6 Access
6.2 Circulation

Circulation
Unlike the much of the existing building, new circulation areas have been designed to ensure unobstructed access. Clear lines of sight maximise accessibility throughout the building. This reduces confusion, and dependence on signage.

The design considerations that have been taken into account are:
- all corridors to accommodate a minimum width of 1500mm, with no obstructions such as furniture or fire extinguishers projecting into the clear corridor width which would present a hazard to children, wheelchair users or blind and partially-sighted people.
- circulation routes should provide splayed or radius corners wherever possible.
- main corridors to have a minimum width of 1800mm to allow two wheelchairs to pass one another.

Internal doors will maximise accessibility without compromising privacy, safety or security. Each door will provide at least the minimum effective clear door opening appropriate to the width and direction of approach. We propose that all doors will:
- not project into an access route
- include manifestations if glazed
- have at least 300mm alongside the leading edge of all doors to enable wheelchair users to open the door.
- have a minimum width of 900mm when fully open.
- be fitted with vision panels to enable people to see and be seen
- will be fitted with lever type handles or ‘D’ pull handles at a height appropriate for a wheelchair user (1000mm from floor level)
- be light enough to be used by disabled people with limited mobility or strength

Lobbies to be designed to accommodate all users and to permit one door to close before the other is opened.

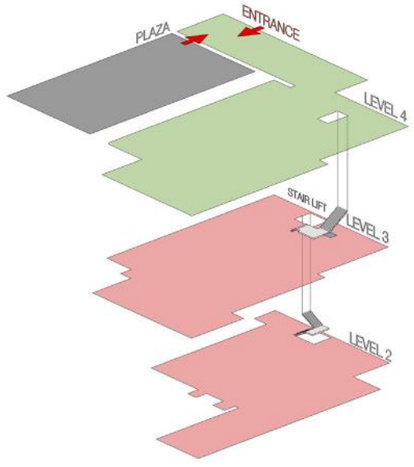
Stairs
To comply with Chapter 4.3.2 of UCL Inclusive Design Standard, stairs will:
- be well-lit
- have a tactile surface to indicate the beginning and end of the flight
- for safety, be designed to be of consistent width
- have unobstructed landings at the head, foot and between flights with a depth at least equal to the width of the channel of the flight
- have no more than 12 risers and uniform risers and treads in consecutive flights
- have riser heights of between 160 and 170mm, with slip resistant treads of 300mm
- have visually contrasting nosings across the full width of the step

Areas under stairs should either have guarding or be closed off to avoid anyone colliding with the underside

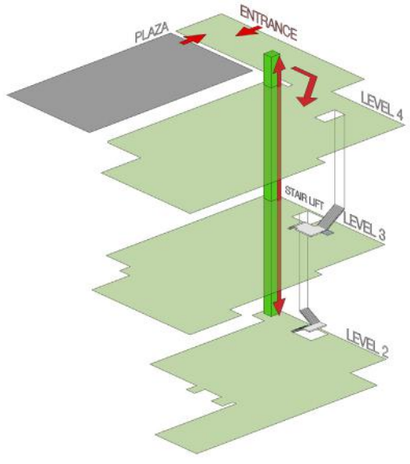
Escape stairs will be designed to the same standard as general access stairs, in order that they are suitable for use by ambulant disabled people and blind / partially-sighted people in an evacuation

Handrails for stairs will be at a height of at least 900mm (1000mm at landings) on both sides running the entire length to enable those with a weakness on one side to use them.

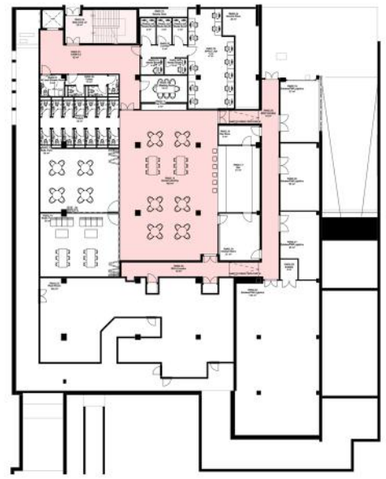
Lifts
The proposals include a new passenger lift in Wing A, linking together levels 2-4 which will accommodate the increased occupancy of the new phase 1 areas. These will:
- be located adjacent to other means of vertical circulation
- accommodate the expected people flow
- have a clear level landing directly in front of the lift of at least 1500mm by 1500mm for manoeuvring and waiting
- conform to the requirements contained within the BS EN 81 Series



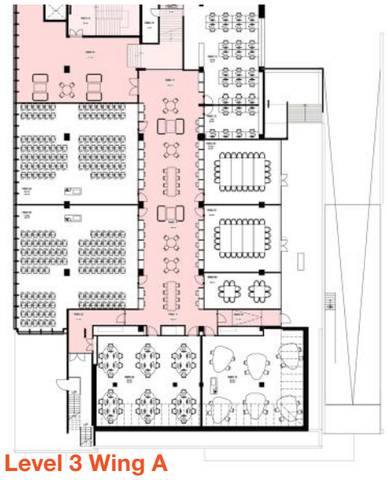
Existing accessible area within the scheme



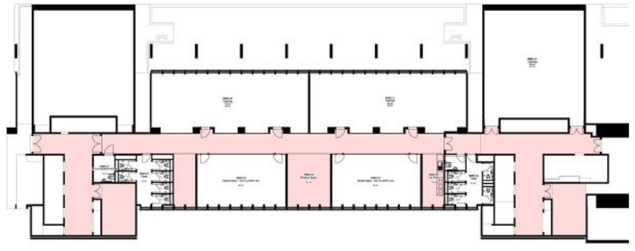
Proposed accessible area within the scheme



Level 2 Wing A



Level 3 Wing A



Core B-C

Study Areas
All rooms for study should be accessible and contain facilities to ensure navigation to, through and within them is intuitive and simple to carry out. Users of an area should also be able to easily control their environment by the use of switches and environmental controls.

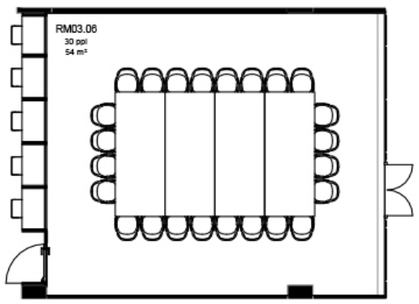
– The height of a fixed desk surface should be between 730mm and 750mm, with the clear height under the desk of at least 700mm
– Where feasible, adjustable height desks should be provided
– Where projected images and videos are used, seating layouts should be flexible to enable partially sighted people to sit close to the screen
– Break-out areas should contain a mixture of seating, including fixed as well as removable seating, preferably with cushions provided
– Seats with and without arm rests should also be provided (including some fold down arms, which will meet the needs of a larger number of people)
– The seat height should be between 450mm and 475mm (compressed cushion heights should be used)

Teaching rooms
Lecture and seminar rooms will provide a variety of spaces for teaching throughout the building. All rooms for study will be accessible and contain facilities to ensure navigation to, through and within them is intuitive and simple to carry out. Users of an area will also be able to easily control their environment by the use of switches and environmental controls.
In rooms requiring seating for lectures, these will take into account:
– Sufficient audience seating provisions for both disabled and non-disabled people to be available
– Wheelchair user seating areas to be provided measuring 1400mm in depth by 900mm wide
– A clear circulation route of 1200mm to be provided behind wheelchair user seating areas
– Consideration should be given to the use of removable / retractable seating, which would maximise wheelchair accessible spectator seating numbers and flexibility of locations
– Reasonable sightlines to be provided
– Seating should contrast visually with the surrounding surfaces
– A hearing enhancement system should be provided for audience members

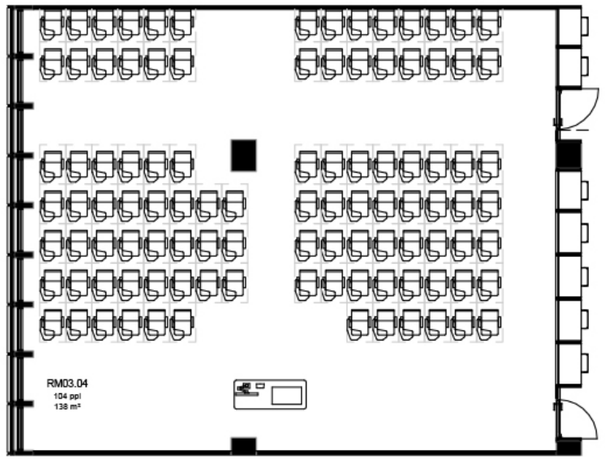
Offices
Offices for academic and support staff will provide flexible spaces for the variety of individuals' requirements, in accordance with best practice.

All offices will be designed to be fully DDA-compliant and compliant with Part M for access and internal circulation.

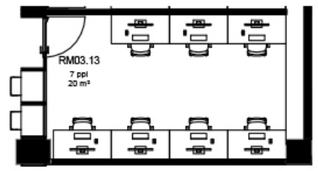
Designs will take into account:
– Door widths, desk heights and storage units to be ambulant and wheelchair accessible.
– Adequate turning space to be provided within each room.



Typical seminar layout



Large scale teaching room layout



Typical office layout

Toilets and Showers

Where provided these spaces will be designed to BS8300: 2009 and the requirements of Part M3 of the Building Regulations.

Fully accessible toilet / showers are designed to address the requirements of people with a variety of impairments. These spaces will be fully equipped for use by disabled people (students, staff and visitors).

The standard dimensions to provide adequate manoeuvring and transfer space for disabled people are:

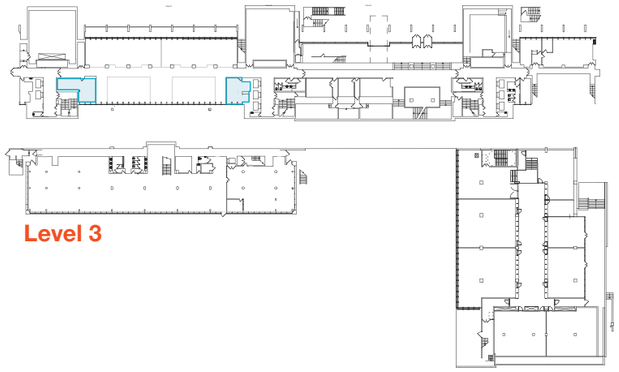
- Unisex accessible corner WC layout 2200mm x 1500mm min.
- Accessible WC compartment for ambulant disabled people 800mm x 1500mm
- Self-contained shower room for independent use 2200mm x 2000mm

Disabled people should be able to find and use suitable toilet accommodation as easily as non-disabled people. The location of the toilet, basin and other accessories in relation to the space required for manoeuvring, is critical in enabling disabled people to use various transfer techniques that allow independent or assisted use of sanitary facilities.

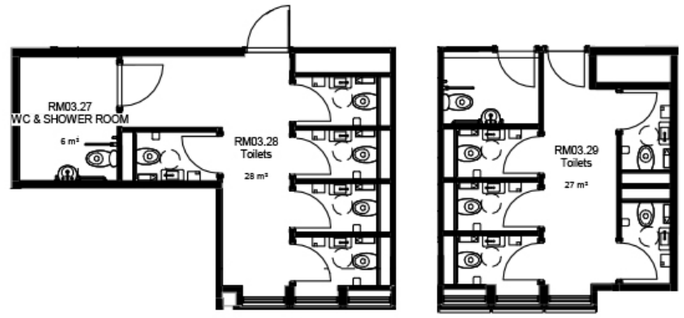
Wheelchair users and other users of an accessible toilet often move more slowly than non-disabled people. Facilities therefore will be provided within a reasonable travel distance from anywhere on a given floor plate to ensure that disabled people have access to the facility via the shortest available direct route.

These spaces will be located together with, and have a similar finish to standard toilet and/or shower provision, and comply with the following requirements:

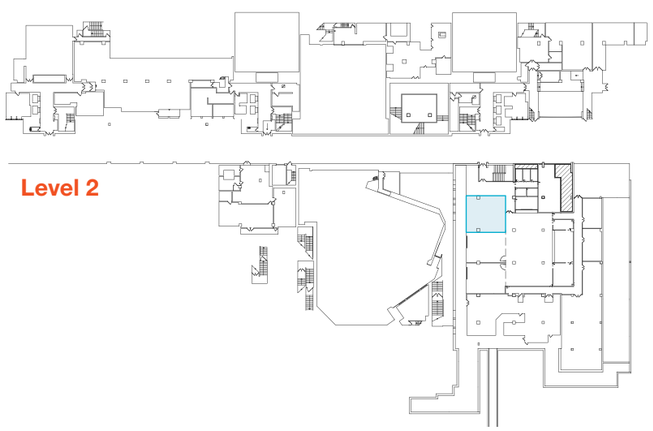
- Accessible, well-lit and clearly-signed
- Have fixtures and equipment that is operable by people with poor dexterity or limited strength (operable with one hand)
- Have good visual contrast between the main features, equipment and controls inside a cubicle
- Not have timed lighting systems
- Door handles to be easy grip D handles and located on the back of doors
- Have clothes hooks sited at 1050mm and 1400mm high
- Have heating pipes and heating equipment carefully located and fitted with thermostatic controls.
- Be fitted with an alarm and reset button that is linked to the UCL alarm system
- Wheelchair-accessible toilets are to be located in similar positions on each level and allow for right-hand and left-hand transfer on alternate floors.



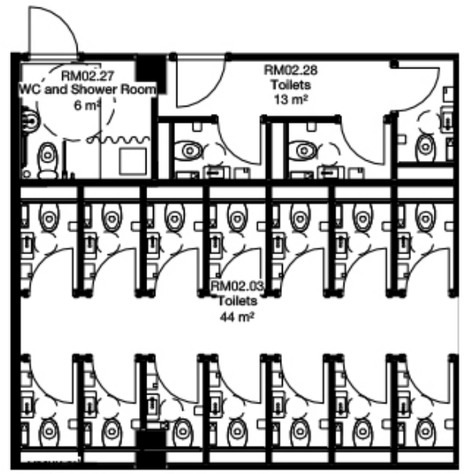
Level 3



Toilets Core B-C



Level 2



Toilets Wing A

6 Access
6.4 Signage and Wayfinding

Signage and Navigation
Signage should be clear, concise and consistent, and suitable for people with visual impairments and learning disabilities, such as dyslexia. It should also align with UCL's corporate system but be sympathetic to IOE's identity and the original Lasdun design. We have developed the planning of the building to be simple and intuitive as the ability to navigate independently around a building is dependent upon the basic building layout. We propose that any signage should be grounded in the following:

– internal signage to be provided in public as well as back of house areas
– easy to see (visual contrast with surroundings), with low glare, and easy to understand (is written concisely and in plain English)
– rules for clear print are followed (contrast between text and background colours, large enough text and easy-to-read fonts)
– simple illustrations or pictograms and symbols should be incorporated whenever possible,
– all directional signs to and within the premises incorporate directional arrows
– the height of signage should be carefully considered to accommodate people of varying stature, as well as maintaining visibility should crowds obstruct lower positioned signage.
– signs are well lit with their own source of light
– tactile signage to be provided where it will benefit users

BS 8300: 2001 indicates that universally recognised symbols should be used to replace text, as an essential aid for people with learning difficulties. Where other types of pictograms and symbols are used these should be supplemented by text, and not used in isolation. The BS provides some examples. Further information on public information symbols can be found in BS 6034 and the RNIB publication Building Sight.

Lighting and Décor
Lighting and decor is important for navigation. Visually impaired people rely on being able to distinguish between the walls, floors, ceilings and doors, and between backgrounds and furniture.

Specifically :

– we propose the use of glare control measures such as blinds, matt finishes to combat reflection.
– we aim to consider using colour as a means of assisting orientation, for instance, using one colour for the floor surface to denote areas of public circulation
– we aim to consider using changes of floor finish in a similar way as colour
– we aim to provide adequate contrast between doors, walls, floors and ceilings, and between furniture and the background against which it will be viewed
– we aim to develop a strategy to distinguish between trims such as coving, skirting boards, architrave, dado and handrails, door handles, finger and kick plates by use of colour, tonal and textural contrast

It is important to recognise that wheelchair provision is only one aspect of building accessibility, in fact it is the extreme situation. In addition to providing level access, the site wide access solutions will address other impairments including those associated with vision, audible and mobility.

– A combination of natural and artificial lighting to be provided where possible to enhance circulation routes
– To avoid glare, confusing reflections or shadows
– Transitional lighting to be provided between areas of lighting level changes to allow people's eyes to adapt to the different levels
– Reception, information points, counters around the Campus to be lit to allow lip reading
– Careful use of down lighters to ensure shadows are not created across people's faces, making lip-reading difficult.
– Up lighters avoided on pedestrian routes.
– 100 lux should be achieved at floor level including stair tread level, ramp level, on landings of stairs and ramps, within corridors and landing spaces in front of lifts
– At least 200 lux should be achieved at work surface heights within kitchens and general lighting within shower rooms and bathrooms
– 300 lux is required for areas within shower and changing facilities
– Visually contrasting non-reflective materials are to be used within areas that could be affected by direct sunlight
– The use of lighting for effect must be balanced with the need to maintain a safe environment, particularly for partially sighted people
– Daylight bulbs to be used within task lighting

6 Access
6.5 Other Accessibility Features

Emergency Egress

- Clear signage and wayfinding
- For people unable to use stairs without assistance, one or more refuge points must be provided on each level offering a place of relative safety until assistance arrives
- A two way communication device will be provided at all refuge points.The size and number of refuges to be relative to the numbers of expected disabled people within a particular building or facility - Please refer to the BuroHappold Fire Strategy submitted alongside this application.

Servicing

- The Level 2 Wing area has direct access onto the shared Service Road. All deliveries and service access will be via the entrance directly off the service road, adjacent to the garage.
- All plant will be accessible from within the Phase 1 areas with clear and accessible routes defined.

Refuse and Recycling

- A refuse and recycling store is located directly adjacent to the rear entrance.
- The proposed layout and management system allows necessary access for refuse vehicle collections as illustrated in the diagram to the right.

Fire Tender Access

- The proposed layout allows access for emergency vehicles directly on the roadway with dry riser access for firefighters.