Access Design Guide

Supplementary Planning Document - Adopted December 2010
Local Development Framework
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Chapter 1: Introduction

1.1 Background

1.1.1 This document seeks to achieve an inclusive and accessible environment within the Royal Borough of Kensington and Chelsea. In all new developments where planning permission is required the Royal Borough will require buildings to be designed so that they can be used safely and easily by all people without unnecessary effort, separation or special treatment.

1.1.2 The Royal Borough of Kensington and Chelsea has a rich architectural heritage with over 70 per cent of the Borough designated as Conservation Areas and over 4,000 Listed Buildings. However, such buildings are often not wheelchair accessible. This Borough is also the most densely populated in London. Therefore, extra consideration will often be required when improving the accessibility of many of its existing buildings, for example, in alterations, refurbishments or extensions. In this respect, the guidance contained in this Supplementary Planning Document (SPD) should be applied where practicable and feasible.

1.1.3 Planning applicants should also be aware of the Disability Discrimination Act (DDA) 1995. Part of this legislation affects the way in which the built environment is designed and managed. It is of particular importance to service providers such as shops and hotels, but also applies to most buildings and open spaces that are open to the general public. Listed buildings are not excluded. Since 2004, service providers have had a duty to make reasonable physical adjustments to their premises to improve access. This duty can require the removal or modification of physical features of buildings – provided it is reasonable. The duty to make reasonable adjustments can be affected by Building Regulation compliance. This measure is to ensure that those services are reasonably accessible to disabled people.

1.1.4 In accordance with government requirements, new buildings will need to be designed to be made accessible for all members of the community.

1.2 Purpose of the document

1.2.1 This document sets out the Council’s guidance to ensure that development proposals achieve a suitable level of access. In particular, this document seeks to ensure that developers, architects, facilities managers and others with responsibility for making improvements to the built environment are aware of the legal and statutory requirements regarding access for all. It ensures that access issues are considered throughout the design and development process and encourages best practice.

1.3 Status of the document

1.3.1 This document is adopted as an SPD. It forms part of the Local Development Framework, and will be used in determining planning applications as a material consideration. It supplements policies in the London Plan (Policies 3D.7 and 4B.5). It also supplements policies of the RBKC Core Strategy (Policies CL1, CL2 and CH2) which have replaced Unitary Development Plan policies CD42 and H27.

1.3.2 This document has been prepared in accordance with national and regional planning policy, as set out in Annex (1).

1.3.3 All applications must be submitted in metric measurements. Imperial measurements have been included in this document for convenience and only as an approximate guide.

1.4 Design and Access Statements

1.4.1 Since August 2006 most planning applications have required a Design and Access Statement (DAS). The access component of a Design and Access Statement is required to ensure that access is considered at the earliest stage in the development process, and to ensure that features are integrated into the design.

1.4.2 Solutions to providing inclusive access may vary depending on the size, scale, nature and intended use of a building. There may also be constraints imposed by existing structures, historic buildings or conservation requirements.

1.4.3 Where the principles of inclusive design and best practice standards cannot be adhered to, the Access Statement enables the developer to explain the constraints of the scheme and the solutions introduced to provide a best possible outcome.
1.4.4 By documenting the various processes leading to a final design an applicant can demonstrate, at planning application stage, that all possible options to improve accessibility have been considered. Additionally, should the owner of the premises ever be challenged under the DDA, the documentation from the Access Statement could assist in demonstrating that no access improvements were possible.

1.4.5 For example, a planning applicant considered removing a step at the entrance to his shopfront by providing an internal ramp. However, investigations revealed that this was not possible.

1.4.6 Many planning applications require a Design and Access Statement. Exceptions are raised within the Council’s website in the section entitled Design and Access Statement Guidance, which include advice on their content.

Photo 1: Victoria and Albert Museum - Ramp and Stepped Approach

1.5 How to use this document

1.5.1 The guidance in this document should be used during the design stage of the development proposal and used to inform the preparation of the DAS to be submitted with the planning application. A high standard of access in a development is more likely to be achieved where accessibility has been considered throughout the development process. This is from the earliest stages, starting with the initial design brief, through the planning process to the detailed design stage and building control approval.

1.5.2 Part M of the Building Regulations sets out minimum requirements to assist in achieving an accessible environment. This SPD also draws on best practice standards and therefore goes beyond Part M. For example, the use of information from British Standard 8300:2009, Department for Transport Inclusive Mobility, English Heritage Easy Access to Historic Buildings and many others. Lifetime Homes Standards and Wheelchair
accessible housing are not covered by the Building Regulations. However, this SPD includes details of the detailed design standards required to meet Lifetime Homes Standards and wheelchair accessible standards. Other topics not covered by Part M, but included in this SPD, are Lighting and Means of Escape. From chapter 3 onwards we set out the principle that the Royal Borough has identified to be achieved for individual aspects of accessibility.

1.5.3 Following this principle, detail is given of how that can be implemented. If, when making an application, the applicant has not been able to meet the requirements in detail, he/she should set out why that is the case in the Design and Access statement, and explain what alternative approach has been taken to deliver the principle.

1.5.4 However, chapter 2 (Accessible Housing) differs from the above. Whilst Lifetime Homes and wheelchair accessible standards are requirements, the information given for Extra Care Schemes / Sheltered Housing and Residential Care Homes is only advisory.

1.6 Disabled People - Space requirements

1.6.1 This section provides information on the basic space requirements that are necessary to ensure that designs cater for society as a whole and are therefore inclusive. The measurements in the following table will help the designer achieve adequate space standards.

**Diagram 1: Illustrations of Space Requirements**
<table>
<thead>
<tr>
<th>Width</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>700mm</td>
<td>Person who does not use a walking aid</td>
</tr>
<tr>
<td>750mm</td>
<td>Person with a walking stick</td>
</tr>
<tr>
<td>900mm</td>
<td>Person with walking frame/crutches</td>
</tr>
<tr>
<td>900mm</td>
<td>A wheelchair user</td>
</tr>
<tr>
<td>1100mm</td>
<td>A parent pushing a buggy and a child</td>
</tr>
<tr>
<td>1200mm</td>
<td>Blind person with cane or assistance dog</td>
</tr>
<tr>
<td>1800mm</td>
<td>A wheelchair user and a parent with buggy</td>
</tr>
<tr>
<td>1800mm</td>
<td>Two wheelchair users</td>
</tr>
<tr>
<td>1800mm</td>
<td>A wheelchair user and passer-by carrying shopping</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1500mm</td>
<td>Wheelchair user</td>
</tr>
<tr>
<td>1400mm</td>
<td>Battery powered scooter</td>
</tr>
<tr>
<td>1750mm</td>
<td>Person pushing a wheelchair user</td>
</tr>
<tr>
<td>1900mm</td>
<td>Parent pushing a buggy</td>
</tr>
</tbody>
</table>
Chapter 2: Accessible Housing

2.0.1 Principle: All new housing, both affordable and private, should be designed to ‘Lifetime Homes’ standards. Where practicable and feasible this should also include conversions and change of use. Additionally, at least 10% of all new dwellings in a development must be designed to be wheelchair accessible.

2.0.2 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

2.0.3 Wheelchair accessible and housing designed to Lifetime Homes Standards is a planning requirement and is not covered by the Building Regulations. It relates to both external and internal design features. Full design details of the proposed housing is normally required with the planning application. As well as the recommended space standards outlined in the table below, the applicant should demonstrate that suitable manoeuvring space and turning circles are incorporated into the design layout, in addition to furniture.

Table 2: Minimum internal floorspace standards

<table>
<thead>
<tr>
<th>No. Rooms</th>
<th>Can accommodate up to a maximum number of persons</th>
<th>m²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lifetime Homes</td>
<td>Wheelchair accessible</td>
</tr>
<tr>
<td>Studio/ bedsit</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>1 bed</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>2 bed</td>
<td>4</td>
<td>70</td>
</tr>
<tr>
<td>3 bed</td>
<td>5</td>
<td>96</td>
</tr>
<tr>
<td>4 bed</td>
<td>6</td>
<td>107</td>
</tr>
<tr>
<td>5+ bed</td>
<td>7</td>
<td>140</td>
</tr>
</tbody>
</table>

These recommended internal floorspace standards are based on a combination of data: English Partnerships introduced minimum space standards for standard dwellings in 2007, and for wheelchair accessible dwellings the John Grooms Association have, for many years, used a Design Brief which details recommended floorspace sizes.

The Council’s Housing Department has also contributed to the information for dwellings. As there is no Housing Corporation Total Cost Indicator for 5-bed units, 30m² has been added to the 4-bed units. This accommodates the extra bedroom and bathing facilities required.
2.1 Lifetime Homes standards

2.1.1 ‘Lifetime Homes’ describes dwellings which incorporate basic design criteria to ensure that the properties are convenient, flexible and adaptable. They are designed to be able to cope with families’ changing needs, but are not intended to be fully wheelchair accessible. The standards exceed those in Part M of the Building Regulations which are only concerned with enabling disabled people to visit a dwelling.

2.1.2 Table 3: Lifetime Homes 16 Design Criteria:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Car parking width</td>
</tr>
<tr>
<td>2</td>
<td>Access from car parking</td>
</tr>
<tr>
<td>3</td>
<td>Approach gradients</td>
</tr>
<tr>
<td>4</td>
<td>Entrances</td>
</tr>
<tr>
<td>5</td>
<td>Communal stairs and lifts</td>
</tr>
<tr>
<td>6</td>
<td>Doors and hallways</td>
</tr>
<tr>
<td>7</td>
<td>Wheelchair turning circles</td>
</tr>
<tr>
<td>8</td>
<td>Living room at entrance level</td>
</tr>
<tr>
<td>9</td>
<td>Identified entrance level bedspace</td>
</tr>
<tr>
<td>10</td>
<td>Entrance level WC and shower drainage</td>
</tr>
<tr>
<td>11</td>
<td>Bathroom and WC walls reinforced</td>
</tr>
<tr>
<td>12</td>
<td>Stair lift and through floor lift</td>
</tr>
<tr>
<td>13</td>
<td>Tracking hoist route</td>
</tr>
<tr>
<td>14</td>
<td>Bathroom layout</td>
</tr>
<tr>
<td>15</td>
<td>Window specification</td>
</tr>
<tr>
<td>16</td>
<td>Controls, fixtures and fitting</td>
</tr>
</tbody>
</table>

2.1.3 Parking

- Where car-parking is provided within the boundary of the building, the space should be capable of widening at a later date to 3300mm (10’ 10”) width.

2.1.4 Approach

- The distance from the car-parking to the building entrance/s should be kept to a minimum.
- The route should be level or gently sloping, and no steeper than 1.20m (4’ 7”) and have a minimum width of 900mm (2’ 12”).

2.1.5 Entrance

- All entrances should be illuminated and have a level threshold and the main entrance should be covered.
- It is important that both external and internal doors are not too heavy for a disabled person to use (see Entrances and Doors for further information). All communal doors should have fused spurs at a high level for future installation of electric door openers.
- For blocks of flats, reasonable provision for disabled people, elderly people, parents with pushchairs etc, to visit occupants on any storey should be ensured. Therefore, in larger developments, usually where an entrance core serves 10 or more units, a lift will be required, unless there are justifiable reasons for not doing so.
- Where entrances are reached by lift, this should be fully wheelchair accessible, with minimum dimensions of 1.1m wide x 1.4m deep (3’ 7” x 4’ 7”) and fittings to Part M standard.
- Whether there is a lift or not, the stair should be designed for ambulant disabled people with maximum 170mm (7”) riser, minimum 250mm tread (10”), suitable continuous handrails on both sides, distinguished nosings and closed risers.

2.1.6 Internal spaces

- All hallways and corridors should have a clear width of a least 1050mm (3’ 6”).
There should be 300mm (12") minimum space between the wall and the latch side of doors on the entrance level.

For apartments/blocks of flats, communal stairs should provide easy access and follow the guidance in Ramps, Steps and Handrails. In larger schemes (ten or above units) a lift should normally be provided – minimum lift size to be 1.1m x 1.4m (3' 7" x 4' 7").

There should be a wheelchair accessible entrance level WC with a floor drain for future shower installation and this should be a minimum of 1.8m x 1.5m (5' 11" x 4' 11"). The wheelchair user should be able to close the door and do a front transfer on to the WC.

The living room should be at entrance level. For town houses this is often shown as living/bedroom. In houses of two or more storeys, there should be a space on the entrance level, that can be used as a bed-space.

A 1.5m (4' 11") diameter wheelchair turning circle (or 1.4m by 1.7m ellipse, 4' 7" by 5' 7" ellipse) should be provided in living and dining rooms.

In kitchens, a minimum of 1.2m (3' 11") width from units to opposite wall should be provided. An open plan kitchen would be preferable, but should allow for doors and screens to be fitted easily if householder preference is for a separate kitchen.

There should be living space at entrance level, e.g. a kitchen and/or a living room.

Walls in bathrooms and WCs should be capable of accommodating grab rails. Wall reinforcement, where provided, should be within 300mm (11") and 1.5m (4' 11") from the floor.

Stairs should have minimum 900mm (2' 12") clear width to accommodate a future stair lift, plus suitable space at top and bottom - a minimum depth of 700mm (2' 4"), clear of door swings and other obstructions.

There should also be a suitable identified space for a future through-floor wheelchair accessible lift from ground to first floor.

The design should allow for a reasonable route for a hoist between the main bedroom and the bathroom.

The bathroom should be designed for ease of access to the bath, WC and washbasin. An outward opening door will normally be required, and 1.1m (3' 7") between the front rim of the WC pan and opposite wall/basin.

Living room window glazing should begin at 800mm (2' 8") or lower and windows should be easy to operate.

Switches, sockets and other controls should be at an accessible height, between 450mm (1' 6") and 1.2m (3' 11") from finished floor level.

### 2.2 Wheelchair accessible Housing

#### 2.2.1 All units designed to meet the 10% wheelchair accessible must achieve the relevant floorspace and structural requirements. For all affordable units the Council's Housing Occupational Therapist must be consulted regarding the layout and detailed fit-out. Contact the Housing Needs section: 020 7361 3008.

#### 2.2.2 Private housing must achieve the relevant floorspace and structural arrangements to ensure that the dwellings can be adapted, if necessary, in the future. As a result of this, adaptations can be made easily if required. Please refer to table below:

<table>
<thead>
<tr>
<th>All units must achieve the following:</th>
<th>Additional for affordable only:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.2.5</strong> For flats/apartments designed to Wheelchair standard, which are located above ground floor level: it is essential that two lifts are provided because a</td>
<td></td>
</tr>
<tr>
<td>All units must achieve the following:</td>
<td>Additional for affordable only:</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>second lift is needed when the first or core lift is undergoing maintenance or is out of service. Ideally one should be designed to evacuation standards.</td>
<td></td>
</tr>
</tbody>
</table>

### 2.2.6 Approach

- Level or gently sloping route to all external entrances, and to external facilities such as storage, parking, garden and clothes drying area. Gradients in excess of 1:20 should be avoided.
- Paths slip resistant and smooth, minimum width 1.2m, maximum cross fall 1 in 5.

#### 2.2.6 Approach

- Path gateways to provide minimum 850mm (2' 9") clear opening width.

### 2.2.7 Lifts from underground/basement level car parks for flats/apartments - ideally there should be two lifts installed or ground level car parking should be available for Wheelchair Standard units. If only one lift is provided, the gradient of the access route to the car park should be no steeper than 1:20. Ensure underground car parks have a headroom height of at least 2m.

#### 2.2.7 Lifts from underground/basement level car parks for flats/apartments - ideally there should be two lifts installed or ground level car parking should be available for Wheelchair Standard units. If only one lift is provided, the gradient of the access route to the car park should be no steeper than 1:20. Ensure underground car parks have a headroom height of at least 2m.

- Path gateways to provide minimum 850mm (2' 9") clear opening width.

#### 2.2.7 Parking within the boundary of the development.

- Good cover at point of transfer from vehicle to wheelchair. Provide a well lit covered area that is integrated within the site layout and aesthetically complements the home. The parking area needs to be 2.4m width with at least an additional minimum of 1.2m width transfer area. The space should be covered.
- Security gates to entrances to underground car parks - locks should be operable without the need for a disabled motorist to leave their vehicle.

### 2.2.8 Entrance

- Entrance landing to be level, and min 1.5m x 1.5m All external doors to give 900mm clear opening and to have accessible thresholds (see also Entrances and Doors for further information about weight of doors) and 300mm clear space on leading edge of door.

#### 2.2.8 Entrance

- Entrance to be covered and well lit.

### 2.2.9 Internal spaces

- Corridors minimum 1050mm wide, 1.2m wide where 90 degree turn necessary and 1502mm wide where 180 degree turn necessary.

#### 2.2.9 Internal spaces

- The general storage space should also be in a position and format usable by a wheelchair user.

### 2.2.9 Internal spaces

- Internal doorways to give minimum 800mm clear opening width and to have level thresholds. Where an approach is not head-on and the corridor/passage width is 1050mm or less, a clear door opening width of 900mm should be achieved.

### 2.2.9 Internal spaces

- Provision for storage and recharging of battery-operated wheelchair. The dimensions of this space should be 1.1m x 1.7m, with one of the longer sides not enclosed and clear of any doorswing. This space is usually located in the hallway and near to
### All units must achieve the following:

- the main doorway within the unit. This should be in addition to normal storage facilities which are appropriate for the size of the dwelling.

### Additional for affordable only:

- Minimum turning space inside entrance 1.8mx1.5m width.

### 2.2.9 Internal spaces

- Rooms all on one level or accessible by wheelchair accessible lift. Where a unit is on more than one level, indicate where space will be allowed for a through-floor lift that links circulation areas at each level and soft-pocket (or structural opening) should be built in.

- Where a lift is required, it should have minimum internal dimensions of 750mm x 1.1m (external footprint of 900mm x 1365mm), have the door on the shorter side, and a 1.5m x 1.5m clear space in front of the entrance.

- Bedrooms, living rooms and dining rooms with adequate space for wheelchair users to turn through 180 degrees with furniture in place i.e. turning circle 1.5m or ellipse 1.4m x 1.8m.

- Normally the main bedroom and bathroom should be connected by a full height knockout panel. This will enable suitable provision for a future hoist to run between main bedroom and bathroom.

- Kitchen layout should provide an effective and appropriate space for use by a wheelchair user. A clear manoeuvring area minimum 1.8m x 1.5m should be provided. An L-shape or open-plan kitchen is preferred.

### 2.2.10 Specific requirements for a bathroom

- The minimum dimensions for a wheelchair accessible bathroom should be at least 2.5m x 2.7m. This will ensure independent approach/ transfer to, and use of, all fittings, including manoeuvring space clear of fittings. It should be noted that any changes to these dimensions must provide an area which is able to accommodate a turning circle of 1.5m x 1.5m clear of fixture and fittings.

- The wash basin should be of an appropriate size, e.g. not a finger basin.
Structural requirements for bathroom/shower rooms to accommodate (future) fitting of wall reinforcement - should be within 300mm and 1.5m from floor.

<table>
<thead>
<tr>
<th>2.2.11 Other considerations</th>
<th>2.2.11 Other considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The glazing line in living/dining/bedrooms should be no higher than 800mm above room floor level.</td>
<td>Controls for mains water stopcock, gas and electric main consumer units should be easy to operate and positioned as per the recommended guidance. Isolating valves for sink and washing machines should also be of a suitable design.</td>
</tr>
<tr>
<td>2.2.11 Other considerations</td>
<td>Controls for mains water, electricity etc should be accessible to a wheelchair user - i.e. high level electricity consumer units, central heating and hot water controls are not acceptable. They should be positioned as per the recommended guidance.</td>
</tr>
<tr>
<td>2.2.11 Other considerations</td>
<td>Provision should be made for remote mechanical and electric window openers if the openers are not within easy reach. See recommended guidance for full details.</td>
</tr>
</tbody>
</table>

2.2.3 Wheelchair accessible housing is designed for people who use a wheelchair in their own homes. It should generally be on one level and should offer sufficient space for wheelchair manoeuvre throughout. However, accessible homes do not need to be on one level if an appropriate through floor lift is provided. In individual houses a through floor lift can be provided and the recommendation is that it opens into circulation space (halls and corridors) rather than rooms (acceptable for lifetime homes). Chair-lifts are not an acceptable option.

2.2.4 It should be noted that wheelchair accessible homes standards exceed Lifetime Homes standards. The proposal should exceed the minimum design criteria for wheelchair accessibility set out in the Wheelchair Accessible Housing, Best Practice Guidance (GLA, the London Plan, 2007) which is based on the National Wheelchair Housing Association Group (NATWHAG, 2006).
Diagram 2: Example of accessible bathroom for independent use

Requirements for a bathroom:
- ceiling track hoists (and ceiling shall be horizontal)
- rails by WC
- shower seat and rails
- floor fixed equipment
- over bath rails.

2.3 Extra Care Schemes / Sheltered Housing

2.3.1 Lifetime Homes standards exist to accommodate the inevitable changes in the housing needs of people during their lives. However, older people will often require additional specific design and support services in their home. Extra Care Schemes and Sheltered Housing should meet the following guidance.

2.3.2 New homes specifically for the above groups both public and private, must comply with Lifetime Homes and where relevant, Wheelchair standards.
In addition they must have lifts to upper floors, capable of accommodating a wheelchair user and an accompanying person and with controls operable from a wheelchair.

- Bathrooms and toilets large enough to manoeuvre a wheelchair.
- Bathrooms and WCs fitted with grab rails and an external override door lock.
- An induction loop system installed in communal rooms and reception areas.
- Well-lit halls and corridors.
- A minimum of category 5 wiring (for easy installation of personal monitoring and alarm systems).

2.3.3 The applicant should make every endeavour to obtain an Approved Design Award under Secured by Design. More details of this can be found at: www.securedbydesign.com.

2.4 Residential Care Homes

2.4.1 To be built in accordance with the Care Quality Commission (previously the Commission for Social Care Inspection Standards), and to have regard to the best practice guidance contained in this document.

2.4.2 For all newly built homes and first time registrations the location and layout of the home is suitable for its stated purpose.

2.4.3 The home provides sitting, recreational and dining space (referred to collectively as communal space) apart from service users’ private accommodation and excluding corridors and entrance hall amounting to at least 4.1sq m (44sq ft) for each service user.

2.4.4 There is a ratio of 1 assisted bath (or assisted shower provided this meets residents’ needs) to 8 service users. Where suitably adapted en-suite bathing/shower facilities are provided in service users’ rooms, these rooms can be excluded from this calculation.

2.4.5 All places are provided in single rooms with a minimum of 12sq m (129sq ft) usable floor-space (excluding en-suite facilities).

2.4.6 Single rooms accommodating wheelchair users have at least 12sq m (129sq ft) usable floor space (15sq m or 161sq ft for wheelchair users – 18-65s) excluding en suite.

2.4.7 Room dimensions and layout options ensure that there is room on either side of the bed, to enable access for carers and any equipment needed.

2.4.8 Rooms which are currently shared have at least 16sq m (172sq ft) of usable floor space (excluding en-suite facilities).

2.4.9 Paragraphs 3.41-3.52 of Part B of the Building Regulations (Fire Safety) as amended 2007 must be met.
Chapter 3: Outside the building

3.1 Car parking - within the area of building curtilage

3.1.1 Principle: Car Parks within the area of the building curtilage should be well laid out, level, adequately lit and, if possible, under cover. Parking for disabled users should be close to the entrance, thus reducing the extra time and effort it can take disabled people to reach the entrance of a building. Any development providing off-street parking should provide a minimum of two Blue Badge parking spaces in accordance with London Plan Policy 3C.23 Parking Strategy and London Plan: consultation draft replacement (October 2009) Policy 6.13 Parking.

3.1.2 As many public transport systems are often not accessible or suitable for disabled people, it is crucial that adequate parking facilities are provided as near as possible to the building or amenities concerned.

3.1.3 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

3.1.4 The spaces should be correctly marked out with white, blue or yellow lines and a wheelchair symbol on the surface of the bay and have a raised sign at the head of the bay.

3.1.5 The ground surface should be firm, stable and slip-resistant with any variation of surface profile not exceeding 3mm, i.e. between paving and surface features.

3.1.6 The parking spaces and transfer zones should be free of obstructions.

3.1.7 There should be adequate artificial lighting around the bay and along the route from the car-park to the building entrance (see Lighting section).

3.1.8 The route between the bay and the building entrance should be accessible, i.e. no level change, with dropped kerbs provided at appropriate locations.

3.1.9 Car-park entry barriers and pay equipment should be capable of use without the driver having to leave their vehicle. For detailed information about ticket dispensing machines please see BS8300.

3.1.10 Information, including payment rates, should be provided at the car park entrance – this should clearly indicate whether or not parking is free for disabled motorists.

3.1.11 Many underground car park areas have a level change (a step) between the car park surface and the lift/stair lobby on that level. Any resulting step should have a ramped alternative.
Diagram 3: Car Parking Layout

Further specific information:


To discuss feasibility of provision of a Disabled Persons Parking Bay, contact the Transportation Section: 020 7361 2553.

For general information regarding existing bays, e.g. the location, contact Parking Line: 020 7361 3004.
3.2 Steps, ramps and handrails - not on the public highway

3.2.1 Principle: disabled people should be able to move independently, without undue effort, separation or special treatment, with dignity, between the street or car park and the building entrance and within the building.

3.2.2 The design of buildings should avoid the use of steps or ramps, but there are occasions where significant level changes are unavoidable. In these situations, where possible, a choice of either a ramp or steps should be provided, because a ramp may not be suitable for some people to use and steps may not be appropriate for other people, e.g. people pushing buggies or wheelchair users. Additionally a sudden change in level, such as a flight of steps should be clearly indicated, as these can be particularly hazardous to visually impaired people.

3.2.3 Handrails are an essential component to all flights of steps and ramps. It is essential that these are installed on both sides of all ramps and steps. Handrails need to be continuous throughout a flight, including landings, platforms and turns. Each handrail should be extended horizontally beyond the top and bottom of steps or ramps - this will provide support as well as giving a clear indication to blind and partially sighted people that the level change has ended.

3.2.4 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved (for internal and external steps/ramps), the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

Table 3: Ramp length in relation to gradient

<table>
<thead>
<tr>
<th>Maximum Gradient</th>
<th>Maximum Length of a Flight</th>
<th>Maximum Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 in 15</td>
<td>5m</td>
<td>333mm</td>
</tr>
<tr>
<td>1 in 16</td>
<td>6m</td>
<td>375mm</td>
</tr>
<tr>
<td>1 in 17</td>
<td>7m</td>
<td>411mm</td>
</tr>
<tr>
<td>1 in 18</td>
<td>8m</td>
<td>444mm</td>
</tr>
<tr>
<td>1 in 19</td>
<td>9m</td>
<td>473mm</td>
</tr>
<tr>
<td>1 in 20</td>
<td>10m</td>
<td>500mm</td>
</tr>
</tbody>
</table>

Other good practice points:

- For more steeply sloping plots where a stepped approach is unavoidable the risers should be between 150mm (6") and 170mm (7") high.

- Suitable handrails to each side, min 900mm (2' 12") width and a maximum flight rise of 1.8m (5' 11") between landings.

- The going of each step should be between 280mm (11") and 450mm (18").

- On external stairways where central handrails are provided it is good practice to incorporate a tapping rail – at a minimum of 100mm (4") above the ground surface.

- Many disabled people find that stainless steel handrails are uncomfortable to use as steel is cold to touch, slippery when wet and does not contrast well against glass or other indistinct backgrounds. There are however, a number of alternatives that could be considered, e.g. handrails made of wood. Current research has indicated that the surface of stainless steel can be bead-blasted which results in a matt charcoal grey finish that has a more visible appearance. Also, adding a screen printed coloured band on the glass against which the handrail will be viewed will help. All of these options will achieve an improved colour contrast.
Diagram 4: Example of ramps, steps and handrails - not for residential dwellings

1. Gradients of ramp – see Table 3 below.
2. Surface width of ramp a minimum of 1.5m.
3. Top and bottom landing of ramp – at least 1.5m in length and clear of any door swing.
4. A ramp should be no longer than 5m. If intermediate landings are necessary they should have a minimum length of 1.5m. Intermediate landing length of ramp 1.5m minimum.
5. Height of curb to open side of ramp 100mm minimum.
6. Nosings to each stair tread distinguished by permanently contrasting material 55mm wide on the riser and up to 65mm on the tread (for external steps).
7. Step risers between 150mm and 180mm in height. Treads between 300mm and 450mm in depth. Risers are not open.
8. Handrails: return to wall or provide positive end. These should also contrast visually with the background. Width between 40mm and 45mm. Heights from landings/platforms between 1000mm and 1100mm, and height above pitch line between 900mm and 1000mm. A second handrail is recommended – 600mm above surface level.
9. Extend handrail horizontally beyond top and bottom step/end of ramp by at least 300mm.
10. For external steps - corduroy tactile paving to top and bottom of steps in accordance with the information given in Part M of the Building Regulations to warn visually impaired people of the impending hazard. For areas involving the public highway, the Council's Streetscape guide should also be consulted.
11. Stair width – 1200mm minimum at surface level.
Chapter 4: Inside the building

4.1 Entrances and doors

4.1.1 Principle: The main or principal entrance to a building should be usable by all. Therefore the access arrangements for disabled people should be included in the overall design and not treated separately.

4.1.2 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

4.1.3 The approach to the main entrance should be level, or should incorporate a ramp that conforms to the requirements given in the Ramps, Steps and Handrails section (in Chapter 3).

Entrances for new buildings and good practice points for existing entrances:

4.1.4 The entrance to a building should include good signage and be well lit.

4.1.5 Entrance doors should be accessible to all, particularly wheelchair users and people with limited manual dexterity. 1000mm (3’ 4”) minimum effective clear width in new buildings and 775mm (2’ 7") width, although 800mm (2’ 8") is preferred in existing buildings where a new shop front or alterations to a shop front are proposed.

4.1.6 Thresholds should be flush, but if unavoidable they should be no higher than 15mm incorporating a chamfered design.

4.1.7 However, if this is not possible in existing buildings the English Heritage publication Easy Access to Historic Buildings states that 25mm (1") is the maximum threshold over which an independent wheelchair user can manoeuvre.

4.1.8 The use of automatic doors is preferred since they are the most convenient form of access for all people. Ideally an automatic sliding door arrangement should be used. See BS8300, section 6.3.3, regarding design information on the different types of automatic doors.

4.1.9 Where it is not possible to install an automatic door, the maximum opening force at the leading edge of the door should not exceed 30 Newton from 0° (closed position) to 30° and 22.5N from 30°to 60°.

4.1.10 Fully glazed doors should have permanent and visible manifestation on the glass which contrasts from the background (from inside and out) at 900mm (2’ 12") and 1500mm (4’ 11") above floor level so that the doors are not hazardous to visually impaired people.

4.1.11 Manifestation may be in the form of a company logo – this should be at least 150mm (6") in height. Alternatively, where broken lines or continuous bands are used, these should be at least 50mm (2") in height.

4.1.12 Where the entrance door and building frontage are fully glazed the glass door should also be distinguishable from the surrounding glass, so that the door can be easily identified by visually impaired people.

4.1.13 Door entry systems should be no higher than 1000mm (3’ 4") above floor level and the controls should contrast in colour and luminance with the background. The use of an LED unit will indicate to people who are hard of hearing that their call has been answered.

4.1.14 Entrance doors and lobby doors should have viewing panels to alert people approaching a door to the presence of another person on the other side. The minimum zone of visibility should be between 500mm (1’ 8") and 1500mm (4’ 11") above floor level, with a minimum width of 150mm (6").

4.1.15 Door handles should be easy to grasp. Lever handles are preferred. The design should ensure that there is at least 45mm (2") between the face of the door and the handle. The handle should be clearly distinguishable from the door by the use of a contrasting colour and should not be cold to the touch.

4.1.16 Care must be taken to ensure these requirements comprise a coherent design and do not result in visual clutter.
Table 4: Minimum effective clear width of door openings

<table>
<thead>
<tr>
<th>Direction and width of approach</th>
<th>New Buildings</th>
<th>Existing Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>External doors to buildings used by the general public</td>
<td>1000mm</td>
<td>800mm</td>
</tr>
<tr>
<td>Straight on approach</td>
<td>800mm</td>
<td>750mm</td>
</tr>
<tr>
<td>At right angles to an access route at least 1.5m wide</td>
<td>900mm</td>
<td>750mm</td>
</tr>
<tr>
<td>At right angles to an access route at least 1.2m wide</td>
<td>900mm</td>
<td>775mm</td>
</tr>
</tbody>
</table>

Entrances to existing buildings

4.1.17 Traditionally many existing buildings have one or more steps to the entrance level and this creates a barrier for many disabled people. However, it may be possible to alter the ground floor level to address the level change or to provide an internal ramp. See Lobbies and Corridors for examples of this. But it is appreciated that this may not be possible due to the presence of, for example, structural beams. Nevertheless, every opportunity should be taken to improve access.

4.1.18 In some instances where there is a small step at the building entrance and it is not possible to provide ramped access into the building, the use of a portable ramp and bell may be considered as a solution. There may however be highway implications and advice should always be sought from the Transportation Section: 020 7361 2557.

4.1.19 New shopfronts should be designed to be accessible to disabled people. Changes of level at entrances should be avoided, but where unavoidable an internal ramp should be provided.

Entrances to Listed Buildings

4.1.20 For Listed Buildings and those in a Conservation Area, the overall design considerations must be taken into account when considering any access improvements such as removing a step. In very exceptional circumstances it may be acceptable to have a secondary entrance as the accessible entrance. The route to this entrance must however be well sign-posted from the main entrance.

4.1.21 In the case of existing buildings where a new shopfront is proposed, the following guidance should be followed:

- Shops which have a change in level of under 180mm (6”) from pavement to shop floor surface can often incorporate ramped access within the shop. Exceptions preventing a ramped area to be created may include the presence of structural beams, floor slabs, socket outlets or basement lights. For specific detailed design guidance about internal ramps for shopfronts see the guidance in the last section of Lobbies and Corridors (Table 5).

- It is often not possible in substantially raised ground level properties to achieve step free access. Nevertheless, every opportunity should be taken to improve access, e.g. by providing a handrail at the stepped entrance.

4.2 Lobbies and corridors

4.2.1 Principle: All lobbies and corridors in new buildings should be accessible to all, and in conversions and extensions should be as accessible as possible.

4.2.2 Entrance lobbies are used for a variety of reasons: to increase security, to reduce heat loss and draughts and to provide transitional lighting (see Lighting section). However, the additional sets of doors may create obstacles for many disabled people. The minimum length of the lobby is related to the door size and swing – automatic sliding doors are preferred since they require less lobby length.

4.2.3 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

- Floor surfaces should be slip resistant.
- All lobbies/corridors should be kept free of hazards.
- Fixtures such as radiators/fire extinguishers should either be recessed or clear of the minimum width of lobby or corridor.

- Internal lobbies should be avoided as they create an unnecessary barrier to disabled people. However, they may be necessary for reasons of fire separation or health.

- Avoid doors opening into corridors from side rooms.

- There should be a contrast in colour and luminance between walls and ceilings, and walls and floors.

Diagram 5: Typical corridor layout

1. Projections such as Service pipes, fire hose reels and radiators should be avoided, wherever possible.
2. Recess at notice board or other assembly point also serve as a passing place for wheelchairs where this creates a 1800mm width and extends for at least 1800mm.
3. Hazard protection at localised obstructions (e.g. columns and ducts).
4. A surface width of 1800mm will allow two wheelchair users to pass one another.
5. Depth of recess not less than the width of the door leaf.
6. Turning circle of 1800mm diameter at a corridor junction acts as a passing place and allows a wheelchair user to turn and return in the other direction.
7. 900mm clear space where a door to a unisex WC opens into an infrequently used corridor which is not an escape route.
8. Clear width of corridor not less than 1200mm.
9. Clear width of at least 1000mm where there is a permanent obstruction over a short distance.
Table 5: Lobbies can sometimes be used to overcome a small level change by the use of a ramp within the lobby area

<table>
<thead>
<tr>
<th>Change in level</th>
<th>Maximum gradient</th>
<th>Length of ramp</th>
<th>+ level landing between end of doorswing/ramp</th>
<th>Doorswing - allow at least 1m</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>50mm</td>
<td>1:12</td>
<td>600mm</td>
<td>1200mm</td>
<td>1000mm</td>
<td>2800mm</td>
</tr>
<tr>
<td>100mm</td>
<td>1:12</td>
<td>1200mm</td>
<td>1200mm</td>
<td>1000mm</td>
<td>3400mm</td>
</tr>
<tr>
<td>150mm</td>
<td>1:12</td>
<td>1800mm</td>
<td>1200mm</td>
<td>1000mm</td>
<td>4000mm</td>
</tr>
<tr>
<td>151mm - 166m</td>
<td>1:12</td>
<td>1800 - 2000mm</td>
<td>1200mm</td>
<td>1000mm</td>
<td>4000 - 4200mm</td>
</tr>
<tr>
<td>200mm</td>
<td>1:15</td>
<td>3000mm</td>
<td>1200mm</td>
<td>1000mm</td>
<td>5200mm</td>
</tr>
</tbody>
</table>

For detailed design guidance see:

BS 8300, Section 6.3.6 and 7.2, and Part M of the Building Regulations, Section 2.25-2.29

4.3 Lifts for non-residential buildings - internal and external

4.3.1 Principle: Lifts should be suitable for the nature and usage of the building.

4.3.2 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

4.3.3 The most convenient form of access between storeys within a building is a passenger or platform lift. In exceptional circumstances, for example, in an existing building where there may be space or other constraints, the use of a stair lift may be permitted. All new non-residential buildings should have at least one lift of a suitable size and design (see Table 6) that is accessible to wheelchair users as well as people with mobility difficulties.

4.3.4 All lifts should be easily identifiable, in particular, either clearly visible or sign-posted from the building entrance. The areas around and within the lift car should be well lit with suitable signage (see Lighting section Page 32). Internal stairs should always be provided nearby as an alternative means of vertical access.

4.3.5 A passenger lift is the most suitable means of vertical access and should be provided in all non-residential multi storey developments. In exceptional circumstances, where a passenger lift cannot be accommodated due to site constraints, a platform lift could be considered to provide access for people with limited mobility.

4.3.6 Wheelchair stair lifts should not be used in new buildings, though their use may be acceptable in existing buildings. A chairlift can only accommodate a person (and not a wheelchair), so should only be used in dwellings.

4.3.7 Passenger lifts:

- The number and size of lifts should suit the anticipated density of use of the building and the needs of disabled people.
### Table 6: Passenger Lift sizes

<table>
<thead>
<tr>
<th>Size</th>
<th>Depth/Width</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 person</td>
<td>1.100 x 1.400mm</td>
<td>Standard Part M</td>
</tr>
<tr>
<td>12 person</td>
<td>1.600 x 1.400mm</td>
<td>Provides sufficient space for a wheelchair user to turn</td>
</tr>
<tr>
<td>16 person</td>
<td>2.000 x 1.400mm</td>
<td>Any type of wheelchair and several other passengers. Sufficient space for wheelchair users to turn 180°</td>
</tr>
<tr>
<td>20 person</td>
<td>2.000 x 1.700mm</td>
<td>Will accommodate larger wheelchairs and scooters easily</td>
</tr>
</tbody>
</table>

### 4.3.8 Other points to be considered:

- A mirror should be provided on the rear wall as it allows a wheelchair user to see if anyone is behind them and also to see the floor indicator panel.
- Lift controls should be consistent with the information provided in Diagram 6 and Table 7, and be clearly distinguishable and have tactile information. Further detailed guidance is given in Approved Document M of the Building Regulations.
- There should be an audible announcement of lift arrival and direction of travel. Within the lift car there should be an audible indication of level reached.
- Where possible, at least one lift in each area should be designed to evacuation standards, i.e. have a separate power supply. It should conform to the relevant recommendations in BS 55 88-8.
- The lift car doors should be distinguishable visually from the adjoining walls.
- Call buttons should have clear symbols in relief to enable tactile reading and contrast in colour and luminance with surrounding face-plate which should similarly contrast with the wall on which it is mounted.
- Doors should include a proximity sensor.
- If the corridor is wide enough seating should be provided outside and near to the lift.

### Table 7: Lift controls

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum door opening</td>
<td>900mm</td>
</tr>
<tr>
<td>Internal/external control panel</td>
<td>Height between 900 - 1.100m</td>
</tr>
<tr>
<td>Handrail height</td>
<td>900mm from floor</td>
</tr>
<tr>
<td>Wheelchair manoeuvring space (immediately outside of lift)</td>
<td>1500 x 1500mm</td>
</tr>
<tr>
<td>Mirror on back wall of lift car</td>
<td>Should not extend below 900mm from lift floor</td>
</tr>
</tbody>
</table>
Diagram 6: Passenger lift
4.3.9 Platform lifts:

- Platform lifts should be designed to allow independent use. There should be clear instructions regarding the use of the platform lift fitted in a prominent position.

- The controls should be set at a height suitable for wheelchair users, and with a clearly visible colour contrast with their surroundings. Ideally the lift should be located adjacent to the stair with which it is associated.

- Platform lifts are operated by continuous pressure controls and travel slowly. They are restricted to a maximum travel distance of 2m (6' 7") where there is no lift enclosure and no floor penetration. Where travel distance exceeds 2m (6' 7") there should be a lift enclosure. The platform size should be sufficient to accommodate a range of wheelchair sizes.

- An alarm should be fitted to the platform lift at a height no lower than 900mm (2' 12").

Photo 3: Platform lift – example within a Listed Building (Royal Court Theatre)

Table 8: Platform lift size

<table>
<thead>
<tr>
<th>Min platform size</th>
<th>Min door width</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>900mm x 1400mm</td>
<td>800mm</td>
<td>Lifting platform enclosed – suitable for an unaccompanied wheelchair user</td>
</tr>
<tr>
<td>1100mm x 1400mm</td>
<td>900mm</td>
<td>Where two doors are at 90° relative to each other, lifting platform enclosed – suitable for an accompanied wheelchair user</td>
</tr>
</tbody>
</table>

NOTE: A lift that does not require a wheelchair user to turn through 90° to exit is preferred.
Photo 4: Platform lift - example of platform lift access to basement of the dwelling
4.3.10 Wheelchair stairlifts:

Photo 5: Example of a wheelchair stairlift - access to raised ground floor dwelling

- Wheelchair platform stairlifts can rarely be used independently and their use will restrict the stair to which they are fitted.

- They should only be considered for conversions and alterations to existing buildings, to serve intermediate levels or a single storey, where a passenger or platform lift cannot be fitted.

- For stairlifts and platform lifts – consideration of the platform size regarding the actual size of wheelchairs/scooters using the facility (see Table 8).

- When the stairlift is parked it should not project more than 300mm (12") into the stairway and the means of escape route must be maintained. For specialist advice consult with Building Control.

Building Control Means of Escape issues:

Tel: 020 7361 3816 – Dave Gammon.
4.4 Accessible WCs

4.4.1 Principle: Toilets should be no less available for disabled people than for non-disabled people.

4.4.2 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

4.4.3 The number of accessible WC cubicles required in a building will depend on the nature and size of the property. Unisex WCs are recommended as opposed to designated male and female toilets. Providing unisex WCs allows use by the many disabled people accompanied by a carer or partner of the opposite sex.

4.4.4 An accessible WC should not be kept locked, and should never be used as a storage cupboard. Baby changing facilities should not be incorporated into unisex accessible WC’s. There should be no unnecessary items that may minimise the wheelchair manoeuvring space, e.g. additional and overly large refuse bins. The following diagrams, photographs and notes provide a checklist of points to consider when designing an accessible WC.

4.4.5 Cubicles should be sited in suitable locations, such as adjacent to lifts or reception areas, where generous space and lobby areas exist. The locations need to be clearly signed, for example, in receptions, along travel routes and adjacent to the cubicle itself.

4.4.6 The minimum dimensions for an accessible WC are 2.2m x 1.5m (7’ 3” x 4’ 11”) with a 1m (3’ 4”) outward opening door. In an existing building where structural alterations may be difficult, a clear opening width of 750mm (2’ 6”) may be acceptable. It is important that this minimum space is achieved because it will ensure wheelchair manoeuvrability within the cubicle. It is equally important that the fixtures and fittings are correctly located so that manoeuvring space is not restricted.

4.4.7 Where space is limited, an inward opening door can be used, provided the length of the cubicle is enlarged to a minimum of 2700mm (8’ 11”).

4.4.8 Alternatively, sliding or bi-fold doors may be considered where space is limited.

4.4.9 A mirror should be fitted – it should be at least 1000mm (3’ 4”) tall and have its bottom edge set at 600mm (1’ 11”) above the floor.

4.4.10 Where more than one unisex compartment is available the layouts should be handed to allow for right and left hand transfer.

4.4.11 There should be good use of colour contrast within the cubicle e.g. fittings contrasting with wall tiles, floor surfaces, as this will assist visually impaired people who may prefer to use the accessible WC.

4.4.12 The flushing mechanism should be positioned on the open or transfer side of the pan for ease of access.
Diagram 7: Unisex accessible WC

Note
Layout for right hand transfer to WC
4.4.13 Basin taps must be located on the side of the basin nearest to the WC and ideally should be a mixer tap with a lever handle.

4.4.14 It should be possible to reach the basin, tap(s), toilet paper, paper towels and/or hand drier while sitting on the WC.

4.4.15 The height of the toilet seat should be 480mm (1' 7'') above floor level.

4.4.16 Use light door springs to improve access for all.

4.4.17 Coat hooks should be fitted at 1200mm (3' 11'') and 1800mm (5' 11'') above floor level on back of door.
Diagram 8: Heights and arrangement of fittings in unisex accessible WC

4.4.18 Where unisex WC’s are located in busy parts of the building, such as reception areas, or directly into public areas e.g. restaurants, it is good practice to provide a lobby or screen that will ensure privacy.

4.4.19 At least one unisex accessible WC should be provided in the building to permit assistance by a companion of either sex.

4.4.20 A combined WC cubicle with shower is not considered suitable as use of the WC is therefore restricted for disabled people. Also, shower floor surfaces and grab-rails become wet and consequently hazardous when transferring from a wheelchair.

4.4.21 Where only one wheelchair accessible WC can be provided, it should be a unisex type, designed for a right-hand transfer.

4.4.22 To assist people with mobility difficulties, e.g. stick users, suites of male/female WCs should include at least one larger sized cubicle that has a minimum width of 1200mm (3’11”) and a minimum length between end of WC pan and door swing of 750mm (2’6”). Appropriate horizontal grab rails should be provided – see position of fixed horizontal rail in Diagram 8.
4.5 Lighting

4.5.1 **Principle:** Good lighting will help to define and differentiate the shape of spaces as well as assisting orientation. It is also important from several other points of view – personal security, safety, the ability to see signs and instructions, and for highlighting potential hazards such as stairs and handrails.

4.5.2 Many people who are visually impaired have some sight – only four to six per cent of people who are registered as blind have no vision at all. People with hearing impairments will also benefit from good lighting strategies as they communicate visually. Additionally, people with reduced mobility rely on good quality lighting. The increasing elderly population, many of whom have failing sight, will also benefit.

4.5.3 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

4.5.4 A lighting strategy should take account of all users of a building, including disabled people.

4.5.5 Buildings should be designed to make maximum use of natural lighting.

4.5.6 Lighting is measured by lux levels – see Table opposite. As the lighting levels of light bulbs diminishes over time, the bulbs should be checked regularly to ensure their effectiveness. Wherever practical low energy bulbs should be used.

4.5.7 Avoid sudden changes in lighting levels – people going from thousands of lux on a sunny day to the dimly lit interior of a building will adjust better if the transition area (entrance areas, lobbies) have good intermediate lighting – see Table 9.

4.5.8 Lighting should avoid creating glare and reflections, pools of bright light and stark shadows as these can mask hazards.

4.5.9 To reduce reflection, non-reflective finishes on internal surfaces should be used.

4.5.10 To reduce glare, lights should be positioned carefully out of the line of vision.

4.5.11 Provide maximum flexibility in the range of lighting solutions, including lamp type, position and intensity (lux level).
### Table 9: Brief guide to minimum lux levels

<table>
<thead>
<tr>
<th>Car parks</th>
<th>50 lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrances to buildings</td>
<td>150 lux</td>
</tr>
<tr>
<td>Lobby areas</td>
<td>500 lux</td>
</tr>
<tr>
<td>Reception/enquiry desks</td>
<td>250 lux</td>
</tr>
<tr>
<td>Office lighting scheme</td>
<td>300 - 500 lux</td>
</tr>
<tr>
<td>Signage</td>
<td>200 lux</td>
</tr>
<tr>
<td>Steps and stairs, at tread level</td>
<td>200 lux</td>
</tr>
<tr>
<td>Top/bottom of ramps</td>
<td>200 lux</td>
</tr>
<tr>
<td>Lifts, internal</td>
<td>100 lux</td>
</tr>
<tr>
<td>Lifts, landing area</td>
<td>200 lux</td>
</tr>
<tr>
<td>Area surrounding an ATM</td>
<td>200 lux</td>
</tr>
</tbody>
</table>

For further information on lighting see – Useful Contacts Annex 3.

Inclusive Mobility A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure Lighting publication can be downloaded from website: www.dft.gov.uk

### 4.6 Means of escape

#### 4.6.1 Principle:
The design of buildings should incorporate good accessibility into and out of each individual building. Means of escape arrangements for disabled people, whether employees or visitors, should therefore have the same consideration. However, it is recognised that it may not always be possible to provide some disabled people with an independent means of escape and they will require a degree of assistance.

#### 4.6.2 Guidance on means of escape is given in Approved Document B (Fire safety) – Volume 2 - Buildings other than dwelling houses (2006 Edition). Some basic guidelines are given below. Some people may be able to evacuate themselves from a building independently; others may need assistance to facilitate vertical escape. Stairs and handrails should be designed in accordance with Part M of the Building Regulations. Current thinking is that, where possible, in multi-storey buildings, there should be an evacuation lift as well as safe refuge areas.

#### 4.6.3 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

#### Refuges:

#### 4.6.4 Where there are stairs, fire protected refuges should be provided as temporary safe places for people to await assistance (the recommended size for a refuge is 900mm x 1400mm [2’ x 4’ 7”]). Refuges should be identified and clearly signposted, preferably located on escape routes where people using the refuge can be seen.
2-way communication systems:

4.6.5 An emergency voice communication (EVC) system should be provided so that people temporarily waiting in the refuge can communicate with the building management organising the evacuation. The EVC system should comply with BS 5839-9:2003. A visual link is useful to allow refuge occupancy to be checked in an emergency situation.

Fire alarm systems:

4.6.6 Consideration should be given to the installation of visual as well as audible alarm systems to ensure that people who are hearing impaired are alerted to the need to evacuate.

Table 10: Good practice management issues

<table>
<thead>
<tr>
<th>Testing</th>
<th>Regular testing of safety equipment: alarms, evacuation chairs, communication points in refuge areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Training</td>
<td>Disability Awareness. Knowledge of emergency procedures, e.g. how to use an evacuation chair (appropriate staff must be identified for this training).</td>
</tr>
<tr>
<td>PEEP’s plan</td>
<td>A Personal Emergency Egress Plan (PEEPs) for individual disabled employees will provide reliable and consistent information that can be used by: the disabled employee; his/her assistant; the organisations Health &amp; Safety staff and the Fire Authority.</td>
</tr>
</tbody>
</table>
Chapter 5: Shops and other Buildings open to the public

5.0.1 Principle: All shops and buildings open to the public should provide a step free entrance into the building. Facilities within the building such as counters, checkouts and fitting rooms should be accessible to disabled people.

5.0.2 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

5.0.3 In the case of existing buildings where there is a small stepped level change between footway and building ground floor surface it may be possible to overcome this with a ramp located within the building. See ‘Lobbies and Corridors’ for advice.

Photo 7: Example of accessible shopfront with internal ramped entrance and a wide doorway with the door held open
Possible measures to improve access (particularly when step-free access cannot be provided):

- highlight steps
- handrail/s / grabrails
- improve the lighting
- door furniture (ironmongery) – good colour contrast from door frame
- contrast with, e.g. stallriser
- decrease weight of door
- fully glazed door – acceptable manifestation
- fully glazed frontage too – distinguish door from frontage
- Signage.
5.0.4 Counters and checkouts:

- Counters should be accessible to wheelchair users as staff and customers.
- Shop checkouts should allow wheelchair access and at least one in every shop should be 900mm (2' 12'') wide.
- The height of counters, desks and shop checkouts should, at least in part, be a maximum of 800mm (2' 8'') to allow easy use by people in wheelchairs.
- Till displays should be positioned at a height suitable for wheelchair users and the installation of induction loops may also be appropriate.

5.0.5 Aisles and shelves:

- There should be sufficient space between display shelves for a wheelchair user to turn. Aisles should have a minimum width of 850mm (2' 10''), or 1.2m (3' 11'') in supermarkets.
- Wherever practicable shelving should be positioned where disabled people can reach it independently. The most accessible shelf heights to reach from a seated position are between 630mm (2' 1'') and 1.17m (3' 10'') above floor level.

5.0.6 Food and Drink:

- Restaurants, cafeterias and bars should be designed to be accessible with split level areas linked by ramps, adequate circulation space, a choice of wheelchair seating locations and accessible self-service facilities.
- Entrances should be designed to allow easy access for wheelchair users and ambulant disabled people, see guidance in Entrances and Doors (Page 19).
- Bars and self-service counters (or sections of them) should be at a level suitable for wheelchair users, preferably 800mm (2' 8'') high.
- Fixed seating should be avoided.

5.0.7 Performance Spaces:

- All assembly and performance areas should allow access and use by disabled people as members of an audience, participants and members of staff.
- Ideally, disabled people should have access to the full range of seating options. They should be able to sit alongside their non-disabled companions.
- To be accessible, spectator seating should provide a minimum of one wheelchair space for every fifty seats, with clear visibility lines without obstructing the view of others, in accordance with the guidance contained in BS8300:2009.
5.0.8 Fitting rooms:

- One accessible unisex changing room should be provided in each suite of fitting rooms.

Diagram 10: Dimensions for a fitting room

- The cubicle size should be a minimum of 1500mm x 1500mm.
- A fixed or tip-up seat at a height of 475mm plus appropriate grab rails.
- A call button for staff assistance fitted at a height in the range of 750mm - 1000mm.
- An outward opening door or curtain should be provided diagonally opposite the seat.
Chapter 6: Hotels

6.0.1 London is a world-class city. The Royal Borough of Kensington and Chelsea contains some of the finest visitor attractions in London that naturally bring in both tourists and visitors to our city. Many of the existing hotels in the Borough are in a Conservation Area and/or are Listed Buildings, and are very often not wheelchair accessible.

6.0.2 **Principle:** All new hotels, including alterations and extensions to existing hotels will need to achieve a greater degree of accessibility. For example, there should be a wheelchair accessible route from arrival at the outside of the hotel, to the reception desk, and then to the accessible bedroom as well as common areas within the hotel e.g. restaurant and bar area. See diagram of corridor in Lobbies and Corridors.

6.0.3 In order to achieve this principle, attention to detail is required. Where the details below cannot be achieved, the applicant should explain why in the Design and Access Statement, and say what alternatives have been put in place to achieve the principle.

**Key points are:**

6.0.4 Wheelchair users should be able to reach all the facilities available within the building. They should also be able to visit companions in other bedrooms, e.g. when attending conferences.

6.0.5 10 per cent of the bedrooms should be wheelchair accessible, and half of these should be fitted with a fixed track hoist or similar system.

6.0.6 A further 5 per cent of the bedrooms should be capable of future adaptation, e.g. wider doors.

6.0.7 The wheelchair accessible bedrooms are designed to provide a choice of location in the hotel. However, all should be located within 50m (164 feet) of a refuge area/lift, but not necessarily right beside these facilities.

6.0.8 All new accessible bedrooms should have an en-suite bathroom. The room sizes must meet the minimum requirements as stated in Diagram 17 of Part M of the Building Regulations. An en-suite shower room as opposed to a bath facility is preferred (Part M Diagrams 24 and 25). For a shower room, this should include a flip-up seat.

6.0.9 If only one accessible bedroom is provided, it should have an accessible shower room rather than the provision of a bath.

6.0.10 If wheelchair accessible bedroom/s are located above/below ground floor level, then more than one lift should be available.

6.0.11 There should be a disabled car-parking space for each wheelchair accessible room, in addition to other general requirements.

6.0.12 Lifts to basement car-parking: If only basement car-parking is provided, more than one passenger lift should be provided. N.B. if there is a valet car-parking service, it is unlikely that these drivers would be able to drive a vehicle that is adapted for a disabled driver.

6.0.13 All routes from the car-park to the hotel entrances must be accessible and well lit.

6.0.14 Other points to be considered:

- Reception desk: should incorporate a lowered section as well as an induction loop.

- An accessible bedroom should cater for as wide a range of disabilities as possible.

- Suitable means of escape should be provided – see Means of Escape section.

- Additionally, for hearing impaired people staying in a hotel, the use of pillow vibrating units or under mattress pads are designed to wake people from sleep, e.g. emergency or alarm calls. For more information contact the RNID.

- All switches, sockets and controls should be safe and fully accessible to wheelchair users and people with hearing, visual or dexterity impairments.

- A telephone that can be used by a person with a hearing impairment should be available in the accessible room.
Diagram 11: Accessible bedrooms

Further information:
Annex 1: Legislation, guidance and planning policies

1.0.1 The Council will expect all planning applications for buildings, including alterations and extensions, to demonstrate the highest standards of access and inclusion. The following is a list of relevant planning policies, legislation and good practice guidance, which advocate the highest standards of access and inclusion.

Local Policy

1.0.2 Policies within the Core Strategy make reference to accessibility in areas development.

1.0.3 Policy CL1: requires all development to respect the existing context, character, and appearance taking opportunities available to improve the quality and character of buildings and the area and the way it functions, including being inclusive for all.

1.0.4 Policy CL2: requires development through architectural design to be inclusive and therefore accessible to all. Policy CL2 (0 - iv) requires new, and alterations to existing shopfronts to be inclusive for all.

1.0.5 Policy CH2: requires new residential developments, including conversions, amalgamations and changes of use, to be designed to as a minimum achieve ‘Lifetime Homes’ standards; floorspace and floor to ceiling heights standards and wheelchair accessibility for a minimum of 10% of dwellings.

Greater London Policy


1.0.7 One of the key objectives of the London Plan is to build a London that is more accessible to disabled people. The plan sets out a framework and policies for achieving the highest standards of safe, easy and inclusive access for all people, regardless of disability, age or gender. The plan includes requirements for all new housing to be built to Lifetime Homes standards and for 10 per cent of new housing to be wheelchair accessible. In particular, the London Plan contains the following policies relevant to inequality and access.

1.0.8 Policy 3A.5 states that Boroughs should take steps to identify the full range of housing needs within their area. Development Plan Document (DPD) policies should (amongst other things) seek to ensure that:

- all new housing is built to ‘Lifetime Homes’ standards
- ten per cent of new housing is designed to be wheelchair accessible, or easily adaptable for residents who are wheelchair users.

1.0.9 Policy 3A.13 states that Borough policies should provide for special needs housing, including sheltered housing with care support, staffed hostels and residential care homes, for older persons, children and other client groups, based on up-to-date estimates of need.

1.0.10 Policy 3D.7 states that the Mayor will work with strategic partners to implement his Tourism Vision and to achieve 40,000 net additional hotel bedrooms by 2026, to improve the quality, variety and distribution of visitor accommodation and facilities and to bring forward a major international convention centre. Boroughs should (amongst other things):

- Support an increase in the quality and quantity of fully wheelchair accessible accommodation in light of integrated strategic and local assessments.
- Require all future development to meet the highest standards of accessibility and inclusion. DPD policies should (amongst other things) integrate and adopt the principles of inclusive design so that developments can be used safely, easily and with dignity by all regardless of disability, age, gender, ethnicity or financial circumstances (Policy 4B.5).
- Are convenient and welcoming with no disabling barriers, so everyone can use them independently without undue effort, separation or special treatment.

Planning Policy Statements (PPS)

1.0.12  PPS 1: General Policy and Principles (2005) makes reference to development providing an opportunity to secure a more accessible environment for everyone and notes that local planning authorities should take into account access issues, including access to and into buildings and the need for accessible housing. It states that developers and local planning authorities should consider access at an early stage, and be flexible and imaginative in seeking solutions, taking into account the particular circumstances of each case.

1.0.13  PPS3: Housing (2006) underpins the delivery of the Government's strategic housing policy objectives and the goal to ensure that everyone has the opportunity to live in a decent accessible home which they can afford, in a community where they want to live.

1.0.14  PPS 6: Planning for Town Centres (2005) includes as a key issue meeting the access and mobility needs of disabled people. It notes that in new retail developments, local authorities should seek to ensure safe, easy access for disabled people. It states traffic and town centre management strategies should meet the needs of disabled people and there should be good access to shops and other facilities.

1.0.15  PPG 13: Transport (2001) notes that local authorities, developers and transport providers should work together to seek to meet the accessibility needs of disabled people in all developments. It notes that in developing and implementing policies on parking should require developers to provide designated parking spaces for disabled people in accordance with current good practice. In addition, ensuring developments adjacent to transport infrastructure protect or improve step free access to train, bus and underground stations.

1.0.16  PPS 5: Planning for the Historic Environment and the accompanying Planning Practice Guide (2010) recognises that there may be conflict between the need to improve access and protecting heritage assets. It encourages local planning authorities to consider imaginative ways of avoiding such conflict and allow for flexibility so that a balance can be struck.

1.0.17  PPG 17: Planning for Open Space, Sport and Recreation (2002) states that local authorities should take account of the mobility needs of the local population and should ensure that facilities are accessible for disabled people.

Legislation

The Disability Discrimination Act (DDA) 1995

1.0.18  This legislation provides new rights for disabled people. Service providers will have to take positive steps to make their goods, facilities or services accessible to disabled people. Since 2004 service providers have a duty to overcome physical barriers in a building (including Listed and/or buildings in a Conservation Area), which make it impossible or unreasonably difficult for a disabled person to use the service.

1.0.19  N.B. the DDA has changed the legal position in respect of historic properties in the UK, the Act does not however override existing planning legislation. It is still essential that any proposal to alter or demolish any part of a Listed building or one within a Conservation Area is approved by the relevant authority. This should include consultation with a Design Officer and the Access Officer, and in certain cases English Heritage too.

Building Regulations 2000

1.0.20  The requirements of the Approved Document M, 2004 edition, ‘Access to and the Use of Buildings’, will be met if reasonable provision is made for people, regardless of disability, age or gender, to gain access to, and use, non-domestic buildings and extensions. It also applies to material changes of use to some non-domestic uses. Additionally, new housing must be constructed to enable disabled people, particularly wheelchair users and those with mobility impairments, to visit a dwelling and have access to a ground floor living space. There is no exemption for historic buildings, including Listed Buildings and buildings situated in a Conservation Area.

1.0.21  The requirements of Approved Document B, 2006 edition, amended 2007, Fire Safety, Volume 2 – Buildings other than Dwelling Houses. This gives guidance on incorporating evacuation and safety measures into buildings. This document also refers to the provision of refuge areas and emergency voice communication system located within each refuge area.
Guidance

1.0.22 BS 8300: 2001. Second edition, February 2009, Design of buildings and their approaches to meet the needs of disabled people – Code of Practice. This document provides detailed guidance on good practice in the design of domestic and non-domestic buildings. It is far more detailed than Part M of the Building Regulations. Many of the recommendations are based on ergonomic research.

1.0.23 Planning and Access for Disabled People, A Good Practice Guide, Office of the Deputy Prime Minister, March 2003. This guide provides guidance, information and examples of good practice to all those involved in the development and planning process. A series of good practice points are suggested to help achieve an inclusive environment to the benefit of all.
### Annex 2: Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM</td>
<td>Automatic teller machine (cash dispenser).</td>
</tr>
<tr>
<td>Chamfered</td>
<td>A bevelled edge.</td>
</tr>
<tr>
<td>Effective clear width</td>
<td>Available width measured at 90° to the plane of a doorway for passage through doorway, clear of any obstructions (e.g. door handles) when door is opened through 90° or more.</td>
</tr>
<tr>
<td>Glare</td>
<td>Brightness, causing a dazzling effect.</td>
</tr>
<tr>
<td>Inclusive Access</td>
<td>An inclusive approach to design creates an environment where everyone can access and benefit from the full range of opportunities available to members of society. Inclusive access benefits the growing population of elderly people with mobility issues, parents with buggies and small children and those carrying heavy luggage and shopping as well as disabled people.</td>
</tr>
<tr>
<td>Illuminance</td>
<td>Amount of light falling on a surface, measured in lumens per square metre or lux.</td>
</tr>
<tr>
<td>Luminance</td>
<td>Brightness or light intensity of a surface, measured in candelas per square metre.</td>
</tr>
<tr>
<td>Manifestation</td>
<td>A series of broken lines or a continuous band or company logo either etched or attached to the surface of a glazed door/screen which provides a contrast to the glass. The location of the door/screen can therefore be identified by partially sighted people.</td>
</tr>
<tr>
<td>Stair riser</td>
<td>Vertical component of a step between tread or landing above or below it.</td>
</tr>
<tr>
<td>Stair tread</td>
<td>Horizontal component of a step.</td>
</tr>
<tr>
<td>Cross Falls</td>
<td>The surface of a footway or ramp having a slope across the line of travel.</td>
</tr>
<tr>
<td>Threshold</td>
<td>A horizontal member across the foot of a doorway.</td>
</tr>
<tr>
<td>Upstand</td>
<td>A concrete kerb or wall on the edge of for example, a ramp surface.</td>
</tr>
</tbody>
</table>
Annex 3: Useful Contacts

Organisations:

RBKC Planning Information Office, the Planning line, Tel: 020 7361 3012, Fax: 020 7361 3463, Email: planning@rbkc.gov.uk or Website: www.rbkc.gov.uk/planning.

Action Disability Kensington & Chelsea (ADKC), Tel: 020 8960 8888, Fax: 020 8960 8282, Email: adkc@adkc.org.uk.

British Standards Institute, BSI Customer Services, Tel: 020 8996 9001, Fax: 020 8996 7001, Email: orders@bsi-global.com.

Commission for Architecture and the Built Environment (CABE). CABE works with architects, planners, designers, developers and clients, offering them guidance on projects that will shape lives. Tel: 020 7070 6700, Email: info@cabe.org.uk, Website: www.cabe.org.uk.

The Centre for Accessible Environments (CAE), CAE is an information provider regarding the built environment. Tel/textphone: 020 7840 0125, Fax: 020 7840 5811, Email: info@cae.org.uk, Website: www.cae.org.uk.

Disabled Living Foundation (DLF), Tel: 020 7289 6111 or Website: www.dlf.org.uk. Helpline: 0845 1309177.


RADAR (Royal Association of Disability and Rehabilitation) campaigns for better lifestyles for disabled people and their families. Tel: 020 7250 3222, Fax: 020 7250 0212, Email: radar@radar.org.uk or Website: www.radar.org.uk.

JMU Access Partnership is a disability access consultancy supported by the RNIB. They specialise in buildings, transport and the street environment and services include access audits for existing schemes, design appraisals for new projects, publications and training. Tel: 020 7391 2002, Fax: 020 7387 7109, Email: info@jmuaccess.org.uk or Website: www.jmuaccess.org.uk.

RNIB (Royal National Institute for the Blind) for information and advice regarding people with sight problems. Helpline: 0845 766 9999 or Website www.rnib.org.uk.

RNID (Royal National Institute for the Deaf). The RNID Information Line covers a range of subjects including employment, equipment and legislation. Tel: 0808 808 0123 (freephone), Email: informationline@rnid.org.uk or Website: www.rnid.org.uk.

Publications:


BS 8300: 2009 Design of buildings and their approaches to meet the needs of disabled people. Code of Practice. Contact BSI British Standards, HQ: 020 8996 9000 or cservices@bsi-global.com.

BS 5588 Part 8: 1999 Code of Practice for Means of Escape for Disabled People. BSI Standards, Tel: 020 8996 7000, Fax: 020 8996 7001.


Inclusive Mobility A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure, Department for Transport, 2002 and updated in July 2005. Available from the free literature service, Tel: 0870 1226 236 (Ref: IM/01) or www.mobility-unit.dft.gov.uk.


Personal Emergency Egress Plans, The Northern Officer Group, 1993, available only from CAE (see Organisations - Annex 3).