

# **Inclusive Accessible Design**

## **for the RIBA series ‘Through the legislation maze’**

By Adrian Cave

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**The following is a summary of the introduction to Inclusive Accessible Design  
by Adrian Cave**

**INTRODUCTION TO THE LEGAL FRAMEWORK**

Medical and social models

The development of legislation about disabled people reflects changing attitudes to disability. Until the 19<sup>th</sup> Century and, indeed, well into the 20<sup>th</sup> Century, disabled people were largely accommodated in institutions and the approach to dealing with disability was focussed on the nature of the disability and the medical symptoms. This approach has become known as the 'medical model' and is no longer acceptable to the disabled community because it reinforces the misconceptions and stereo-types of disabled people as a group, such as 'the disabled', 'the blind', 'the deaf' and worse still 'the wheelchair bound'. This term serves to illustrate the misleading consequences of medical labels because very few users of wheelchairs are 'wheelchair bound' – most are able to stand or walk for a short time and the great majority seek as much independence as possible in their daily lives.

In order to be able to achieve independence and full participation in society, and to the extent that disability may or may not be seen as a 'problem', most disabled people prefer to be considered as individuals rather than as members of a disabled group. In addition, most disabled people have developed skills that enable them to be largely independent, limited mainly by the problems of buildings and the physical environment. By this approach, the difficulties and limitations experienced by a disabled person in the social and physical environment are seen as the consequences of society's attitudes and decisions. This is the 'social model'.

Inclusive design

For example, a pavement with a raised kerb is a serious obstacle for a wheelchair user yet a dropped kerb at junctions and corners is easy to provide and is advantageous to many more people than those who have a disability. Recognition of the many benefits to society as a whole of providing a social and physical environment which takes account of the needs of disabled people leads to the concept of inclusivity in many aspects of life. Current legislation and the Building Regulations are now focussed less on the needs of disabled people as such and more on 'inclusive design' and 'inclusive environments'.

In the Disability Discrimination Act, 1995, the definition of a person who is disabled is as follows: A person has a disability if he has a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities.

Concern for the needs of disabled people is reinforced by awareness of the implications of an aging population, with the prospect of many people becoming less mobile or experiencing sensory impairments during their later years. Aspirations towards enabling everyone to have access to buildings and to use their facilities have led, therefore, to the evolution of concepts for inclusive design.

The concept of inclusive design implies that it is more appropriate to design for the needs of people generally rather than for people with a specific disability. Increasing numbers of children's pushchairs and buggies, shopping trolleys, luggage with wheels and people who have become less mobile with increasing age all indicate the benefit of inclusive design. This is quite apart from the needs of people who use wheelchairs or electric scooters. The problems faced by elderly people are particularly relevant because, unlike someone who has been disabled from childhood and who has a lifetime of developed skills to cope with the disability, elderly people become frail or begin to experience impairments of mobility, sight or other faculties at a time when it is difficult to acquire new skills. However, elderly people, just as disabled people, have a great desire for independence.

### Chronology

In 1963, the seminal book 'Designing for the Disabled' by Selwyn Goldsmith did much to raise awareness among architects about the nature of the difficulties experienced by disabled people in the built environment. Selwyn Goldsmith, an architect who was disabled by polio as a young man, set out systematically the nature of the obstacles encountered by disabled people in moving around buildings and in using their facilities.

The Chronically Sick and Disabled Persons Act 1970 required that, in any building proposals, the means of access to and within the premises should "make provision, in so far as it is in the circumstances both practical and reasonable, for the needs of members of the public visiting the building or premises who are disabled."

The Building Regulations 1976 began to address for the first time the problems faced by disabled people, with the introduction of Part T, the forerunner of Part M. The Building Regulations of 1987 introduced Part M, 'Access and facilities for disabled people', and Approved Document Part M provided guidance on how to meet these requirements. Approved Document Part M was revised and developed in 1992.

The turning point in legislation about disabled people came with the publication of the Disability Discrimination Act in 1995. This consists of a number of sections including:

- Part 1 – Definitions of disability
- Part 2 – Employment
- Part 3 – Provision of goods, facilities and services
- Part 4 – Education
- Part 5 – Transport (excluded from the requirements of Part 3)

Approved Document Part M was revised in 1999 and sought to ensure that disabled people were able to have "access to and use the facilities of a building".

The publication in 2001 of British Standard 8300 (BS 8300: 2001), 'Design of buildings and their approaches to meet the needs of disabled people' set new and authoritative criteria for designing for disabled people based on extensive research and ergonomic studies. For the first time designers were able to refer to extensive and systematic guidance about how to design to meet the needs of disabled people. This British Standard is currently the main reference for standards of design for disabled people and, if challenged in a court of law, designers who have not followed the guidance of BS 8300 will have to be able to explain why they did not do so.

Approved Document Part M was revised again in 2004 to incorporate many of the recommendations of BS 8300. Significantly, Approved Document Part M 2004 (ADM 2004), now sought to ensure that "Reasonable provision shall be made for people to gain access to and use the building and its facilities". ADM 2004 requires that "People, regardless of disability, age or gender, should be able to:

- a) gain access to buildings and to gain access within buildings ~~and use their facilities, both as visitors and as people who live or work in them;~~
- b) use sanitary conveniences in the principal storey of a new dwelling."

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Note that instead of focussing on the needs of disabled people, ADM 2004 uses phrases such as requiring access for "people, including disabled people".

### The Disability Discrimination Act 1995

The Disability Discrimination Act (DDA) makes it illegal to discriminate against a disabled person on the grounds of their disability in respect of Employment and the provision of goods and Services.

The Act offers protection to those who have long-term adverse affect on their ability to carry out normal day to day activities. At a retail centre this would apply to all those people who enter the premises, whether as customers or as employees.

The DDA has, since December 1996, made it unlawful for employers to discriminate on the grounds of a person's disability against current or potential employees and for service providers to refuse to serve, offer a lower standard of service on worse terms to, a disabled person for a reason relating to their disability. Further duties, affecting service providers, have been and will be introduced over time. For the purposes of the Act discrimination will have occurred when:

- For a reason that relates to a disabled person's disability the service provider or employer treats that disabled person less favourably than they would treat others to whom that reason does not or would not apply; and
- A service provider or employee fails to comply with a duty to make reasonable adjustment in relation to a disabled person as required by the DDA.

Whilst elements in respect of Employment, such as the need to make reasonable adjustments and provide equipment, came into force in 1996, the remaining provision in respect of Goods and Services are being phased in over a number of years. From October 1999 service providers have been required to make reasonable adjustment to practices, policies and procedures, which would exclude disabled people and to provide auxiliary aids and services to facilitate use of a service. From October 2004 should a permanent feature of a building make it unreasonable steps should have been taken to remove, alter or avoid it if the service cannot be otherwise provided.

The risk to service providers under the DDA is that a successful action taken through the courts would entitle the complainant to seek compensation, and might also result in a requirement to carry out costly adjustments to remove the barrier to accessing the service.

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Because the DDA is not based on compliance but on 'reasonable' provision in respect of the physical environment, the understanding of current good practice is subject to continuing development. An Access Statement is commonly used to explain and record the decisions taken for accessibility. Within this context, two of the main references used in the development of current good practice are: Approved Document Part M, 2004 and BS8300 (2001)

#### Access and escape

The many implications of enabling disabled people to have improved access into buildings included the need to ensure that they would be able to escape safely during a fire or other emergency. Previous escape arrangements had been based on the assumption that, in an emergency, people would be able to escape without assistance and, typically, by using fire escape stairs in protected compartments. This would clearly not be possible for wheelchair users and for many people who have impaired mobility.

One solution to this problem was to propose assisted evacuation with folding evacuation chairs which would be kept on the landings of the fire escape stairs but this raised almost as many problems as it solved. For example, evacuation chairs are not easy to use and, if a disabled person is very severely disabled or heavy, it is not easy to make the transfer into the evacuation chair and considerable strength and skill is required on the part of the assistant if the descent of the staircase is to be made safely. This contributed to the development of horizontal evacuation and safe refuges.

Horizontal evacuation relies on separate fire protected zones which can enable anyone to move away from the area at risk, without negotiating any steps, to a safe refuge where they can remain until the emergency is over or from where they can be rescued in due course.

### Access Statements

The Disability Discrimination Act of 1995 is not based on compliance with specific requirements for the physical environment. Instead, the requirement is that the provision for disabled people should be 'reasonable'. This means that the interpretation of good practice depends largely on judgement but, equally, should be based on an understanding of current good practice. For architects and designers the practical application of good practice is tested in an application for Building Regulations approval. For the first time in the Building Regulations, Approved Document Part M, 2004, refers to Access Statements, pointing out that the guidance contained in the Approved Document is designed to indicate one way in which the requirements may be met. The Approved Document Part M (ADM) also points out that there may be other, equally satisfactory ways of meeting the requirements and that appropriate solutions to access problems may vary according to the size, nature and intended use of the building.

ADM recommends that an Access Statement should be provided to assist building control bodies in making judgements about whether the proposals are reasonable and that the Access Statement should be provided at the time that plans are deposited, a building notice is given or details of a project are given to an approved inspector. ADM also points out that guidance on access in the planning system recommends provision of an Access Statement to identify the philosophy and approach to inclusive design, the key issues of the particular scheme and the sources of advice and guidance used.

### The test of reasonableness

When there are problems about accessibility to a service or there is a physical barrier to access, such as on a restricted site or in a historic building, the duty to make reasonable adjustments comprises a series of duties falling into three main areas which are listed in the DRC Code of Practice as follows:

- changing practices, policies and procedures
- providing auxiliary aids and services
- overcoming a physical barrier by
  - removing the feature; or
  - altering it; or
  - avoiding it; or
- providing services by alternative methods.

The Code lists some of the factors which might be taken into account when considering what is reasonable:

- whether taking any particular steps would be effective in overcoming the difficulty that disabled people face in accessing the services in question
- the extent to which it is practical for the service provider to take the steps
- the financial and other costs of making the adjustment
- the extent of any disruption which taking the steps would cause
- the extent of the service provider's financial and other resources
- the amount of any resources already spent on making adjustments
- the availability of financial or other assistance.

## RIBA WORKSTAGES

### Implementing the principles of inclusive design

The process of implementing the principles of inclusive design is well illustrated by the following chart which is based on the 'Commitment to Inclusive Design' published by the Disabled Persons Transport Advisory Service (DPTAC) 2005

| RIBA Stage   |   | Deliverables   |
|--|---|--|
| <b>A/B</b><br>Audit existing building(s)<br>Feasibility Study of client's requirements<br>Strategic Design Brief | <b>1. Access Strategy</b> <ul style="list-style-type: none"> <li>the Access Strategy will incorporate inclusive design principles at all RIBA work stages</li> <li>it will set out a process to embed and implement inclusive design principles commencing from the design brief</li> </ul> <p><u>For small projects:</u></p> <ul style="list-style-type: none"> <li>designate an Inclusive Design Champion or representative</li> </ul> <p><u>For medium to large projects:</u></p> <ul style="list-style-type: none"> <li>appoint an Access Consultant</li> <li>ensure the project team and the client's appointed access consultant work closely together</li> <li>identify key access requirements and constraints</li> </ul> | <b>Access Strategy</b><br>To demonstrate a commitment to including inclusive design principles<br>To set out a process suited to the project |
| <b>C/D</b><br>Project Brief Outline and Detailed Design  | <b>2. Access Statements</b> <ul style="list-style-type: none"> <li>incorporate key access requirements into design proposals</li> <li>consult with potential users including disabled people</li> <li>develop design proposals on inclusive design principles</li> <li>provide an Access Statement to support outline and detailed Planning Applications</li> </ul>   | <b>Access Statement</b><br>For Planning Approval   |
| <b>E/F</b><br>Final Proposals and Production Information   | <b>3. Building Control Submission</b> <ul style="list-style-type: none"> <li>monitor and review design development, including fixtures and fittings</li> <li>ensure designers and suppliers specify products which can be used by all</li> <li>provide an Access Statement to</li> </ul>  | <b>Access Statement</b><br>For Building Control Approval   |

|                                  |  |   |
|----------------------------------|--|---|
|                                  | support Building Control submission for Part M approval  |   |
| <b>G/H</b><br>Tender             | <b>4. Procuring Accessibility</b> <ul style="list-style-type: none"> <li>• ensure inclusive design details are incorporated into the contract documentation for the buildings, fixtures and fittings</li> <li>• appraise any novated design in response to access procurement</li> </ul> |   |
| <b>K</b><br>Construction         | <b>5. Monitoring progress</b> <ul style="list-style-type: none"> <li>• ensure compliance with Access Statement by monitoring all key access features during the construction period</li> </ul>   |   |
| <b>L</b><br>Practical Completion | <b>6. Sign-off report</b> <ul style="list-style-type: none"> <li>• audit completed building and check agreed standards have been met</li> <li>• identify post-occupancy matters for inclusion in Facilities Management Handbook and Maintenance Manuals</li> </ul>                       | <b>Access Statement</b><br>For passing Access File to client    |
| Post Occupation                  | <b>On-going</b> <ul style="list-style-type: none"> <li>• provide suitable information where necessary for staff briefings, including circulation and escape arrangements</li> <li>• make any adjustments necessary to meet the needs of disabled employees</li> </ul>                    | <b>Access Review</b><br>For access awareness and staff training |

## DUTIES UNDER THE DDA

The Disability Discrimination Act (DDA) makes it illegal to discriminate against a disabled person on the grounds of their disability in respect of Employment and the provision of goods and Services. The Act offers protection to those who have long-term adverse affect on their ability to carry out normal day to day activities. At a retail centre this would apply to all those people who enter the premises, whether as customers or as employees.

Under the terms of the DDA, and as summarised in the Code of Practice 'Rights of Access' published by the Disability Rights Commission, "A person has a disability if he has a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities." The test of whether an impairment affects normal day-to-day activities is whether it effects one of a the broad categories of capacity listed in the Act. These are:

- mobility
- manual dexterity
- physical co-ordination
- continence
- ability to lift, carry or otherwise move everyday objects
- speech, hearing or eyesight
- memory or ability to concentrate, learn or understand
- perception of the risk of physical danger.

The DDA has, since December 1996, made it unlawful for employers to discriminate on the grounds of a person's disability against current or potential employees and for service providers to refuse to serve, offer a lower standard of service on worse terms to, a disabled person for a reason relating to their disability. Further duties, affecting service providers, have been and will be introduced over time. For the purposes of the Act discrimination will have occurred when:

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## **PLANNING AND DESIGN PARAMETERS FOR ACCESSIBILITY**

The following are examples of the access issues which are likely to have to be considered at the stage of an application for outline or detailed planning permission:

1. Inclusive Design: the proposals should be guided by the recognition that in addition to wheelchair users and other disabled people, the main beneficiaries of accessible routes are likely to include families with children, people who are frail and elderly and people with wheeled luggage or trolleys.
2. 24-hour routes for pedestrians, including disabled people, to be step-free and with gentle gradients
3. Seats and level resting places to be distributed at horizontal distances of not more than about 50 metres.
4. Sloping routes with gradients of 1:20 to 1:40 to have level resting places and or seats at vertical rises of not more than 500mm
5. Slopes of 1:20 or steeper to be designed as ramps with reference to the standards recommended in Approved Document Part M, 2004
6. Entrances into buildings and to lifts to be step-free and suitable for disabled people.
7. Car parking in the multi-storey car park to include grouped parking spaces for disabled people and possibly for a Shopmobility scheme.
8. External car parking spaces and pick-up/set-down points for disabled people to be distributed in groups close to the main pedestrian routes.
9. Sanitary facilities to be conveniently located, preferably available within 100 metres during normal working or shopping hours, to be supervised and to include Unisex Accessible WCs and separate facilities for baby-changing.
10. Street furniture, paving and landscape features to enhance the circulation routes, without creating barriers or hazards for disabled people.
11. The primary access routes to be clearly legible, minimising the need for elaborate signage.
12. Commitment to inclusive design
  - Stages for design development (see chart for progression design)
  - Consultation process
  - Information and signage
  - Emergency escape
  - Management policies
  -

Drawings which accompany the Access Statement at the planning application stage should show the main access routes and features, preferably marked up in colour, so as to make the access proposals clearly evident.

## REFERENCES

Typical reference documents may include the following:

**1. Planning and Access for Disabled People (2003)**

This document was published by the office of the Deputy Prime Minister to provide guidance in the delivery of inclusive environments through the Town and Country Planning system.

**2. Building Regulations Part M (2004)**

A central aspiration for this development is to meet and where possible exceed new Part M (2004) residential standards. Although conferring itself to planning issues this Access Statement is in line with the new Building Regulations.

**3. Local Authority Unitary Development Plan (UDP)**

This is the main reference for the standards to meet the requirements of the local authority, including any references to Lifetime Homes Standards and Wheelchair Housing Standards.

**4. Lifetime Homes Standards**

Lifetime home standards originally developed by the Joseph Rowntree Foundation have been widely adopted by Local Authorities.

**5. Disability Discrimination Act 1995**

The developers or others may have ongoing obligations under the DDA as landlords and may also have obligations as service providers where they are also providing services to the public. In the main, the Act will apply more to issues of services and information rather than building design.

*Adrian Cave, 2007*