board ship - see designs for "Public Toilets".
- (d) Safety belts shall be provided on board for wheelchair users to enhance their stability as required during sailing.

SCHEDULE III

[Regulation 8 (2)]

SAFETY MEASURES FOR THE PERSONS WHO ARE VISUALLY IMPAIRED

1. Guiding Blocks

- (a) Dot-type blocks give a warning signal. They are used to screen off obstacles, drop-offs or other hazards, to discourage movement in an incorrect direction, and to warn of a corner or junction (Figure 48 and 49).
- (b) Line-type blocks indicate the correct route to follow.
- (c) Places to install guiding blocks.
 - * in front of an area where traffic is present (Figure 49).
 - * in front of an entrance or exit to and from a staircase or multi-level crossing facility (Figure 49).
 - * entrances or exits at public transport terminals or boarding areas.
 - * sidewalk section of an approach road to a building.
 - * guiding path from a public place to the nearest public transport station.
 - * in rural areas, stones of different sizes may be used to separate the road from the kerb, and to indicate the approach to public places.

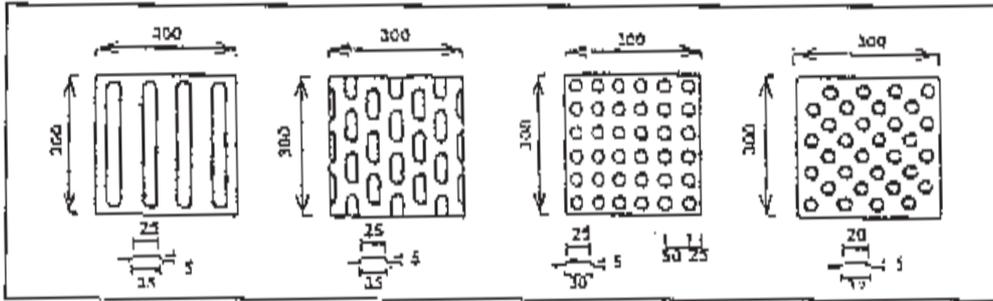


Figure 47 : Type of guiding blocks

Arrangement of guiding blocks for persons with visual impairment

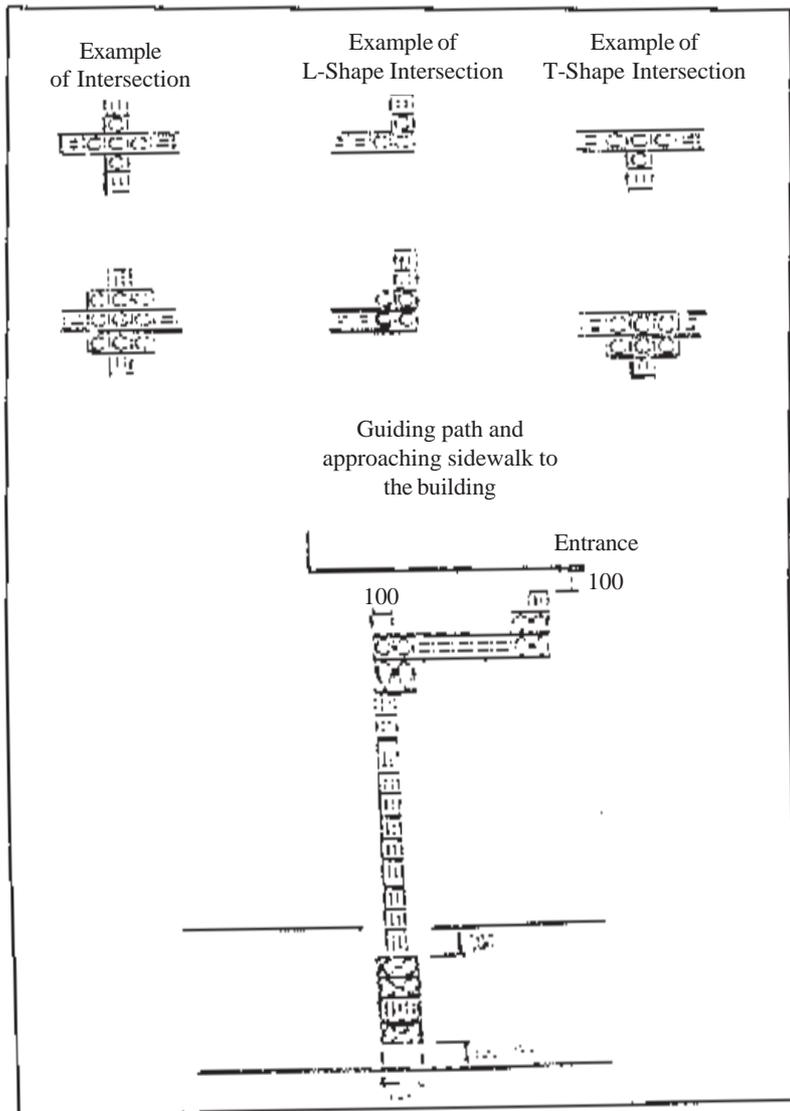


Figure 48 : Diverse Arrangement of guiding blocks

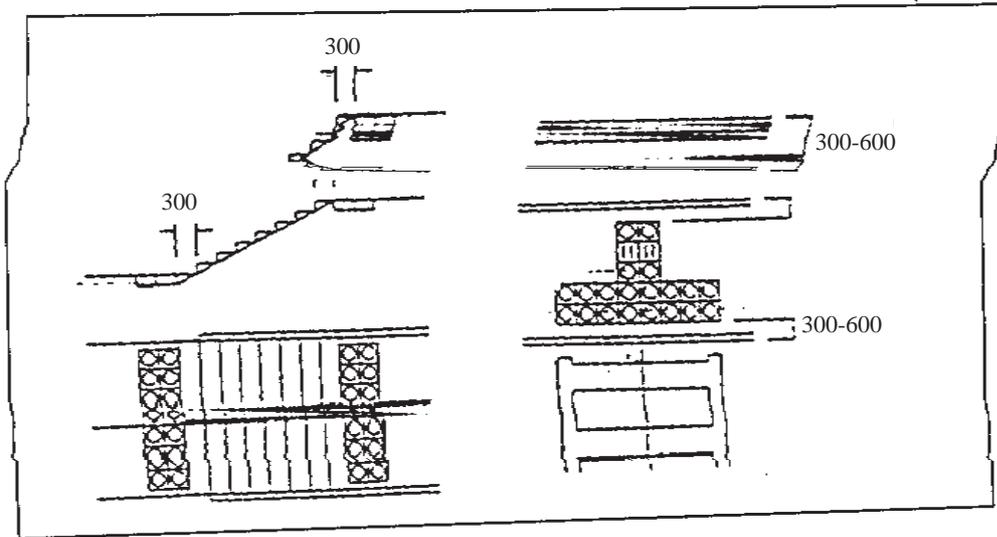


Figure 49 : Stairs and crosswalk

(2) Protection from protruding objects

- (a) Protruding objects, such as directional signs, tree branches, wires, guy ropes, public telephone booths, benches and ornamental fixtures shall be installed with consideration of the range of a visually impaired person's cane.
- (b) A barrier to warn blind or visually impaired persons shall be provided under stairways or escalators (Figure 52)
- (c) Walkways, halls, corridors, passageways, aisles or other circulation spaces shall have clear headroom to minimize the risk of accidents (Figure 50)

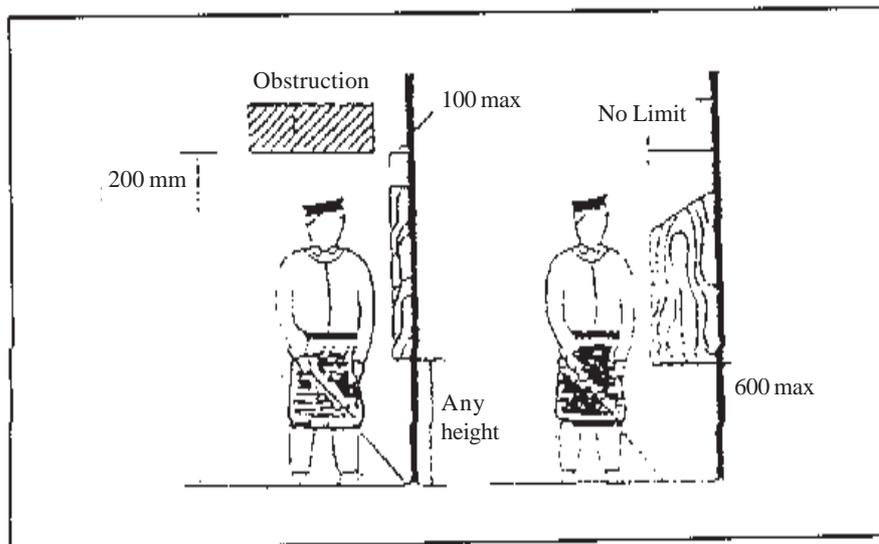


Figure 50 : Protruding Objects

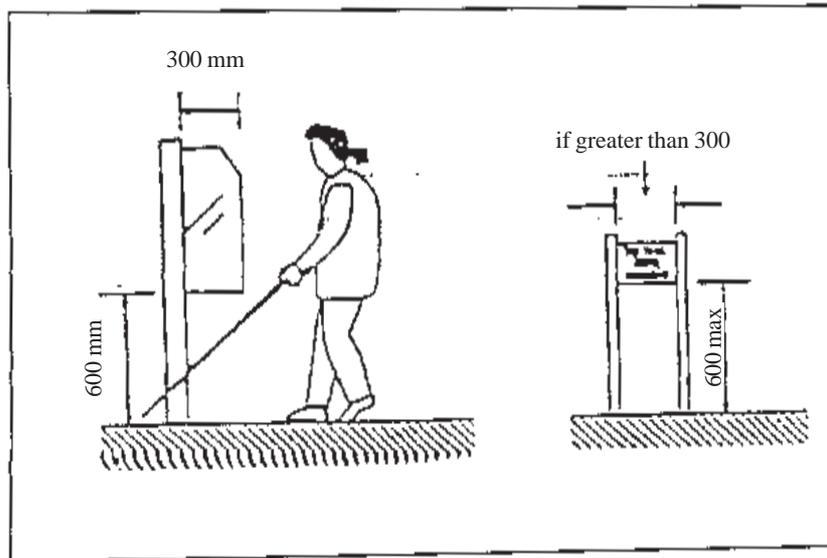


Figure 51 : Free standing object

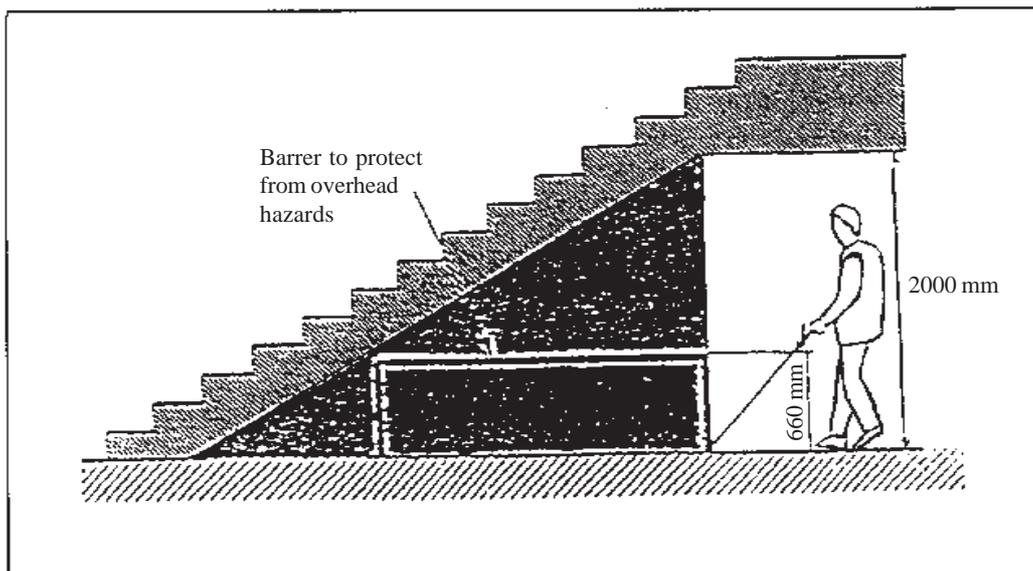


Figure 52 : Overhead hazards

(3) Signals and Signs

- (a) Signs shall be in contrasting colours and preferably be embossed in distinct relief.
 to allow visually impaired persons to obtain the information they contain by touching them.
- (b) Simple symbols and contrasting colours which are universally recognized shall be used (eg. Green for safety or go, yellow and amber for risk or caution, and red for danger).
- (c) Use clear system of signs throughout a building. Signs shall be at the same height and of the same style at each change in direction.
- (d) The height of signs shall comply with figure 52.

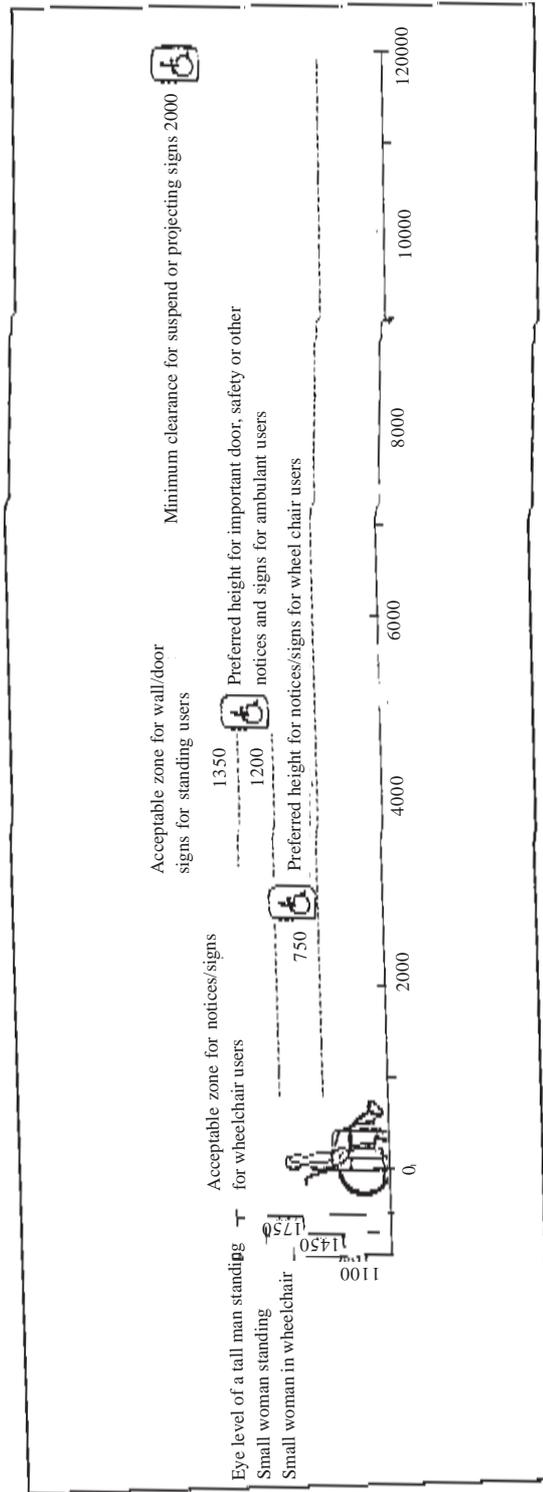


Figure 53 : Sign posting