

University of Oxford Estates Services

DISABILITY ACCESS PHILOSOPHY DOCUMENT



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DISABILITY ACCESS GUIDANCE DOCUMENT

INTRODUCTION

This document is one of the suite of Philosophy Documents which provide guidance to design teams working on projects at the University of Oxford. See 'Introduction to Philosophy Documents' for general guidance.

BACKGROUND INFORMATION

The University of Oxford seeks to provide an inclusive environment for all staff, students and visitors. An inclusive environment will be one which is easily used by as many people as possible without undue effort, special treatment, or separation. It should aspire to offer people safe and independent access and egress, as well as an unaided means of movement around the building. There should be integrated participation with the use of facilities, and recognition that disabled people are all different and will have diverse needs that may be met in a variety of ways. The design of new University buildings should strive to achieve the BS8300 standard for access.

1) Legal framework

Building design is governed by Building Regulations, British Standard's Design of Buildings' Code of Practice, and duties under the Equality Act 2010. These regulations, codes, and Act provide the legal and regulatory framework for good practice standards.

Approved Document for Part M of the Building Regulations

These regulations set minimum standards in these covered areas:

- i.) Access and use
- ii.) Access to extensions to buildings, and
- iii.) Sanitary conveniences in extensions to buildings.

British Standards S8300:2001:

Design of Buildings and Their Approaches to Meet the Needs of Disabled People.

This document explains how a building should be designed to anticipate and overcome the restrictions imposed by an inaccessible environment.

Equality Act 2010

This Act outlines the requirement to make reasonable adjustments for the needs of disabled people.

The Design Team will be required to meet at least the standards set within the current legal framework. None of the information provided in this document shall override the legal requirements. In addition, the University will provide further guidance based on its experience of managing and maintaining buildings as informed by feedback from staff and students.

2) University Approval Procedures

The Buildings Access Forum (BAF) must be consulted at an early stage in the design process and will require further updates as the design of the project progresses. The panel should receive copies of design layout drawings and the Access Statement via the University Estates Services. The panel includes staff and students with day-to-day experience of using University buildings, as well as members of the Estates Services and Disability Advisory Service.

In addition to BAF, Kevin Green (Architectural Assistant) and Niall Strawson (Accessibility Adviser) should be consulted at Stage C, D and F regarding design and fit out.

3) Access Information

Disability Access Guide

The University is in the process of developing a Disability Access Guide for all its buildings. The Access Guide provides information to staff, students, and visitors about general access to University buildings and their facilities. The design team should review the Access Guide when developing proposals for existing buildings, and take account of any shortcomings in access where appropriate.

Access Statement

The design team must fill in the Access Checklist prior to meeting with the Disability Access Advisory Panel. The Checklist should include a statement about building management for access, e.g. where access for wheelchair users is assisted and how wheelchair users will be assisted from the building in the event of a fire.

O&M Manuals

The design team should ensure that full information is made available in the O&M manuals on the provision, maintenance, and operation of equipment and aids.

STANDARDS

All new University buildings should provide equal access to services for all users. Refurbishment projects should also aim for this standard and should provide information within the Access Statement outlining any limitations and how they might be reasonably overcome through the management of the building. The following guidance highlights issues to which the design team should pay particular attention. The list is not exhaustive and further feedback will be given as appropriate through the Disability Access Advisory Panel, or by the Accessibility Adviser.

4.1) Entrances

Access to buildings should be the same for all users. Only in very exceptional circumstances is it appropriate for users with mobility difficulties to be sent via a different entrance. It should never be the case that wheelchair users are required to access buildings through plant room spaces or rear service yards. All users should be able to access buildings

without the need for special assistance, e.g. where it is necessary to telephone in advance.

Design teams should be aware of the potential conflict between access and security measures. When designing security measures, the requirements of wheelchair users and those with visual impairments must be considered.

The position of swipe card or key fob locations should be easily accessible by all users. Sensor systems – such as key fobs or card sensors – are preferable to swipe cards, particularly for users with manual dexterity issues.

Main entrances should have automatic powered doors. Proximity motion sensors to open doors are ideal. Where there is more than one set of doors through to the reception or the main foyer space, all doors should be powered.

Entry into the building should be level with no lips or ramps leading directly up to the door. Thresholds should be level. There should be sufficient circulation space on both sides of the door to allow for wheelchair maneuvering. There should be a sensible level area in front of the door to ensure that wheelchair users do not roll backwards.

Revolving doors are problematic for the visually and mobility impaired. Entrances should always be supplemented by power-assisted side doors.

4.2) Egress

Emergency fire exit doors and exit paths should be wide enough to accommodate wheelchairs and kept clear of clutter and obstructions.

Where escape from an upper floor is necessary, wheelchair refuge(s) should be provided within a fire-protected lobby. A two-way intercom at the refuge point should be provided to allow the wheelchair user to keep in contact with rescuers during an emergency.

During an emergency it may be beneficial to have corridor lighting leading to exits to reduce anxiety in those with mental health and autism spectrum disorders.

4.2) Internal Doors

Very large/oversized doors should not be specified unless they are powered. Heavy doors pose a problem for a range of building users. Doors and door closers should be specified to ensure that the force required to open them is as small as possible.

Consideration should be given to providing powered doors to all main areas within a building.

Doors should normally have a vision panel sited to allow clear vision for all users.

Lever handles are preferred over door knobs.

Sliding doors which aren't powered should not be used, particularly on disabled access WCs (see below).

4.3) Flooring

Hard, non-slip surfaces are ideal. There should be high contrast with walls and door frames. Avoid sisal matting for doorways. Place plug sockets at an accessible level for all users, and consider high contrast plug sockets to assist the visually impaired. There should be consistency throughout the building for the visually impaired. Carpets provide good acoustic sound proofing but avoid deep pile as they can obstruct wheelchair users.

We have had several instances of carpet fitters cutting hearing loops. Please be vigilant when installing flooring.

4.4) WCs

Accessible toilets should be provided near lecture theatres and teaching areas. In larger buildings, accessible toilets should be provided on every floor. These facilities are to be made *in addition* to the toilet allocation per buildings and not as a substitute for losing a cubicle elsewhere. This avoids conflicts with disabled users who need access and cannot use a standard toilet.

Door furniture should be large and easy to grab. The door opening direction should allow for easy access. Doors and door closers should be specified to ensure that the force required to open them is as small as possible.

Sliding doors should be avoided on accessible toilets. They are difficult to use manually and therefore require powered mechanisms which are confusing to the users and make emergency release difficult.

Small and 'fiddly' locking mechanisms should be avoided. Locks should be able to be operated from the outside in an emergency, e.g. with a coin.

Toilets should be flush against the wall to provide back support; avoid a separate back support mechanism as these are uncomfortable to use. The layout of the toilet, sink, and grab rail relationship should allow adequate space for forward and side transfers. Sink height should allow a wheelchair to fit underneath.

High-contrast railings, rubbish and sanitary bins, the sink and soap dispenser, and the toilet roll holder should all be within easy reach of the toilet. Motion sensor sanitary bins or those without a foot pedal are preferred. There should be a full-length mirror, a clothing hook, and both a paper and hand dryer option, all at accessible levels. A pull cord should operate the light switch and be within easy reach. The soap dispenser and toilet roll holders should be very simple to operate. The toilet flush should be an easy-to-operate paddle flush as opposed to wall mounted buttons.

Alarm systems in WCs should include an alarm with a full-length pull cord at floor level and a link to a staffed area during working hours. The pull cord should be near the toilet but placed in such a way that it does not entangle with the railings. Alarms should be regularly checked and pull cords should not be tied up out of reach. Staff should be suitably trained in alarm response procedures.

There should be flashing fire alarms in the standard toilets for the hearing impaired.

The design of accessible WC cubicles should be sufficiently spacious to allow motorised wheelchairs to be easily maneuvered. Accessible WCs should never be used as storage cupboards.

Accessible WCs are often designed as ugly, utilitarian afterthoughts. Aim to provide a space as stylish as the standard toilets. Good colour contrast between flooring and walls will help individuals with a visual impairment. The floor surface should be level and non-slip.

The preferred terminology is 'accessible toilet', not 'disabled toilet.' Signage should reflect this.

4.5) Kitchens

Narrow galley kitchens should be avoided. It is not acceptable for kitchens to be designed in such a way that wheelchairs cannot be turned around in the space. Where space is limited, it is preferable for kitchen facilities to be sited in alcove spaces. Fittings (sinks, urn, etc.), switches, storage cupboards and shelves should be at an accessible height for all. There should be a dropped worktop with a knee-hole space to accommodate a wheelchair user.

Kitchens and food preparation areas should be avoided adjacent to work areas where smells can be overwhelming and unpleasant for those with sensory overload conditions.

4.6) Windows

Window opening/closing mechanisms should be simple to use and should be easily accessible by all users.

4.7) Lighting

Lighting should be carefully considered. Lighting which is as close as possible in colour to natural daylight will provide the best quality of light for those with visual impairments and autism spectrum disorders. When possible, allow users the option of varying local lighting levels using dimmer switches. Energy efficient lighting can cause unnecessary visual stress for those on the autism spectrum.

The design team should also avoid creating areas where glare could be a problem. This can occur where there are large areas of glass or where very light-coloured finishes have been chosen with little or no visual contrast. This is a particular problem on staircases.

A range of lighting options in seminar meeting rooms, lecture theatre, labs personal/group work areas spaces can be beneficial to those with visual impairments and autism (sensory overload); these should allow changes of set up to suit different users.

4.8) Reception Areas

Reception areas should be designed to allow visitors in wheelchairs to access services at the main reception desk. A dropped section of desk and a kneehole space should be designed to allow a wheelchair to pull up to the counter at the first point of contact- it is frustrating to wheelchair users to pass a high (obscured)section to reach a low section to gain attention.

If reception is not staffed, a doorbell or intercom should be provided at an accessible level for all.

Reception areas should incorporate hearing support systems. Estates Services can advise on the most suitable system for a space. Consideration should be given to using sound-absorption materials to reduce noise and echo.

Where waiting areas are provided, there should be accessible seating areas with backrests, and some with arm supports. There should be good colour definition between floor coverings, walls, doors and furniture. Avoid architectural clutter for the visually impaired.

4.9) Café Areas

Café areas should be designed to allow for wheelchairs to be easily maneuvered. Where necessary, they should provide a dropped section of counter with a kneehole space to allow wheelchair users to reach the displays and the payment point. Any self service facilities such as refrigerated cabinets should be easily accessible by all users with displayed items in easy reach.

Loose chairs and tables can easily be rearranged to accommodate wheelchair users. If the layout has fixed seating in alcoves, it should be designed so that wheelchairs users can also sit at some tables. Some chairs should be provided with arms and some without. Tables should have a kneehole space and not obstruct wheelchair maneuvering, e.g. small tables with corner legs rather than pedestal bases. Often tables have a substantial frame underneath, these should be avoided.

Acoustic shielding will absorb excess noise and echoes and assist users with a hearing impairment and autism spectrum disorders.

Food preparation areas should be avoided adjacent to work areas where smells can be overwhelming and unpleasant for those with sensory overload conditions.

4.10) Seminar Rooms and Lecture Theatres

Seminar rooms and lecture theatres should be designed to accommodate wheelchair users as both lecturers and participants.

It is recommended that areas for wheelchairs are provided so that it is not necessary to access past the lecturer. This will allow users to access the space even if they arrive late for a session. Plan ahead so that the extra height of wheelchair users does not obstruct sight lines.

There should be cut outs or movable chairs at the front and rear of the room. Spaces which incorporate desks or writing tablets should be adjustable for wheelchair users. Desks that are too low to fit under and chairs with flip desks attached are not accessible to wheelchair users.

Tiered seating with a slope is highly preferable to steps. If only steps there should be a platform lift with access to the front of the room and a level of seating that does not require the use of steps. Any steps should have tactile, high contrast, clearly defined stair nosings.

Teaching equipment should be easily accessible for all users. For example, consideration should be given to lecterns, access to the stage, and the position of any computer equipment and lighting controls. Furthermore consideration should be given to high contrast writing surfaces with a matt finish and good lighting. Avoid glass whiteboards as they create glare which some users with visual impairment find difficult.

Lecture theatres and seminar rooms should include some form of hearing support systems. Estates Services can advise on the most suitable system for a space. When fitting carpet extreme care must be taken not to cut the hearing loop system- this had been an increasingly common occurrence and renders the system useless. Protection to the cabling should be considered as part of the installation.

4.11) Laboratories

All labs should be fitted with height adjustable benching and where applicable, one height adjustable fume cupboard. Eye wash stations should also be accessible for those with reduced mobility. Access to switches for equipment and power banks should be easy for those with limited reach.

4.12) Libraries

Libraries should have height adjustable desks and at least one height adjustable computer terminal. Access control gates must be easy to use and make it possible for wheelchair users to enter and egress independently. Help desks should be lowered with a clear sight line for readers. It is important that corridors between shelves and furniture

around libraries allow adequate space for a wheelchair to pass. Consider accessible allocated quiet space for those that need it.

4.13) Corridors

Corridors must be of adequate width and not obstructed by deliveries or storage.

4.14) Lifts

The position of lifts within buildings should be considered to allow for easy access by all users. A large number of non-power assisted doors between the front entrance and the lift can pose a significant barrier to users. In addition, buildings with shared teaching spaces should provide easy access to facilities. The position of lifts in relation to security should be carefully considered.

New buildings and major refurbishments which incorporate new lifts should aim to provide evacuation lifts. Where possible, these should be fed from a dual power supply from separate sub stations; where this is not possible, the secondary supply can be brought from an adjoining University building. Any exceptions to this must be agreed and signed off by the University Fire Safety Officer.

It is preferable to design the lift to accommodate the turning radius of a wheelchair. There should be an adequate dwell time before the lift doors close.

Controls should be positioned inside and outside at an accessible level. There should be tactile call buttons, and a visual and tactile indication of storey level on each storey served. Consider a voice announcement to indicate storey level.

Where platform and stair lifts are necessary, they should be able to take a reasonably heavy weight so they can accommodate a powered wheelchair. They should accommodate a wheelchair user in their own wheelchair and as well as a companion and should be independently operated so that a wheelchair user does not need to get someone with a key whenever they need to use it. Platform lifts cannot be used as a means of escape.

See the M&E Philosophy Document for more detailed information on the installation and operation of lifts in University properties.

4.15) Stairs

It is extremely important that visual contrast is provided on the front edge of steps. This is particularly important where steps are light in colour and/or where there is a mix of landings and steps. Handrails should be installed on both sides and around the landing where possible.

Tactile surfaces should be installed at the head of stairs and near changes in level to provide a warning to people with visual impairments.

4.16) Landscaping

Landscaping should provide easy access for all users. The use of uneven materials such as highly contoured cobbles, sets, or riven paving slabs should be avoided.

The use of resin bonded gravel with high loose gravel content should be carefully considered. Avoid set stones and loose chippings which can be problematic for users of manual wheelchairs.

The route to front doors from accessible parking bays should be properly designed. Excessive slopes, particularly where the slope is in more than one direction, are not acceptable. Dropped kerbs should be incorporated to aid access.

A drop-off bay/set down point should be provided close to main entrance points.

Where there are gardens with benches make sure that some benches have backrests. If there are informal seating areas these should be accessible with suitable furniture and pathways to access them. Roof terraces should be accessible with level access over the threshold.

4.17) Car Parking

A sufficient number of accessible parking bays should be provided where accessible entrances are located. Disabled parking bays should be clearly marked with an International Disability Symbol (i.e., a wheelchair symbol), with markings both on the road and a sign at the driver's eye-level. Bays should allow sufficient transfer space at the sides to allow doors to be fully opened. These bays should not be located on a slope and should have a smooth road surface all around to allow easy access to parked vehicles. Bays should be positioned so the wheelchair users can reach a dropped kerb with tactile strips.

Car parking areas with barriers can be difficult to negotiate. If a barrier is necessary, there should be a help button linked to a reception point to give assistance.

It is the University's intention that all buildings have two allocated disabled parking bays adjacent to the entrance for those with reduced mobility.

4.18) Signage

External signage should be in accordance with the University's sign guidance documents.

Internal signage should be clear and legible and allow for good contrast for those with a visual impairment. The use of Braille is encouraged where practical.

4.19) Fire Alarms

Fire alarm boxes should be installed so that they are conspicuous, unobstructed, and accessible. Consider fire alarm strips at skirting level. An alert system that has a comfort light to allow the user to know help is on its way is the preferred option for refuge points.

4.20) Acoustics

For general comfort of those who suffer from sensory overload (autism spectrum disorders) minimising the transmission of sounds is vital – carpets, ceilings, floors should be sound dampening where possible.

Often electrical fit out can be a source of noise that is unbearable to those with autism e.g. Fans, heaters, radiators, sounds from other areas and rooms, buzzing from lights.

4.21) General design for Autism

Individuals who have an autism spectrum condition (ASC) may be sensitive to light, touch, sound, temperature, space and often suffer from sensory overload. Avoid bright white walls and furniture – these can

reflect light and make the environment visually stressful. Alternatives such as off white or cream can be much kinder to the eye. Avoiding unusual patterns and bright colours on carpets, floors and walls tends to create a friendlier and less distracting environment.

Individuals with and ASC may like to use their own equipment, such as laptops, and therefore additional power points would be useful

Drastic temperatures can be a source on anxiety for those with ASC and are best avoided where possible.

4.22) Break out spaces/common rooms

Flexible furniture when it comes to sofas and chairs, if there are desks or coffee tables make sure furniture is accessible (height/overall size) with accessible tea/coffee making facilities where applicable.

Areas in communal rooms for only 1-2 people for those who do not wish to be in large groups to allow for quieter social collaboration.

ACCESS CHECKLIST

Note: The checklist should be completed prior to engagement with the Disability Access Advisory Panel. The Checklist is not a list of requirements but provides an indication of compliance with the Disability Access Guidance.

ENTRANCES	Yes	No
Level access through main entrance		
Automatic opening door		
Lowered section of reception desk		
Visual contrast in reception area		
CIRCULATION		
Lift		
Lift capable of use for evacuation		
Lift in protected lobby		
Oversized doors in main circulation spaces		
Power-assisted doors through main circulation spaces		
DISABLED WCs		
Disabled WCs close to main reception area		
Call point linked to manned location		
SECURITY		
Main access system usable by wheelchair users		
Security barriers accessible by wheelchair users		
Are any shared/public access lecture theatres or seminar spaces accessible without assistance?		
MANAGEMENT OF ACCESS		
Please provide a brief statement of what management systems need to be put in place to provide access to the building and its facilities. For example, can access only be provided with assistance and is evacuation from the building via an evac. chair?		

EXAMPLES OF GOOD DESIGN

Please see the attached picture files under the headings used above. The files should be named with the location of the building on the University estate where this good example can be found.