

DESIGN FOR MAXIMUM ACCESS

Design guidelines for people with restricted mobility



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1.0 Introduction

If you are submitting a planning application for a building to which the public will have access, or a housing development, then you should be making provision for those with restricted mobility. This leaflet summarises information and gives advice on some of the main aspects with references for more detailed advice where necessary at the end of the leaflet.

This document provides supplementary planning guidance to the Council's Unitary Development Plan, which has an underlying theme to create an environment which is accessible to all.

1.1 Why should provision be made?

There are two main reasons for this:

1. Statutory and policy requirements.
2. We are all likely to be affected directly or indirectly by restricted mobility at some time in our lives.

1.2 Statutory/policy requirements

It is a legal requirement under the Chronically Sick and Disabled Persons Act 1970 that buildings to which the public are admitted, places of employment, and education buildings, should be accessible to people who are disabled; and that suitable toilets and parking should be provided where reasonable and practicable. There are minimum requirements under the Building Regulations, and provision for those with restricted mobility may be a material consideration when a planning application is considered. Specifically, the Unitary Development Plan requires the provision of both "mobility" and "wheelchair housing" and has policies and standards for shopfronts, public services, and other facilities which cover the needs of those with restricted mobility. This leaflet includes both statutory and advisory guidelines for good design which take account of these needs.

1.3 Who is affected?

Restricted mobility does not only refer to those in wheelchairs. Other conditions can also affect mobility – poor eyesight, deafness, breathlessness, pain, pregnancy, arthritis, lack of coordination, degenerative conditions, unsteadiness and those temporarily restricted by small children or luggage. Many of these conditions increase with age and we have an ageing population and increased life expectancy. The Borough has 5,000 registered disabled people (thought to be an underestimate as not all disabled people are registered) and the highest proportion of elderly people in London. 15% or 24,500 are over 65 (12% nationally) and half of these are over 75. It is estimated that by 2025, 23% of us will be over 65. When you include parents with small children (9,961 children are aged 0-4 in the Borough) it is clear that most of us are, or will be, affected by restricted mobility at some time in our lives.

1.4 General guidelines

Accessible buildings are hospitable to all; the aim is an accessible and welcoming environment. The following points should be noted:

Think of access early. It is usually easier and less expensive to design for at this stage.

Aim to maximise access and information as far as possible. Facilities should be carefully designed, not just the basic minimum.

Wherever possible, facilities for those with restricted mobility should not be separate as this can cause alienation and humiliation.

Contact the Planning Division, Building Surveyors or Council's Access Officer (addresses at end) for further advice at an early stage.

REMEMBER, ACCESSIBLE BUILDINGS WILL BENEFIT ALL USERS.

1.5 Types of restricted mobility and design requirements

Requirements vary according to the mobility problem. Sometimes needs may conflict; contact the Council for further advice (addresses at end). Main categories are:

- *Visually Impaired people who require:-*
 - "Stable environment" ie. without moveable objects, unnecessary change or low overhead projections
 - Texture contrasts underfoot to aid location and give warning of hazards
 - Use of raised lettering, braille or audible instructions where appropriate
 - Good lighting and colour contrasts to aid partially sighted; large lettering
- *Deaf/hard of hearing people who require:-*
 - Clear signposting
 - Induction loops for hearing aid users
- *Users of wheelchairs/prams/buggies who require:-*
 - Alternatives to steps/escalators eg. ramps and lifts
 - Doorways at least 850mm, preferably 900mm wide and manoeuvring space
 - Accessible controls and handles
 - Reserved parking spaces close to entrances
- *Ambulant disabled people who require:-*
 - Steps as well as ramps
 - Ample seating of suitable design
 - Easily gripped handrails

1.6 Types of building

The guidelines apply to all types of building other than some private dwellings (see section on housing). They concentrate on the external environment, entrances, toilets and changes in level. Further advice is available regarding the internal environment if required. Areas covered are housing, shops, offices, industry, hotels, community facilities, leisure and entertainment facilities and educational facilities (where, in general, the specific requirements set out in the DES Design Note 18 apply).

2.0 Parking

Those with restricted mobility tend to rely heavily on the private car, often with a companion. Car parks for buildings and public places must, therefore, include spaces suitable for disabled users, near to the entrance.

2.1 The orange badge scheme

People who cannot walk more than 100m are eligible for an orange badge which gives them permission to park in restricted parking areas and also in reserved parking spaces. The 100m criterion makes it essential that any parking provision is made as near as possible to the destination, and not more than 50m as an absolute maximum.

2.2 Percentage of spaces

Public car parks of more than 25 spaces should have 4% of spaces reserved for orange badge holders, with at least one space in smaller car parks (very small car parks of less than 6 spaces should have one 3m wide space for the ambulant disabled). At work places, spaces should also be available for employees with restricted mobility who might not be orange badge holders.

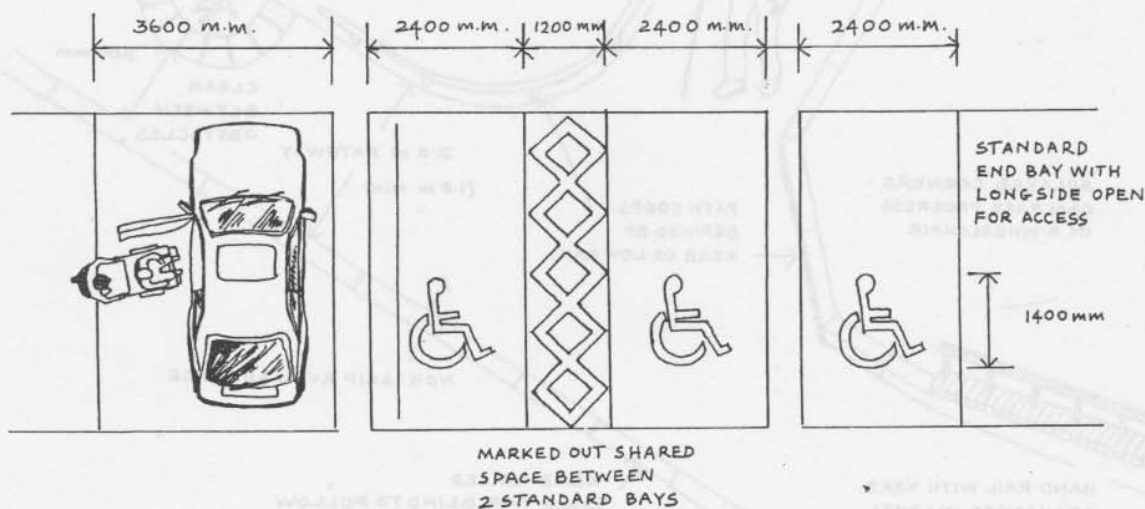


Diagram 1 PARKING

2.3 Location/dimensions/design

Spaces should be located as near as possible to the most accessible entrance of the building, within a maximum of 50 metres. If possible, reserved spaces should be under cover with covered access to building entrances to give all-weather protection.

- 2.4 Avoid routes from the parking spaces to the entrance which cross vehicle paths. Pedestrian routes should be clearly defined, well lit, level and/or with dropped kerbs if necessary.
- 2.5 Reserved spaces should be on the level and preferably 3.6m wide (minimum of 3.2m) to allow transfer from a wheelchair into a car. Alternatively 2 bays of 2.4m with a shared space of 1.2m between could be provided.
- 2.6 Reserved spaces should be denoted by painting the internationally recognised symbol on the ground, by clear signposting at the entrance to the car park and beside the spaces themselves.

3.0 The pedestrian environment

Width of footways, surfaces, crossings, soft and hard landscaping and lighting are all important in the pedestrian zone to give a safe, hazard free route. Routes should be clearly defined and well lit, continuing up to entrances of buildings. Reference should be made to the Institute of Highways and Transportations revised guidelines "Reducing Mobility Handicaps", for more details.

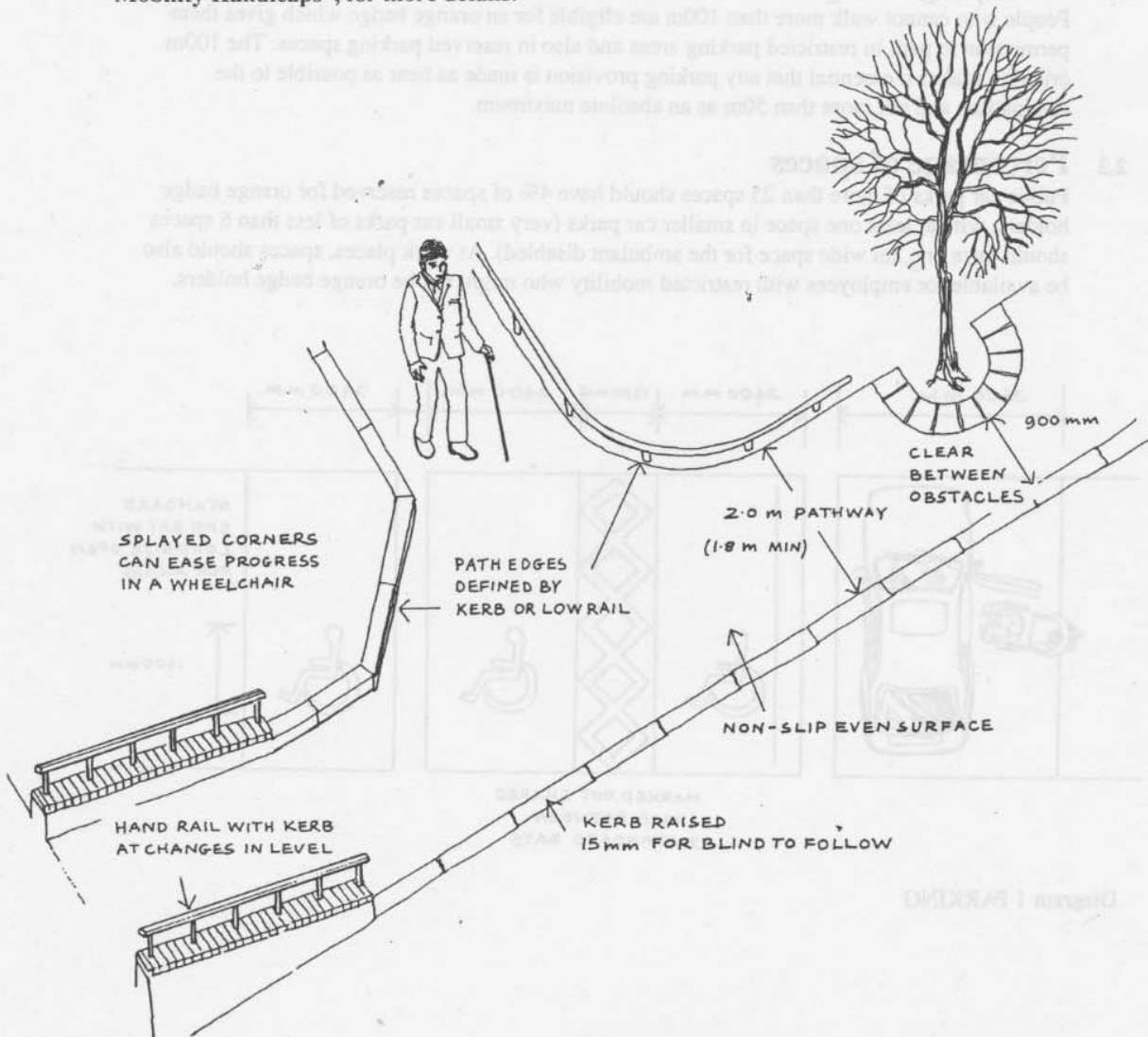


Diagram 2 THE PEDESTRIAN ENVIRONMENT

3.1 Dimensions of footways

Pedestrian routes should be at least 2m wide and free of obstacles to allow people with prams/buggies and wheelchairs to pass easily, and wider in areas of large pedestrian flows eg. near shops or bus stops. Splayed corners should be considered for visibility and easier progress for wheelchairs.

3.2 Surfaces

Appropriate surfaces are essential for those who have no feeling in their feet or legs, the unsteady (many elderly) and those with poor eyesight as well as those pushing wheelchairs, prams and buggies. Abrupt changes in level should be avoided, and the opportunity should be taken to level areas which may be difficult to negotiate. (See "changes of level" below).

3.3 Surfaces should be even, firm and non-slip in both wet and dry conditions. For this reason loose gravel should be avoided. Multiple and V joints can cause unnecessary vibration to wheelchair users; all joints should be flush and without gaps.

- 3.4 Some changes in texture, raised kerbs (minimum 100mm high) or the use of contrasting colours can help announce hazards such as street furniture, changes in level and crossing places (see "crossing points"), but unnecessary changes should be avoided.
- 3.5 Channel covers, gratings etc should be flush with the surface and gratings should be at right angles to the line of pedestrian flows, so as not to trap wheelchair or buggy wheels.
- 3.6 Glare from surfaces should be avoided in all lighting conditions, very pale reflective or shiny surfaces should be avoided in areas which get a lot of sun.
- 3.7 Finishes should be durable and properly laid to avoid the danger of cracked and uneven surfaces. Surfaces should be chosen for easy maintenance to avoid future problems.

3.8 Kerbs and crossings

Crossing points should preferably be at right angles to the street, with clear views of traffic. If crossings are light controlled then barriers should be incorporated on the junctions for safety; visual and audible signalling should be provided. (Refer to the Institute of Highways and Transportation Guidelines "Providing for People with a Mobility Handicap" for further advice). Kerbs should have a 15mm raised edge for the blind to follow.

- 3.9 Dropped kerbs should be provided at all places where pedestrians are crossing roads, directly opposite one another across the carriageway. The kerb should be ramped flush with the carriageway without an upstand, preferably 1:20 gradient (but not exceeding 1:12) subject to detailed design and drainage requirements.
- 3.10 Where a footway is being constructed or renewed, a dropped kerb should ideally be provided over the whole width of the footway. Where a dropped kerb is to be inserted into an existing footway, a ramped section can be used to a maximum gradient of 1:12, providing a 900mm minimum walkway is allowed behind the ramp.
- 3.11 To allow easy movement for wheelchairs, road cambers should not slope into dropped kerbs at an acute angle. A camber between 1 in 25 and 1 in 40 is recommended in a new development, depending on circumstances.
- 3.12 A textured surface should be provided around the crossing point where a pedestrian route crosses a carriageway and at the top of steps, to allow easy identification by the visually impaired. However, an alternative, smoother route should be incorporated as the jolting caused by textured paving can be painful for some people in wheelchairs and uncomfortable for people suffering arthritis in their feet. For the same reason this textured paving should not extend right across the footway.

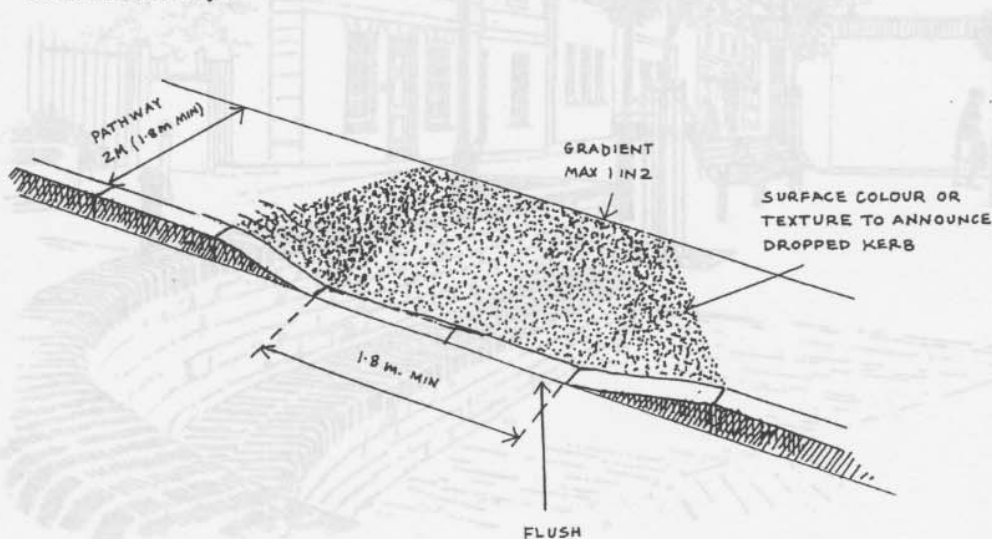


Diagram 3 DROPPED KERBS

3.13 Headroom

Low projecting awnings, signs and hanging flower baskets can be dangerous; the minimum height to allow clear headroom is 2m.

Obstacles

- 3.14 Temporary obstacles such as roadworks should be marked with signs, barriers and lighting to indicate the hazard. A low rail or board will allow detection by people using tapping canes. Where the footway is temporarily restricted an alternative route should be provided and clearly marked.
- 3.15 Particular care is needed with building sites and where scaffolding is used. People with vision problems are most vulnerable when familiar routes suddenly change or are obstructed by vehicles.
- 3.16 Path surfaces are often damaged or narrowed when building works take place. Particular efforts should be made to maintain clear ways with safe surfaces.
- 3.17 Forecourt displays and merchandise should not be placed on the footway, and the Council will take action to secure the removal of items illegally obstructing the footway. UDP policy is against parking on the footway, except in certain exempt areas.

3.18 Lighting

All access routes, signs, facilities such as car parking spaces and seats and hazards such as steps, ramps, street furniture and main door entrances should be lit at all times at least to the standards laid down in the British Standard Code of Practice BS 5489.

3.19 Street furniture

Bollards, bins, planters, seats etc must be well designed and carefully located. Sharp edges should be avoided and the furniture should be well maintained for safety. All street furniture should be located so as not to obstruct the main pedestrian route, and should follow the same alignment to allow a direct route without zigzagging.

- 3.20 Items should be clearly distinguished from their background by means of contrasting colour or textured paving and, where appropriate, raised kerbs or protective handrails.
- 3.21 Barriers should be more than average knee height (500mm), low bollards should be avoided. Mobile, free standing or projecting obstacles eg. low shop blinds, signs or jutting steps can be dangerous and should be avoided.



Diagram 4A STREET FURNITURE

3.22 Seats

The provision of sufficient "resting places" can extend the range of people with limited mobility, especially because of heart conditions or walking difficulties, as well as pregnant women or people with small children.

- 3.23 Seats should be provided frequently along pedestrian routes, especially those leading from shops, in shopping centres and, where possible, in areas where waiting is likely eg. at bus stops, entrance halls, beside lifts, telephones and check out counters. Seats should be positioned in a safe, clearly visible and well-lit area, with adjacent space for wheelchairs and pushchairs. If possible, a choice of seating should be provided with varied heights, some with arms (often preferred by the elderly) and some with backs.

3.24 Landscaping

Planting should not obstruct, but can be used to enhance the environment for those with restricted mobility.

- 3.25 Trees and bushes should not obstruct pathways and low branches should be kept trimmed back.

- 3.26 Plant species emphasising colour, texture and scent can provide a pleasant environment for the partially sighted or blind, especially near seating areas. Raised beds could be considered where there is a large number of wheelchair users. Planting for nature conservation, for example species which attract butterflies and birds, could provide a more interesting environment for everyone. Plants with poisonous leaves or berries should be avoided where they may be reached by children.

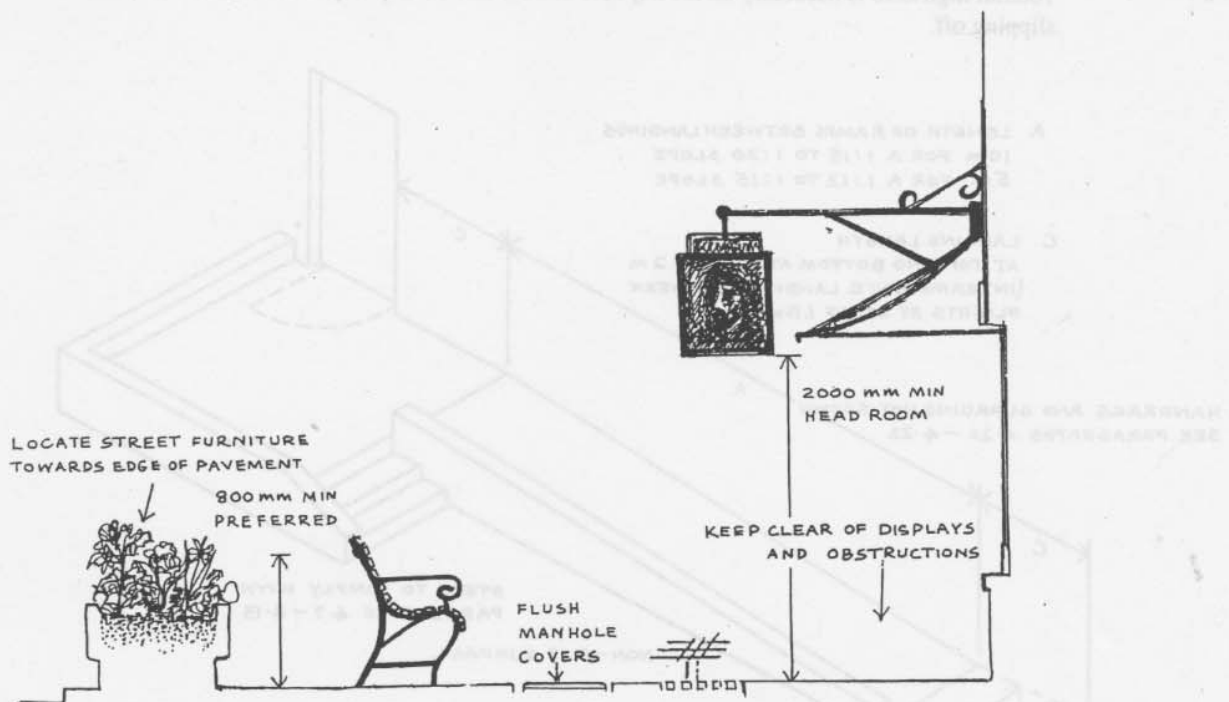


Diagram 4B STREET FURNITURE

4.0 Changes in level

Both indoors and outdoors, the way changes in level are designed is critical for those with restricted mobility. Where possible a choice should be provided eg. between stairs and ramps, or stairs and lifts or escalators. Handrails should also be provided; see below for details. Note that care should be taken in designing the sides of ramps and steps to ensure that there is no danger to children from falling or getting their heads stuck between banisters. Note also the comments in paragraph 9 regarding the need for consent for listed buildings or in Conservation Areas.

4.1 Ramps (see also "handrails" below)

Changes in level should be avoided, especially at entrances and exits to buildings. However, where this is impossible, a ramp no steeper than 1:20 should be provided for prams, pushchairs, wheelchairs and trolleys. If site constraints are such that a steeper ramp is necessary it should not be steeper than 1:15 if flights are not longer than 10.0m., or not steeper than 1:12 if individual flights are not longer than 5.0m. Steps should be provided as well; this allows both access for people in wheelchairs and for people who can more easily and safely use steps.

4.2 Ramps should be 1.8 metres wide to allow wheelchairs and prams to pass. 1.2 metres would be acceptable on very short ramps. They should have a non-slip surface, a 100mm kerb to denote the edge of the ramp, and continuous handrails on both sides.

4.3 A level platform 1.8 metres long (a minimum of 1.2 metres by 1.2 metres clear of any door swing) should be provided at the beginning and end of the ramp. Where there are outward opening doors this platform should be large enough for a wheelchair user to open the doors without having to rest the chair on the ramped surface. A level platform a minimum of 1.5 metres long should be provided at 10 metres intervals on long ramps clear of any door swing. A 100mm high kerb is necessary on the exposed side(s) of the ramp to prevent wheels or sticks slipping off.

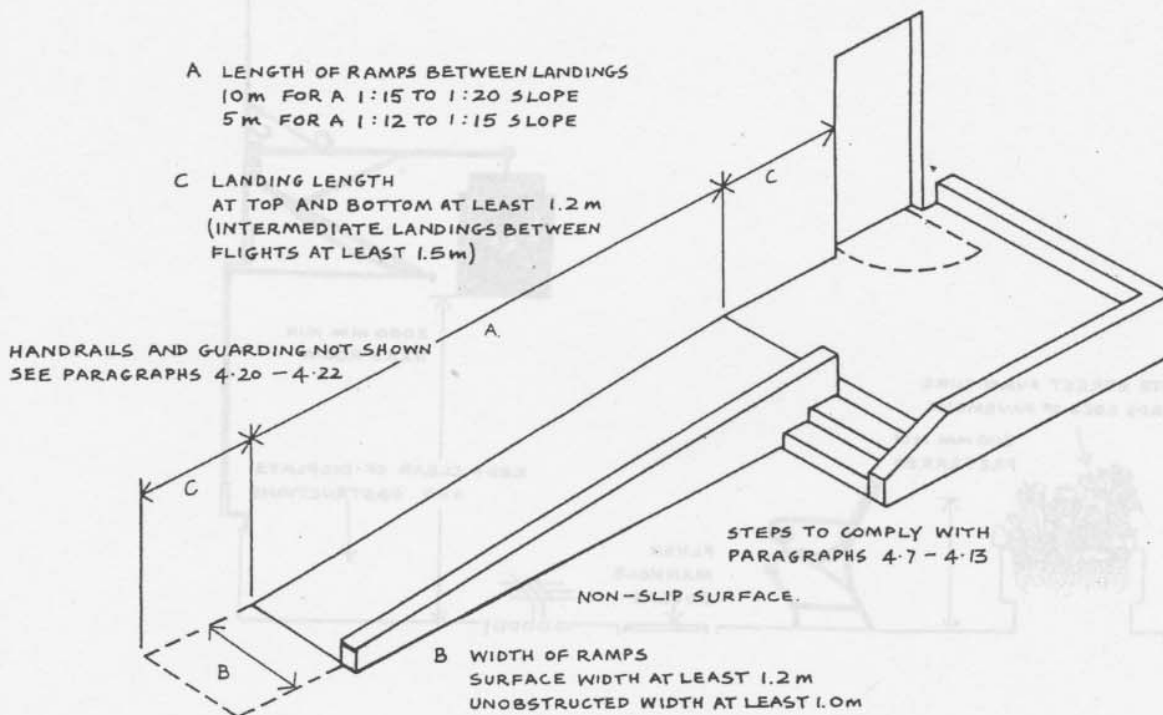


Diagram 5 RAMPS

4.4 Ramps and steps should be well lit and ideally protected from the weather.

4.5 Ramps should be an integral element in the design of new buildings or alterations, not added as an afterthought.

4.6 In some circumstances a temporary ramp might be appropriate; portable ramps are available and can be stored when not in use. See Access Officer for details.

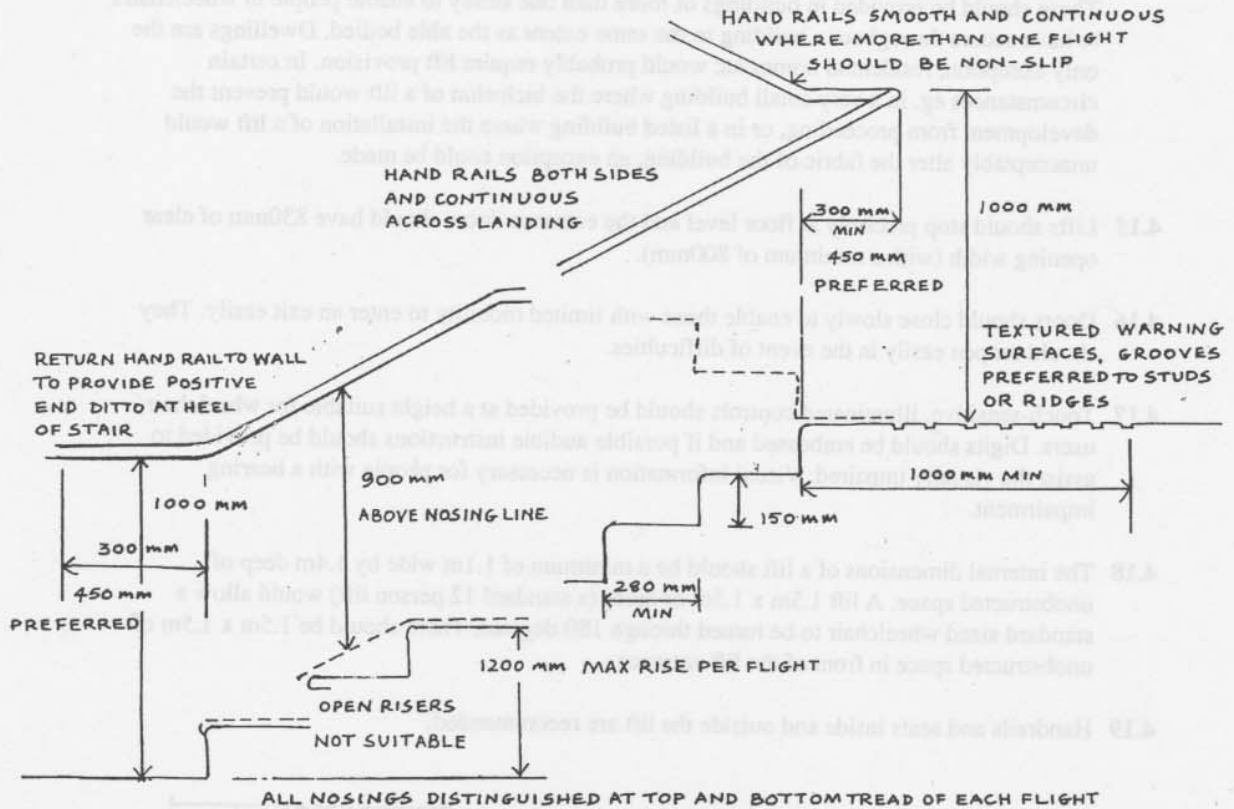


Diagram 6 STEPS

- 4.7 Steps** (see also "handrails" below)
Ambulant disabled people often find a short flight of steps with handrails easier to manage than a ramp.
- 4.8** Single steps can be dangerous especially where sited adjacent to a doorway, so should be avoided.
- 4.9** A flight of stairs should be 1.8 metres wide (minimum of 1.0m. clear), with handrails on both sides, and have a non-slip surface.
- 4.10** Stair treads should be a minimum of 280mm and risers a maximum of 150mm and they should be uniform. Open stair risers must be avoided.
- 4.11** The edge of steps or stairs should be clearly defined eg. by use of a contrasting colour.
- 4.12** A level platform for resting should be provided every 1.2 metre vertical rise of a flight of steps, and at the top and bottom of the steps, should be at least 1.2m. clear of any door swing..
- 4.13** Sharp, overhanging nosings can trip people and should be avoided. Nosings in a contrasting colour to stairs aid easy recognition; indicate approach to steps with a textured warning surface.

4.14 Lifts

These should be provided in buildings of more than one storey to enable people in wheelchairs to have access throughout a building to the same extent as the able bodied. Dwellings are the only exception, residential homes etc would probably require lift provision. In certain circumstances eg. in a very small building where the inclusion of a lift would prevent the development from proceeding, or in a listed building where the installation of a lift would unacceptably alter the fabric of the building, an exception could be made.

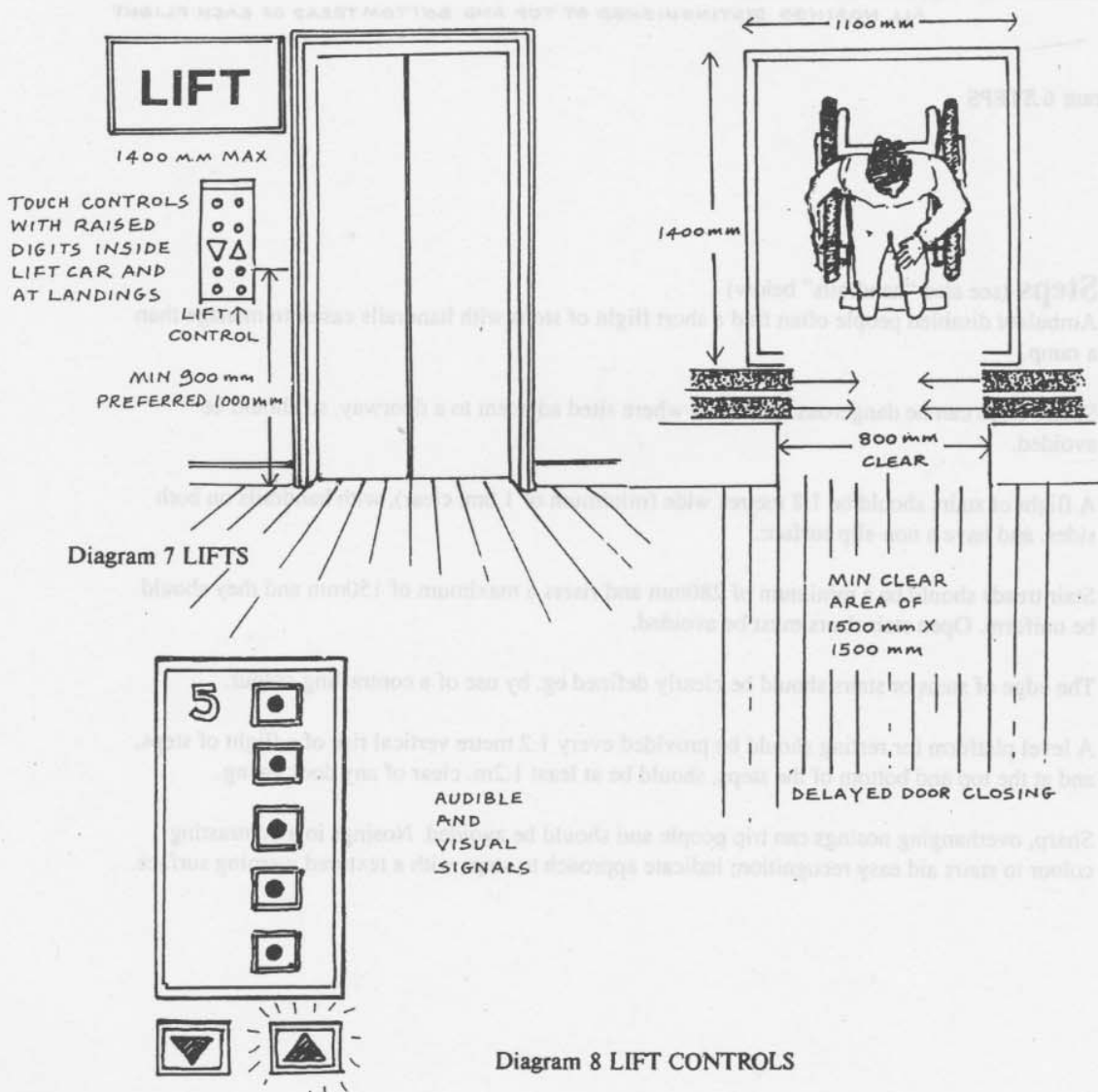
4.15 Lifts should stop precisely at floor level and the entrance doors should have 830mm of clear opening width (with a minimum of 800mm).

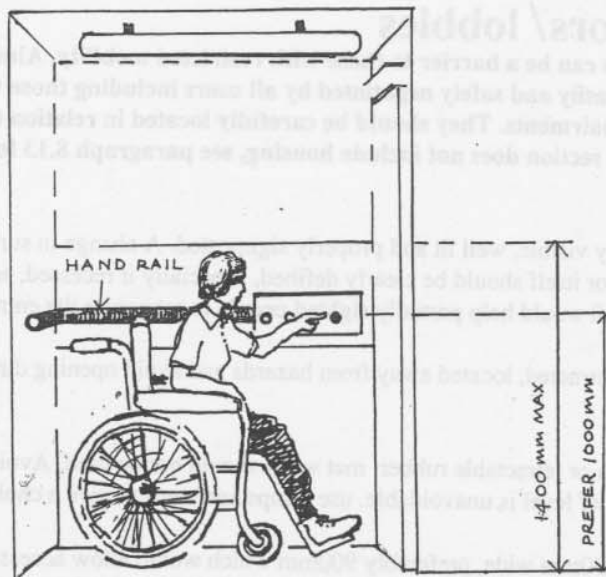
4.16 Doors should close slowly to enable those with limited mobility to enter an exit easily. They should reopen easily in the event of difficulties.

4.17 Touch-sensitive, illuminated controls should be provided at a height suitable for wheelchair users. Digits should be embossed and if possible audible instructions should be provided to assist the visually impaired. Visual information is necessary for people with a hearing impairment.

4.18 The internal dimensions of a lift should be a minimum of 1.1m wide by 1.4m deep of unobstructed space. A lift 1.5m x 1.5m or more (a standard 12 person lift) would allow a standard sized wheelchair to be turned through 180 degrees. There should be 1.5m x 1.5m of unobstructed space in front of the lift entrance.

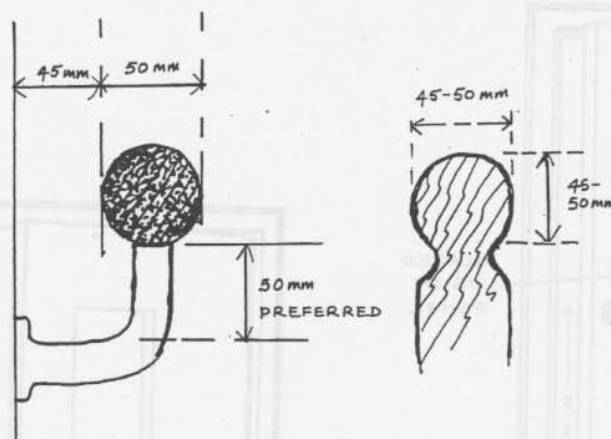
4.19 Handrails and seats inside and outside the lift are recommended.





TOUCH CONTROLS WITH RAISED DIGITS
INSIDE LIFT CAR AND AT LANDINGS

Diagram 9 HANDRAILS



4.20 Handrails

Handrails should be provided inside lifts, on both sides of steps and ramps if they exceed 1000mm width, or if a ramp gradient is greater than 1:15 and longer than 3m. A handrail should be provided centrally if the flight or ramp is wider than 1800mm. They should be 1 metre above a landing and not more than 900mm above the surface of the ramp/steps/floor of the lift and continue to the door entrance or at least 300mm and preferably 450mm beyond the end of the ramp or steps. If possible a double handrail could be provided with a lower rail approximately 700mm high for use by children, and an upper rail 900mm high.

4.21 The rail should be smooth, non-slip continuous and easy to grip; a round or half round section is preferable, 45-50mm in diameter and 45mm clear of the adjacent wall.

4.22 Handrails should end in a clearly recognisable way or return to the wall. A rough textured finish to the wall behind the handrail should be avoided.

5.0 Entrances/doors/lobbies

Badly designed entrances can be a barrier to those with restricted mobility. Aim for entrances which can be easily and safely negotiated by all users including those with mobility and sensory impairments. They should be carefully located in relation to access routes and parking. This section does not include housing, see paragraph 8.13 for this.

5.1 Entrances/doors

Entrances should be clearly visible, well lit and properly signposted. A change in surface could mark the entrance. The door itself should be clearly defined, especially if recessed, and a change in colour to the wall would help partially sighted people to recognise the entrance.

5.2 Doorways should be unobstructed, located away from hazards and avoid opening directly onto pathways.

5.3 Thresholds should be flush or retractable rubber; mat wells should not be used. Avoid single steps and, where a change of level is unavoidable, use ramps and steps to give a choice.

5.4 Doors should be at least 850mm wide, preferably 900mm which would allow access for most makes of double buggy. At least one door of double doors should be a minimum of 800mm wide. There should be 300mm of unobstructed space beside the leading edge of a door to minimise the amount of wheelchair reversing and manoeuvring.

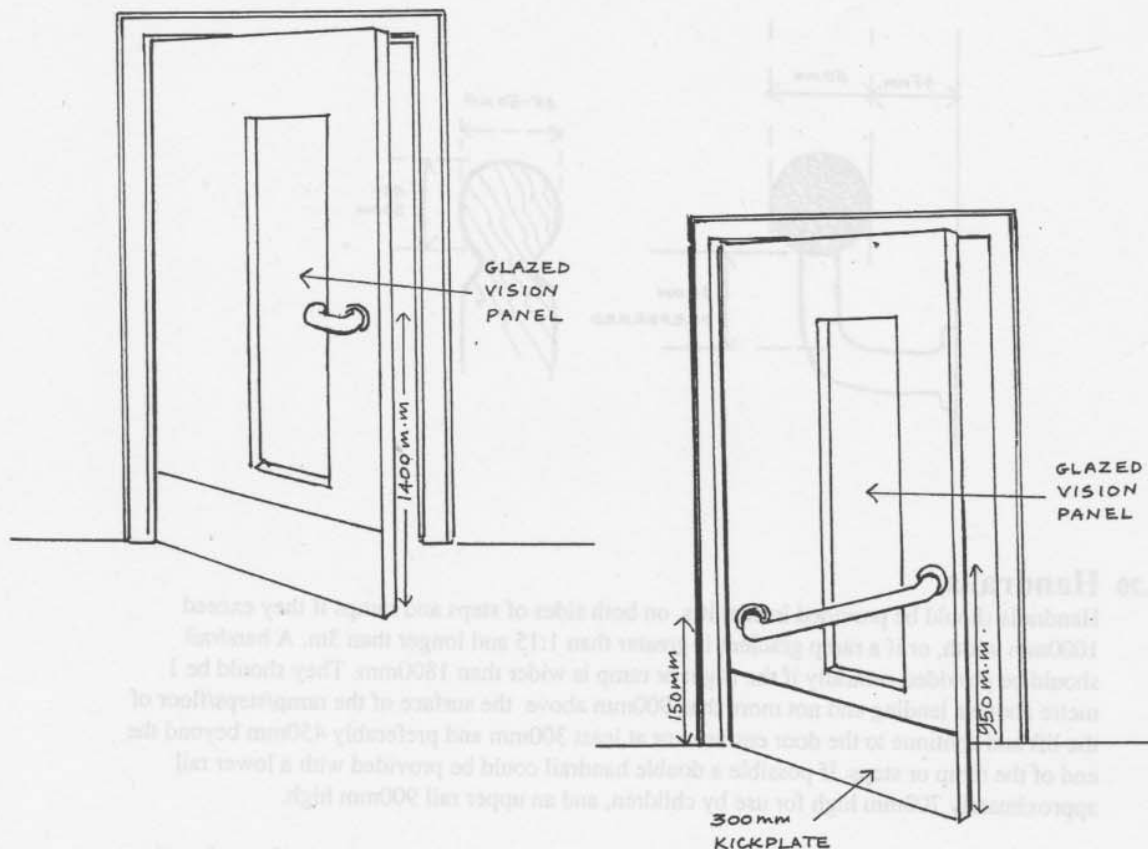


Diagram 10 DOORS

- 5.5 Revolving and heavy doors should be avoided. Where self closing doors are required for safety reasons, gentle closures usable by people with disabilities should be used. Automatic sliding doors are ideal in many locations, but they should be adjusted to allow sufficient closing time to allow people with limited mobility to pass through safely.
- 5.6 Plate glass doors should be easily distinguishable, perhaps with a brightly coloured band at about 1575mm. Solid doors should have glazed panels extending to a low level to allow hazards to be anticipated, in public areas, and where there are likely to be children or those with restricted mobility.
- 5.7 Door handles should be clearly visible, easy to grasp and use and approximately 1m above floor level. Diagonal handrails are a good choice. Fittings should be grouped near the handle so that the lock and opening mechanism can be operated with one hand. Indicate clearly whether doors are "pull" or "push".

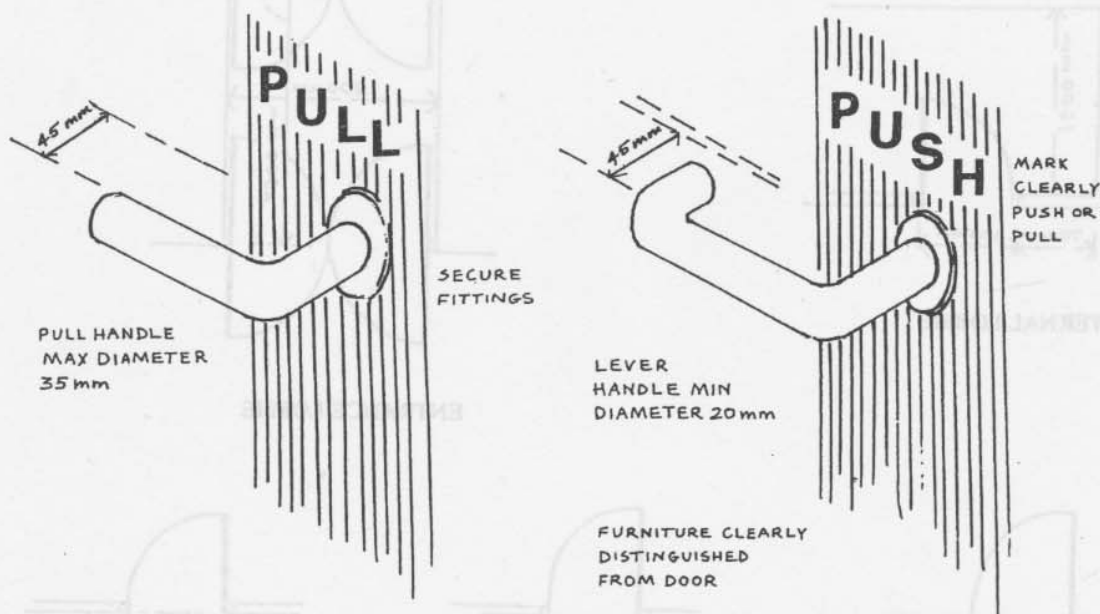


Diagram 11 HANDLES

5.8 Lobbies

Lobbies should have a minimum of 1.5m x 1.5m of space clear of the door swing. Doors in lobbies should preferably open the same way (illustrations to comply with Building Regs Part M).

- 5.9 Entrance halls should be spacious, well lit and provided with generous seating of varying heights. Routes from the entrance door to lifts, stairs, enquiries desks and toilets should be clearly defined and unobstructed. Avoid deep pile, open texture or soft carpets and mats which can impede the movement of a wheelchair. Use secured rubber matting or short pile carpets and low profile dirt collecting mats with tapered edges.

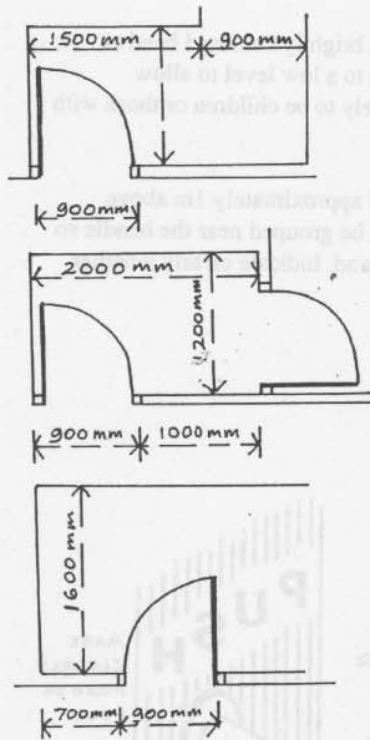
5.10 Corridors

Avoid unexpected changes of level, especially at doorways. Clearly indicate any ramp level changes.

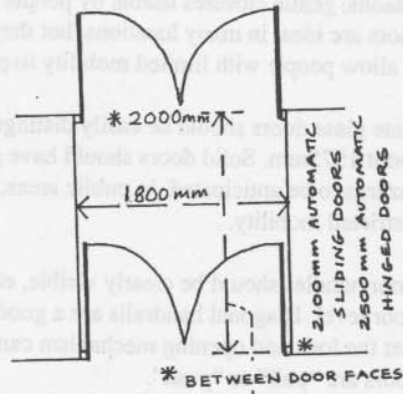
5.11 Corners

Splayed corners are preferred, which must allow enough room to turn a wheelchair.

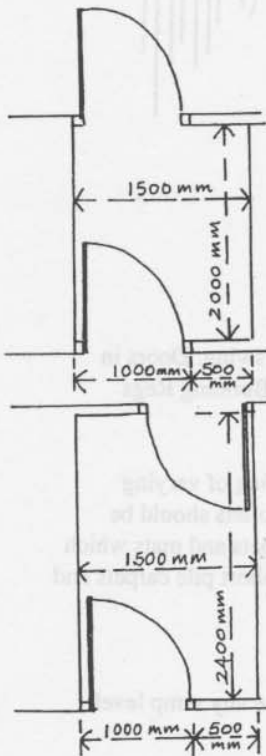
Diagram 12 ENTRANCES & LOBBIES



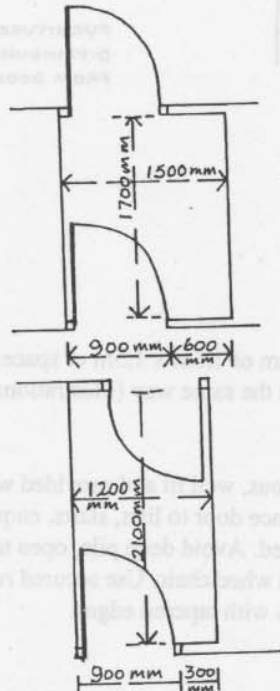
INTERNAL LOBBIE



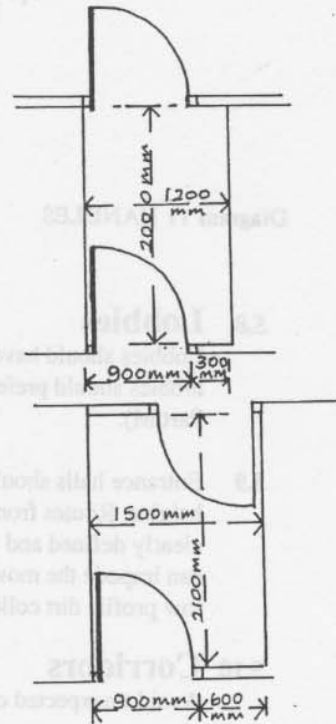
ENTRANCE LOBBIE



INTERNAL LOBBIE



INTERNAL LOBBIE



INTERNAL LOBBIE

6.0 Toilets

Where toilets are provided for staff or visitors in buildings or public places these should be accessible to and suitable for disabled users. Unisex accessible toilets should be provided, where possible, to permit assistance from a helper of the opposite sex.

Consideration should also be given to the needs of parents with small children and babies; at the least, a cubicle should be provided large enough for a parent and child, with a safe place to leave a buggy. Where those with children are likely to be frequent users, changing and nursing facilities should be provided as described below.

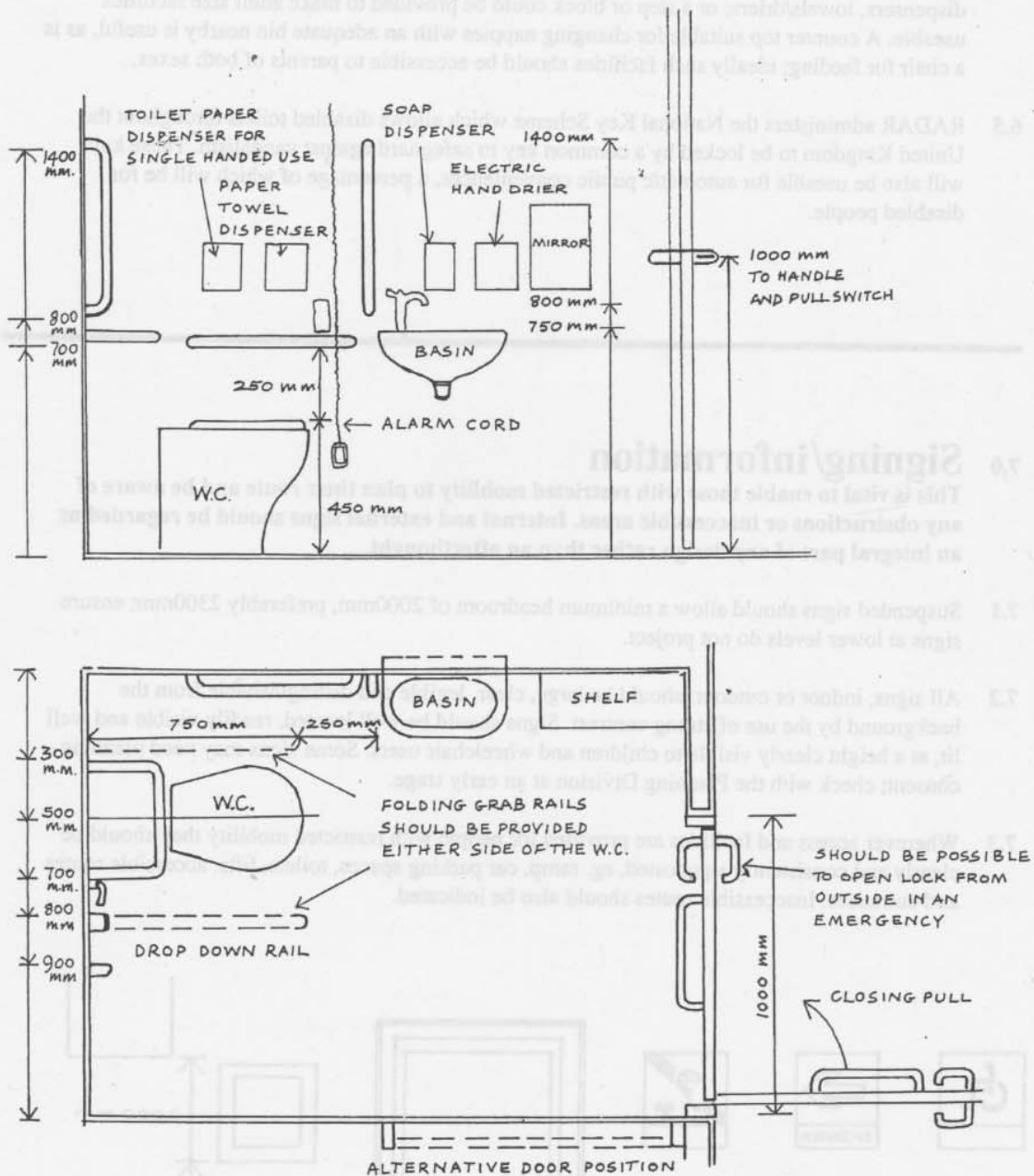


Diagram 13 TOILETS

- 6.1 The internal dimensions of a toilet cubicle should be preferably a minimum of 2m x 1.5m with a 1m wide outward opening or sliding entrance door and a non-slip floor. (Doors may open inwards provided the size of the cubicle is enlarged to provide 1.1m by 700mm of unobstructed space clear of the door swing. This would provide sufficient space for a wheelchair user or parent and child.

- 6.2 The internal layout of a toilet and provision of fittings should allow convenient use by wheelchair users (see diagram 10). Where more than one toilet is to be provided, left handed and right handed access should be provided. Locks should be of a type that can be opened from the outside in an emergency.
- 6.3 Occasionally, in an existing building where space is limited, provision of a fully accessible toilet can be difficult so perhaps a larger than standard cubicle could be provided suitable for the ambulant disabled or those with small children. Doors must open outward or slide/fold.
- 6.4 Where possible, facilities should be useable by small children eg. some low sinks, soap dispensers, towels/driers; or a step or block could be provided to make adult size facilities useable. A counter top suitable for changing nappies with an adequate bin nearby is useful, as is a chair for feeding; ideally such facilities should be accessible to parents of both sexes.
- 6.5 RADAR administers the National Key Scheme which allows disabled toilets throughout the United Kingdom to be locked by a common key to safeguard against vandalism. These keys will also be useable for automatic public conveniences, a percentage of which will be for disabled people.

7.0 Signing/information

This is vital to enable those with restricted mobility to plan their route and be aware of any obstructions or inaccessible areas. Internal and external signs should be regarded as an integral part of any design rather than an afterthought.

- 7.1 Suspended signs should allow a minimum headroom of 2000mm, preferably 2300mm; ensure signs at lower levels do not project.
- 7.2 All signs, indoor or outdoor, should be large, clear, legible and distinguishable from the background by the use of strong contrast. Signs should be well located, readily visible and well lit, at a height clearly visible to children and wheelchair users. Some signs may need planning consent; check with the Planning Division at an early stage.
- 7.3 Wherever access and facilities are provided for people with restricted mobility they should be clearly and consistently signposted, eg. ramp, car parking spaces, toilets, lifts, accessible routes and entrances. Inaccessible routes should also be indicated.

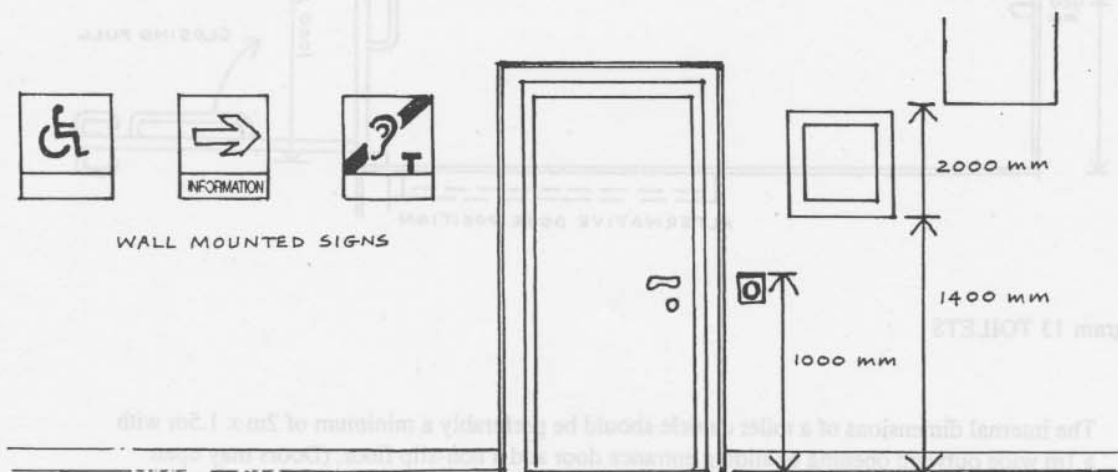


Diagram 14 SIGNS



Provision for guide dogs



Access for wheelchair users



Facilities for people with partial sight



Induction loop facility for hearing aid users

Diagram 15 STANDARD SYMBOLS

- 7.4 Standard symbols should be used where appropriate to indicate facilities. Symbols, pictorial signs or very simple wording would be helpful to children or those who do not read or understand English. Signs in other languages may be appropriate in some circumstances, such as where there are local minority languages or tourists.
- 7.5 For the visually impaired the clearest signs are black on yellow; remember that reading distances are less for these people. Raised/ embossed numbers, letters and floor plans could be used, supplemented by the use of braille, located 1.2m-1.5m above floor level.

8.0 Requirements for specific uses

8.1 Places of assembly and entertainment, pubs and restaurants

Users with reduced mobility do not want back entrances or segregated seating areas. The aim should at least be for wide doorways and no unnecessary changes in level.

- 8.2 In new buildings, reasonable provision for access should be made for disabled people to enter the building; inside suitable toilets and seating accommodation should be provided for the disabled where there is audience seating. Suitable seating should be available at all prices.
- 8.3 In old buildings, attempts should be made to improve access and facilities where possible. If a fully accessible building cannot be achieved then accessible parts and routes should be aimed for.
- 8.4 The main entrance should have clear access and signage, using ramps and steps where a change of level occurs. Parking areas should be close by. Entrance areas should be easy to negotiate with provision of information and signing of facilities. Internal circulation should be planned to give access to the maximum number of facilities (eg. each floor, toilets, bars and information desks). Avoid unnecessary changes of level (eg. seating "wells" in pubs). Where turnstiles are provided, there should be a by pass gate at least 800mm and preferably 900mm wide to allow for wheelchairs and buggies.

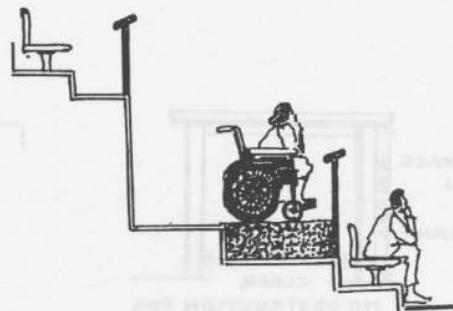
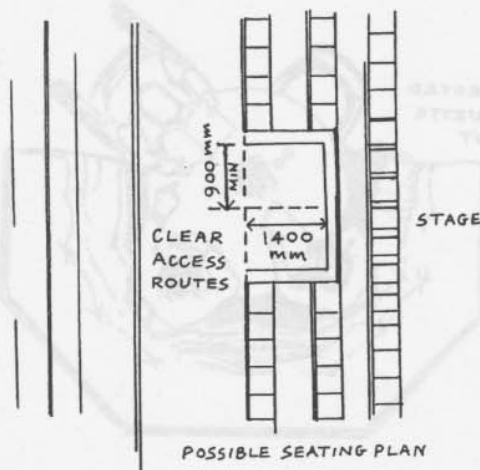
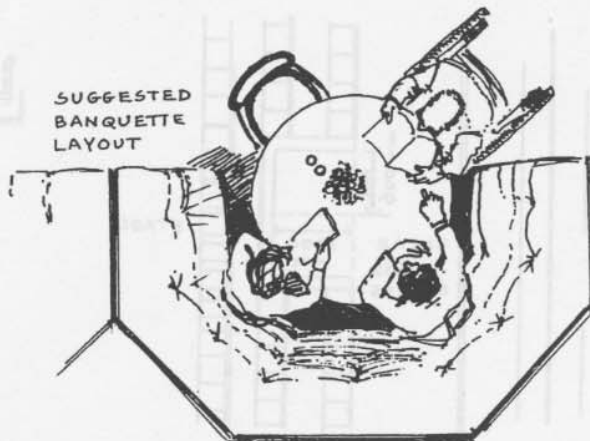
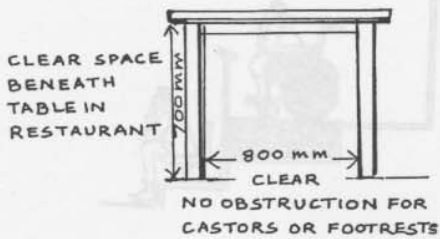
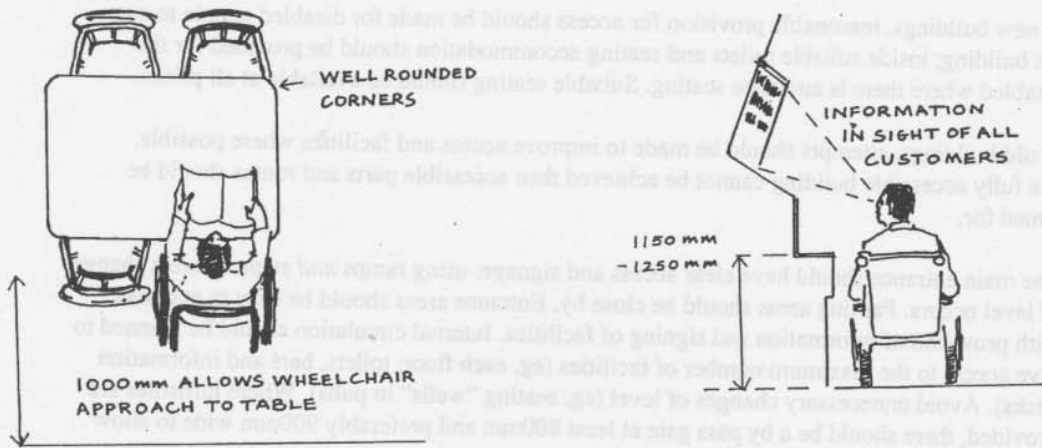


Diagram 16 SEATING ARRANGEMENTS

Diagram 17 PLACES OF ENTERTAINMENT, PUBS & RESTAURANTS



8.5 Shops

Shops should be fully accessible to all with restricted mobility, including parents with prams/buggies and small children. It is UDP policy that doorways in shop-fronts must incorporate suitably designed access for people with restricted mobility.

8.6 Doorways need to be at least 900mm wide to accommodate most types of double buggy.

8.7 Avoid unnecessary changes of level within shops.

8.8 Design display areas carefully, avoid obstructions which may restrict access for those with a visual impairment, wheelchairs or buggies; this includes temporary features such as rubbish bins, display baskets etc. Avoid sharp edged shelf units which could be walked into by a child or poorly sighted person.

8.9 Counters should be preferably 600/800mm high to allow for use by people in wheelchairs.

8.10 Checkouts/counters and surrounding areas should be wide enough. At least one checkout, or one in five in larger shops, should be 800mm wide (preferably 900mm) for wheelchairs/buggies.

8.11 Where turnstiles are provided, there should be a by pass gate at least 800mm wide for wheelchair/buggy users and the ambulant disabled.

8.12 Where staff are willing to help, advertise the fact and provide a facility such as a bell, if appropriate, to enable assistance to be called for.

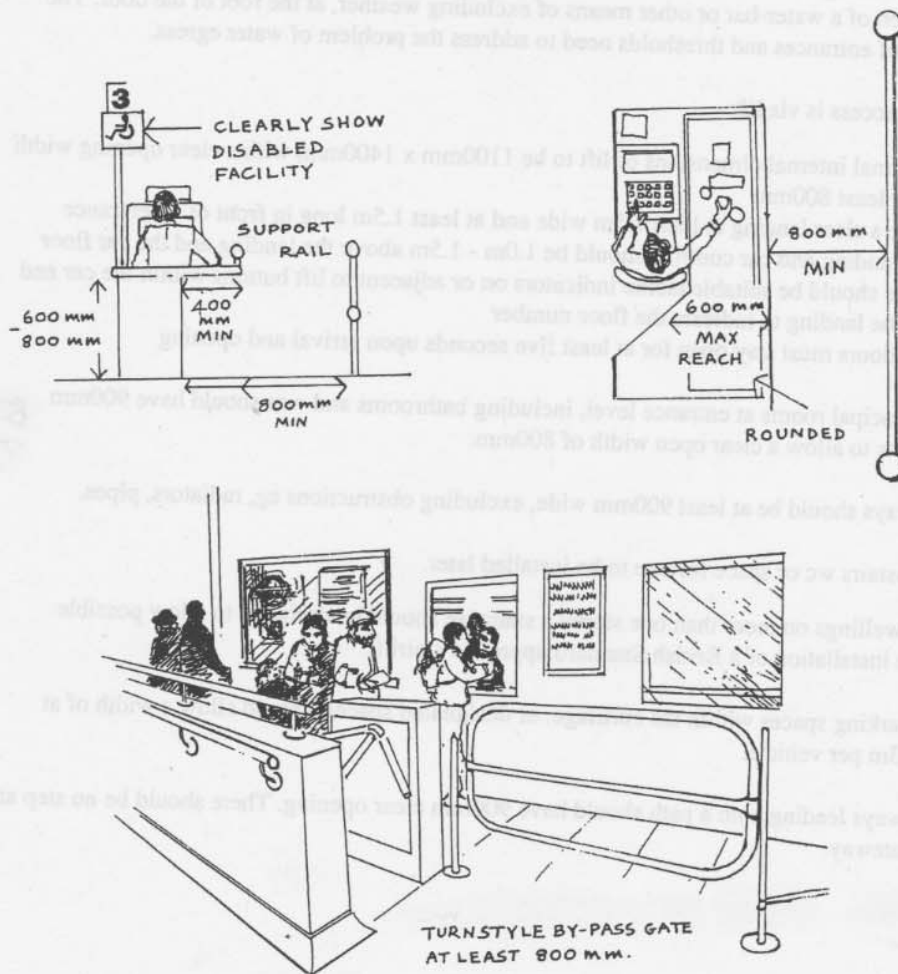


Diagram 18 SHOPS, CHECK-OUTS & ENTRANCES

8.13 Housing

The Unitary Development Plan (UDP) recognises the difficulty that those with restricted mobility may have in finding suitable housing, and aims to make provision for those with special needs.

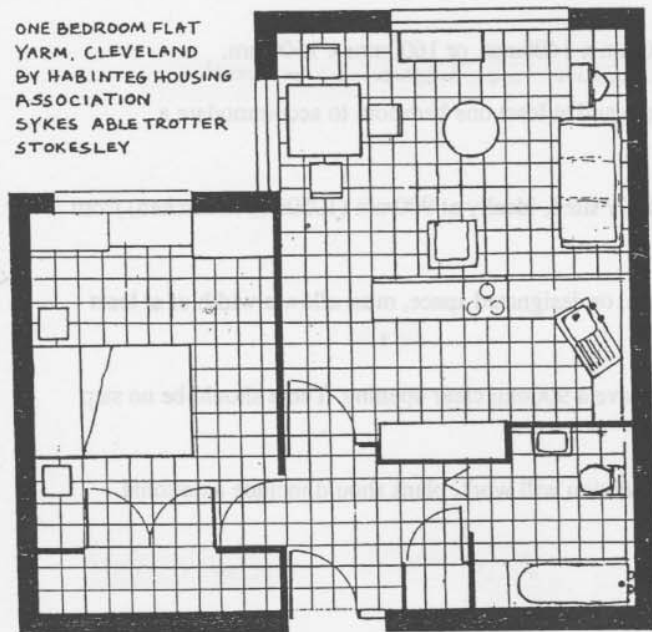
8.14 Mobility housing

It is UDP policy (HSG 7) that all new housing will normally be required to conform to the Council's mobility standards at ground floor level, and at other levels where there is lift access. Units created by conversion should also be designed to conform as far as practicable to mobility standards. Developers are also referred to "Housing for Disabled People" published jointly by the Institute of Housing and the RIBA. The Mobility Standards are as follows:

- a) At least one entrance to have level/ramped access from the street and/or parking area.
- b) Ramps should have a gradient between 1:14 and 1:20, be at least 900mm, and preferably 1200mm wide, with a level platform at the top of the ramp. Gradients to footpaths should be of limited length. 10m is considered to be the maximum length for a gradient of 1:20. Level access should also apply in approaches, entrances, hallways and corridors which are communal areas of access for multiple dwellings or flats.
- c) Standing area outside entrance door preferably covered (1200mm x 1200mm clear of any door swing).
- d) Entrance door minimum 850mm clear opening. 900mm clear opening would allow a double buggy to pass through.
- e) Threshold not higher than 15mm above floor level to either side of entrance ie, there may be a 15mm change in level to permit weathering of the sill or concrete threshold and the provision of a water-bar or other means of excluding weather, at the foot of the door. The design of entrances and thresholds need to address the problem of water egress.
- f) Where access is via lift:
 - minimal internal dimensions of lift to be 1100mm x 1400mm, with a clear opening width of at least 800mm
 - have a clear landing at least 1.5m wide and at least 1.5m long in front of its entrance
 - the landing and car controls should be 1.0m - 1.5m above the landing and the car floor
 - there should be suitable tactile indicators on or adjacent to lift buttons within the car and on the landing to indicate the floor number
 - the doors must stay open for at least five seconds upon arrival and opening
- g) All principal rooms at entrance level, including bathrooms and wcs should have 900mm doorsets to allow a clear open width of 800mm.
- h) Hallways should be at least 900mm wide, excluding obstructions eg, radiators, pipes.
- i) Downstairs wc or space for one to be installed later.
- j) For dwellings on more than one storey a staircase should be designed to allow possible future installation of a British Standard approved stairlift.
- k) Car parking spaces within the curtilage, or designated spaces, should allow a width of at least 3m per vehicle.
- l) Gateways leading onto a path should have 900mm clear opening. There should be no step at the gateway.

8.15 Wheelchair housing

On developments of 10 or more housing units it is UDP policy (HSG 8) that 10% of units must be specifically designed for, or easily adapted for, "Wheelchair Housing". The standards for "Wheelchair Housing" are as follows:



UNIT IN PROPOSED THREE-STOREY
SCHEME OF INTEGRATED WHEELCHAIR
AND ORDINARY HOUSING:
CIRCULATION SPACE WELL ORGANIZED
IN RELATION TO WHEELCHAIR
MANOEUVRE, AND AT 6.47 PERCENT
OF OVERALL AREA IS NOT EXCESSIVE
BEDROOM 3300 mm WIDE AFFORDS
COMFORTABLE WHEELCHAIR
MANOEUVRE AND ACCESS TO
DRESSING TABLE ETC

FROM "WHEELCHAIR HOUSING"
CI/SFB/81 (E3P)

WHERE SEVERAL MORE EXAMPLES
MAY BE FOUND

Diagram 19 EXAMPLES OF WHEELCHAIR HOUSING

- a) At least one entrance to have level/ramped access from street and/or parking area.
- b) Ramps should have a gradient between 1:14 and 1:20, be at least 900mm, and preferably 1200mm wide, with a level platform at the top of the ramp. Gradients to footpaths should be of limited length. 10m is considered to be the maximum length for a gradient of 1:20. Level access should also apply in approaches, entrances, hallways and corridors which are communal areas of access for multiple dwellings or flats.
- c) Standing area outside entrance door, preferably covered (1200mm x 1200mm clear of any door swing).
- d) Entrance door: 900mm doorset allowing 850mm clear opening.
- e) Where access is via lift:
 - minimum internal dimensions of lift to be 1100mm x 1400mm, with a clear opening width of at least 900mm
 - have a clear landing at least 1.5m wide and at least 1.5m long in front of its entrance
 - the landing and car controls must be 1.0m - 1.5m above the landing and the car floor
 - there must be suitable tactile indicators on or adjacent to lift buttons within the car and on the landing to indicate the floor number
 - the doors must stay open for at least five seconds upon arrival and opening
- f) Level access throughout, with flush or collapsible thresholds.
- g) Minimum corridor width 1200mm, or preferably a 1500mm minimum square hall and no corridors.
- h) Door widths 900mm to allow a clear open width of 800mm. The positioning and direction of opening of doors needs special attention. There should be no obstruction (eg, radiators) to limit the full opening of doors which should have a straight approach from both sides. Easily operated sliding or folding doors may be acceptable.

- i) Windows should have a maximum sill height of 900mm.
- j) Minimum bathroom dimensions 2100mm x 2100mm, preferably with a floor gully as well as a bath outlet to allow for subsequent adaptation. Including the wc in the bathroom will allow more room for manoeuvring. There should be space for a wheelchair and helper at one side of all the fittings.
- k) A separate wc should be at least 1700mm x 1400mm, or 1600mm x 1500mm.
- l) Hall, kitchen, living room, dining room and at least one bedroom to accommodate a 1500mm diameter clear circle.
- m) Sockets and switches should be carefully sited, ideally at 900mm (1050mm in kitchen) from floor level.
- n) Car parking spaces within the curtilage, or designated space, must allow a width of at least 3m per vehicle.
- o) Gateways leading onto a path should have a 900mm clear opening. There should be no step at the gateway.

In order to demonstrate how internal circulation will work, plans should include a notional layout for furniture.

8.16 Cash dispensers/letter boxes/stamp machines/ticket machines, recycling facilities etc.

All such equipment should be at a height suitable for wheelchair users.

- 8.17 Bank, building society, post office and other service machines should be accessible from a wheelchair, ie. no higher than 1m above floor level, and should be easy to operate with clearly visible information and an unobstructed approach. On controls, the use of raised numerals will allow for use by visually impaired people.

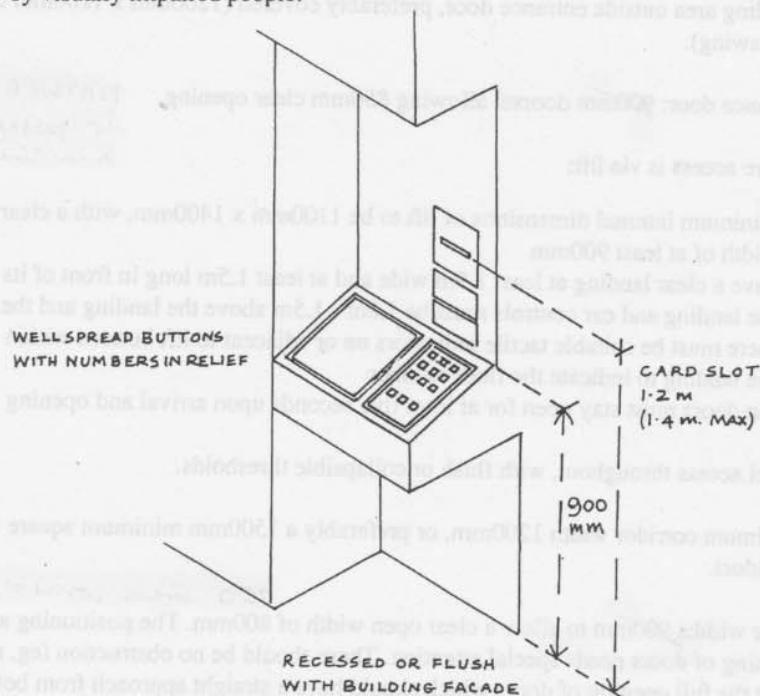


Diagram 20 SERVICE MACHINES

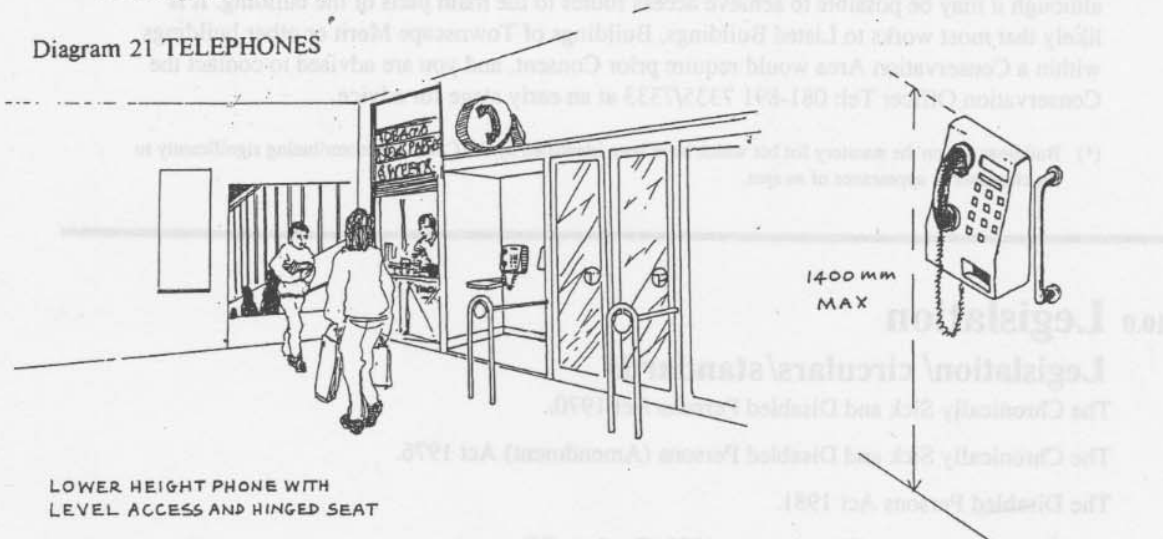
8.18 Telephones

Such facilities should take account of people in wheelchairs and those with impaired hearing.

8.19 Where public telephones are to be installed, at least one should be accessible to people in wheelchairs ie. the overall height no more than 1.4m above floor level with the coin slot no higher than 1.1m, with an acoustic enclosure and an adjacent support rail and good lighting. There should be sufficient space in front to manoeuvre a wheelchair (1.4m x 1.1m). Provision of a folding seat at 450mm height adjacent to the telephone is recommended for the use of ambulant disabled people.

8.20 Telephones should be equipped with amplifiers and induction couplers for the benefit of those with impaired hearing.

Diagram 21 TELEPHONES



LOWER HEIGHT PHONE WITH
LEVEL ACCESS AND HINGED SEAT

8.21 Security/fire and means of escape

Entry phones and other security systems should be installed in such a way as to allow use by people with disabilities. For specific advice on means of escape please contact the Chief Building Surveyor.

8.22 Notices regarding evacuation in the event of a fire or other emergency must be clearly visible, and exits must be well signposted.

8.23 Fire escapes and emergency exits must be accessible for those with wheelchairs. Consideration should be given to the measures that enable the safe evacuation of people with disabilities in the event of fire, in accordance with BS 5588 Part 8 1988.

8.24 Fire alarm systems should be visible as well as audible.

Diagram 22 EMERGENCY SIGNS



9.0 Special arrangements for Listed Buildings and Conservation Areas

With Listed Buildings, Buildings of Townscape Merit (*) and in Conservation Areas and other visually sensitive areas, accessibility has to be balanced against the effect on the building or its surroundings, and sometimes the ideal cannot be achieved.

However, most alterations to listed buildings to enable access to all-comers will be possible *provided* that the alterations would not involve removal of the original fabric of the building. In some instances the use of portable ramps may be more appropriate, indoors or out. Internal doorway widths may not lend themselves to the recommended wheelchair clearance width, although it may be possible to achieve access routes to the main parts of the building. It is likely that most works to Listed Buildings, Buildings of Townscape Merit or other buildings within a Conservation Area would require prior Consent, and you are advised to contact the Conservation Officer Tel: 081-891 7335/7333 at an early stage for advice.

(*) Buildings not on the statutory list but which have been identified by the Council as contributing significantly to the character or appearance of an area.

10.0 Legislation

Legislation/ circulars/ standards

The Chronically Sick and Disabled Persons Act 1970.

The Chronically Sick and Disabled Persons (Amendment) Act 1976.

The Disabled Persons Act 1981.

The Town and Country Planning Act 1990 (Sections 76).

Building Regulations 1991 Access for Disabled People Approved Document M.

Circular 10/82 DoE 1982 Re: Disabled Persons Act 1981.

Development Control Policy Note No. 16 Access for the Disabled DoE 1986.

Design Note 18 "Access for Disabled People to Educational Buildings" DES 1984.

"Code of Practice for Access for the Disabled to Buildings" British Standards Institution BS.5810: 1979.

"Code of Practice for Design and Housing for the Convenience of Disabled People" British Standards Institution BS.5619: 1978.

"Fire Precautions in the Design and Construction of Buildings – Part 8 – Code of Practice for Means of Escape for Disabled People" British Standards Institution BS.5588 Part 8: 1988.

"Road Lighting British Standard Code of Practice" British Standards Institution BS.5489.

"Textured Footway Surfaces at Pedestrian Crossings" – Department of Transport Disability Unit, Circular DU1/86.

Other documents

"Designing for the disabled". Selwyn Goldsmith RIBA 1976.

"Access for disabled people". Design guidance notes for developers. Stephen Thorpe. Centre for Accessible Environments.

"Designing for people with sensory impairments". Stephen Thorpe. Centre for Accessible Environments.

"Housing for Disabled People" – a supplement to "Homes for the Future" – 1988 – The Institute of Housing/The Royal Institute of British Architects.

"Reducing Mobility Handicaps". The Institution of Highways and Transportation July 1991, ISBN 0 902 933 08 6.

- "Designing buildings for visually handicapped people". Royal National Institute for the Blind 1986.
- "Informal Countryside Recreation for Disabled People". Countryside Commission Advisory Series No. 15 1981.
- "Providing Accessible Accommodation". English Tourist Board 1990.
- "The Part M Planner". Centre for Accessible Environments 1991.
- "Specifiers Handbook 1; Electrical Controls". Centre for Accessible Environments 1990.
- "Part M Design Sheets". Centre for Accessible Environments 1990.
- "The Good Loo Design Guide". Centre for Accessible Environments 1988.

11.0 Further advice

London Borough of Richmond upon Thames

Principal Officer
Occupational Therapist Unit
Fortescue House
Stanley Road
Teddington
TW2 5PZ
081-894 5544

Development Control Officers
Planning Department
Civic Offices
Twickenham 081-891
x7479 Ms. B Campbell (Richmond/Kew)
x7472 Mr G Green (Ham, Petersham/Mortlake, East Sheen, Barnes)
x7450 Mr R Summers (Twickenham and Whitton)
x7917 Mr D Tanner (Teddington and Hamptons)

Mr D Stabb (for listed building enquiries)
Conservation Officer
Planning Division
Civic Offices
Twickenham
081-891 7335

Mr D Baker
Chief Building Surveyor
Civic Offices
Twickenham
081-891 7347

Richard Kember
Richmond Advice and Information on Disability
The Annexe Day Centre
Fortescue House
Stanley Road
Teddington
TW2 5PZ
081-898 4225

Other organisations

GLAD (Greater London Association for Disabled People)

336 Brixton Road
London, SW9 7AA
071-274 0107

Centre for Accessible Environments

35 Great Smith Street
London, SW1P 3BJ
071-222 7980

Access Committee for England

35 Great Smith Street
London, SW1P 3BJ
071-233 2566

RADAR (Royal Association for Disability and Rehabilitation)

25 Mortimer Street
London, W1N 8AB
0207 250 3222

Royal National Institute for the Blind

224 Great Portland Street
London, W1N 6AA
071-388 1266

Royal National Institute for the Deaf

105 Gower Street
London, WC1E 6AH
071-387 8033

The Partially Sighted Society

Mrs Jo Beech – Director
206 Great Portland Street
London, W1N 6AA
071-387 8840

Disabled Living Foundation

380-384 Harrow Road
London, W9 2HU
071-289 6111

MIND

22 Harley Street
London, W1N 2ED
071-637 0741

MENCAP (Royal Society for Mentally Handicapped Children and Adults)

Mencap National Centre
123 Golden Lane
London, EC1Y 0RT
071-253 9433

Age Concern

60 Pitcairn Road
Mitcham
Surrey, CR4 3LL
081-640 5431

Confederation of Indian Organisations (U.K.)
5 Westminster Bridge Road
London, SE1 7XW
071-928 9889

Standing Conference on Ethnic Minority Senior Citizens
Anjana Nathwani
Information Officer
5 Westminster Bridge Road
London, SE1 7XW
071-928 0095

The Institution of Highways and Transportation
3 Lygon Place
Ebury Street
London, SW1W 0JS
071-730 5245

RIBA (Royal Institute of British Architects)
66 Portland Place
London, W1N 4AD
071-580 5533

RTPI (Royal Town Planning Institute)
26 Portland Place
London, W1N 4BE
071-636 9107