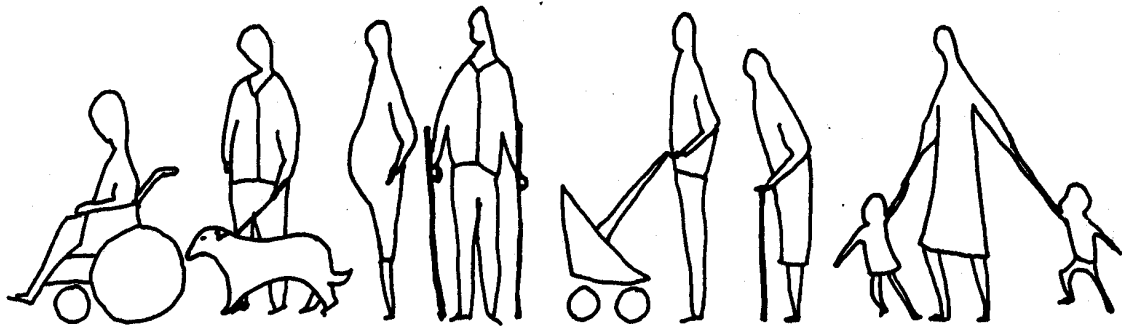


ACCESS FOR ALL

Designing for an Accessible Environment



Planning Policy and Guidance

Support for Good Development

Department of Planning Services
Planning and Building Standards
May 1996



A great place to live, work & play

ACCESS FOR ALL

Designing for an Accessible Environment

Contents

Introduction	Page 1
The External Environment	Page 2
Changing Levels	Page 7
Entrances	Page 9
Inside Buildings	Page 11
Accessible Toilets	Page 13
Types of Buildings	Page 16
Provisions for those with sensory disabilities	Page 20
Access Check List	Page 21

INTRODUCTION

These guidelines aim to allow full access for everyone in Scarborough Borough to buildings and outdoor spaces. These include: car parks, pedestrian areas, homes, shops, libraries, banks, building societies, places of worship, schools, factories, cinemas, community or leisure centres, hospitals, surgeries, and all places of work including offices. The Council is committed to making access improvements to its own buildings. Difficulties arise where buildings are of historic interest. Solutions are not always straightforward. Where alterations and/or adaptations are made to listed buildings or to buildings in a Conservation Area, it is often necessary to reach a compromise between accessibility and aesthetics. The Council's Planning Section can help with this.

People with disabilities experience limitations to their mobility, comprehension or communication which they generally overcome with the aid of quite commonly used equipment such as wheelchair, stick, crutches, hearing aid, spectacles, long cane or guide dog. Having achieved rehabilitation in learning to overcome their acquired impairment, they are then disabled by a combination of poorly designed environment and equally poor social attitudes towards their personal circumstances.

A fully accessible environment improves the quality of life for all its users, but is essential for people with mobility, sight or hearing difficulties, elderly people, children and people with prams, buggies or shopping trolleys.

The Building Regulations 1991 require through Part M that provision be made for disabled people to use all new buildings, except for houses and flats.

Standards prescribed in the Building Regulations may differ slightly from standards set out in this guidance. Building Regulations provide minimum standards.

The guidelines are not meant to be definitive, and many are also minimum requirements to be improved on where possible. The guidelines do not cover internal specifications to any great extent. The Council can give you further advice on design and should be contacted for more information if needed.

Whilst appropriate legislation has been considered, further investigations (for example of the Buildings Regulations 1991) may be necessary to ensure that a finished building complies with all aspects of health and safety legislation. Further advice is available from the individual Departments within the Council.

If you require further information or assistance with a project in relation to disability issues, then please contact the Council's Planning or Building Control Sections on 01723 372351. Alternatively you may write to the Director of Technical Services, Scarborough Borough Council, Town Hall, St. Nicholas Street, Scarborough, YO11 2HG.

THE EXTERNAL ENVIRONMENT

Car Parking

Parking bays, clearly marked with the Orange Badge symbol, must be provided close to an accessible (and main) entrance to the building, for people with restricted mobility. Covered space is preferred as transfer between the car and a wheelchair may take some time, while puddles or ice could be dangerous for those unsteady on their feet.

There should be the following numbers of special parking spaces for drivers with disabilities:

Offices - 1 space for each 470 sq m of office floor space;

Industry and Warehousing - 1 space for each 743 sq m of industrial or storage floor space;

Shops - 1 space for each 470 sq m of retail floor space;

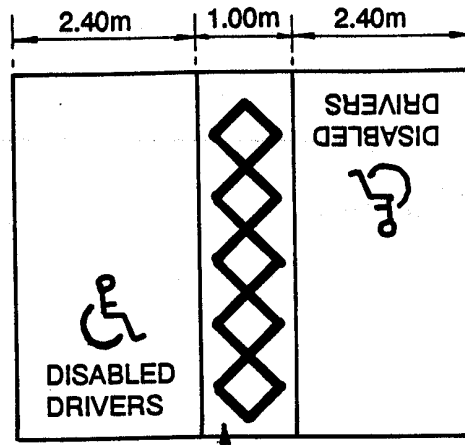
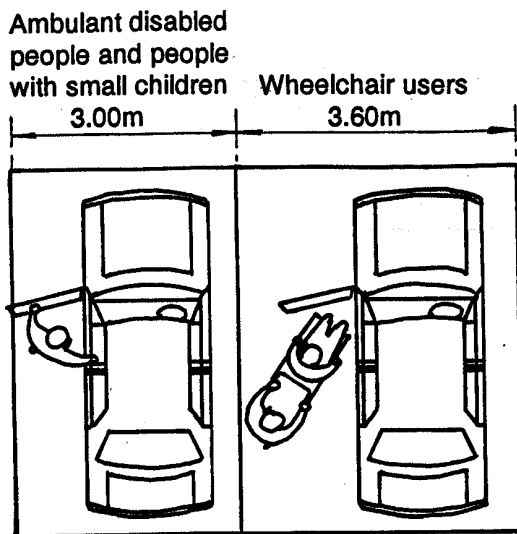
Other - 5% of spaces required for other kinds of development.

Individual spaces of 3600 mm in width are required but standard bays of 2400 mm can be used with a shared space of 900-1200 mm clearly marked out between bays. In this case, vehicles could park in opposite directions.

Where garages for people with disabilities are provided, up-and-over doors that do not necessitate stepping back or reversing the chair are preferred, although not all such doors are convenient. There should be adequate room to draw a wheelchair alongside the car.

In larger car parks wider bays should also be provided for users with push-chairs and small children. These can be designated with the 'We Welcome Small Children' campaign symbol.

- *The car park surface should be smooth and even and free from loose stones.*
- *Accessible bays should be clearly signposted from the car park entrance.*



Marked out shared space between 2 standard sized parking bays allows space for transfer from a wheelchair into a car

- *Bays need to be wide enough to allow car doors to be fully opened to allow disabled drivers and passengers to transfer to a wheelchair parked alongside.*
- *Kerbs between the parking area and routes to buildings should be dropped.*
- *Bays should be identified as for disabled drivers or passengers only.*
- *Bays should be close to the facilities the car park serves - within 50 m if routes are uncovered, 100 m if covered.*
- *Where ticket machines are provided these should be close to the disabled parking, clearly advising of any concession for disabled people and accessible for wheelchair users. They should be at an appropriate height for use by a wheelchair bound person.*

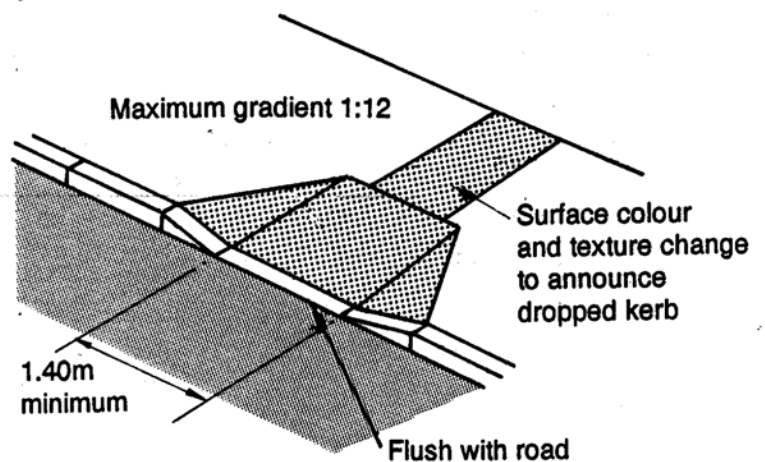
Pavements, Paths and Pedestrian Areas

Pavements and paths need to be wide enough to allow the unimpeded passage of wheelchairs, and push-chairs. Where there are lamp posts or other obstructions on the edge of a pavement these should not reduce the width to the extent that a wheelchair cannot pass. Surfaces should not be uneven, in particular paving stones should be level, and loose gravel chippings should not be used as they make wheelchair access virtually impossible. Surfaces should be firm, slip resistant in all weathers and well

laid and maintained. Path edges should be defined for tactile and visual information. At road junctions or crossing points, pedestrian and vehicular surfaces should be blended to a common level with an easy slope.

All routes used by pedestrians should:

- *be at least 20 m wide to allow people with prams/ buggies and wheelchairs to pass without difficulty;*
- *have an even, well-maintained non-slip surface;*
- *be as level as possible, with gradients not exceeding 1 in 20;*
- *have well-defined edges;*
- *be well signposted with good contrasting colours and clearly defined symbols;*
- *provide a direct well-lit route, with no pools of light and dark.*



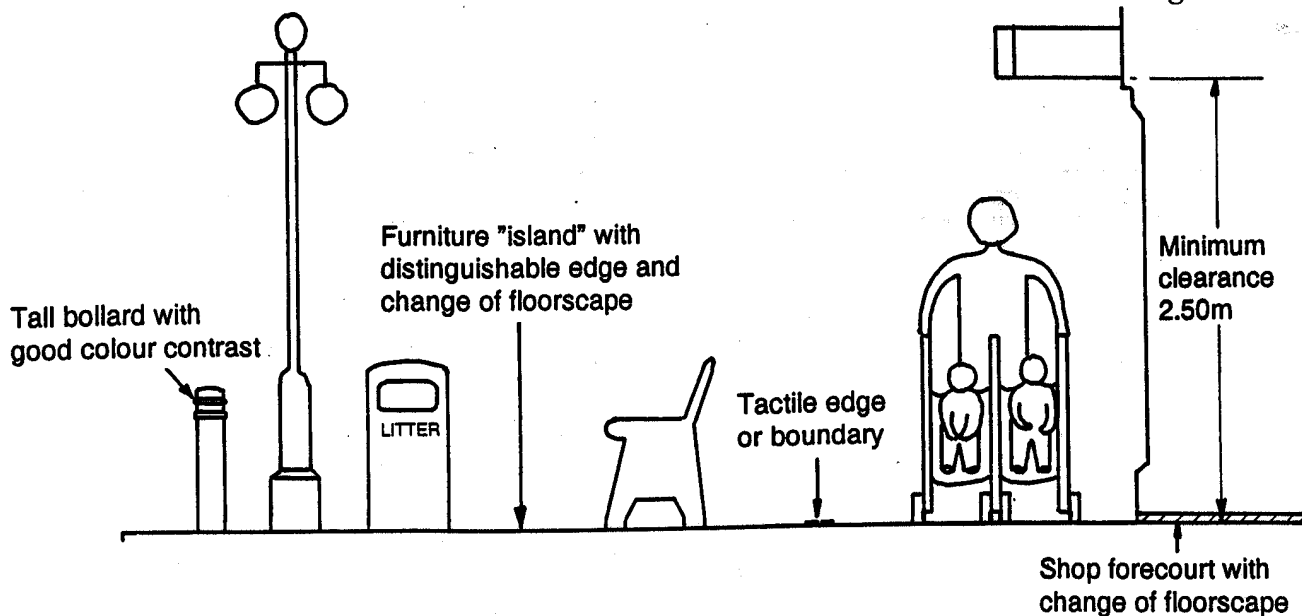
At all places where pedestrians are crossing roads or other vehicle carriageways:

- *the kerb should be ramped flush with the carriageway - no upstand;*
- *there should be a gentle gradient (preferably 1:20, but not exceeding 1:12);*
- *the area around the ramp should have a textured surface that is easily identified by blind or partially sighted people;*
- *crossing ramps should be directly opposite one another across the carriageway;*
- *a large camber on the road into the gutter should be avoided.*

Street Furniture and Lighting

Street furniture should be negotiable by people in wheelchairs and with prams and should not be hazardous to blind and partially sighted people. The provision of appropriate seating is important for people with disabilities.

- *Seats with arms and upright backs should be provided wherever possible, especially where people are likely to be waiting for any length of time, for example at bus stops, by taxi ranks, by public telephones or by lifts. They should be provided along roads that are frequently used by the elderly and disabled - particularly in shopping streets.*
- *Street furniture should be positioned at either the front or the back edge of the pavement rather than in the middle where it would cause an obstruction.*
- *For the blind and partially sighted it is important that wherever possible obstacles (whether seats, raised flower beds, litter bins or anything else) be regularly, rather than randomly, situated.*
- *Projections at head level (including buildings, shops' awnings and overhanging bushes) can be dangerous and obstructions at ground level should be about 900 mm, i.e. waist rather than knee high.*



- *For the partially sighted a change in the colour of the surface around an obstacle helps, while for the blind a change in the texture is essential. In many cases this can be incorporated as a design feature, for example, around raised planters or litter bins.*
- *Gratings should be at right angles to the pedestrian flow and flush with paving. This is so that wheelchair wheels do not get caught.*
- *Windows or doors in general use should not open outwards and should not cause an obstruction on a path which runs along the edge of a building.*
- *Display boards on the public highway are illegal and are a danger to elderly people, blind or partially sighted people, other disabled people and people pushing prams.*
- *All pedestrian routes and facilities such as car parks, steps, ramps and precincts should have a high standard of artificial lighting and this should be designed to prevent glare and shadows.*

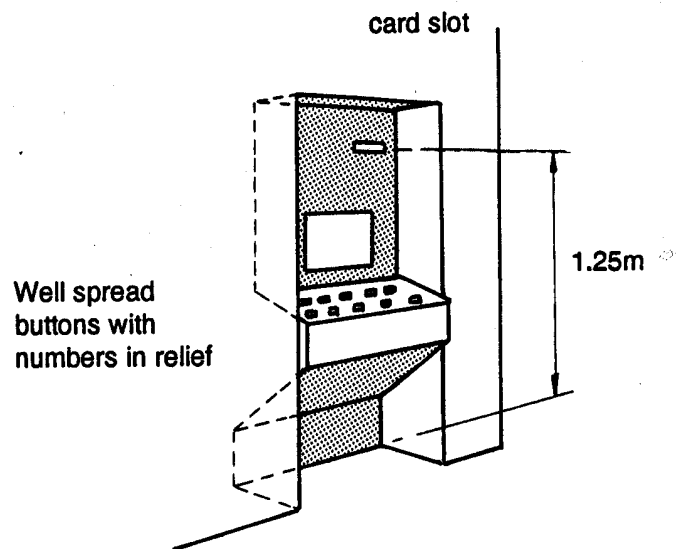
Telephones, Cashpoints and Vending Machines

Public telephones should:

- *include phones with handsets no higher than 1400 mm, with coin or card slot no higher than 1100 mm, and equipped with amplifiers;*

- *not be fully enclosed as this impedes access;*
- *be provided adjacent to taxi-ranks and convenient places for the caller to be picked up by car;*
- *be in well-used and well-lit locations.*

Pillar boxes, vending machines, cash points, etc should also be fully accessible to people with a range of disabilities.



All automatic telling machines should provide:

- *an accessible clear space at least 1500 mm x 1500 mm in front of the machine to give direct access;*
- *all controls including information on their functions visible from a height of 1060 mm to 1740 mm;*

- *identification of controls and their functions by colour contrasts, together with raised letters/numbers or Braille;*
- *controls separated from each other, positive (not touch-sensitive) in their action, and raised above their background;*
- *no control higher than 1250 mm above adjoining ground level (lower if recessed or if immediate access prevented by a projection on the building face);*
- *information or instructions displayed on a screen to be of a size and colour-contrast to maximise convenience to users, and visible from all heights between 1060 mm and 1740 mm in all lighting conditions by careful location, screening or light-sensor brightness adjustment;*
- *voice guidance.*

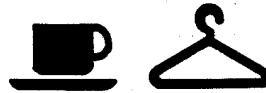
A single machine should meet all these requirements, as should one in an installation of two or more at the same location. If service outside normal business hours is provided, at least one machine meeting these requirements should provide that extended service.

Signs, Signposts and Symbols

Information signs should be:

- *positive and an integral part of design;*
- *well-lit in bold lettering;*

Waiting room — Letters should provide good contrast against background



— Symbols should be as near pictorial as possible



— Access for wheelchair users

- *at a height clearly visible to children and wheelchair users;*
- *recognised symbols or simple words;*
- *printed in black or dark blue on a yellow background as preferred by partially sighted people.*

Raised letters are helpful to blind people particularly. They should be within hand reach at a reasonable level. Ensure the background surface is comfortable to touch. Confine to single letters, numerals, symbols and keep to standard positions in a building.

Symbols should be as near pictorial as possible and standard symbols should be used where possible. There are standard symbols for facilities such as induction loops and "assistance available if required."

CHANGING LEVELS

Steps and Stairs

Many ambulant disabled people prefer steps to ramps. There are different recommended step sizes for internal and external steps, but the principles that should be observed are similar.

- *There should be a change in the texture and colour on the surface near the steps and a top landing should have a tactile surface, to give advance warning of the change in level.*
- *Step nosings should be distinguishable through contrasting brightness.*
- *People who wear callipers or who have stiffness in hip or knee joints are particularly at risk of tripping by catching their feet beneath nosings or treads. Physical weakness on one side or the other and sight impairments, necessitate tread dimensions which allow both feet to be placed squarely onto them.*
- *Tread surfaces should be non-slip and winding staircases and open risers should be avoided while nosings should not project, although risers may be splayed.*
- *Treads must measure at least 280 mm in depth on external steps, 250 mm on internal steps.*

- *Risers must not exceed 150 mm on external steps, 170 mm on internal steps.*
- *Each flight must rise only 1200 mm before a level landing is reached.*
- *The edges of steps must be clearly marked and landings at the top and bottom of steps should have textured warning surfaces.*
- *Where there is a small change in level, two shallow steps separated by a platform of at least 1200 mm depth could be negotiated by a wheelchair user, whereas two steps without a platform would be impossible for most.*

Ramps

Ramps are nearly always preferable to steps for people in wheelchairs, but for many ambulant disabled people - particularly those who are unsteady on their feet - they can be a hazard. It is essential that the presence of a ramp is clearly indicated by a change in the texture and possibly the colour of the surface at either end of the ramp, and the surface must be non-slip.

Very long ramps are not only tiring but also space consuming, and in the long run lifts may be a better alternative. Where long ramps are necessary then rest platforms should be incorporated in the length of the ramp. There should be a level platform at each end of the ramp, particularly where there are outward-opening entrance doors. In this case the platform should be large enough for a person in a wheelchair to open the doors without having

to reverse the chair onto the ramped surface. A well designed ramp can help people with baby buggies, prams, shopping trolleys and those making deliveries as well as wheelchair users.

Ramps:

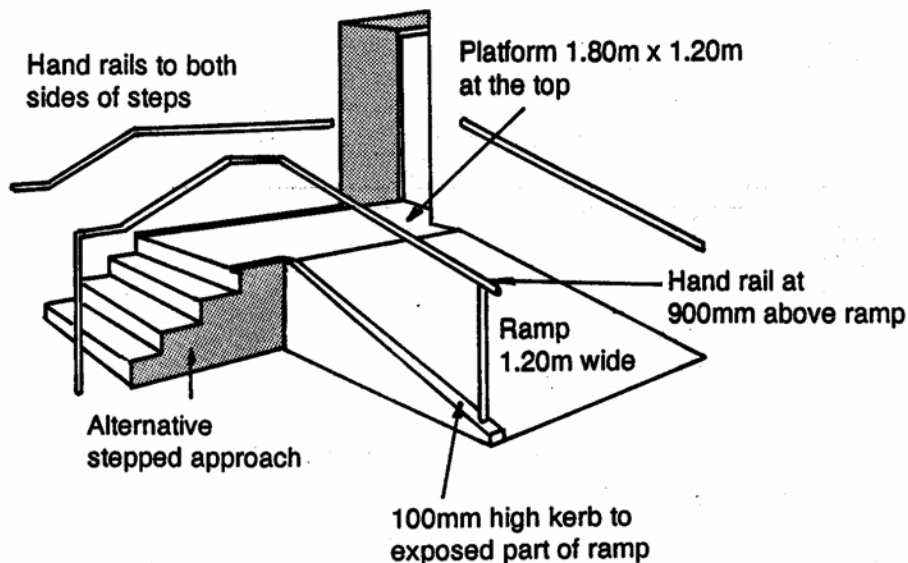
- *should be at least 1200 mm wide;*
- *must never exceed a slope of 1:12 when the slope is 5 m in length, 1:15 where it is 10 m in length and have a preferred slope of 1:20;*
- *should have a level unobstructed platform measuring 1800 mm x 1800 mm at the top (minimum 1800 mm x 1200 mm);*
- *should be no longer than 10 m or have platforms every 10 m;*
- *should have handrails on both sides, 900 mm above the ramp and landing levels;*

- *there should be a small kerb of at least 100 mm on the exposed side(s) of the ramp to prevent wheelchairs or walking sticks from slipping off the edge.*

Handrails

Handrails:

- *should be continuous on both sides of ramps and steps;*
- *must be 900 mm above surface level of the ramp or the pitch line of the stairs and extend at least 300 mm beyond both the top and bottom of the ramp or steps;*
- *a lower handrail (600 mm) should be provided for children's use;*
- *should be circular with an easy grip, and a diameter of 45 - 50 mm;*
- *the end of the handrail should end positively with a rounded end, or return to the wall;*



ENTRANCES

The main entrance must be easy to identify, covered and well lit. Level access or ramps and steps must be provided and the entrance must have a flush threshold.

Doors

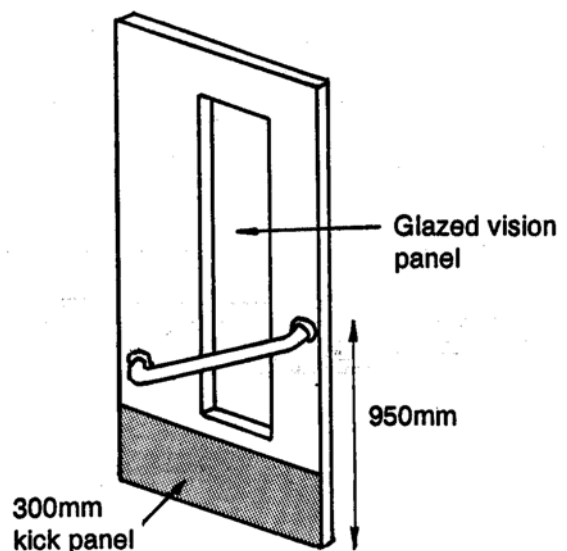
Apart from being of an adequate width for wheelchairs, doors should be easy to open by people with limited strength or who are unsteady on their feet.

- *Where doors have two leaves it should be possible for a wheelchair to obtain access without having to open both doors.*
- *Two-way swing doors are advisable as some people find it easier to push a door than to pull it towards them.*
- *Revolving doors must be avoided where they are the only means of access.*
- *In public buildings and shops, self opening doors are often preferred by people with wheelchairs or pushchairs but sensors must be adapted to respond to varying heights and weights and must have reasonable opening times to avoid accidents.*

Entrance doors must:

- *have a clear opening at least 800 mm wide, to allow access for larger electric wheelchairs or a double buggy;*

- *have either lever handles placed 950 mm above the ground or sloping D-shaped handles which start not more than 750 mm from the ground and reach no higher than 950 mm at the opening side;*
- *have a floor spring or door closer with delayed action, although not so strong that access is hindered;*
- *have long glazed vision panels to enable children and wheelchair users to be seen - the area of visibility must be at least 900 mm to 1,500 mm;*
- *be light and easy to open;*
- *have a kickplate of 300 mm in depth minimum;*
- *have an unobstructed space on the side next to the leading edge of at least 300 mm;*



- *have features such as letter boxes and door bells set about 1000 mm above the ground.*

Frameless glass doors are dangerous as the partially sighted and children may not see them, while wheelchairs may damage the glass or even break it. Where large areas of glass are used this should be clearly indicated by the use of coloured panels or signs on the door, and kicking plates should be provided.

Visual warnings on glass doors should be set between 1050 mm and 1650 mm from the floor.

Entrance Lobbies

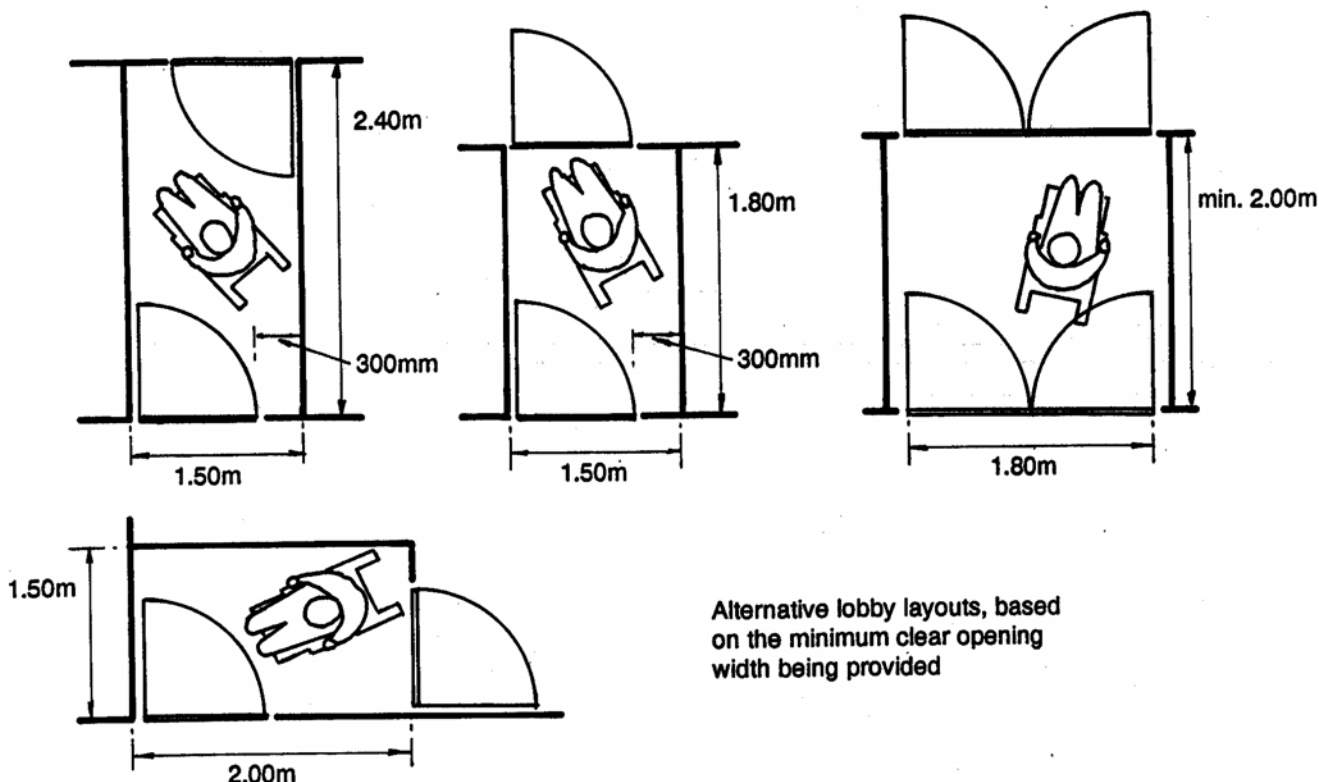
Many public buildings have double doors at the entrance with a lobby between them to minimise heat loss. If this space is too small anyone with a mobility impairment can become trapped. Where right angled turns are involved, as occurs in some smaller shops and restaurants, additional space is needed.

Entrance lobbies must provide:

- *adequate space for wheelchairs and double buggies to manoeuvre without obstruction;*
- *doormats which are inset flush with a non-slip floor;*
- *artificial lighting, used to improve contrast and visibility when moving from the light outside into the interior. Uplighting is preferred by partially sighted people.*

Consideration should be given to the fact that other people may be using the lobby at the same time, either assisting the person in the wheelchair, or passing in the opposite direction. Turnstiles must be avoided.

The lobby layouts shown in this section are based on a minimum clear opening width. Wider doors are preferable to ease access wherever space is available to do so.



Alternative lobby layouts, based on the minimum clear opening width being provided

INSIDE BUILDINGS

Routes within the building should be clear, uncluttered and obvious.

Lighting

Lighting should provide a uniform level of light. Special attention should be paid to possible danger areas such as the top and bottom of stairs and ramps. High levels of concentrated light, such as spotlights, and highly reflective surfaces should be avoided as they can cause glare.

Doors

Single doors should provide a clear opening width of 750 mm, although a preferred width is 900 mm.

In appropriate locations, automatic sliding doors are ideal, hinged swing doors being potentially hazardous.

In solid doors, vision panels are necessary, extending below the middle of the door.

Lever type door handles should be provided in a contrasting colour, located about 1040 mm from floor level.

Reception Areas

Reception areas should be easily located and well-lit and should have:

- *enough space for circulation of prams, buggies, wheelchairs and people;*
- *desks and counters with at least a portion which is only 750 mm high so that wheelchair users and children can see and be seen over the top;*
- *seats at varying heights but not lower than 420 mm;*
- *where appropriate, induction loops (as described at page 21), indicated by a clear, visible sign and staff should be trained in their usage. The loop system must always be switched on;*

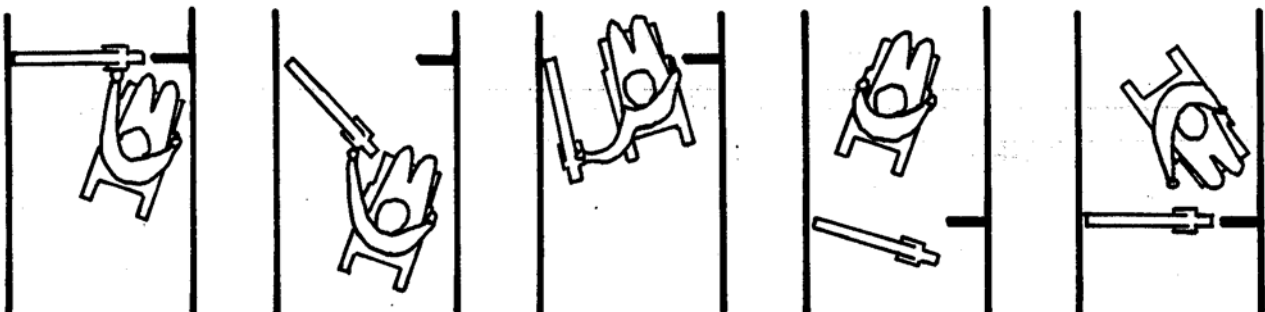


Diagram showing the space required to open a door from a wheelchair and how it is used

- *a furniture layout that avoids positioning desks and counters in front of windows; bright light behind a speaker's head makes it very difficult to lip-read;*
- *where space permits and in appropriate circumstances, play equipment for waiting children.*

Corridors and Circulation Space

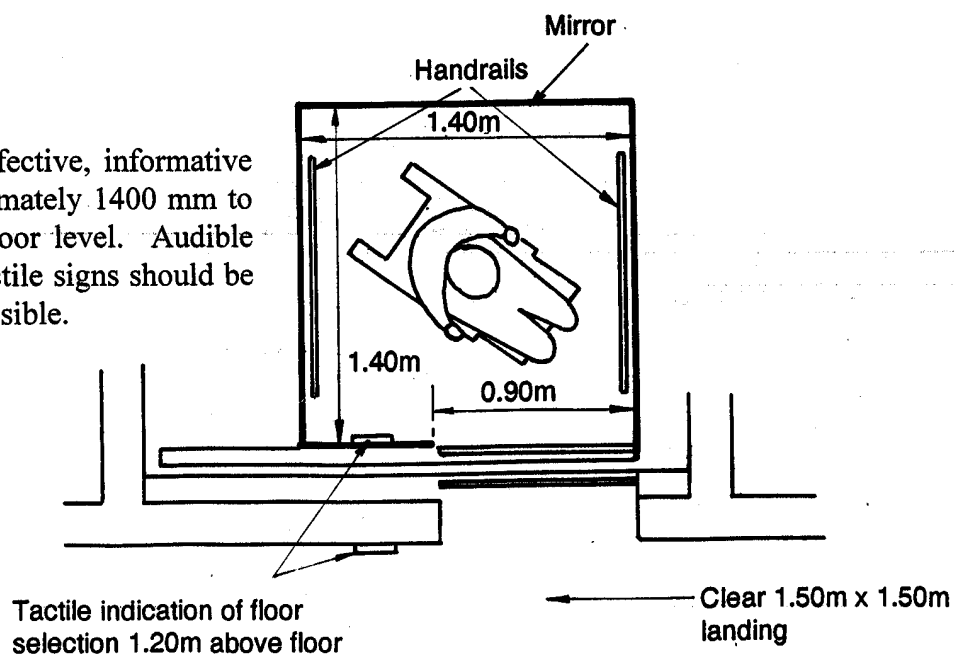
These must be at the same level as the accessible entrance and lift landings. Any change in level or ramp must be lit and identified by contrasting colours and textures (see Stairs and Steps).

Corridors should be 1500 mm wide (minimum 1200 mm) to allow a wheelchair user to manoeuvre. Internal doors should be 900 mm wide (minimum 750 mm).

Internal steps must comply to the same standards as external steps to allow good access for the ambulant disabled. Lobbies should measure at least 1500 mm by 1700 mm.

Signs

Signs should be effective, informative and placed approximately 1400 mm to 1700 mm above floor level. Audible information and tactile signs should be provided where possible.



Floor Surfaces

Floor surfaces should be non-slip when wet or dry. Changes in floor materials, i.e. changes from carpet to lino, at set points throughout the building, can provide clues to location for people with a visual handicap.

Fire Alarm Systems

Fire alarm systems should provide visual in addition to audible warning. There is a need to set aside "refuges" normally sited within staircases, where disabled people can await evacuation in the event of an emergency.

Lifts

Lifts are the best method of vertical circulation for most people with disabilities. For safety, lifts should be self levelling at each floor and there should be sufficient unobstructed space in front of the lift to allow a wheelchair to approach without the need to turn. A bench or chair should be provided for people waiting for the lift. The call button should be within the reach of a person in a wheelchair.

Lifts should have:

- *a clear landing at least 1500 mm wide and 1500 mm long in front of its entrance;*
- *a door or doors which provide a clear opening width of at least 900 mm;*
- *a car whose width and length is at least 1400 mm.*

Where possible allowance should be made for space for a person accompanying the wheelchair. A preferred internal lift size is 2200 mm x 1400 mm;

- *landing and car controls which are between 900 mm and 1200 mm above the landing and the car floor and suitable tactile indicators on or adjacent to lift buttons;*
- *visual and voice indication of the floor reached if it serves more than three floors;*
- *doors which will stay open for at least 5 seconds upon arrival and opening;*
- *handrails fitted at recommended handrail height;*
- *a mirror on the wall opposite the doors.*

If a storey of a building contains a unique facility, such as a small library or a training room, and which anyone using the building could reasonably expect to use, access could be by a wheelchair stairlift provided no

reasonable alternative solution is available.

Seats and Tables

Provision of seating is of considerable benefit to many people who need to rest periodically, especially in many wine bars and sandwich bars where it is assumed that most customers want to stand. Seats should not be fixed to the floor. It may be necessary to remove seating to allow a wheelchair user to sit at a table, or someone may need additional leg room if they have stiff joints. A variety of seating will assist in accommodating different needs.

ACCESSIBLE TOILETS

The provision of accessible toilets is essential if disabled people are to enjoy equal access to, and the use of, buildings. In principle, toilets should be no less available for disabled people than for others.

Facilities for Wheelchair Users

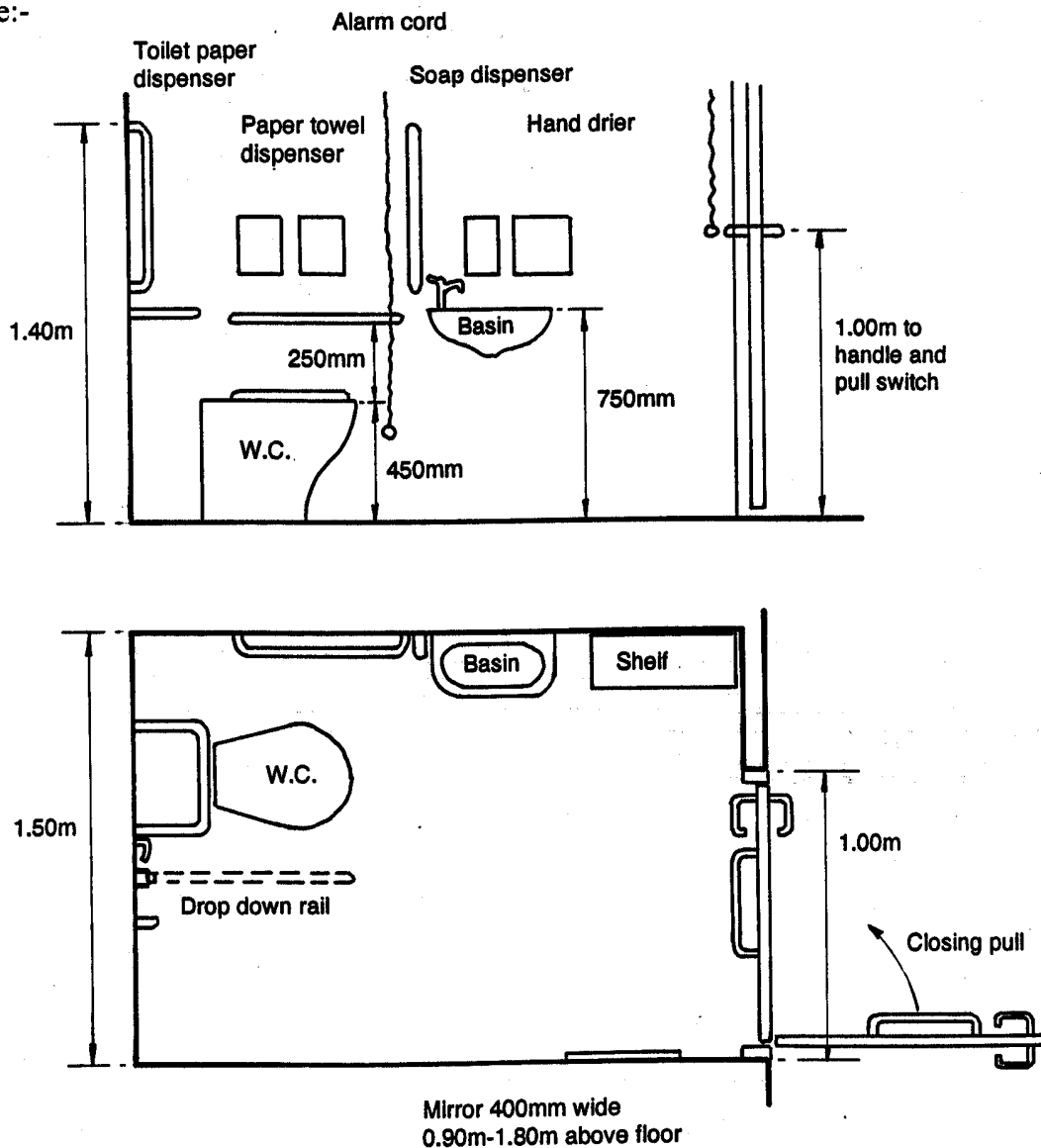
A separate unisex w.c. should be provided to allow a disabled person to be assisted by a member of the opposite sex if necessary. In addition single sex facilities may also be provided. The internal dimension of a toilet cubicle must be a minimum of 2000 mm x 1500 mm with a 1000 mm wide outward opening entrance door. Where there is the potential to provide a larger facility, the provision of a changing bench for an adult may be considered. A facility for the door to be opened from the outside in an emergency must be provided and a hinged door should be fitted with a

grab bar to allow it to be pulled or pushed shut and a kick plate to allow it to be nudged open.

Toilets should be able to accommodate a wheelchair both alongside and in front of the pedestal. There are many different layouts of the cubicle that are acceptable, and also different sizes of cubicle quoted as being adequate for wheelchair use. The information given here is intended to act as guidance, alternative layouts which may be found in other publications are also acceptable so long as the minimum cubicle size is observed.

The basic principles to be observed in designing a toilet for use by the disabled are:-

- a clear space for a wheelchair next to the toilet - 850 mm;
- w.c. seat of closed type and firmly fixed;
- a shallow wash basin fitted with lever spray mixer taps set at a height of 750 mm from the floor;
- grab rails within easy reach of the toilet;
- a full-length mirror (to check dress);



- *space for a wheelchair to manoeuvre;*
- *a chain or handle to flush the toilet, rather than a push button;*
- *a non-slip floor surface in contrasting colour to the wall;*
- *a light switch at 1040 mm from floor level;*
- *a pull-cord operated alarm bell, which should extend to within 300 mm of the floor, in supervised facilities;*
- *a toilet paper holder for single handed operation;*
- *a coat hook 1400 mm from floor level - additional hooks and shelves are useful for placing or hanging bags etc and should be set at a height of 750 mm;*
- *a container for disposables should be provided, which could be wall mounted or inset into the wall.*

Grab rails should:

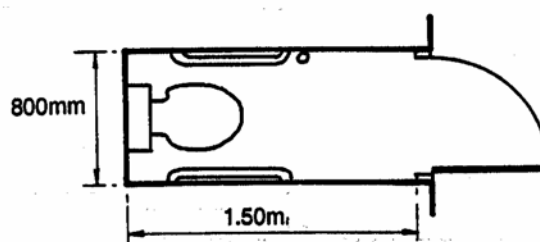
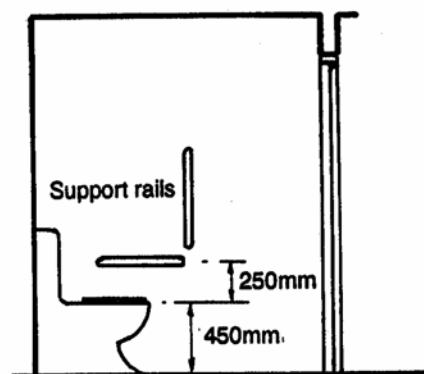
- *be 35 mm diameter and have a good grip when wet;*
- *be in contrasting colour to the walls;*
- *include fixed vertical and horizontal rails, and a drop down rail.*

Facilities for the Ambulant Disabled

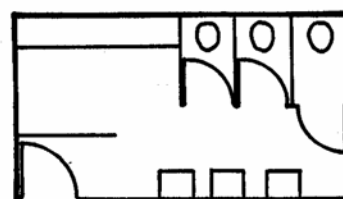
Disabled people may be able to make use of traditionally designed, able-bodied single-sex toilet accommodation if it follows some key design principles. There are many older buildings which do not have lift access to every floor. In these instances provision should at least be improved to follow these guidelines and provide for the ambulant disabled person.

The following basis principles should be observed:

- *access into the accommodation should follow the guidelines for doors and lobbies;*



Layout suitable for ambulant disabled people



Example of cloakroom layout for ambulant disabled people

- *all facilities inside the toilets - including any controls, coin slots, etc should be located within the height range of 900 mm to 1200 mm;*
- *male accommodation should provide all urinals with a single handrail above and at least one urinal in five (with at least one) set at a height of 600 mm. This will be of use to young children too;*
- *one in five cubicles (with at least one) should be provided to ambulant disabled standards;*
- *door handles, locks, etc should be suitable for people with limited dexterity, having lever type handles and clear indicators to show when doors are locked.*

TYPES OF BUILDINGS

Housing

The Council requires a proportion of all new dwellings, including conversions, to be suitable for wheelchair users. In large residential developments the Council would seek to negotiate that a significant proportion, probably in the region of 10% of dwellings, should be designed to be capable of being accessible by independent wheelchair users. Also all ground floor flats and a proportion of other dwellings with ground floor accommodation or lift access, old people's homes and hostels should be built to mobility standards.

Mobility and Wheelchair Housing

Housing development normally required to provide mobility and wheelchair standards should provide:

- *if possible a level site, or a gradient of not more than 1:20;*
- *a level or ramped entrance (and flush threshold) from the street and parking area for car users with disabilities;*
- *the front door should have a clear opening width of not less than 800 mm;*
- *hard surfaced paths and/or driveways at least 1200 mm wide and with non slip surfaces;*
- *play areas to be at least accessible to parents and carers with disabilities;*
- *internal doors should have a clear opening width of not less than 750 mm;*
- *kitchens should preferably have a clear turning space of 1400 mm x 1400 mm;*
- *kitchens, corridors, bathrooms and toilets large enough to manoeuvre a wheelchair;*
- *normally an accessible toilet on each floor;*
- *switches, sockets, handles etc not less than 900 mm and not more than 1000 mm from floor level;*

- *habitable rooms should have a good outlook and windows should be low enough for people who are seated to see out;*
- *access to communal and private gardens should be level or ramped and have handrails;*
- *if providing a garage it should be at least 3800 mm wide to allow the car door to open fully and 6000 mm long to accommodate those who enter and leave the car from the rear. An integral garage with direct access to the house is preferable although if the garage is detached, a side door opposite the door of the vehicle may provide suitable access/egress. If a garage is not provided, a car port is the second best alternative. If neither of these options are possible a convenient parking space should be provided close to the main entrance to the house for wheelchair access; the car parking space should be at least 5000 mm by 3500 mm, provided on level ground;*
- *in addition to the above mobility standards, wheelchair housing should include internal planning for wheelchair manoeuvre in all principal rooms, with bathrooms and toilets large enough to permit lateral transfer from wheelchair to w.c. and bath;*
- *lobbies and halls to have a clear turning circle of at least 1500 mm in diameter, corridors to provide a space at least 900 mm deep outside room entrances;*
- *good lighting is very important as an aid to the visually impaired;*
- *access to communal and private gardens should be level or ramped and have hand rails;*
- *principal entrance to have a porch or shelter;*
- *access to upper floors should be by lift or by a straight flight staircase suitable for the installation of a stairlift; alternatively at least one bedroom, bathroom and w.c. must be at entrance level in family housing.*

Further information can be obtained from the Access Committee for England.

"Building Homes for Successive Generations" details mobility standards and is available from:

**Access Committee for England,
12 City Forum,
250 City Road,
London.
EC1V 8AF
Tel. 0171 250 0008**

Sheltered Housing and Residential Accommodation

New sheltered housing and residential accommodation, whether public or private, must have:-

- *a level access;*

- lifts to upper floors (also possibly stair lifts);
- bathrooms and toilets large enough to manoeuvre a wheelchair;
- switches, sockets, handles etc not less than 900 mm and not more than 1000 mm from floor level;
- a loop system installed in communal rooms and reception areas;
- good lighting.

In addition:

- bedrooms should be 12 sq m for a single and 28 sq m for a double room though slightly larger ones may be required for people with learning difficulties (mental handicap) and for wheelchair users. There should be no more than 1 in 4 double rooms;
- bathrooms and w.c's should be provided on each floor used for sleeping accommodation with at least one bathroom for every 10 residents and one toilet for every 4 residents. They should be large enough to manoeuvre a wheelchair;
- sitting and dining rooms must be adequate to allow residents a reasonable social life with 2.3 sq m for sitting and 1.39 sq m for eating for each resident. At least two separate rooms should be provided for sitting/eating unless spacious bedsitters are available for

each resident. Alternative rooms may be required in larger homes;

- kitchens should have a minimum area of 15 sq m;
- laundries should be easily accessible to staff and residents.

Other rooms should include adequate storage of linen, cases and wheelchairs. Accommodation for staff to sleep in should have separate washing and toilet facilities. A staff rest room may be needed in a larger home but an office may suffice in a smaller one. Residents should have somewhere to receive visitors or medical treatment and a pantry to make cups of tea.

Garden space should be at least 75 sq m for a small home. Extension to an existing home or construction of a new one should allow for adequate amenity space which is sunny for at least part of the day.

Supermarkets and Stores

- Wide checkouts should be distributed along the length of the checkout line, be easily identified, have a minimum width of 1200 mm and should always be available. The conveyor belt should make the items accessible to elderly people and people with mobility difficulties.
- Aisles should not be less than 2700 mm wide and shelving should be between 200 mm and 1700 mm deep.

- *Overhead signs indicating produce location and points where assistance may be obtained should be easily seen.*
- *Seats must be provided near the exit.*

Banks and Building Societies

- *Customer areas, including interview rooms, should be accessible to all.*
- *Counters and desks should be no more than 850 mm high and have a recess below the counter top at least 650 mm high by 900 mm wide with a 300 mm overhang.*
- *Communication with cashiers should be facilitated for those with impaired hearing by the issue of loops or improved systems.*

Sports Facilities/Leisure Centres

Female and male changing rooms in swimming pools and other physical recreation buildings should be provided for people with disabilities and should include:

- *good wheelchair manoeuvring space;*
- *a strong, non-slip seat to allow ease of transfer from wheelchair;*
- *non-slip floor;*
- *shower heads at a reachable height for a wheelchair user;*

- *shower control taps at a reachable height;*
- *clothes hooks and shelves at a reachable height;*
- *full length mirror;*
- *alarm cords.*

Holiday Accommodation

New hotels and holiday facilities should provide access to the full range of services offered, i.e. swimming pools and fitness rooms and the associated changing areas, reception, dining areas and bars, conference rooms and sanitary conveniences.

Hotel accommodation should provide at least one guest bedroom out of every 20 or part thereof, which is accessible to a disabled person. Accessible bathrooms should be provided as an en-suite facility.

Self catering accommodation and static caravan sites should also have one accessible facility out of every twenty units.

Further information can be obtained from the Holiday Care Service and the English Tourist Board who produce guidance notes specifically for holiday accommodation. Providing Accessible Accommodation (a design guide for holiday facilities) is sold by:-

**Holiday Care Service,
2 Old Bank Chambers,
Station Road,
Horley,
Surrey.
RH6 9HW
Tel. 01293 774535**

Cinemas, Theatres, Etc

Auditoria with tiered seats must include areas accessible to wheelchair users where they can sit with their companions. The minimum requirement is 6 spaces, or 1% of the total number of seats, whichever is the greater. In sports stadia, the number is 20, or 0.5% of the total number of seats, whichever requirement is the greater.

A 'wheelchair space' can be provided by a clear space with a width of at least 900 mm and a depth of at least 1400 mm, accessible to a wheelchair user and providing a clear view of the event. The space may be one which is kept clear or be one which can readily be provided for the occasion by removing a seat. The spaces should be dispersed along the remainder of the places so that disabled people may sit with able-bodied companions.

Induction loops must be provided in all theatres, cinemas, halls, meeting places and sports stadia. A clear, pictorial and visible sign should indicate the presence of the loop, and the loop must be switched on.

A minicom type telephone should be part of any well planned reception area and booking hall.

Visitor Attractions

It is important that visitor attractions cater for both the physically disabled, and those with sensory impairments. **The National Tourist Boards publication "Providing Accessible Visitor Attractions" contains detailed advice, and can be purchased from the:**

**English Tourist Board,
Thames Tower,
Blacks Road,
Hammersmith,
London.
W6 9EL
Tel. 0181 846 9006**

PROVISIONS FOR THOSE WITH SENSORY DISABILITIES

The Blind and Partially Sighted

The blind and partially sighted will benefit from the observance of the design standards in this series of leaflets, although some may prefer steps to ramps. However, certain additional points need to be borne in mind:

- *unexpected obstructions should be avoided. This includes the avoidance of windows opening over paths and pavements, and the use of low awnings over shopfronts;*
- *protection from hazards on external routes close to buildings;*
- *textured surfaces to give warning of changes of level external to the building and contrasting edges on top and bottom steps of flights of internal stairways;*
- *means of identifying large areas of clear glazing in order to minimise the risk of people*

colliding with them; referred to in British Standards as 'manifestation';

- *tactile or audible indication of floor calls in some lifts.*

The Deaf and Hard of Hearing

Good signposting outside and within buildings is essential for the deaf and hard of hearing, as is good lighting in places where conversations are likely to occur - particularly at enquiry points or in interview rooms - to assist lip reading. The installation of an induction loop in public halls, churches or waiting rooms (for example doctors' surgeries) where a public address system is in use should be allowed for at the design stage. This is not expensive to install even if left until the building is complete, and is very easy to incorporate in the design of new buildings.

An induction loop is an insulated cable laid around a listening area, with a microphone or other input source such as a TV or loop amplifier. The loop sets up a magnetic field so that a person using a hearing aid with a pick-up coil can receive sound without loss or distortion through bad acoustics or extraneous noise. The loop should be able to suppress reverberation, audience or other environmental noise, thereby enabling a hearing aid user to fully benefit from and participate in the meeting.

For further detailed advice on installation; write to the RNID for their leaflet "Installation Guidelines for Induction Loops in Public Places" at 105 Gower Street, London, WC1 6AH, tel. 0171 387 8033. If operating the system in a public

building or school a licence from the Department of Trade and Industry is required.

ACCESS CHECK LIST

Here is a simple checklist of features of which you should ensure your building, or area of open space, takes account. The watchword is attention to detail.

- *A ramped alternative to a stepped entrance.*
- *Doors with adequate opening width, door handles at an appropriate position and a level threshold.*
- *Car parking bays for users with disabilities (not just the Orange Badge holders).*
- *Dropped kerbs and tactile paving, particularly in car parks.*
- *Signposting:*
 - *to entrance to building*
 - *car parking spaces for people with disabilities*
 - *raised letters on signs to allow blind/visually impaired to interpret them.*
- *Unisex toilet for people with disabilities.*
- *Reception desks:*

- *with recessed areas for the knees of wheelchair users*
- *lowered sections*
- *Good, balanced lighting.*
- *Induction loops.*
- *Audio-visual alarms and information systems.*
- *Lifts, for major changes in level.*
- *Handrails to changes in level.*
- *Clear routes for the blind/visually impaired.*

Don't be tempted to:

- *Use large areas of glazing or mirror-glass, its dangerous and confusing for the visually impaired.*
- *Ignore size recommendations:*
 - *ramps that are too steep are no good at all*
 - *toilets that are too small (or lack adequate hand-rails)*
- *Allow dark interiors.*
- *Have reception desks with high counters and security screens.*
- *Have 'back-door' entrances for people with disabilities.*
- *Install revolving doors with no alternative.*

"Easy Access to Historic Properties" has been produced by English Heritage. It can be obtained from:

**English Heritage,
23 Savile Row,
London.
W1X 1AB
Tel. 0171 973 3434**

"Designing for Accessibility - An Introductory Guide" has been produced by the Centre for Accessible Environments and provides additional information and advice. It can be purchased from the:

**Centre for Accessible Environments,
Nutmeg House,
60 Gainsford Street,
London.
SE1 2NY
Tel. 0171 357 8182**

The Disablement Action Groups in Scarborough and Whitby can provide further advice.

They can be contacted on the following addresses:

**Scarborough and District Disablement Action Group,
Allatt House,
5/6 West Parade Road,
Scarborough.
YO12 5EP
Tel. 01723 379397**

**Whitby and District Disablement Action Group,
6 Victoria Road,
Whitby.
YO21 1QL
Tel. 01947 821001**