

designing inclusive buildings  
**access** for all





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### **Introduction**

This booklet is designed to highlight the most important principles in designing inclusive buildings, which meet the needs of all users including disabled people. It is particularly aimed at developers and builders of small-scale projects. Reference should also be made to the Approved Document M of the Building Regulations (2004 edition) and British Standard 8300: 2001, from which the specifications used in this booklet have been taken. As the requirements of Part M for dwellings are under review at the time of writing, this document addresses only non-domestic developments.

The Royal Borough of Kingston upon Thames has produced this 'Supplementary Planning Document' (SPD) to support Policy RES3 (Determining Planning Applications) in the Royal Borough of the Unitary Development Plan (First Alteration). This policy and supporting text is reproduced at Appendix 1. This document has been prepared in accordance with the Town and Country Planning (Local Development) (England) Regulations 2004. The document was adopted by the Council's Executive on 26th July 2005. It forms part of Kingston's Local Development Framework (LDF) and is therefore a material consideration in the determination of planning applications.

Reference should also be made to the London Plan, published by the Greater London Authority in February 2004, and to the Supplementary Planning Guidance 'Accessible London: achieving an inclusive environment', published by the Greater London Authority in April 2004.

### **Designing buildings for everyone to use**

Public buildings should be designed so that all members of society can use them – be they wheelchair users, people with mobility or visual impairment, people who are Deaf or hard of hearing or people with learning disabilities, or whose first language is not English. Disabled people make up more than 15% of the population, and this figure is rising. It has been estimated that whilst over the next thirty years the UK population will rise by 7%, the number of disabled people will rise by 40%. This is due in large part to an expected increase in the number of older people, as disability often results from the ageing process. Older people with reduced mobility, sight or hearing often do not think of themselves as disabled, but always benefit from design which makes life easier for everyone, including disabled people.

The fact is that everyone has different needs anyway. Mothers with children in pushchairs or people carrying heavy shopping benefit from many of the same features that are essential for wheelchair users. People entering a building for the

first time benefit from good signage, which is essential for Deaf people. Everyone benefits from good demarcation of different parts of the building, for instance by colour, tonal and textural contrast, but these factors make a huge difference for people with impaired vision.

### **Inclusive design**

Inclusive design creates an environment where everyone can access and benefit from the full range of opportunities available to members of society. It aims to remove barriers that create undue effort, separation or special treatment, and enables everyone regardless of disability, age or gender to participate equally, confidently and independently in mainstream activities with choice and dignity. In short, inclusive design provides a single solution for everyone. Buildings designed to be inclusive will be safe, predictable, convenient, flexible, adaptable, sustainable and legible, and will be useable by everyone.

By contrast, accessible design, rather than inclusive design, often leads to separate facilities for disabled people, such as platform lifts or ramps to one side of the main entrance. This approach tends to result from the consideration of access needs as an afterthought to gain Building Control approval, and will often result in unsatisfactory solutions to access needs. Inclusive design will normally produce a much more satisfactory outcome, both aesthetically and practically, and will often result in lower building costs as accessibility features are seen as standard.

An inclusive building is one which

- Provides equitable access
- Allocates appropriate space for people
- Requires minimal stress, physical strength and effort
- Achieves a safe, comfortable and healthy environment

### **Access Statements**

Access statements are required for all commercial planning applications and larger residential applications. Their purpose is to show how the principles of inclusive design, including the specific needs of disabled people, have been integrated into the proposed development, and how inclusion will be maintained and managed.

The access statement should clearly identify:

- The philosophy and approach to inclusive design
- The key issues of the particular scheme
- The sources of advice and guidance used

- How the principles of inclusive design have been implemented in the scheme
- How inclusion will be maintained and managed in the use of the scheme

The exact form of the access statement will depend on the size, complexity and nature of the scheme. For example, alterations to a shopfront may include a brief description, indicating how the issue of access has been dealt with given the opportunities and constraints of the site, backed up by a plan showing door dimensions, threshold details etc.

With respect to a major development, more substantial details will be required, demonstrating how the following issues are being addressed:

- Transport links
- Approaches to and around the site
- Car parking, setting down points and garaging
- Entering the development, including the buildings it includes
- Circulation routes and layout
- Use of surfacing materials
- Facilities in the building(s)
- Wayfinding and signage
- Evacuation

The access statement should explain how the needs of disabled people and everyone else are incorporated into the design of the scheme, and should be accompanied by plans showing circulation routes, facilities, dimensions etc. For very large schemes, the developer may seek the services of an access consultant (reference can be made to the National Register of Access Consultants ([www.nrac.org.uk](http://www.nrac.org.uk)) for qualified consultants).

The Access Statement should be used where constraints of the site mean that the specifications given in the Approved Document to Part M of the Building Regulations cannot be followed in every detail. The Access Statement, in these circumstances, should be used to explain how the proposed specification would work to enable access.

### **The legislative background**

Society's views on disability have changed a great deal over the last few decades. For example, it is becoming much more common for disability to be seen in a social context rather than as purely a medical problem affecting the disabled person.

Viewing disability as society's concern rather than solely the concern of the disabled person and medical profession has led to an acceptance that society has an obligation to remove barriers to participation by disabled people as full members of society. This obligation has to a greater or lesser extent been enshrined in legislation to speed the process of full inclusion by disabled people in society. The principal relevant pieces of legislation are outlined below.

### **The Chronically Sick and Disabled Persons Act 1970**

Section 4(l) of the Chronically Sick and Disabled Persons Act 1970 requires that:

'Any person undertaking the provision of any building or premises to which the public are to be admitted, whether on payment or otherwise, shall, in the means of access both to and within the building or premises, and in the parking facilities and sanitary conveniences (if any), make provision, in so far as it is in the circumstances both practicable and reasonable, for the needs of members of the public visiting the building or premises who are disabled.'

### **Disability Discrimination Act 1995 and the Disability Discrimination (Employment) Regulations 1996**

The Disability Discrimination Act 1995 ('DDA') contains duties to make reasonable adjustments to physical features of premises in certain circumstances.

Following the guidance in the Approved Document Part M is not a requirement for satisfying these duties to make reasonable adjustments. However, the following points should be noted.

### **Duties in the Employment Field**

Section 6 of the Disability Discrimination Act imposes on employers a duty to make reasonable adjustments to facilitate access for disabled employees, and from 1 October 2004 this duty is imposed on all employers regardless of the number of employees. Depending on the nature of the organisation concerned, the requirement for reasonable adjustment is set out in sections 4A, 4B(5), 4B(6), 4E, 6B, 7B, 7D, 14, 14B, 14D and 16A(5) of the DDA as amended by the Disability Discrimination Act 1995 (Amendment) Regulations 2003 (SI 2003/1673).

### **Duties of providers of services to the public**

From 1 October 2004 providers of goods and services to the public have a duty to make reasonable adjustments to their premises to facilitate access by disabled people. The duty to make reasonable adjustments is set out in sections 21(2)(a), (b) and (c) of the DDA and applies to all those who provide services to the public irrespective of their size. It requires service providers to take reasonable steps to remove, alter or provide a reasonable means of avoiding a physical feature of their premises, which makes it unreasonably difficult or impossible for disabled people to make use of their services.

### **Note: Safe evacuation from buildings**

While ensuring that disabled people can enter and use a building and its facilities, it is essential that the building is designed and managed to ensure that disabled people can be safely evacuated in the event of fire. Reference should be made to the Building Regulations, and specifically to BS5588-8 in this regard.

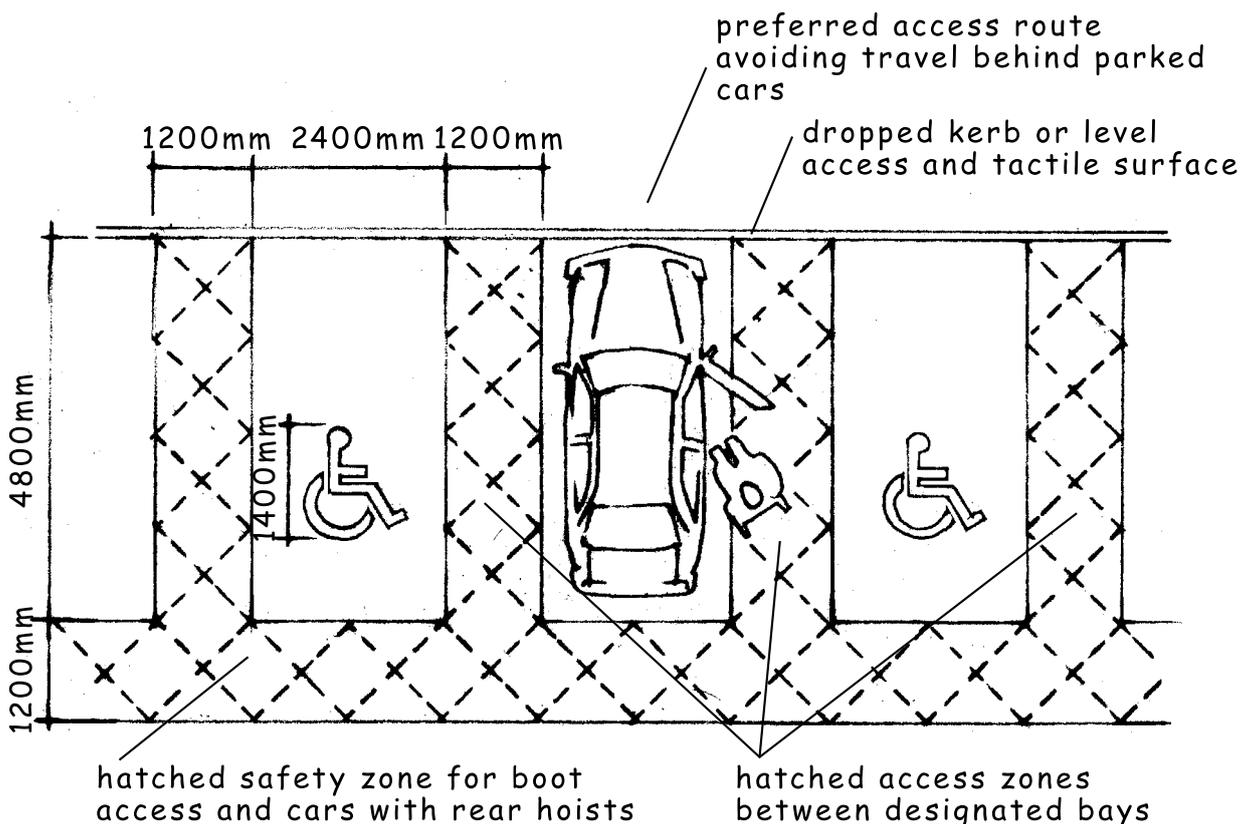


## Car parking

If a building has its own parking area, 6% of the spaces should be designated for people with limited mobility or sight, who will normally have a blue badge (previously orange badge) issued by their local council giving parking concessions. In smaller car parks at least one blue badge space should be provided. Even if there is no standard parking provision, blue badge parking may still be needed.

It is important that the parking area and the entrance to the building are easy to find and clearly indicated with signs. The bays should be clearly marked and monitored for disabled visitors' use and should be on level ground no more than 50 metres from the entrance to the building.

- A single bay for use by blue badge holders should be at least 3.6 metres wide, to allow wheelchair users to transfer sideways from the car seat to the wheelchair, or to allow space for walking aids.
- If two blue badge bays are adjacent, each bay should be 2.4 metres wide and there should be a 1.2 metre shared transfer space. It is a good idea to cross-hatch this area.
- A rear transfer area 1.2 metres deep should be marked out between the bays and the vehicular route.

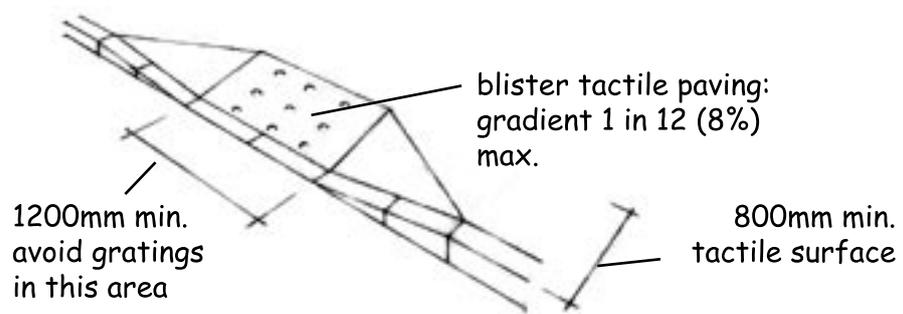


# 1. CAR PARKING

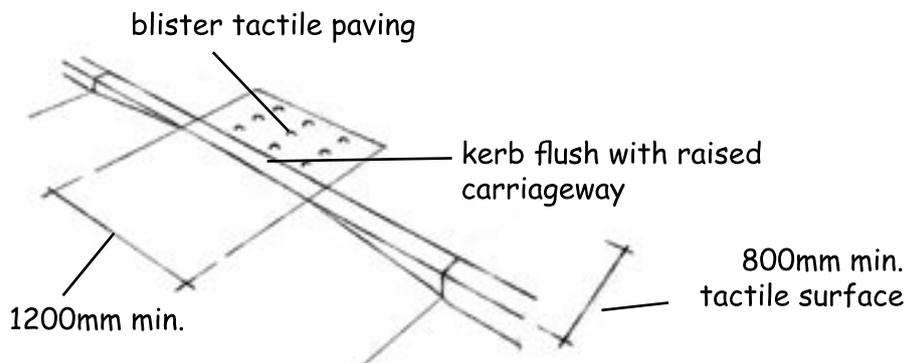
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- The surface of designated bays should be level, stable, durable and slip resistant.
- The approach from the parking area to the entrance should be level, ramped or, where necessary, made accessible by the use of dropped kerbs. A dropped kerb should have smoothly merged edges and should be at least 1.2 metres wide with an unobstructed slope. Where the dropped kerb leads to an uncontrolled crossing point across a vehicular route, buff coloured modified blister pattern paving should be used.

## Dropped kerb:

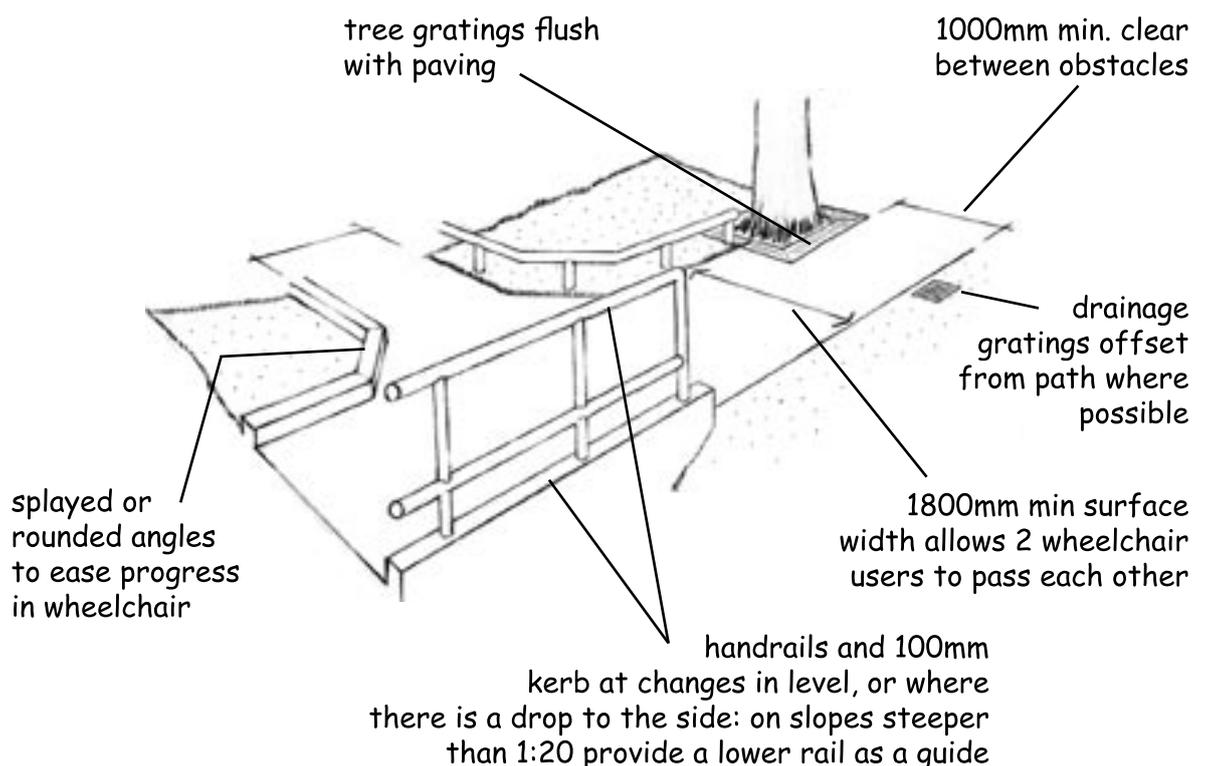


## Raised carriageway:



## Paths

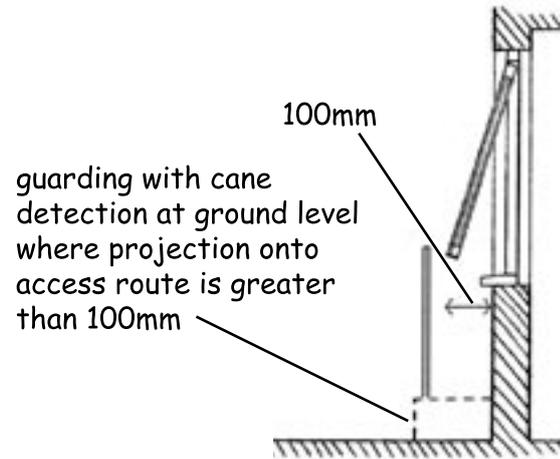
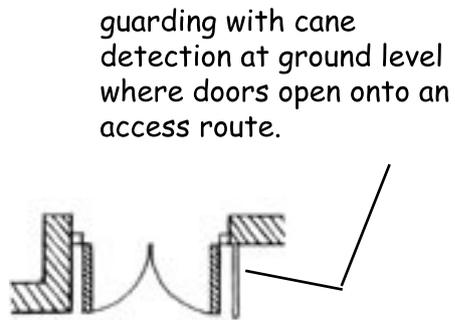
- For easy access for wheelchair users, it is preferable for a path to be at least 1.8 metres wide clear of obstructions. A minimum width is 1.5 metres, but there would then need to be a passing place 1.8 metres wide and 2.0 metres long for every 50 metres of length. There should be a minimum width of 1.0 metre to pass obstructions.
- For safety reasons for both visually and mobility impaired people, there should be a 100mm raised edge on paths from which there is a drop to the side.
- Gratings and timber decking should be laid at right angles to the direction of the path and any slope across the path should be no steeper than 1:40.
- The path surface should be even, stable, durable, slip resistant, non-glare and in colour contrast with its surroundings. For wheelchair users, gravel paths are particularly difficult unless the gravel is very well compacted.
- For safety, projecting or suspended hazards at a height lower than 2.1 metres should be guarded or indicated at ground level. Be careful that there are no opening windows or doors that could obstruct paths running along the side of buildings. Isolated objects such as bollards should be defined with colour contrast bands to aid visually impaired people.



## 2. PATHS

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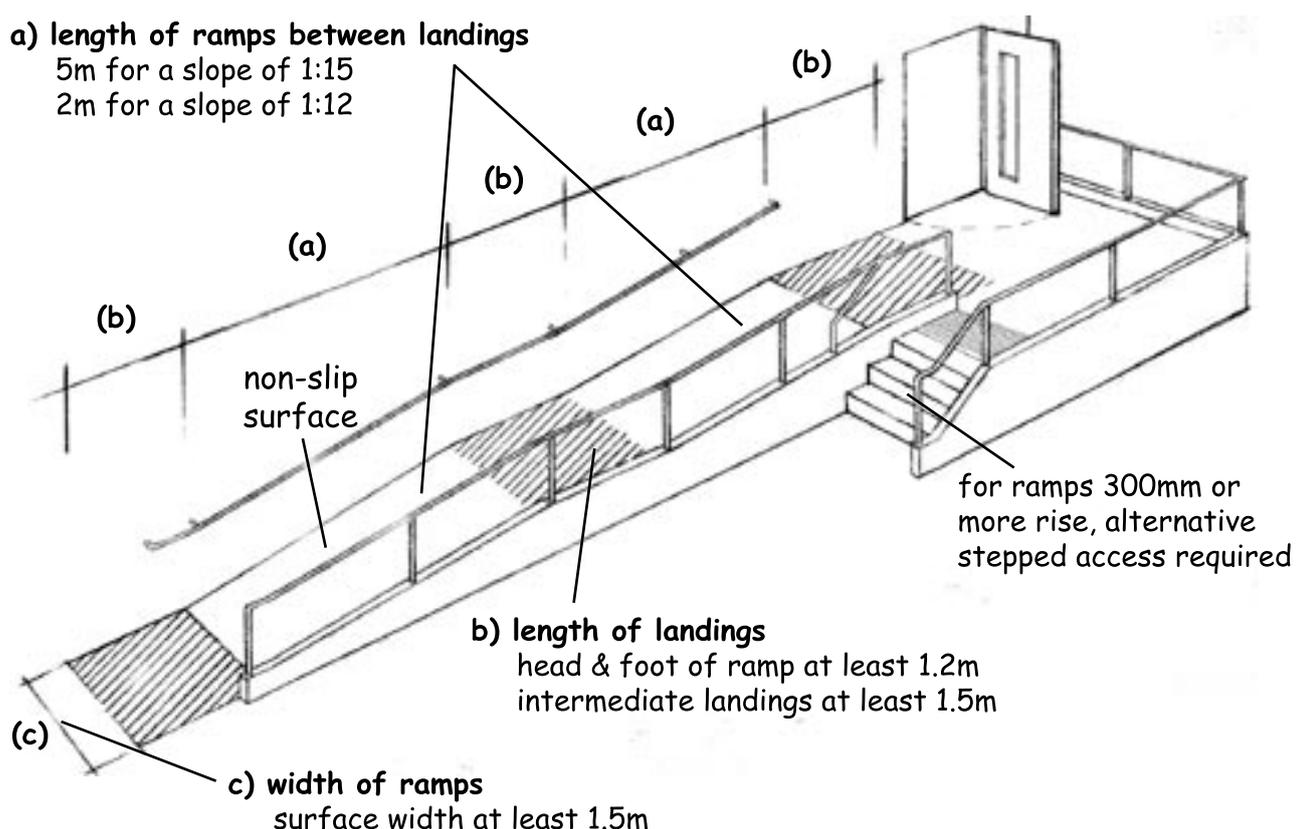
### Guarding access routes:



#### Steps, stairways and ramps (external)

Steps are often impossible obstructions to people with mobility impairment. Usually, the most practical solution to the obstacle represented by steps is a ramp. However, many ramps present a greater hazard than steps. They can be too steep, slippery in some conditions or a hazard to visually impaired people. These are the important criteria for a safe ramp.

- The surface width of a ramp should be at least 1500mm.
- The preferred gradient for a ramp is 1:20, but it is acceptable to have steeper ramps where space is limited, to a maximum gradient of 1:12. However, long ramps should always have landings at regular intervals, both for safety and to enable manual wheel chair users to take a break.
- If the gradient is 1:15, level landings 1.5 metres long should be provided at 5 metre intervals.
- If the gradient is 1:12, the maximum length of the ramp before a landing is 2 metres.
- There should only be a change of direction at a level landing.



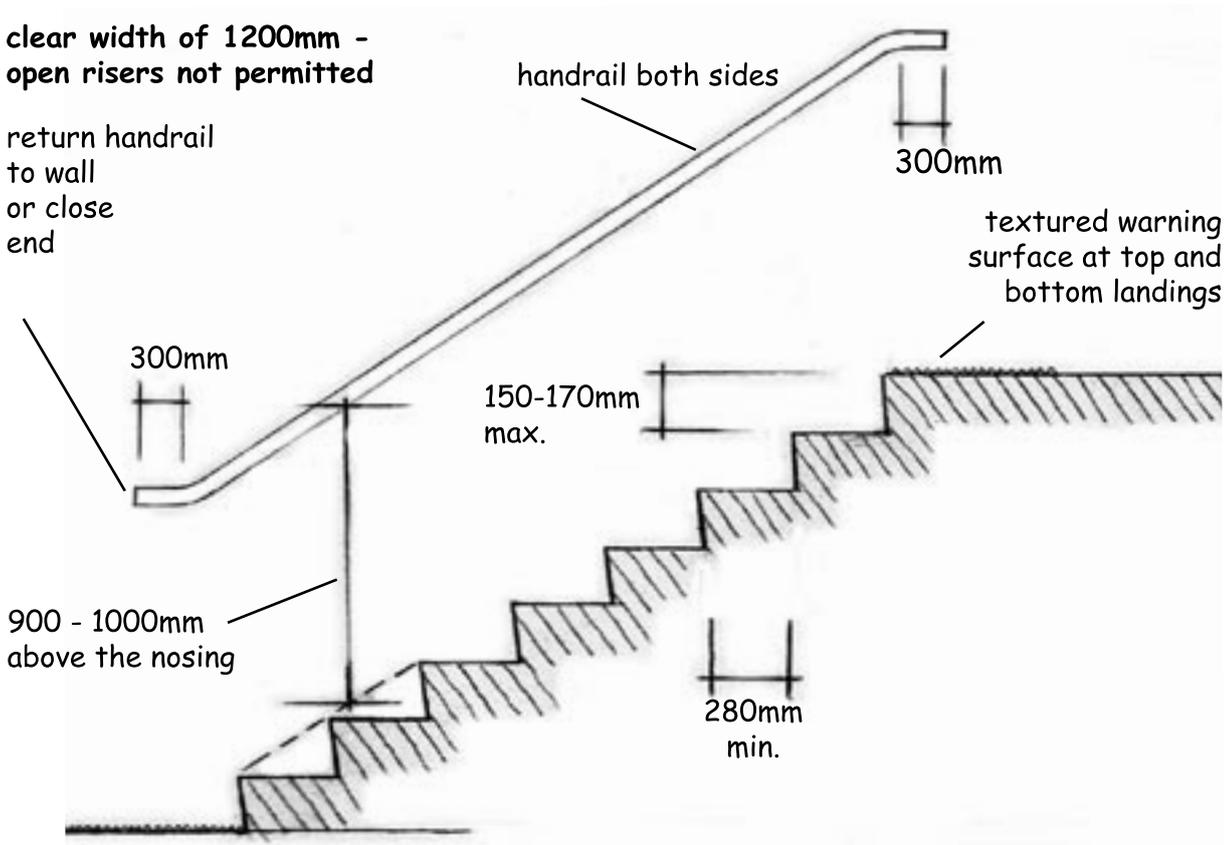
### 3. STEPS, STAIRWAYS AND RAMPS (EXTERNAL)

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- There should be a 100mm high kerb along the open edge of the ramp and any landing.
- The ramp surface should be even, stable, durable, slip resistant, non-glare and in colour contrast with surroundings.
- Ramps and landings should have a continuous handrail, preferably on both sides.
- Where a ramp leads to an entrance door, there should be a level landing giving a 1.2 metre long, level, unobstructed space clear of the door swing. It is not possible for a wheelchair user to open a door on a slope as the wheelchair will run back.

Ramps are not a solution for everyone. Some people with walking difficulties, perhaps due to arthritis, find walking on ramps difficult, so there should be alternative access using steps where the rise of the ramp is greater than 300mm. However, for safety reasons, it is important that steps and staircases comply with some basic specifications:

- Step sizes **must** be consistent.
- Risers (the vertical part of a step) should not be open.



### 3. STEPS, STAIRWAYS AND RAMPS (EXTERNAL)

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- Dimensions of external steps should be within the range 150-170mm high (riser) by 280-425mm deep (tread).
- There should be a maximum of 12 steps between level landings (where the going is less than 350mm) and 18 steps (where the going is more than 350mm).
- Landings should be at least 1200mm long.
- Corduroy paving (which should be in a colour contrasting with the steps) should be used at the top and bottom of external steps. It should be 800 mm deep, and be located no further than 400mm from the top and bottom steps.
- The minimum unobstructed width of external steps should be 1.2 metres.
- There should be a colour contrast strip 55mm wide on both the tread and the riser.
- A handrail is required on both sides of the flight.

### 3. STEPS, STAIRWAYS AND RAMPS (EXTERNAL)

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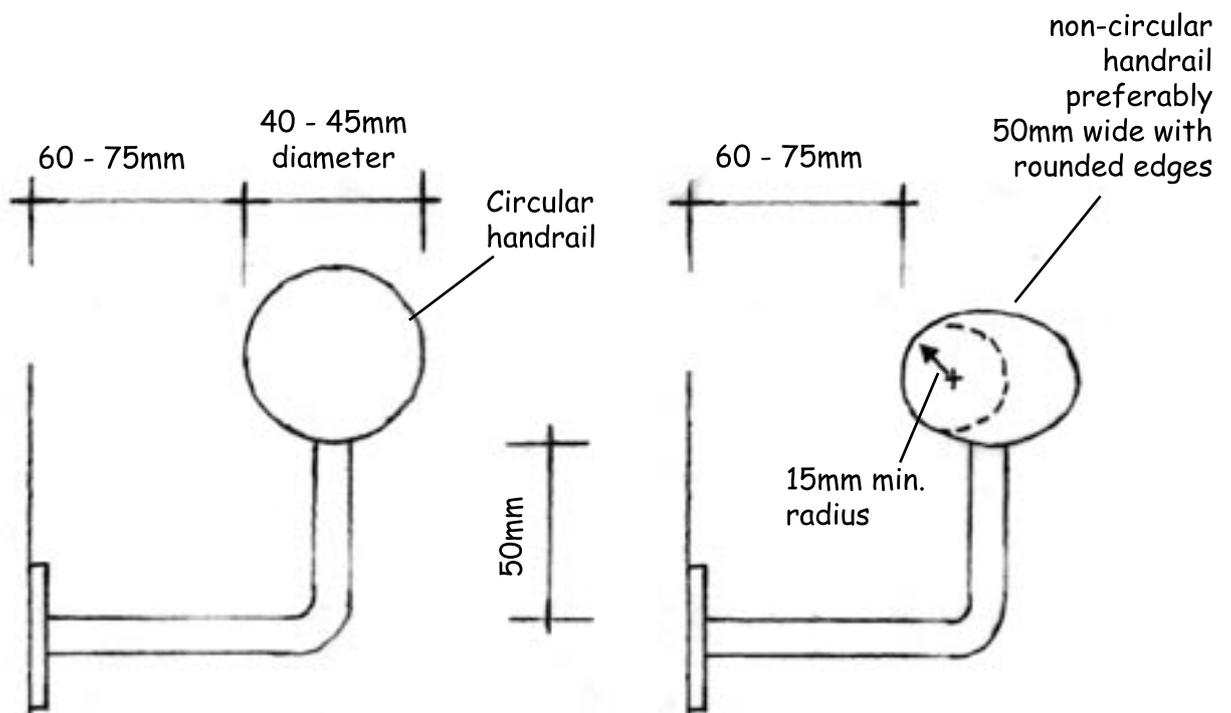
## 4. HANDRAILS

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### Handrails

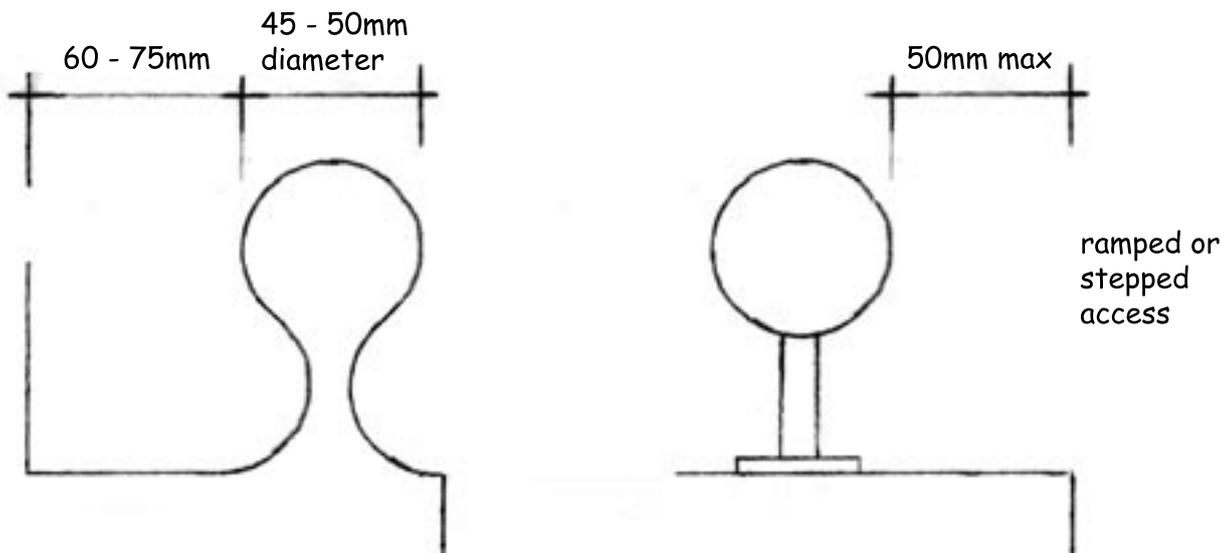
You must provide handrails to assist those using steps or ramps (even single steps). For many reasons, it is essential that handrails are provided on both sides of stairs (or ramps). The handrails should meet the following specifications:

- They should be round with a diameter of between 40mm and 45mm, or oval with a broad horizontal face, preferably 50mm wide and 38mm deep.
- The gap between rail and wall should be between 60mm and 75mm, and at least 50mm between a cranked support and the underside of the handrail.
- The handrail should be positioned between 900mm and 1000mm above the slope of the ramp or flight of steps.
- On a landing, the handrail should be positioned 900-1100mm above the floor.
- Handrails should be extended horizontally 300mm beyond the top and bottom of steps or ramps, so that blind people know where the end of a stairway occurs.
- Handrails should continue across all flights and landings of ramped or stepped access.
- Handrails should contrast visually with the background against which they are seen, but should not be reflective.
- The handrail surface should be slip resistant and not cold to the touch.

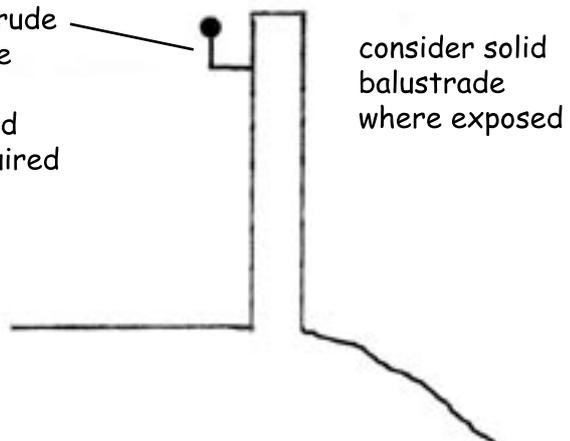


## 4. HANDRAILS

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handrails should not protrude more than 100mm into the surface width of a ramp or stairs, where this would impinge on the width required for means of escape.



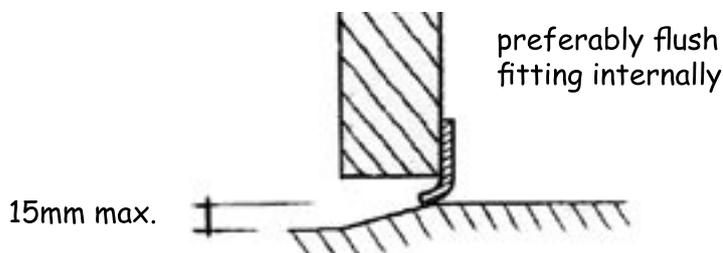
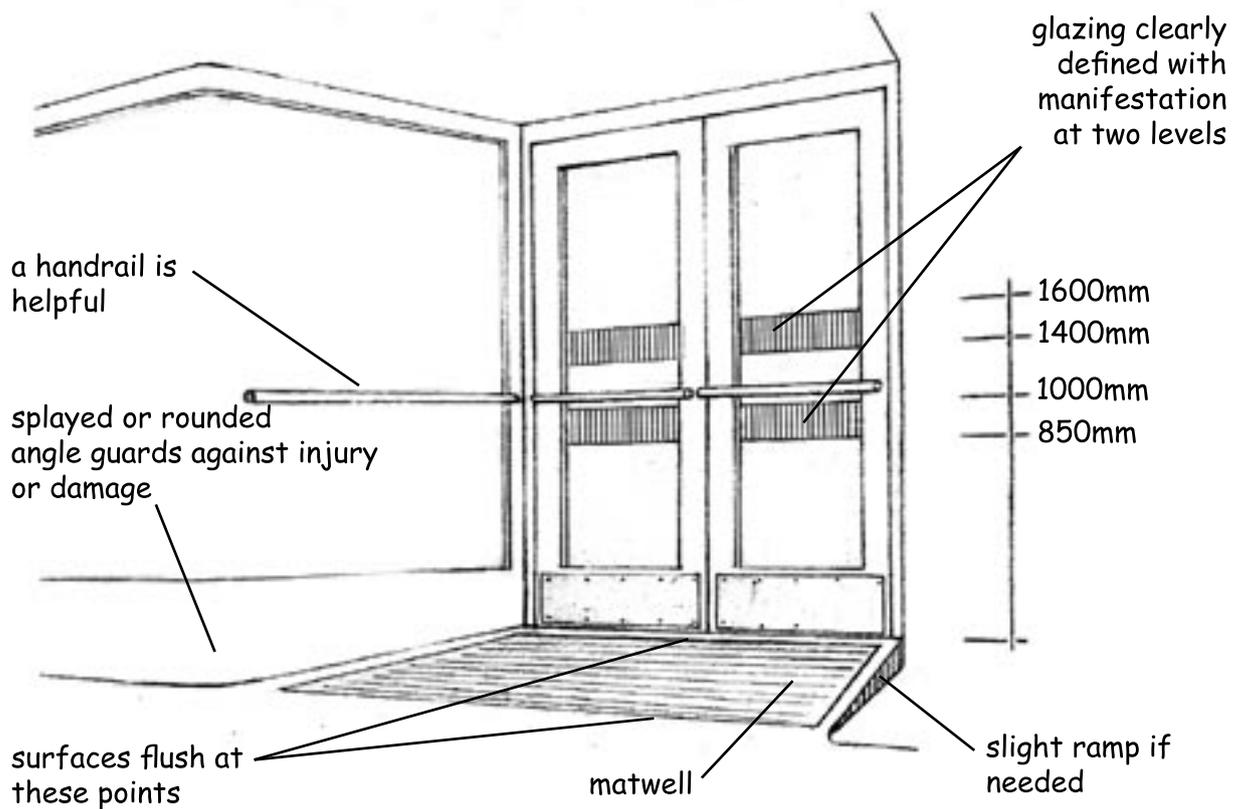
Example of contrasting handrail.



## 5. ACCESSIBLE ENTRANCES

### Accessible entrances

- Accessible entrances should be clearly sign-posted from the edge of the site and from any car parking.
- The threshold should be level or, if this is impossible, should have a maximum height of 15mm.
- Door entry systems should be useable by people with any type of disability, including wheelchair users, Deaf or hard of hearing people, people with visual impairments etc. Controls should be set no higher than 1200mm above ground level.
- Any doormat and matwell should not impede the movement of wheelchairs. Coir matting should not be used and mats and matwells should not constitute a trip hazard.

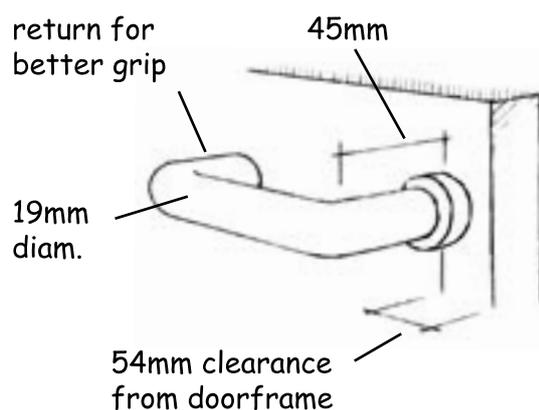
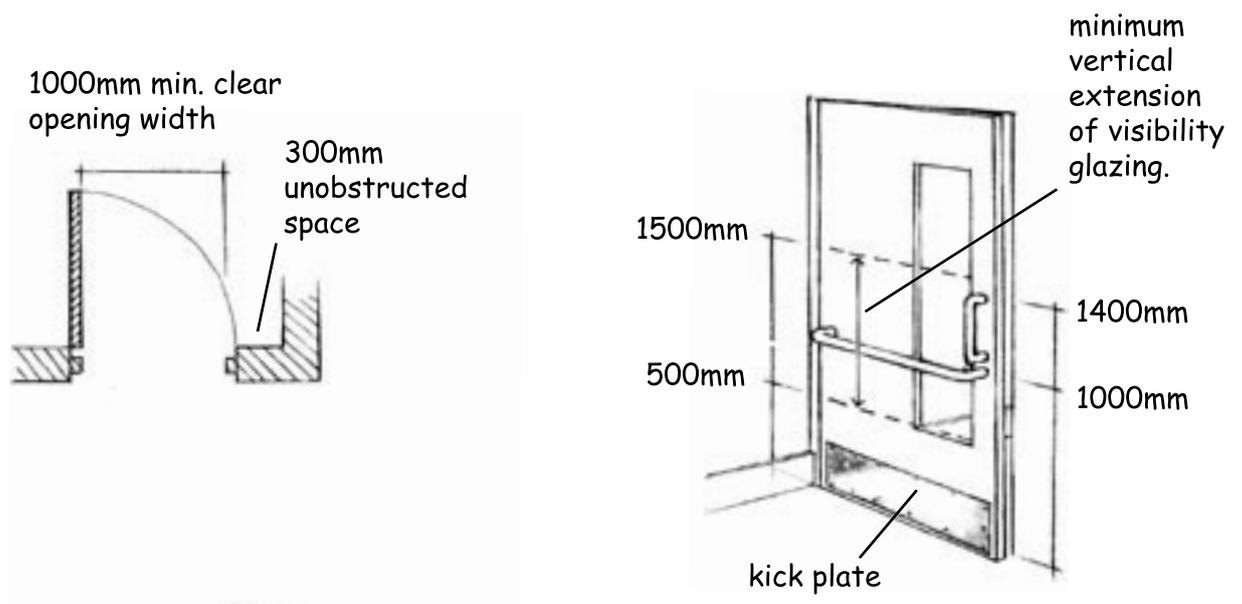


## 5. ACCESSIBLE ENTRANCES

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### Entrance doors

- Automatic or powered entrance doors are preferred.
- If manual entrance doors are fitted, these should be capable of opening and closing by wheelchair users and people with limited strength or dexterity.
- Entrance doors to buildings to be used by the general public should ideally provide a clear opening width of 1000mm, through one leaf in the case of double doors. If this is not possible, the Access Statement should be used to explain how a narrower entrance is accessible to people, including wheelchair users and mothers with double buggies.
- Entrance doors should have vision panels towards the leading edge of the door, extending from 500mm to 1500mm from the floor, but, if necessary, interrupted between 800mm and 1150mm above the floor to accommodate door furniture.



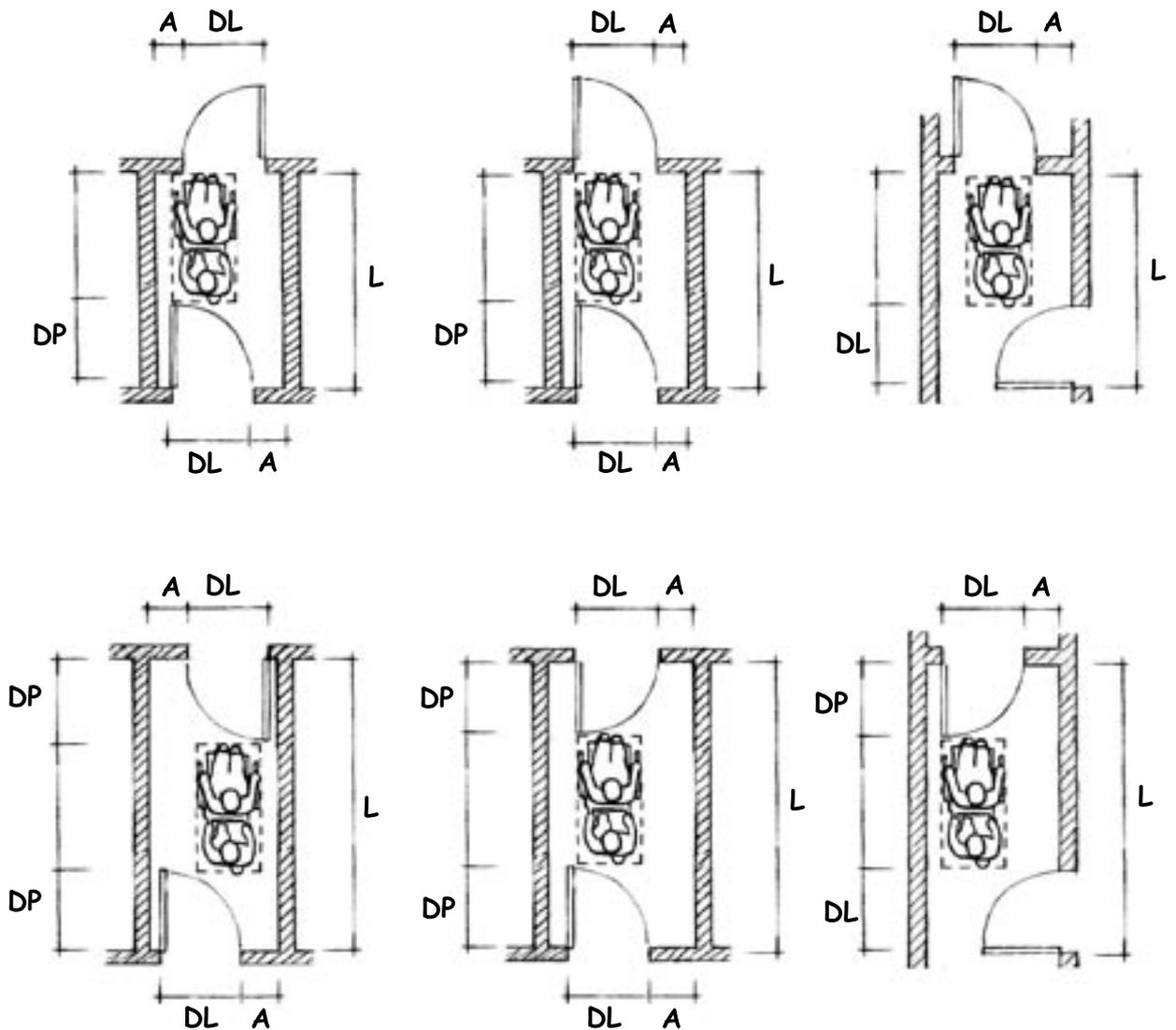
## 6. ENTRANCE DOORS

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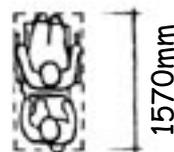
- In the case of manually operated entrance doors, there should be an unobstructed space of at least 300mm on the pull side of the door between the leading edge of the door and any return wall.
- Door handles should be operable with one hand using a closed fist (lever handles are suitable) and should contrast visually with the surface of the door.
- Any controls for powered entrance doors should be clearly distinguishable from their background, should be located between 750mm and 1000mm above floor level and should be operable with one closed fist.
- Glass entrance doors should be made visible by the use of manifestation at 850mm to 1000mm and 1400mm to 1600mm above floor level, which contrasts visually with the background seen through the glass. In addition, there should be a high-contrast strip around the door to distinguish it from its surroundings.

**Entrance lobbies**

Entrance lobbies should be large enough to allow a wheelchair user and person pushing or a person pushing a pram to move clear of one door before opening the second door.



- DL** Door leaf dimensions of the doors to the lobby
- DP** Door projection into the lobby
- L** Minimum length of lobby (or length up to door leaf for side entry lobby)
- A** at least 300mm wheelchair access space (this can be increased to reduce 'L')



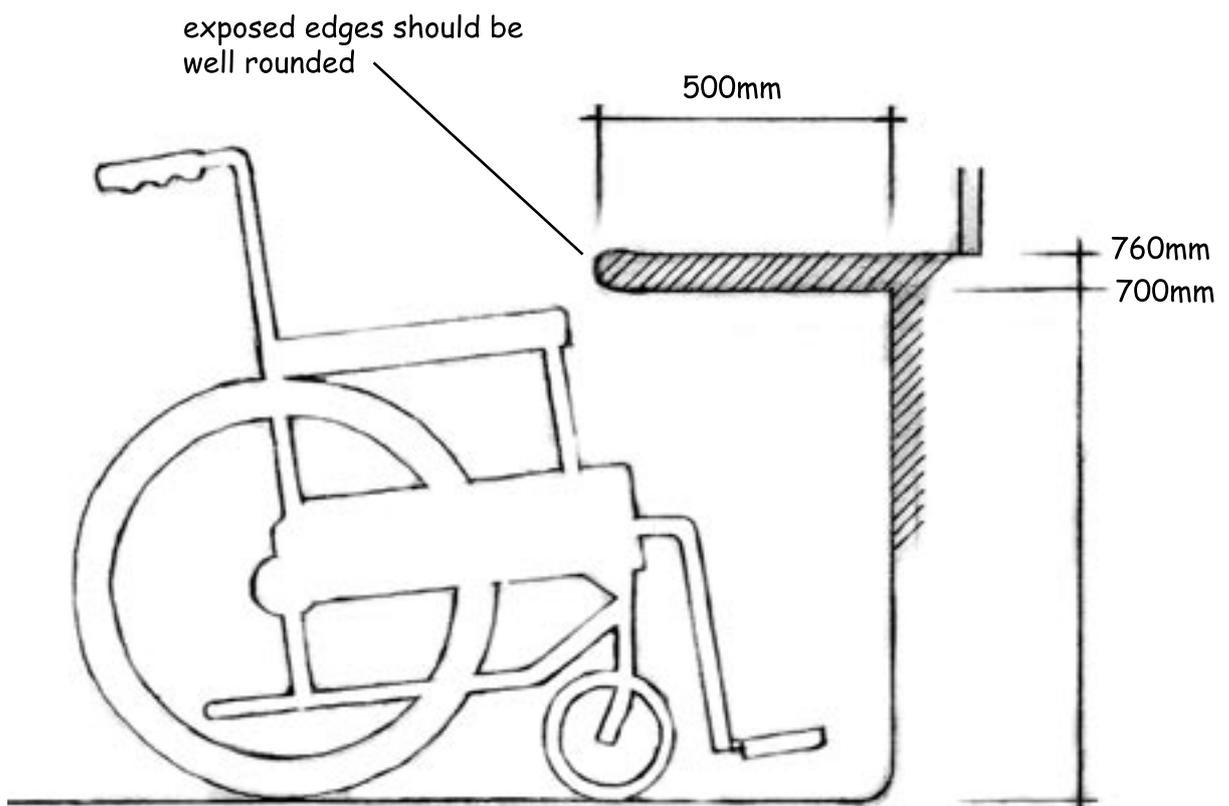
1570mm-long space represents the area occupied by a wheelchair user and their assistant.

## 7. ENTRANCE LOBBIES

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### Entrance hall and reception area

- The reception point should be easily identifiable from the entrance doors or lobby.
- A lower part of any reception desk should be included for use by wheelchair users, at least 1500mm wide, with its surface no higher than 760mm and a knee recess 700mm high, 500mm deep and 900mm wide provided underneath.
- There should be a clear space at least 1200mm deep and 1800mm wide in front of the reception desk (1400mm deep and 2200mm wide if there is no knee recess).
- The reception desk should be fitted with an induction loop or other hearing enhancement system, and its presence indicated by the standard pictographic sign.
- any screen in front of the reception desk should be glazed in non-reflective material so that someone who lipreads has a good view of the speaker.
- Good information and directional signage should be provided in reception areas.

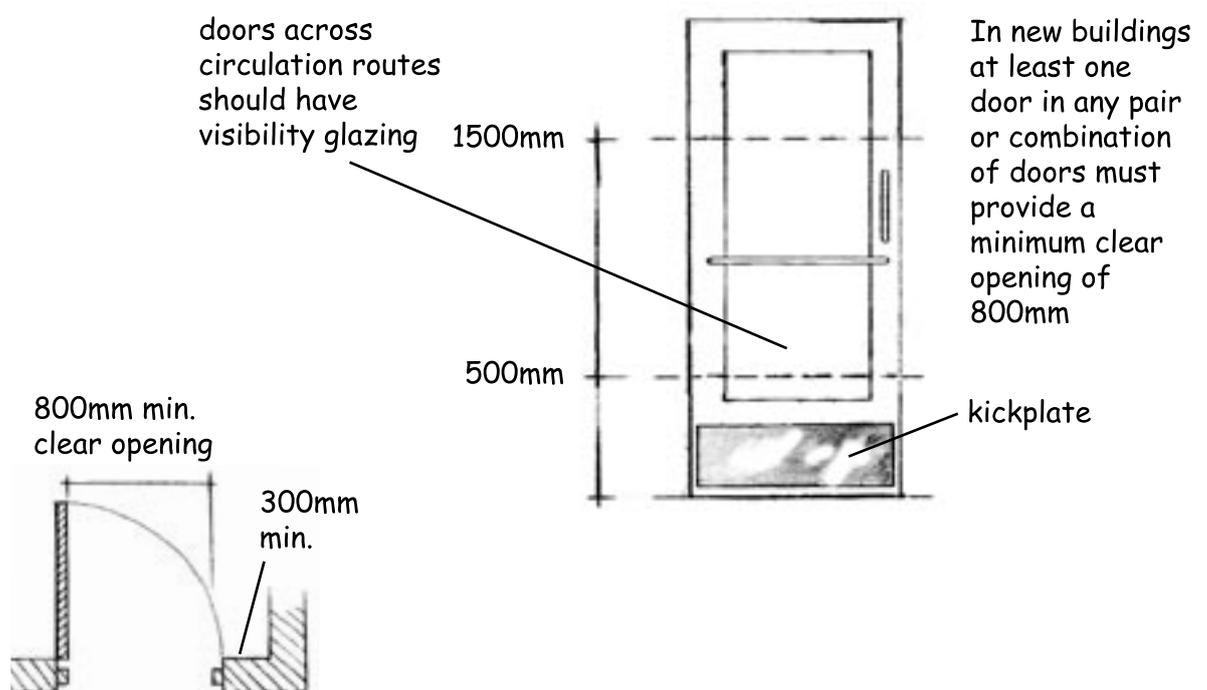


## 8. ENTRANCE HALLS AND RECEPTION AREAS

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### Internal doors

- Doors should be capable of being opened and closed by wheelchair users and people with limited strength or dexterity. In the case of fire doors, use should be made of electro-magnetic hold-open devices or similar.
- The clear opening width required depends on the angle of approach (see table over) and should be provided through one leaf in the case of double doors. If this is not possible, the Access Statement should be used to explain how a narrower entrance is accessible to people, including wheelchair users and mothers with double buggies.
- Where appropriate, vision panels, towards the leading edge of the door, should extend from 500mm to 1500mm from the floor, but, if necessary, interrupted between 800mm and 1150mm above the floor to accommodate door furniture.
- There should be an unobstructed space of at least 300mm on the pull side of the door between the leading edge of the door and any return wall.
- Door handles should be operable with one hand using a closed fist (lever handles are suitable) and should contrast visually with the surface of the door.
- Glass doors should be made visible by the use of manifestation at 850mm to 1000mm and 1400mm to 1600mm above floor level, which contrasts visually with the background seen through the glass. In addition, there should be a high-contrast strip around the door to distinguish it from its surroundings.



## 9. INTERNAL DOORS

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### **Minimum effective clear widths of internal doors.**

Direction & width of approach	New buildings	Existing buildings
Straight on (without a turn or oblique approach)	800mm	750mm
At right angles to an access route at least 1500mm wide	800mm	750mm
At right angles to an access route at least 1200mm wide	825mm	775mm

### **Internal stairs**

The principles to be followed for internal stairs are similar to those for external steps and stairs

- A flight between floors should have no more than 12 risers, or 16 risers in small premises where the plan area is restricted.
- Rise of each step should be between 150mm and 170mm , and the going (tread) at least 250mm.
- The area beneath a stair (or internal ramp) where the soffit is less than 2.1m above the floor should be protected by guarding and low level cane detection or by a permanent barrier.

### **Corridors and passageways**

- Corridors should have an unobstructed width of at least 1200mm, with passing places at least 1800mm long and at least 1800mm wide at reasonable intervals.
- Flooring should be level, slip resistant and non-reflective.
- There should be colour contrast between floors and walls, between ceilings and walls and between doors and walls.
- Corridors and circulation spaces should have good quality, diffused lighting and a good acoustic environment.
- If there are obstacles projecting into the corridor, these should be protected by, for example, a colour contrasted guard rail.
- Outward opening doors should be recessed so that they do not project into the corridor space.

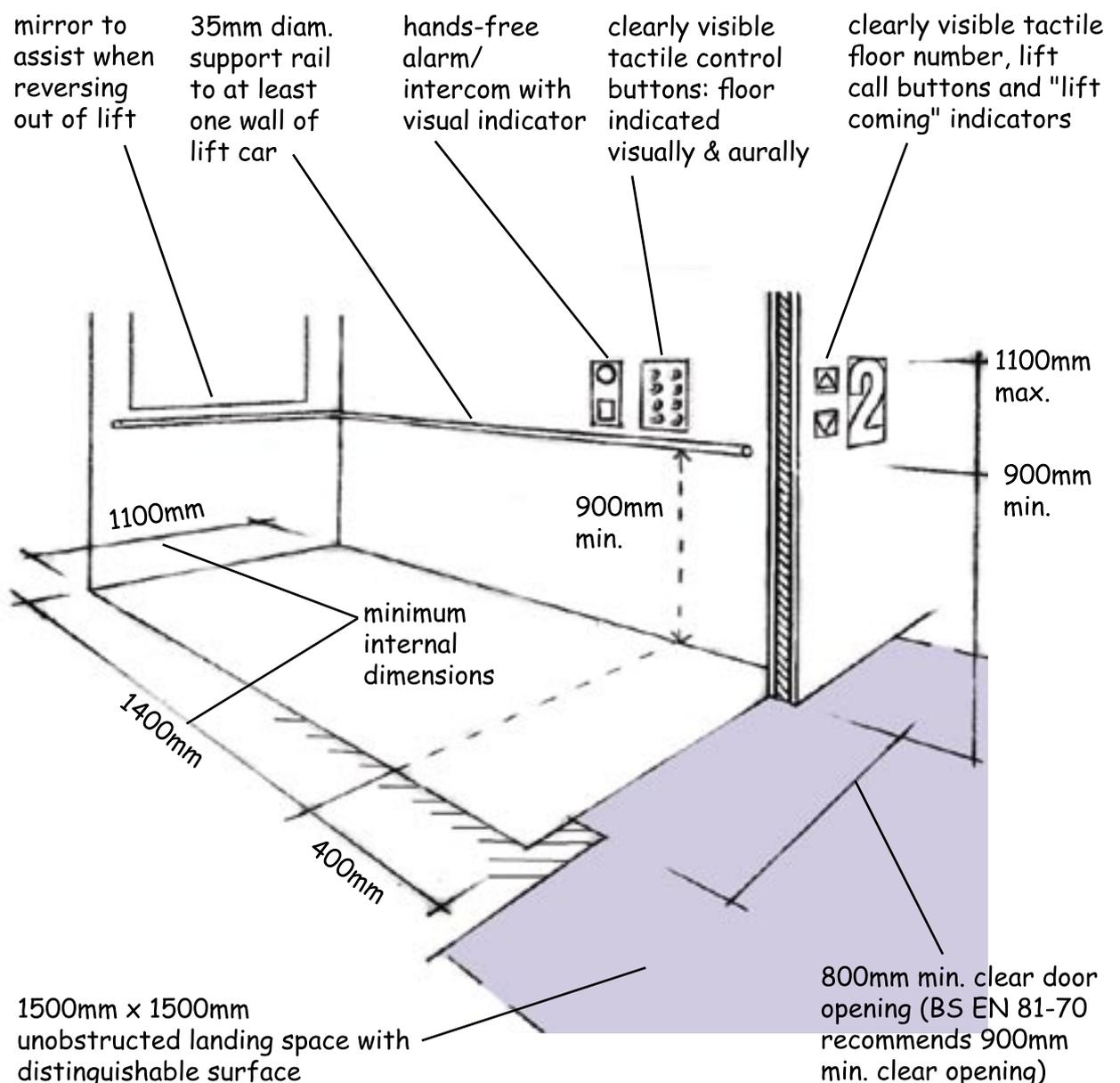
## 10. INTERNAL STAIRS / CORRIDORS & PASSAGEWAYS

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## Lifts

Passenger lifts are the best solution to internal level changes, but sometimes, due to the constraints of the building, a wheelchair platform lift or platform stairlift might have to be used.

- There should be an unobstructed manoeuvring space of 1500mm by 1500mm, or a straight access route 900mm wide in front of a lift.
- Landing call buttons and lift buttons should be 900mm to 1100mm above the floor and at least 500mm from any return wall (landing), or 400mm from return wall (inside lift).
- Symbols on call buttons and control buttons should be tactile, with raised lettering.



## 11. LIFTS

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- Buttons should be colour contrasted with the faceplate and the faceplate should be colour contrasted with the surroundings.
- The lift floor should not be of a dark colour and should be non-slip.
- A handrail should be provided on at least one wall of the lift with its top surface 900mm from the floor.
- An emergency communication system should be fitted.
- The minimum size for a passenger lift should be 1100mm by 1400mm.
- There should be audible and visual information, provided in the lift car and in the lobby, to tell people when the lift has arrived, which floor it is on etc.
- Wall surfaces in the lift should not be visually reflective.
- A mirror should be provided on the back wall of a lift that is too small to allow a wheelchair user to turn round.
- The clear opening width of the lift doors should be at least 800mm.
- Lift doors and landings should be colour contrasted with the surroundings.

### **Switches, sockets and controls**

- Socket outlets should be 400mm to 1000mm from the floor.
- Switches should be 400mm to 1200mm from the floor, although controls requiring precise hand movements should be sited 750mm to 1200mm above the floor.
- Pull cords for emergency alarm systems should be red, as close to the wall as possible and have two 50mm diameter bangles, one at 100mm and the other between 800mm and 1000mm from the floor.
- Controls for use by the general public should have large push pads and be colour contrasted with the wall.
- Lighting pull cords should have a 50mm bangle 900mm to 1100mm above the floor, colour contrasted with its surroundings but visually distinguishable from emergency pull cords.
- Faceplates of switches and sockets should be colour contrasted with the surrounding wall.

### **Aids to communication**

- The use of visually or acoustically reflective materials should be avoided.
- There should be good lighting levels and lighting should not create glare, pools of light or shadows. Lighting should illuminate the face of a person speaking, to facilitate lip-reading.
- Hearing enhancement systems, such as induction loops, infrared or radio systems, should be used for counters, ticket booths etc and for public performances or to facilitate discussions, and should be supplemented by visual information.
- Areas covered by hearing enhancement systems, including telephones suitable for hearing aid users, should be indicated by the standard symbol.
- Fire alarm systems should incorporate flashing beacons as a visual warning aid.

## 12. SWITCHES, SOCKETS & CONTROLS/ AIDS TO COMMUNICATION

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### **Colour Contrast**

It is very important for people with any degree of visual impairment that there is good colour and tonal contrast in the building. As a basic guide,

- Walls should contrast strongly with floors



**Contrasting floor and wall colour**

- Doors should contrast strongly with walls, even when the door is open and only the leading edge can be seen
- Door furniture should contrast with doors
- Grab rails, toilet seats and other fittings in toilets should contrast with the surrounding walls
- Steps and stairs should have colour contrasting nosings on both the tread and the riser
- Lift buttons should contrast with their surrounds, which, in turn, should contrast with walls

## 13. COLOUR CONTRAST AND LIGHTING

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If the importance of good colour contrast is understood, routine redecoration can provide an ideal opportunity to improve colour contrast in the building and therefore its legibility to visually impaired people. It usually works well to use paler and darker shades of the same basic colour. For example, in a toilet, walls could be pale blue or grey, floors could be mid-blue and toilet seats and grab-rails could be dark navy. As a general rule, greater contrast is required for a small feature, such as a door handle against a door, than for a large area, such as a wall against a floor.



**Contrasting floor and wall colour in a toilet cubicle.**

### **Lighting**

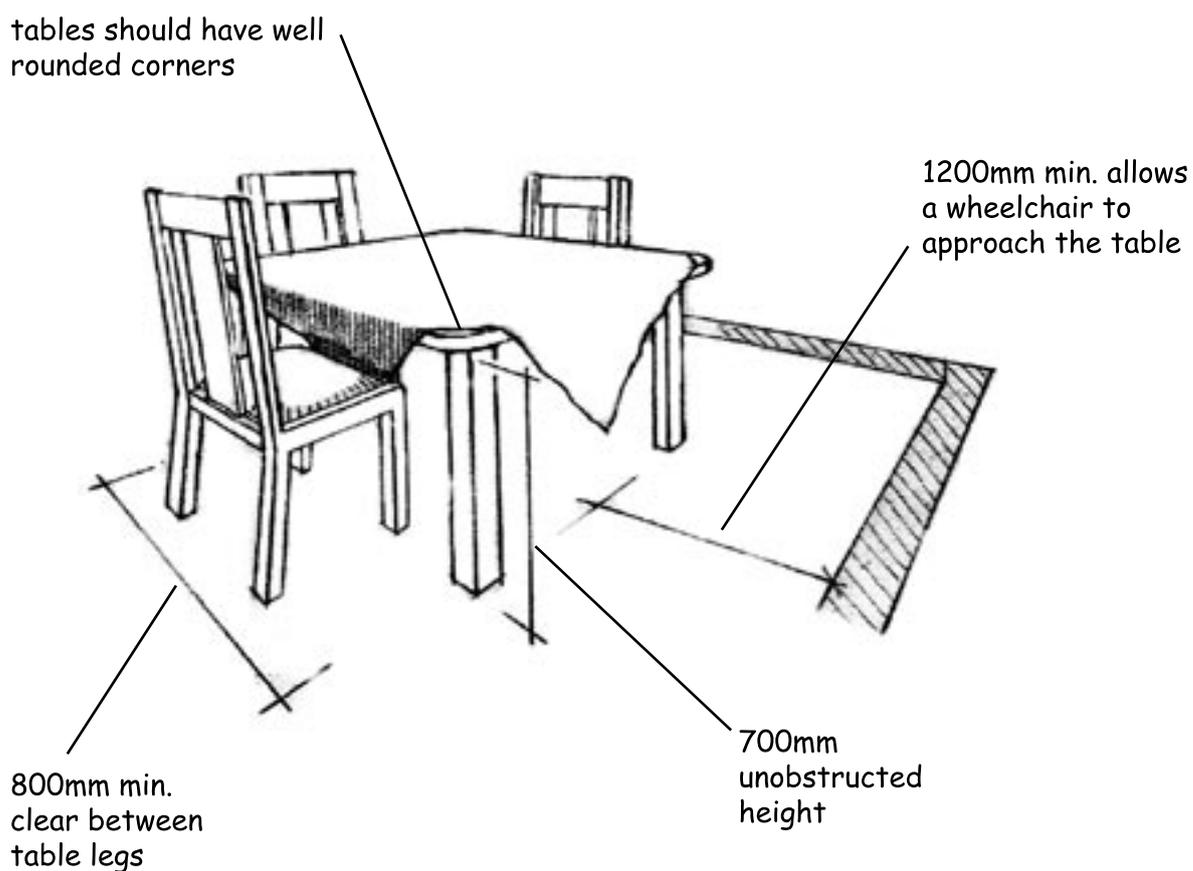
Everyone benefits from a good level of lighting, but for visually impaired people the level and type of lighting is critical. Lighting should meet the following criteria:

- Lighting should be diffused, to avoid pools of light and dark areas. Pools of light make life very difficult for visually impaired people as it takes some time for their eyes to adjust to a different level of lighting.
- Lighting levels should be sufficient to comply with recommended lux values. If necessary, task lighting can be provided.
- Lights should not flicker.

Steps, stairs and entrances should be well-lit to avoid accidents.

### Restaurants and bars

- Bars, self-service counters and seating areas should be accessible to wheelchair users and ambulant disabled customers.
- Consideration should be given to the provision of menus and other information in alternative formats to assist visually impaired customers.



## 14. RESTAURANTS AND BARS

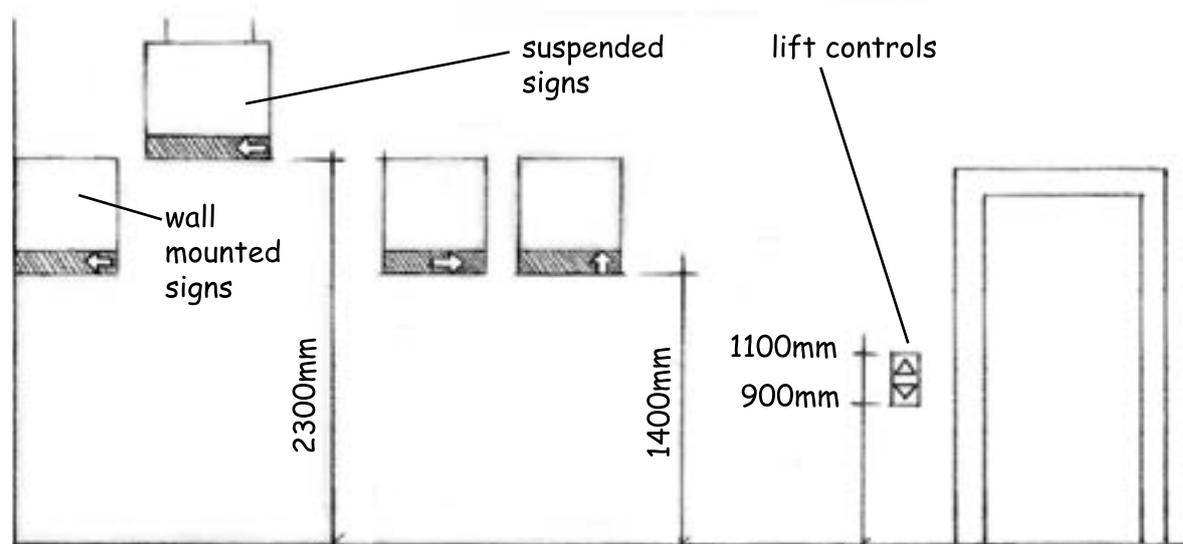
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## Signage

All of us benefit from having clear signs outside and within buildings to minimise the questions we have to ask of others and to get easily to where we need to go. Most people need good, clear indication of where to go when they first come to a building, for example, where the toilets are situated. For some people, entering and finding their way around a new building is a particularly stressful experience, and providing clear directional information will reduce this stress.

Even before entering the building, disabled blue badge users will need to know the location and the best route to reserved parking spaces for their use and people using hearing aids are helped by seeing a sign outside the venue that there is a loop system available.

- Keep the number of signs to the minimum needed to reduce opportunity for confusion.
- All signs should be located in a logical position and care must be taken that they do not project, becoming an obstruction or a hazard, particularly to visually impaired people.
- Make sure that signs are adequately lit. Signs can be difficult to read if positioned in front of a light.
- To minimise glare, avoid reflective glass and ensure signs have a matt surface.
- Signs associated with a control panel, eg lift signs, should be between 900mm and 1200mm above floor level to meet the needs of wheelchair users and others.
- Signs need to be mounted so they are in colour contrast with their background wall.



## 15. SIGNAGE

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The lettering or pictograms (pictorial representation of men and women for toilets, crossed knife and fork for eating area or cafeteria etc) on the sign needs to be in contrast to the sign background.



Access for  
wheelchair  
users



Lift useable  
by wheelchair  
users



Guide dogs  
welcome



Visually  
impaired  
awareness.



Ramp suitable  
for wheelchair  
users



Induction  
loop fitted

The table below gives recommendations for suitable colour contrasts against a variety of backgrounds.

Background	Sign board background	Lettering
Red brick Dark stone	White	Black, dark green or dark blue
Light brick Beige stone	Black or dark colour	White or yellow
Whitewashed or Beige stone	Black or dark colour	White or yellow
Green foliage	White	Black, dark green or dark blue

- Signs should be simple, short and easily understood.
- The text used on signs should be in a sans-serif font like this one, **and not in a serif font like this one.**
- Use both upper and lower case lettering as most people read words by recognising their shapes. Text written with all capital letters is difficult to read.
- Handwritten signs and notices should not be used unless absolutely necessary.
- If a sign is to be viewed from 3metres away, the height of the text should be between 100mm and 170mm. For other viewing distances the text height should be altered on a pro-rata basis. Text size on signs should never be smaller than 25mm in height.
- The use of standard pictograms is very useful for people who cannot read or whose first language is not English.
- Consider providing colour-contrasted tactile signs for people with little or no useable sight. This is particularly helpful in lifts, which are often inadequately lit. Care needs to be taken where tactile signs are placed. For most people that means at a height of between 1400mm and 1700mm above floor level.
- Tactile signs should be embossed rather than engraved.



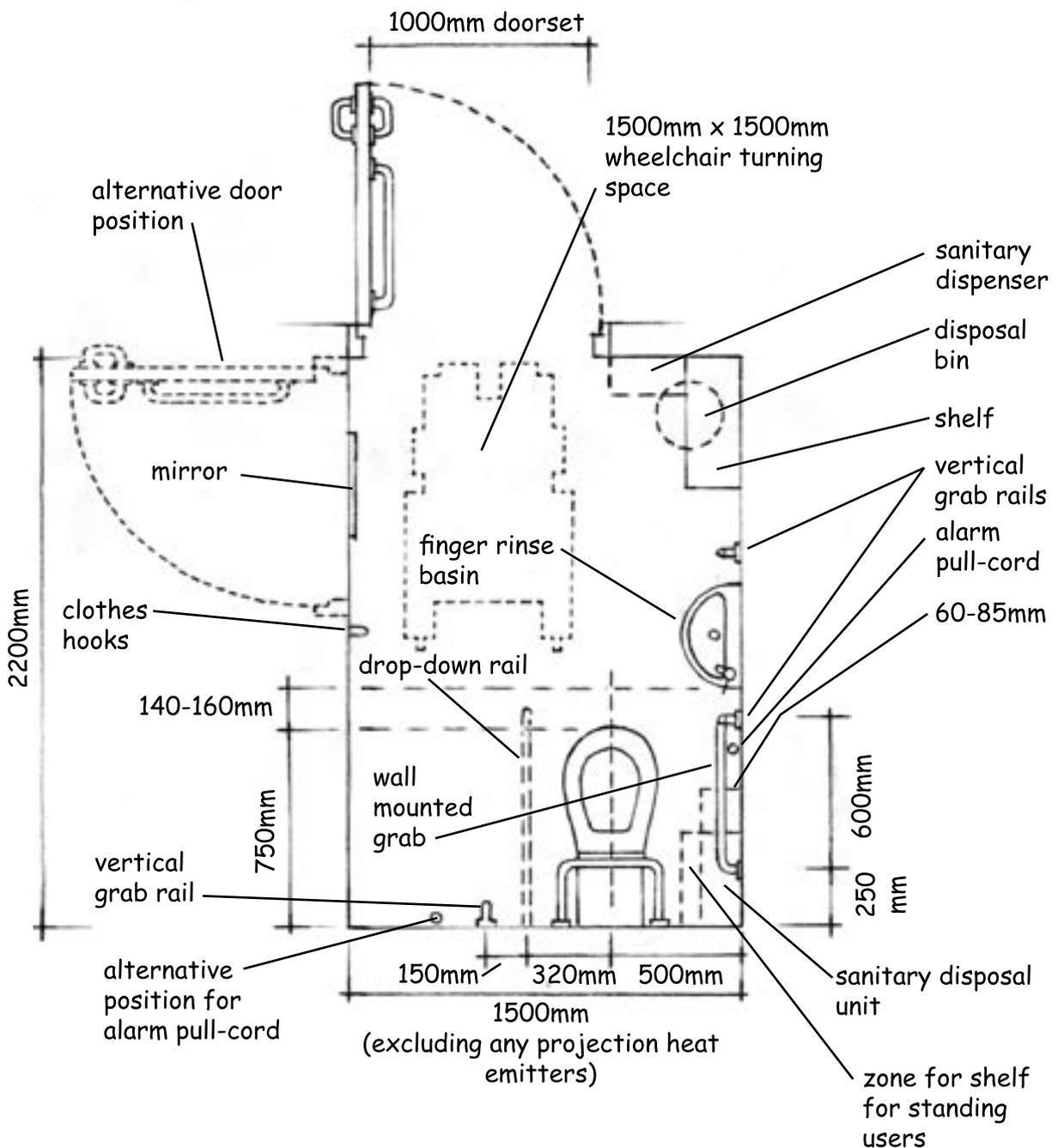
**Wheelchair accessible toilet sign**

## 15. SIGNAGE

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**Wheelchair accessible toilets**

- In any new building where toilet facilities are provided, these must include the provision of a wheelchair accessible toilet. Where more than one unisex toilet is available, a choice of layouts suitable for left-hand and right-hand transfer should be provided.
- If at all possible, an accessible toilet should be completely separate from existing ladies' and men's toilets. This allows a disabled person to be assisted by their partner, or a disabled youngster to be assisted by either parent.
- The door to the accessible WC should open outwards and should be fitted with an emergency release mechanism operated from outside the cubicle.



## 16. WHEELCHAIR ACCESSIBLE TOILETS

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- The door to the wheelchair accessible toilet, when open, should not obstruct emergency escape routes
- Door handles and latches should be of a design that makes their use easy for people who have limited use or strength in their hands. A horizontal pull rail on the back of the door is essential as it allows a wheelchair user to pull the door closed behind them without assistance.
- For safety reasons it is important that the floor covering is slip resistant. It is also important that the floor area is kept clear and unobstructed, as wheelchair users need space to manoeuvre their chair.
- Fittings, pipes etc should not be located so as to restrict manoeuvring or transfer space.
- Fixtures and fittings should be colour contrasted with the floor and walls to make them easily visible, and floor and wall coverings should not be shiny or reflective. For example, a loo seat should not be white, and coloured tiles behind a wash basin are helpful.
- The heights and positions of grab rails shown in the drawings must be followed exactly to ensure they are useable by disabled people. Probably the two most critical dimensions are the height of the wall grab rail beyond the WC (680mm) and the distance between the centre of the WC and the wall (500mm) because a wheelchair user who can't weight-bear will reach across and swing themselves onto the WC.

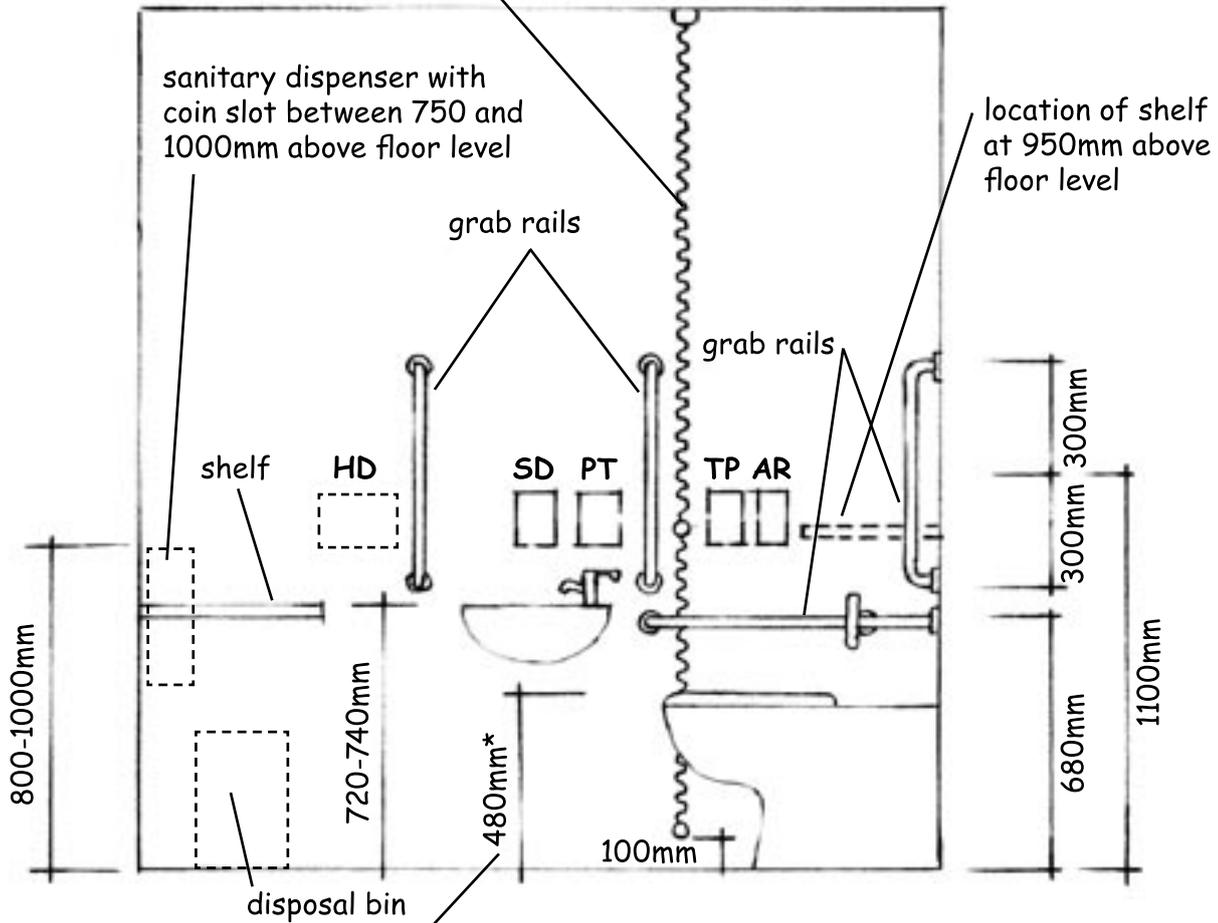


**Accessible toilet**

- A drop down (hinged) rail is usually provided to the side of the WC furthest from the wall, for use if necessary. It is important that the drop down rail is easy to operate for people with limited strength, or people who need to raise or lower it from a sitting position. It is essential the top of the drop-down rail is exactly the same height as the wall rail so that users can push down on both bars to lift themselves.
- Support rails should be very firmly fixed to the wall, as they are used to support body weight, for instance to enable a mobility-impaired person to stand upright.
- The flush mechanism should be lever operated with the lever located on the transfer side of the cistern (furthest from the wall) so that a wheelchair user can operate it when seated back in their wheelchair. It is helpful if the flush lever is large and requires minimum force to operate, for people who have limited upper body strength and mobility.
- It is essential to provide an emergency pull cord, coloured red, with two 50mm diameter bangles, one set at 100mm and the other set between 800mm and 1000mm above the floor, so that someone who has fallen onto the floor can summon assistance. The alarm needs to sound in an area where someone will respond to the call! The cord should never be tied back.
- Specifically, the emergency alarm system should have:
  - Visual and audible indicators that an emergency call has been received
  - A reset control reachable from both the wheelchair and the WC
  - A signal that is distinguishable visually and audibly from the fire alarm
- Coat hooks should be placed at a height of 1200mm so that they are accessible for wheelchair users.
- Mirrors should preferably extend from 600mm to 1600mm from the floor so that people either sitting or standing can use them.
- Toilet paper should be located within easy reach of the WC, to assist disabled people with limited upper body movement. Ideally the toilet paper should be able to be torn off using only one hand.
- Doors should have 'kick plates' at an appropriate height to avoid damage to doors by wheelchair footplates.

# 16. WHEELCHAIR ACCESSIBLE TOILETS

alarm pull cord with two red bangles, one at 100mm, the other at 800 to 1000mm above floor level



\* height subject to manufacturing tolerance of WC pan

- HD possible position for automatic hand dryer
- SD soap dispenser
- PT paper towel dispenser
- AR alarm reset button
- TP toilet paper dispenser

- Light switches with large push pads should be used in preference to pull cords, and should be positioned between 900mm and 1100mm above the floor. Push pads or the bangles on pull cords should be colour-contrasted with the walls and easily distinguishable from the emergency pull cord.
- Any space heater should be screened or have its surfaces kept no hotter than 43°C. It should not restrict the minimum clear manoeuvring space.
- Any fire alarm should emit both a visual and audible warning to anyone using the WC.
- Ideally, the wheelchair accessible toilet cubicle should not include a baby changing table, but if this is unavoidable it is essential to ensure that it does not restrict transfer or manoeuvring space.
- It is important that wheelchair users are able to use handwashing and drying facilities while sitting on the WC, before transferring back to their wheelchair. Soap dispensers, taps and towels should therefore be within easy reach of someone sitting on the WC, and the wash basin tap should be on the same side as the WC.
- The basin tap should be a thermostatic, lever operated mixer tap that can be operated with a closed fist, to assist people with limited dexterity and to enable it to be easily reached from the WC.



**Basin in accessible toilet**

## 16. WHEELCHAIR ACCESSIBLE TOILETS

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- There should always be a large, securely closeable (to avoid odours) waste disposal bin available in the accessible WC cubicle, both for sanitary disposal and for incontinence equipment. Care should be taken, however, to ensure that the bin does not restrict manoeuvring space for wheelchair users and others.
- Where the accessible toilet is the only toilet facility in the building, the width should be increased from 1500mm to 2000mm and the cubicle should include a standing height wash basin in addition to the finger rinse basin associated with the WC. This basin should normally be opposite the finger rinse basin.
- Packs containing the basic grab rails required in an accessible toilet are available from a number of building suppliers, such as Nicholls & Clarke ([www.nichollsandclarke.co.uk](http://www.nichollsandclarke.co.uk)) in their Phlexicare range.

### **Appendix 1: Determination of Planning Applications RES3**

In determining planning applications the council will take particular account of the following factors wherever relevant:

1. Design and layout;
2. Impact on amenity;
3. Impact on traffic, public transport, parking and safe access for vehicles, pedestrians and people with disabilities;
4. Car and cycle parking;
5. Landscaping and ecological impact;
6. Sustainability of proposals.

### **Appendix 2: Sources of help on inclusive design**

- Approved Document M (2004 edition) to the Building Regulations 2000
- BS8300:2001 'Design of buildings and their approaches to meet the needs of disabled people – a code of practice' (BSI)
- 'Inclusive mobility – A guide to best practice on access to pedestrian and transport infrastructure' (Dept for Transport)
- 'Inclusive projects: a guide to best practice on preparing and delivering project briefs to secure access' (Disabled Persons Transport Advisory Committee/Department for Transport)
- Sign Design Guide (RNIB/JMU)
- BS5588 Part 8 'Means of escape for disabled people in entertainment premises'
- Access for Disabled People to School Buildings - Management and Design Guide (Building Bulletin 91, 1999), DfEE
- Inclusive School Design: Accommodating pupils with Special Educational Needs and Disabilities in Mainstream Schools (Building Bulletin 94, 2001), DfEE

- Health Facilities Note 14: Disability Access (1996), a National Health Service Estates publication, (see [www.nhs.gov.uk](http://www.nhs.gov.uk))
- Design guide note 'Access for Disabled People', December 2002 (Sport England)
- Designing for Accessibility, 2004 edition, Centre for Accessible Environments
- The Good Loo Design Guide, 2004 edition, Centre for Accessible Environments

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