

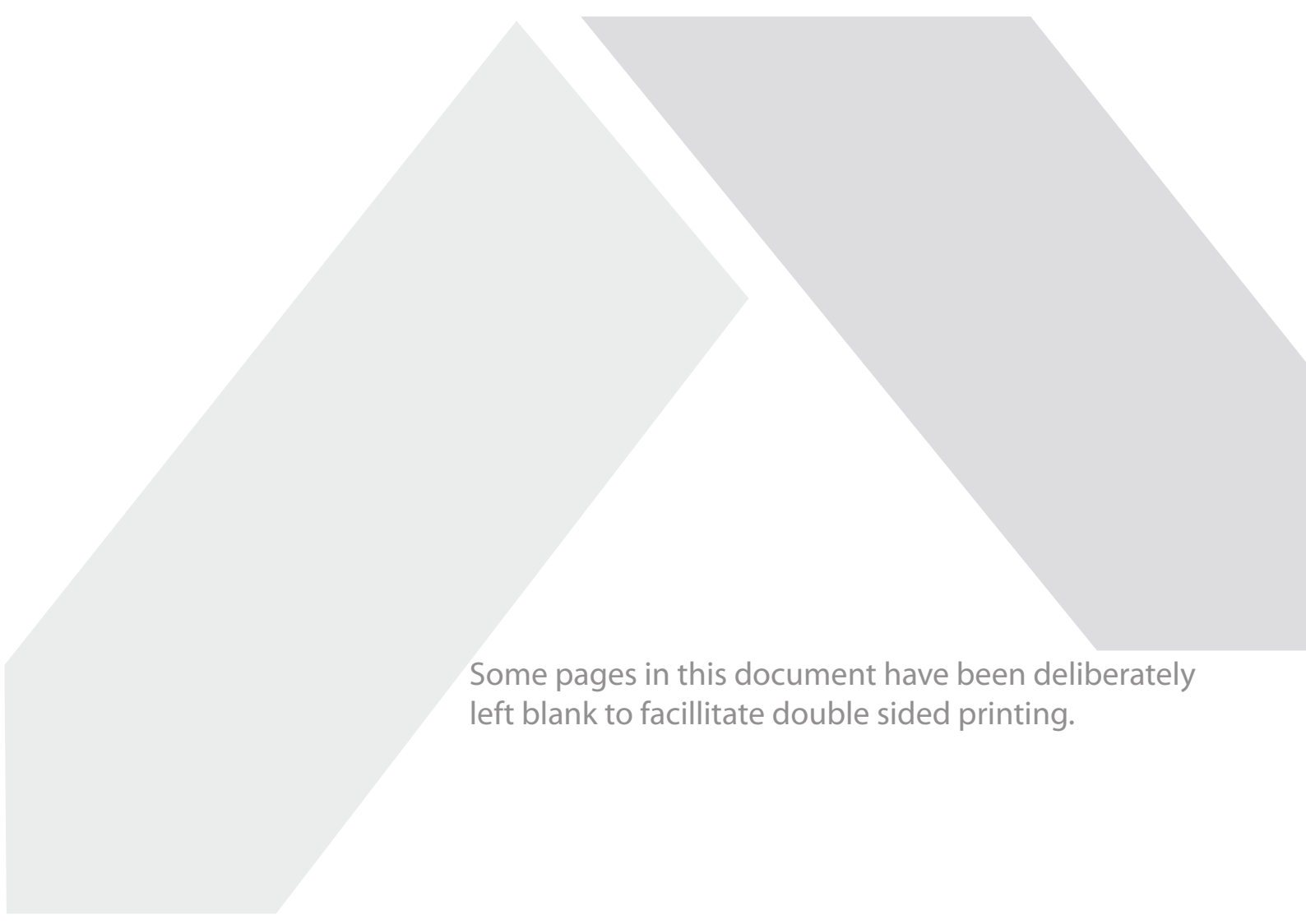
Carlisle City Council Building Control



Better Access

Practical Building Details

January 2007



Some pages in this document have been deliberately left blank to facilitate double sided printing.

Foreword

This booklet has been produced by Carlisle City Council Building Control Section as a result of the frequent questions asked by architects, designers and builders. The advice contained in the following pages includes the experiences of disabled people themselves and in particular, Carlisle Access.

January 2007

If you would like the booklet in an alternative format, please contact Carlisle Building Control:

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section 1

Access statements

Planning and Access for Disabled People – A Good Practice Guide published by the Office of the Deputy Prime Minister, and **Approved Document M of the Building Regulations – Access to and Use of Buildings**, both ask for an Access Statement to be submitted with planning applications and applications for building regulations approval. In order to ensure that local planning authorities have sufficient information on which to make a decision, an application may be rejected until a satisfactory access statement has been received.

Access Statements should identify the philosophy and approach to inclusive design adopted and any relevant advice and guidance used. External routes and car parking should be included. Statements are especially necessary for alterations to existing buildings. It should be noted that they might also be used as evidence in challenges in court under the Disability Discrimination Act.

The Disability Rights Commission has produced detailed notes on access statements on their website: www.drc-gb.org. However, the following headings give guidance on what should be contained within an access statement.

- A statement of policy and approach to access with particular reference to the inclusion of disabled people
- A description of how relevant legislation and advice on accessibility has been followed (e.g. Planning Regulations, Building Control Regulations, Disability Discrimination Act)
- Details of consultations with other parties as appropriate (e.g. Conservation Officer, English Heritage, Access Officer, local access group, building users)

- A statement of compliance with Approved Document M
- Reasons (if any) for departing from Approved Document M (Building Regulations) e.g. constraints of the building environment or building structure
- A convincing argument that an alternative solution will achieve the same outcome (if relevant)
- Management and maintenance policies (to include parking and approach to the building, circulation within the building, lighting, colour contrasts in decoration, furniture, sound enhancement systems and any other relevant features)
- **A proforma Access Statement is available from the Building Control/Planning website:**
www.carlisle.gov.uk/planning

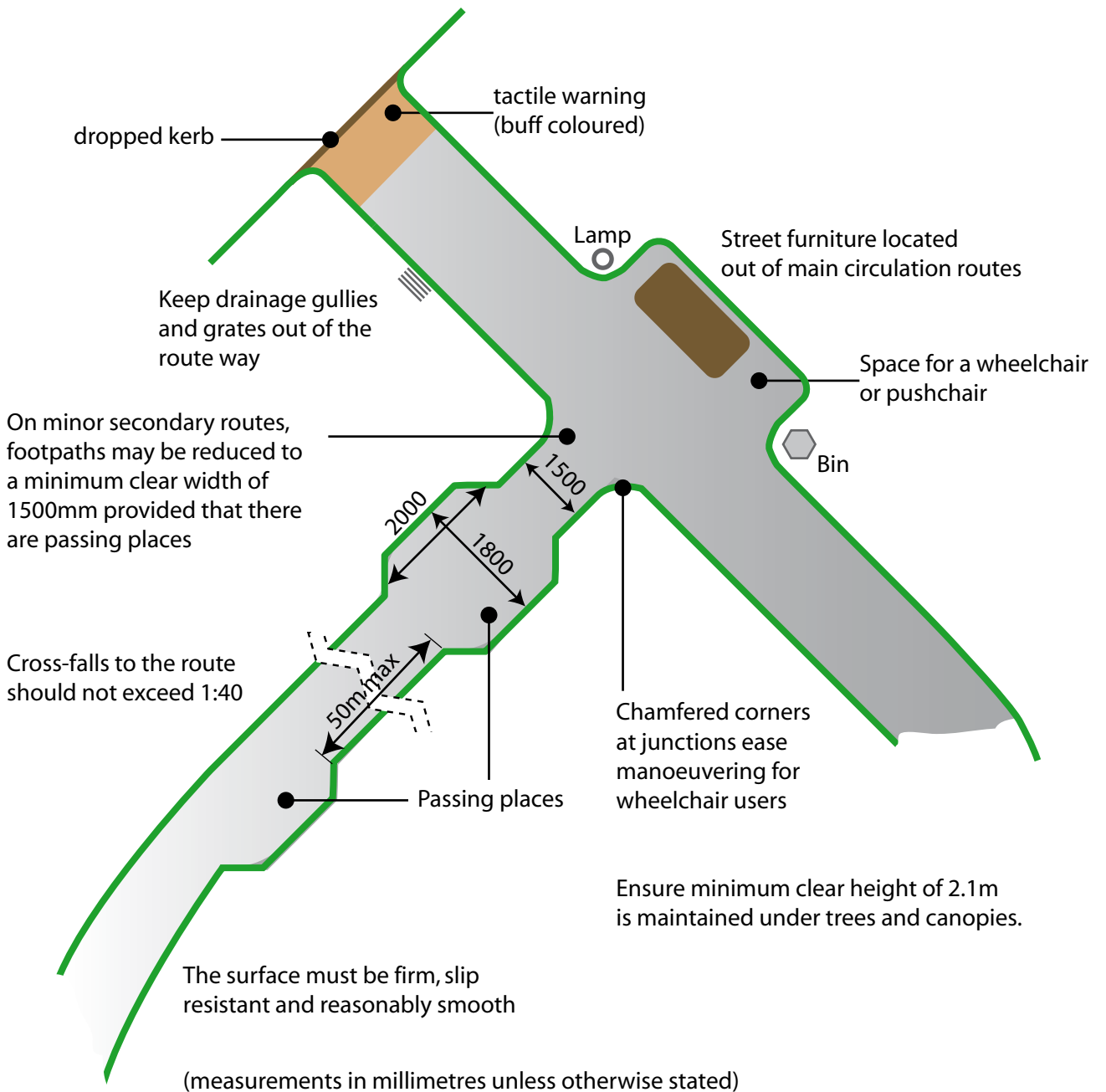
section 2

Approach and Pathways

- Routes and pathways should be as level as possible (1 in 60). Any gradient which is steeper than 1 in 20 must comply with the regulations for a ramp.
- Access routes should not contain steps, turnstiles or any other barrier unless a suitable means of bypassing them is provided close by
- Paths should be 1800mm wide to allow 2 wheelchair users to pass or 1500mm min. to allow a walking person to pass. For paths less than 1800mm wide and in excess of 50m long, passing places 1.8m x 2.0m are required. No path should be less than 900mm in any circumstances.
- The crossfall should not be more than 1 in 40
- All surfaces should be firm and slip-resistant. Cobbles, bare earth or loose gravel should not be used
- Sharp corners at pathway junctions should be avoided
- To avoid the danger of inadvertently walking into a vehicle route, a buff coloured blister surface should be provided at any uncontrolled crossing point
- Any seating, lighting columns, sign posts or litter bins should be located beyond the boundaries of the access route
- Space for wheelchairs or pushchairs should be provided beside benches and seating
- If bollards are necessary, they should be at least 1000mm high, contrast in colour with the background and not be linked with chains

See over for diagram 

Section 2 diagram
Approach and Pathways

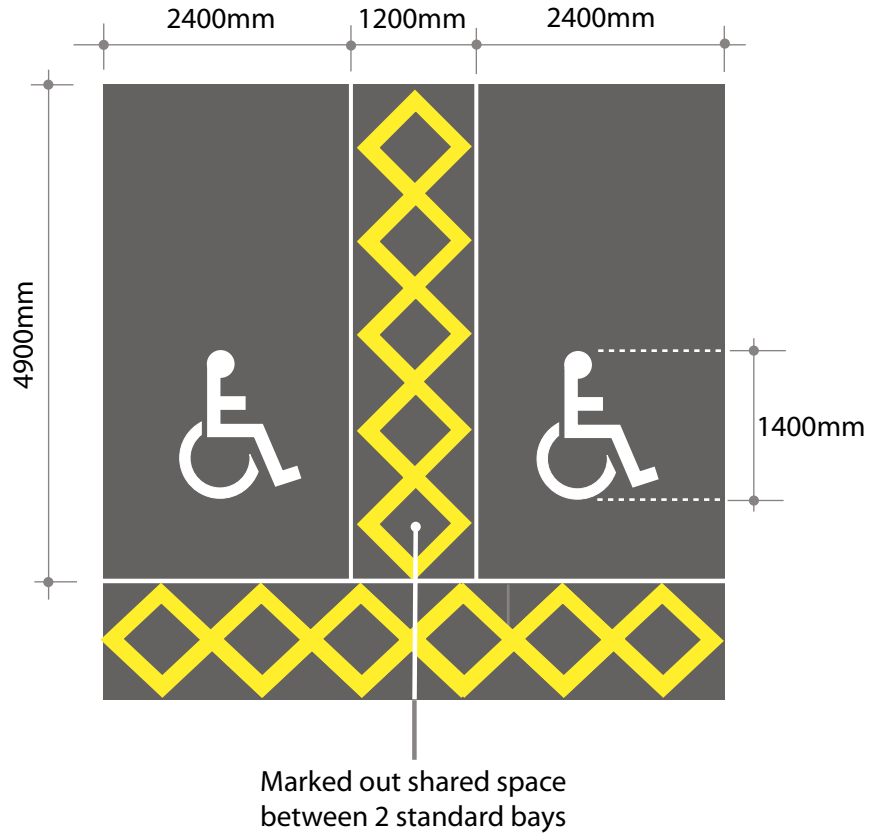
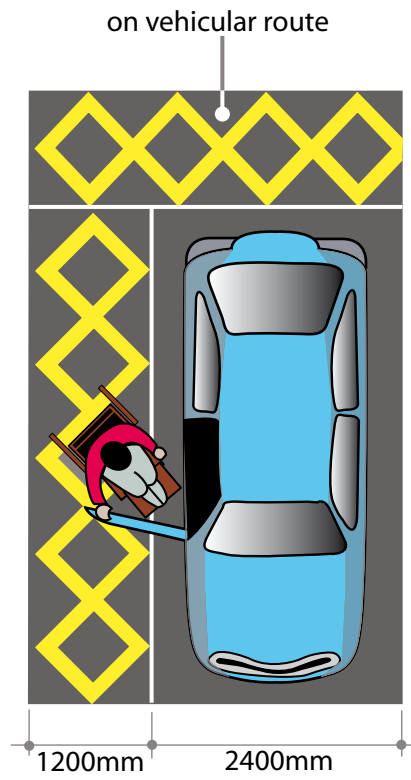


section 3

Car Parking

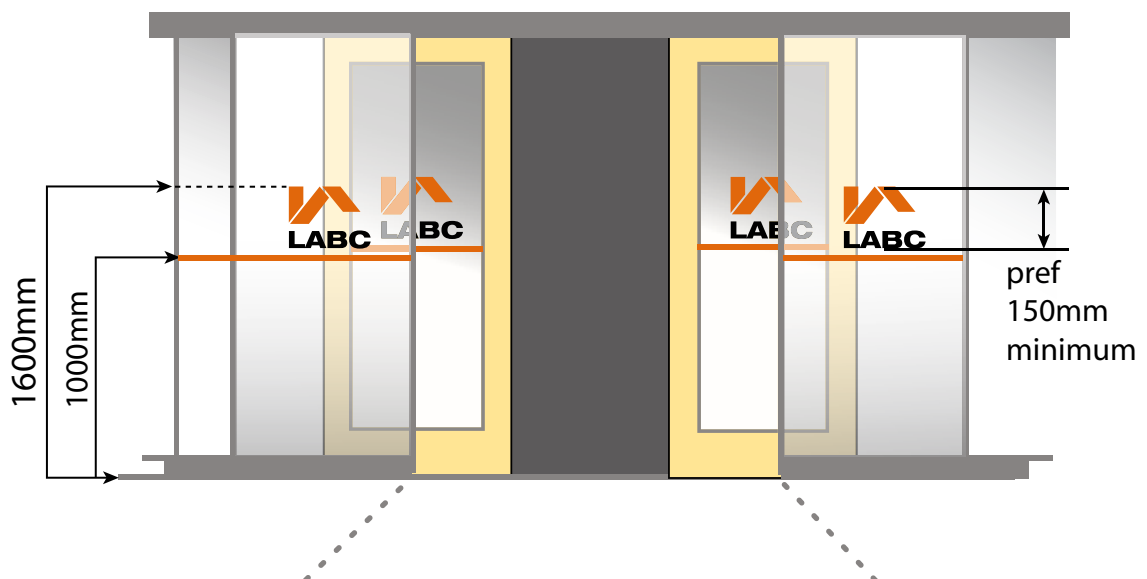
- separate spaces for visitors and employees required
- located 50m max. from entrance (if uncovered route)
- 4800mm long x 3600mm wide (i.e.2400 plus 1200 hatched area) as shown in the diagram
- min. 1 bay for employees and 3% (workplaces)
- min. 1 bay for employees and 6% (shopping, recreation, leisure)
- min. 1 bay for employees and 5% (railway car parks)
- min. 4 bays or 4% of total
- barrier control systems should be useable by disabled drivers (see BS8300 for guidance)
- dropped kerb at least 1000mm wide for access on to footway
- bays identified by symbol and clear signposting
- smooth compacted surface (not gravel)
- ticket dispensers at a height between 750 and 1200mm

See over for diagram 



section **4**
Doors

- as few doors as possible
- door handle/push plate height 1000mm max.
- labels to indicate push or pull
- easy grip or 'D' shaped handles
- handle colour to contrast with door
- logo or vision strips at two heights between 850 - 1000mm. and 1400 - 1600mm. on glazed doors
- kickplate 400mm deep from base of door
- visibility panels to start 500mm. from floor
- door or door frame colour to contrast with walls
- pressure on self-closers to be as light as possible with delayed action (30 Newtons max.)
- automatically opening doors preferred, especially sliding
- revolving doors are not accessible
- fully glazed frameless doors should be avoided

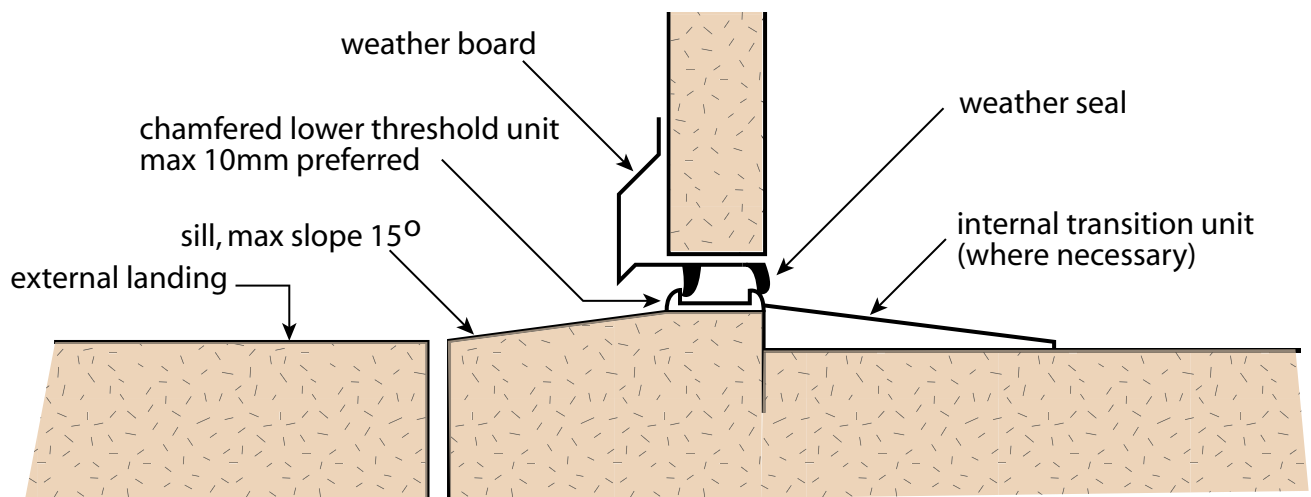


section 5

Entrance

- level threshold (max. 10mm chamfered upstand)
- matting not to be coir/coconut (stops control of wheels)
- non-slip floor covering in contrasting colour to the walls
- avoid deep pile carpets and ones with a "busy" pattern
- seamless surfaces recommended - any joints should be flush
- "path" of contrast texture or colour from the main floor covering, should take visitors from the door to the reception desk, WC and lifts or stairs
- good general lighting levels important, preferably controllable natural light, avoiding 'pools' of light
- windows opposite entrance door should be avoided
- position of lights should not cause glare or reflection
- fluorescent lights should be avoided as they produce a 'hum' which interferes with hearing aids
- clear signage in lower case (with appropriate capital letters for the beginning of words) should comply with RNIB guidelines (Further information available from Access Officer)
- if a secure entry system is used, any intercom should be no higher than 1200mm above ground level and give audible and visible instructions

NB Card swipes and keypads create problems for people with limited dexterity and should be specially designed



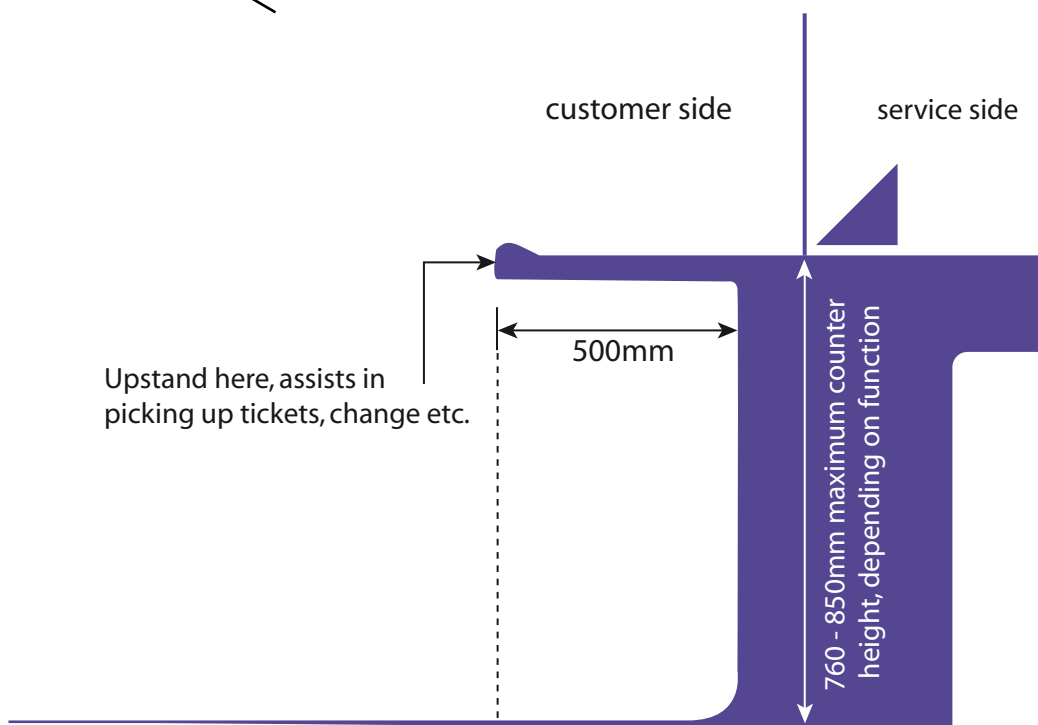
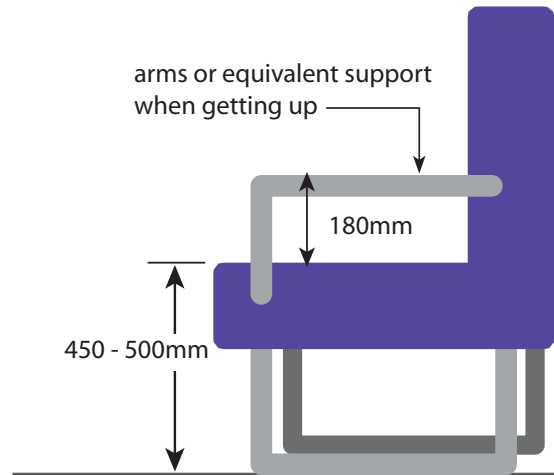
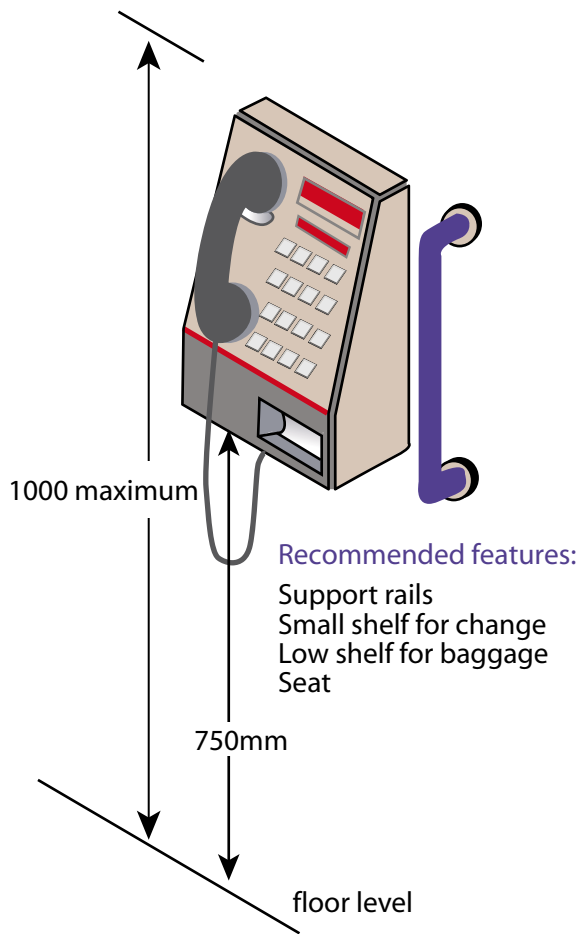
section 6

Reception/counter area

- lower section of counter at 760mm max. height and 1500mm wide
- knee well or shelf 500mm deep on visitor's side
- desk top induction loop for hearing aid users
- receptionist position should be well lit to assist lip reading, therefore avoid lighting from behind
- if desk is not staffed permanently, an easily identified, reached and located bell for attention is recommended
- at least half the seating should have armrests with seats no lower than 450mm from the ground
- spaces for wheelchair users should be integrated
- if a queuing system is necessary it should have an audible as well as visual light system
- access to the service side of the desk for disabled staff should be provided (see **BS8300** for guidance)
- if provided, an accessible public telephone should be available for wheelchair users, with:
 - controls between 750 and 1000mm above the floor
 - no.5 on telephone with raised dot
 - receiver fitted with inductive coupler
 - seat and or support rail available
 - shelf
- refreshment counters or bars should have at least one section 1500mm wide and 850mm from the floor

See over for diagrams 

section 6 diagrams



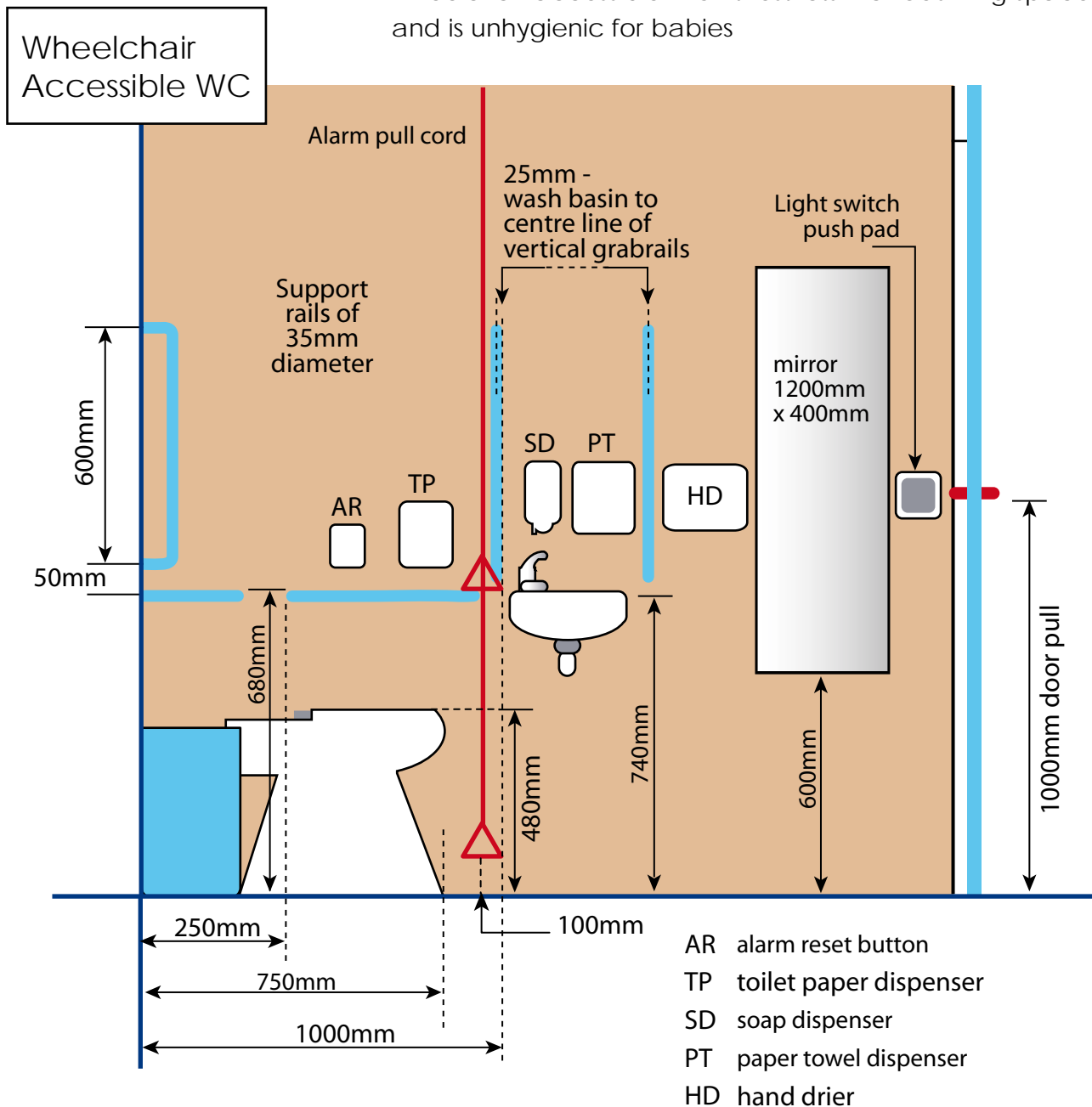
section 7

Wheelchair Accessible WC

- lobbies should be avoided as the more doors there are, the more difficult it is to negotiate. Screens are recommended if privacy is thought necessary
- door locks should be large and easy to use for people with limited dexterity
- light switches with large push pads are preferable to pull cords
- mirror large enough for standing and seated people i.e. 1200mm x 400mm positioned 600mm max. above the floor
- 'trombone' shaped pull down rails are not recommended as the end cannot be gripped easily and the depth of the 'loop' causes an obstruction for lateral transfer when it is in the vertical position
- flush lever on cistern to be positioned on wheelchair transfer side
- cistern behind partition wall is not recommended unless WC pan is brought forward, as it reduces depth of transfer space from wheelchair
- monoblock lever taps on the side of the basin nearest to the WC should be used, so that hands can be washed (and dried) without moving from the WC pan
- automatic hand drier or paper towels positioned as above, 1200mm from the floor and reachable from the WC
- moulded WC seat is not recommended as it causes great difficulty for full leg calliper users
- coat hook at 1200 mm from the floor is appreciated

- parcel shelf at 950mm from the floor is appreciated
- red emergency pull cord with two 50mm diameter bangles set at 100mm and 900mm above the floor
- fittings should contrast with walls etc. to assist visually impaired people (see appendix iv)

NB baby change facilities should not be located in the wheelchair accessible WC. It restricts manoeuvring space and is unhygienic for babies



NB A combined public shower and WC cubicle is not considered suitable as use of the WC is denied to anyone else whilst the shower is occupied. The facilities and floor also become wet and therefore dangerous to subsequent users.

section **8**
Signs



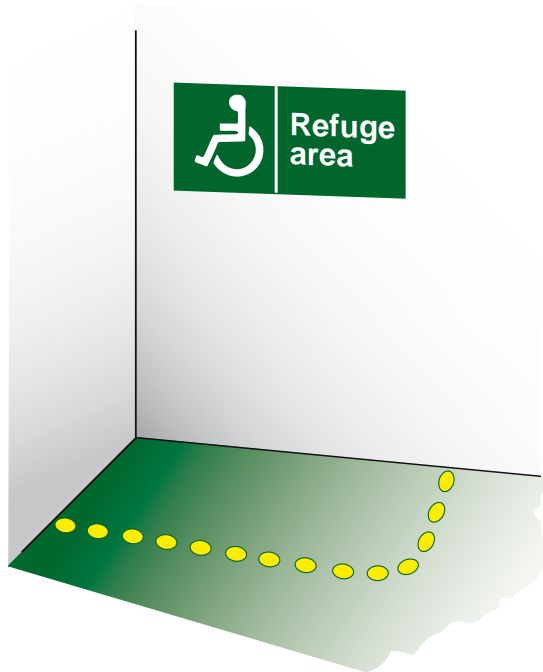
- matt non-reflective surfaces
- pictogram and international symbols should be used wherever possible
- sans serif typeface (i.e. letters without small lines at the base like 'f' or 'p') e.g. Arial, Comic Sans, Futura, Helvetica, Avante Garde, Univers
- avoid thick and thin lines
- lower case lettering with capital first letters where appropriate
- usually align words to left
- good contrast between lettering and background
- tactile relief signs for WCs and lifts at a height between 1400 and 1600mm from the floor
- Braille where space and cost permit
- for a 1.5m viewing distance, 50mm lettering can be read by 70% of people
- the height of the sign should be between 1.4m and 1.6m above ground level. In places likely to be crowded, signs should be above head height i.e. 2.3m to the underside from finished floor level for overhanging or projecting sign

Recommended contrasts:-

dark blue/dark green/ black background with white or yellow writing	white/yellow background with black/ navy/dark writing
red writing is very difficult to read, but white writing on a red background is easier	outline of sign should be a good contrast to the wall

section 9

Emergency Systems

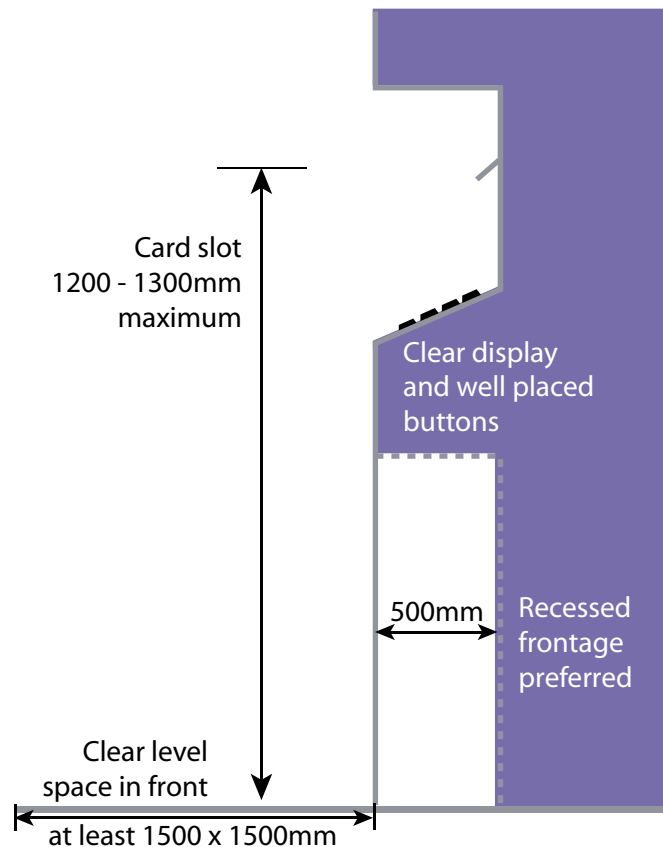


- audible signal should be supplemented by visual one
- refuges provided in protected areas e.g. stairways
- refuges should not reduce the width of the escape route or obstruct the flow of people escaping
- evacuation chair should be available to negotiate stairs when lift cannot be used

section 10

Cash Dispensers

- clear space of 1500mm x 1500 in front of machine
- controls at a maximum height of 1200/1300mm
- external screens positioned to avoid reflection of bright sunlight
- controls should be a good colour contrast from background
- control buttons should be raised and have tactile or raised numbers



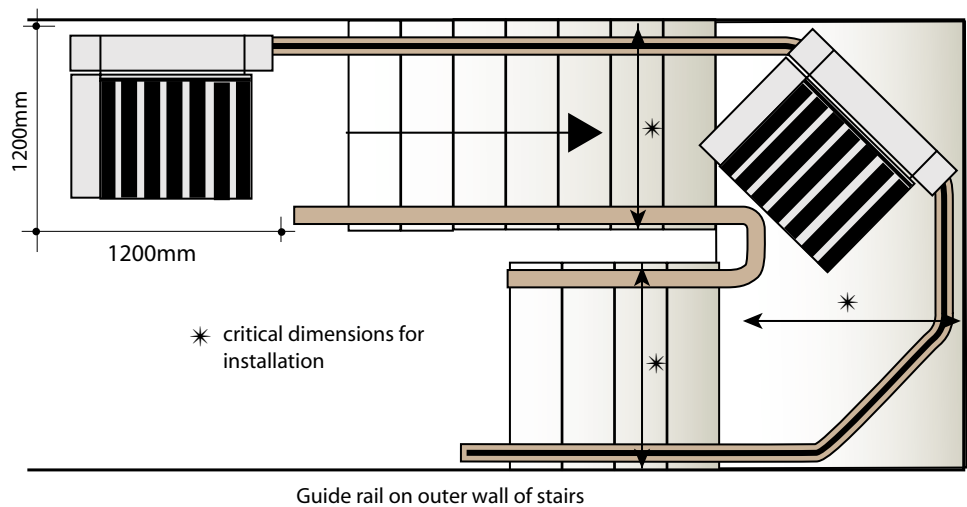
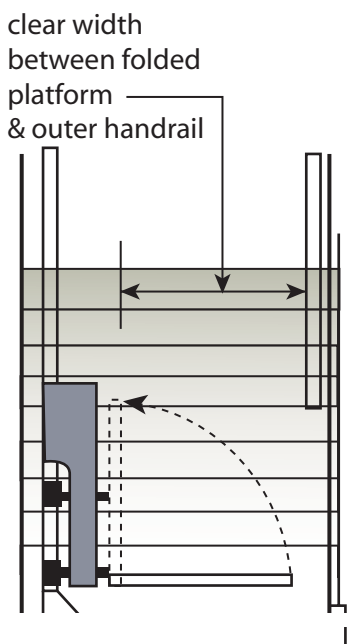
Platform and Stair Lifts

Lift access is now required to all levels in a building but they cannot usually be used for emergency evacuation

Vertical Rise Platform Lift

(e.g. Powered Lifting Platform; Short Rise Lift; Scissor Lift)

- platform lifts must comply with BS 6440: 1999, (being revised to harmonise with ISO European Standards)
- rise restrictions usually 1980mm but ISO standard may allow travel up to 4 metres
- requires a pit up to 300mm deep
- should finish level with the floor at top and bottom
- clear landing of 1500mm at top and bottom
- constant pressure on travel control button is not recommended
- call panel should be easily distinguishable
- buttons should be easily manipulated
- alarm button should have clear visual identification
- platform should rest level with the landing but in no case should the difference be greater than 12mm (BS 6440)

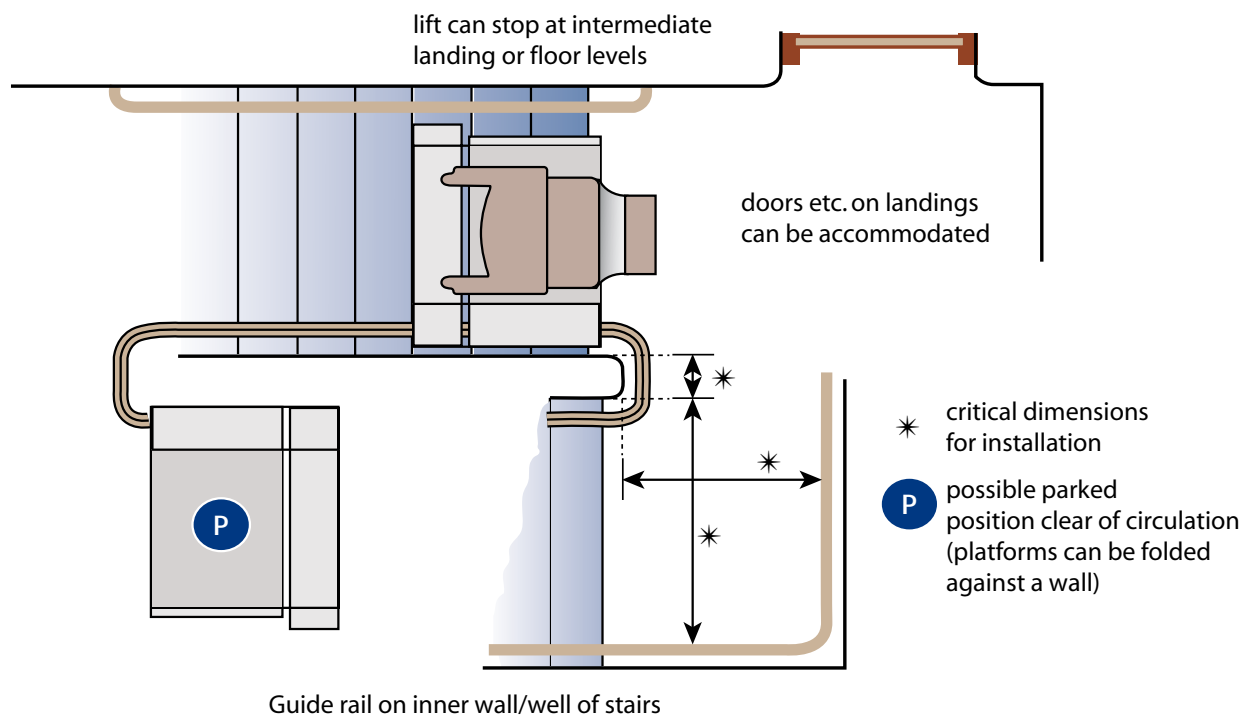


continued overleaf ↗

section 9 continued from overleaf

Stair Lift

- not recommended in public buildings if there is an alternative, as they often require assistance and are slow in operation
- 'seat' design stair lifts are not acceptable as some wheelchair users cannot transfer
- can be used on straight and split flights of stairs
- guide rails can be either on inner or outer walls of stairs
- battery 'back up' system recommended in case of power failure etc
- even with platform folded, clear stair width must leave dimensions suitable for use in evacuation (consult Building Control)
- platform can be parked at the top or bottom of the staircase but must not cause an obstruction (does not usually project more than 300mm)
- space of 1200mm x 1200mm is required for manoeuvre on and off the platform



section 12

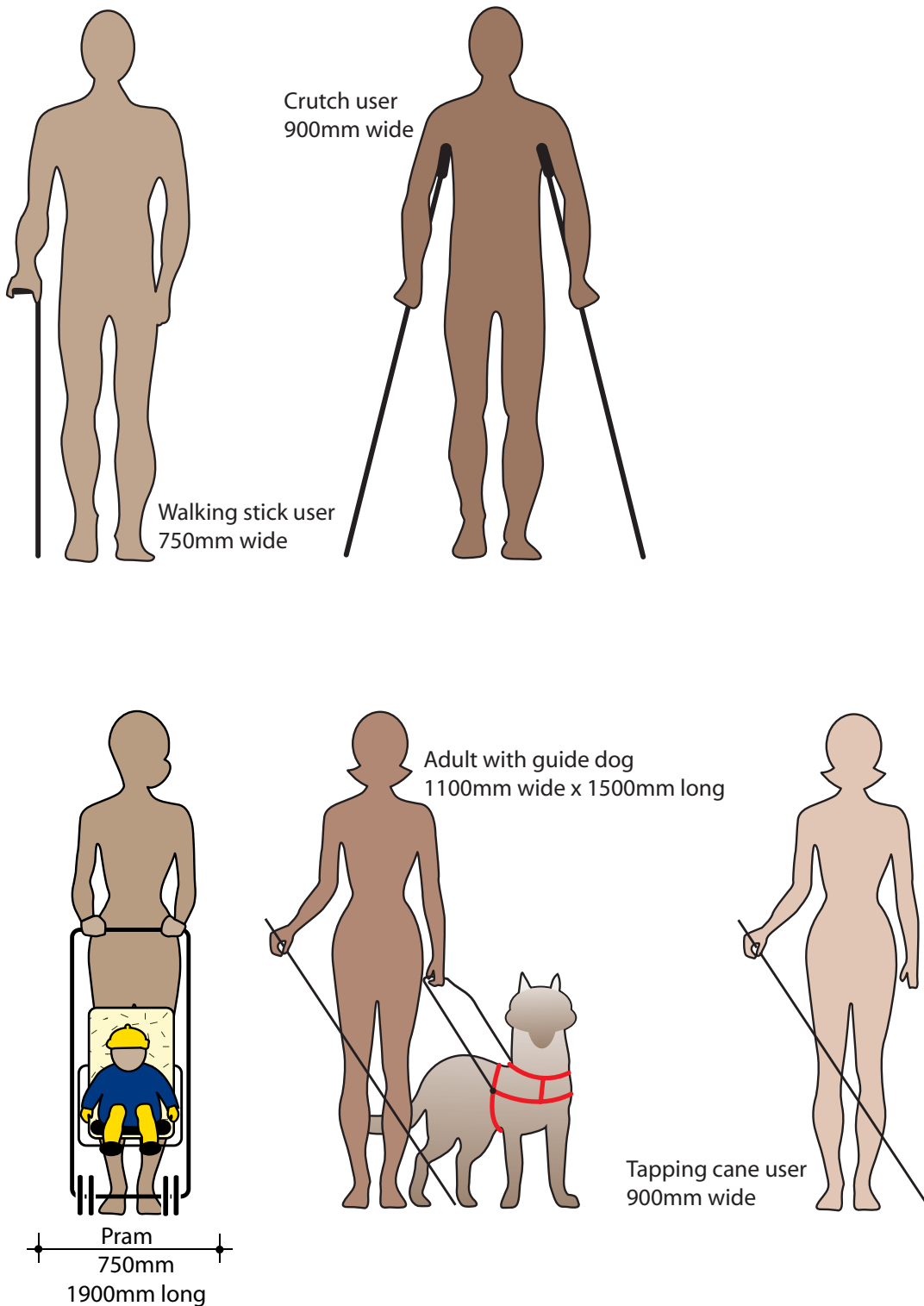
Baby/Adult Changing Areas

- should be accessible to **everyone**
- should be well heated (21°C)
- a bench of 1.4m minimum long x 600mm wide with adjustable height from the ground and clear space beneath
- a bench between 1.6m and 2m should be considered for adults and older disabled children who also need to be changed
- a shelf for placing creams, tissues etc
- a sealed bin for the disposal of soiled nappies
- a large paper towel dispenser for covering the changing bench
- sufficient space for a double buggy

appendices

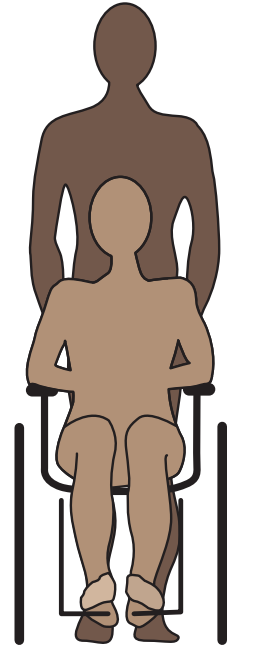
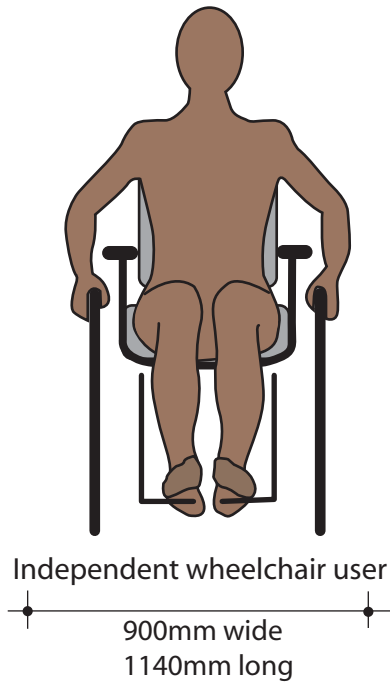
appendix i
Passing widths

Space requirements for people using mobility aids



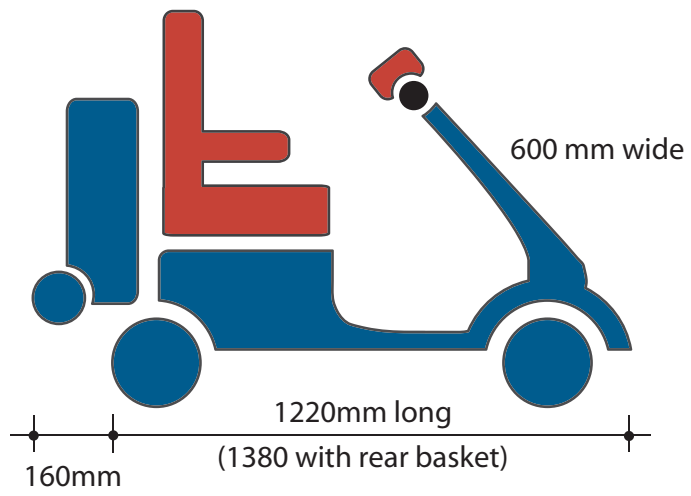
Average wheelchair and scooter dimensions

Independent wheelchair user



Wheelchair user
640mm wide
1750mm long
Assisted wheelchair user:
640mm wide 1750mm long

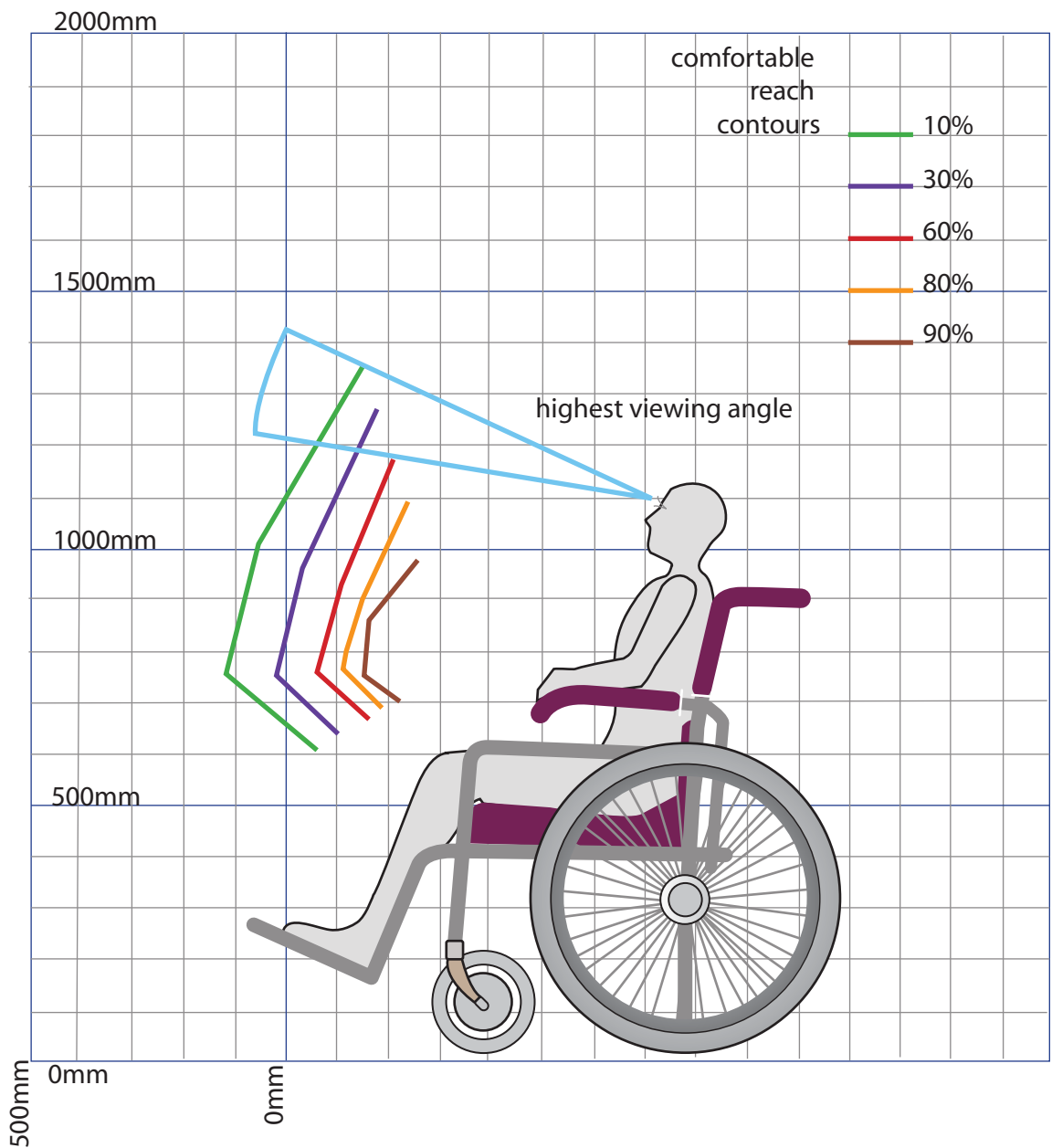
Scooter



Reach and viewing angles for wheelchair users

Comfortable reach contours for wheelchair users and the highest viewing angle of a person with 5th percentile stature.

(Source: Centre for Accessible Environments)



Colour contrast guidance

According to Part M, visual contrast means 'the light reflectance value (LRV) between two surfaces should be greater than 30 points on a scale between 1 and 100. The Dulux colour palette gives numbers to their shades. **Colour Contrast and Perception** by the Research Group for Inclusive Environments, University of Reading, is also useful.

The following are taken from Approved Document M

External

- ◆ All signs to be clearly distinguishable from their background
- ◆ Sign lettering to be clearly distinguishable from the background
- ◆ Surface of ramp to contrast with landings
- ◆ Kerb upstand at side of ramp to contrast with the ramp surface
- ◆ Handrails to contrast with the wall (background)
- ◆ All step nosings to be made of permanently contrasting material (55mm wide) both on tread and riser
- ◆ Entrance doors to contrast with the wall
- ◆ Guarding for doors which open outwards to contrast visually with the background
- ◆ Door furniture to contrast with the door
- ◆ If automatic or to be held open, the leading edge of doors to be clearly seen
- ◆ Glazed doors and screens to have manifestations at 2 heights which contrast with the background as seen from both sides

Internal

- ◆ Internal door requirements the same as external
- ◆ Any columns, ducts etc which project more than 100mm to have a visually contrasting guard rail
- ◆ Visual contrast between wall and ceiling
- ◆ Visual contrast between wall and floor
- ◆ Visual contrast between floor and furniture
- ◆ Visual contrast between sockets, switches and wall
- ◆ Visual contrast between WC fittings and the wall and floor in all WC facilities (not just disabled persons') as visually impaired people use both kinds of provision
- ◆ Visual contrast between handrails and wall in the wheelchair accessible WC
- ◆ Lift landing should be easily distinguishable
- ◆ Lift floor should not be a dark colour
- ◆ Lift call and control buttons should contrast with the faceplate and the faceplate should contrast with the surface on which it is mounted. Controls should also be raised to facilitate tactile reading.

appendix V

Access legislation

Chronically Sick and Disabled Persons Act 1970

Section 4 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 to be available (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.”

Section 6 - requires similar provision at places of accommodation, refreshment or entertainment.

Section 8 - relates to access and facilities at university and school buildings.

Education (Handicapped Children) Act 1970

Makes provision in England and Wales for discontinuing the classification of handicapped children as unsuitable for education at school.

Chronically Sick and Disabled Persons (Amendment) Act 1976

Extends the requirement of the previous 1970 Act to places of employment.

The Disabled Persons Act 1981

This introduces Sections 29A and 29B into the Town and Country Planning Act 1971.

Section 29A - places a duty on local planning authorities when granting permission for any development covered by Section 4 of the 1970 Act to draw the attention of the developers to the relevant provisions of that Act and to BS5810:1979.

Section 29B - makes similar provision for educational buildings.

appendix v continued

DoE Circular 10/82

This suggests that developers are made aware of their obligations under the 1970 Act by means of a note accompanying the local planning authority's notice of the grant of planning permission and ... "where appropriate, conditions may be attached to a grant of planning permission."

It also suggests that local authorities appoint an 'access officer' to provide a clearly identified point of contact on questions of access for disabled people.

The Building Regulations 1985: Part T - Access and Facilities for Disabled People

- ◆ Applies to all floors of new office and buildings and to other single storey buildings to which the public may be admitted and includes sanitary conveniences.
- ◆ It also requires that 'access to and within' halls, auditoria and sports stadia where access to all the seating is impracticable due to it being fixed or tiered, there should be a specified number of spaces for wheelchairs.

Design Note 18 1984 - Access for Disabled Persons to Educational Buildings

Published by the Secretary of State for Education and Employment. Very similar standards as Part M.

The Building Regulations 1987: Part M - Access and Facilities for Disabled People

Extends application of the regulations to extensions and material alterations in so far as any access provision that existed before any subsequent works, should not be lessened.

BS 5588: Part 8 1988

British Standard code of Practice for Means of Escape for Disabled People

BS 6523: 1989

Information on access to and movement within and around buildings on certain facilities for disabled people

Town and country Planning Act 1990

Section 76 requires that local planning authorities draw the attention of developers, when granting planning permission, to the relevant provisions of previous legislation, British Standards and Design Notes.

appendix v continued

The Building Regulations 1991: Part M - Access and Facilities for Disabled People

- ◆ This document extends the definition of disabled people to include those who have a sight or hearing impairment. It requires aids to hearing in some auditoria and meeting rooms and also ticket offices, plus visual indications of floor calls in some lifts.
- ◆ It also extends the requirement to buildings that have been substantially reconstructed and to extensions which include a ground storey.
- ◆ As an alternative to passenger lifts, wheelchair stairlifts or platform lifts should be used to gain access to areas which contain a unique function.
- ◆ 1 in 20 of all hotel bedrooms should be suitable for use by disabled people.
- ◆ Changing facilities in swimming pools and other recreational buildings should be provided.
- ◆ Design of WC provision for ambulant disabled people.

The Building Regulations 2000: Part M - Access and Facilities for Disabled People

- ◆ Now applies to new dwellings as well as other buildings and includes clarification on student accommodation.
- ◆ The regulations apply to purpose-built student living accommodation, other than traditional halls of residence which provide mainly bedrooms and are not equipped as self-contained accommodation.

The Building Regulations Part M – Access to and Use of Buildings 2004

- ◆ Access statements required for all non-domestic buildings
- ◆ Now applies to material alterations and changes of use (including historic buildings)
- ◆ Many new dimensions required
- ◆ Colour contrast to help visual impairment included

PPG 1 Planning Policy Guidance Note: General Policies and Principles (DoE 1997)

- ◆ Para 33 - “Proposals for the development of land provide the opportunity to secure a more accessible environment for everyone, including wheelchair users, other people with disabilities, elderly people and those with young children. Local planning authorities, both in development plans and in determining individual planning applications, should take into account access issues.”
- ◆ Para 34 - “When a new building is proposed, or when planning permission is required for the alteration or change of use of an existing building, the developer and local planning authority should consider the needs of people with disabilities at an early stage in the design process. They should be flexible and imaginative in seeking solutions, taking account of the particular circumstances of each case. Resolving problems by negotiation will always be preferable, but where appropriate, the planning authority may impose conditions requiring access provision for disabled people....”

The Disability Discrimination Act 1995

The Act covers:

- Part 1 Definition of disability
- Part 2 Employment
- Part 3 Selling and letting of land and property **and** Access to goods, facilities, services and premises
From 2004, service providers have had to make ‘reasonable adjustments’ to the physical features of their premises to overcome physical barriers to access.
- Part 4 Education
- Part 5 Transport

The Disability Rights Commission Act 1999

This led to the establishment of the Disability Rights Commission (DRC) in April 2000. It sets out the DRC's statutory duties:

- ◆ To work to eliminate discrimination against disabled people
- ◆ To promote equal opportunities for disabled people
- ◆ To encourage good practice in the treatment of disabled people
- ◆ To advise the government on the working of disability legislation – The Disability Discrimination Act (DDA) 1995 and the Disability Rights Commission Act 1999

Special Needs and Disability Act 2001 (SENDA)

This establishes legal rights for disabled students not to be discriminated against in pre- and post-16 education. It covers training and any other services provided wholly or mainly for students in further and higher education. It includes field trips, examinations, assessments, short courses, arrangements for work placements and library and learning resources.

The Disability Discrimination Act 2005 (Amendments)

The amendments to this Act include:-

- ◆ a new positive duty on public bodies to promote equality for disabled people
- ◆ coverage of almost all activities of the public sector including services such as licensing
- ◆ coverage of larger private clubs (i.e. those with more than 25 members)
- ◆ protection for people diagnosed with the progressive conditions of cancer, MS and HIV
- ◆ an end date for transport and rail vehicles to comply
- ◆ new rights for Councillors not to be discriminated against
- ◆ Blue Badge parking scheme amended in line with other European states

Access maintenance checks for Building Managers

- Check that external paths, ramps and steps are kept clean and unobstructed
- Check that there is no obstruction or misuse of designated parking spaces for disabled people
- Check that manoeuvring spaces are kept clear and not obstructed by deliveries, displays and cleaning equipment
- Check that moveable tables and chairs do not encroach into access routes (min. 900mm clear width)
- Check that any lifts or platform lifts are working properly and ensure that there is a procedure in place in case they break down
- Ensure that accessible WCs are NOT used for storage
- Check that emergency pull cords in WCs are not left tied up (especially after cleaning)
- If applicable, check that shower heads are returned to the lowest position after use
- Ensure that sound enhancement systems (e.g. induction loops) are clearly indicated, tested regularly and maintained, and that staff are aware of how to use them
- Ensure that signs comply with the guidance for size, font and colour contrast and updated as necessary
- Ensure that there is an emergency evacuation plan for both visitors and staff and that procedures are rehearsed and reviewed
- Ensure that there is always someone available and "on duty" to respond to alarm systems in WCs
- Provide ongoing disability equality training for all staff