



UCL

Internal Sign Manual

March 2010



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1 Introduction

University College London (UCL) has a range of varying internal signage systems and styles in its various buildings. An effective wayfinding and signage strategy for UCL can only be achieved if a consistent approach for internal signs is taken across all buildings, in terms of both appearance and content. It is understood that the current wide difference in delivering information to users adds confusion, visual clutter and reduces the awareness of the UCL brand. UCL's intention is to now procure all new internal wayfinding signage in the same system and style so that eventually all internal systems will be consistent.

The new system has been trialled through a set of pilots in several different buildings:

- Wilkins Building
- UCL Science Library
- UCL Main Library
- Darwin Building

Through the development of these pilot projects the range and types of signs, and sign positioning has undergone a variety of amendments to suit the specific requirements of individual situations, whilst also ensuring the range of variations are developed within a consistent graphic and size style to maintain a coordinated family of signs and a consistent delivery of information.

This manual takes the conclusions from the pilots and so now sets out the mandatory standard sign system specification and user guide to procuring any future new internal wayfinding signs .

The Internal Sign Manual has been set out as a step by step guide for building managers/users to enable the updating and procuring of new signs as required with minimal input if any, from outside consultants or UCL Estate Facilities Division projects group.

The steps are set out as the possible questions a building manager needs to answer in order to procure a signage project:

- What type of signage scheme is this project?
- Where do the signs need to go?
- What should the signs say?
- Which signs do I choose?
- Do I need a map?
- How should the signs be positioned?
- Do I need any consents?
- How do I order?

The appendix sets out the standard specification, artwork guides and standard order forms.



Figure 1
Old UCL internal signage examples

2.1 Step 1: What type of signage scheme?

The type of project to be undertaken may vary in size from just ordering a few replacement slats to update an existing scheme through to a whole new scheme for a building. It is envisaged there will be three types of project:

Type A: Updates to an existing scheme

This would be where the new system is already in place and all that is needed is to procure some new slats or a few simple additional signs.

This would be procured as a direct order between building manager and manufacturer on the basis that the manufacturer will supply and install the signs.

Type B: Simple directional information and room naming

This would be a new scheme for a simple building that would not require any major wayfinding analysis. Suitable signs required would be for basic directional information and signs for naming rooms and facilities.

This would be procured as a direct order between EFD manager and manufacturer.

Type C: Larger schemes requiring wayfinding and route analysis

This would be in more complex buildings where a wayfinding analysis of key routes and destinations is needed to establish a hierarchy of information. Sign types would be selected from the standard sign family, however non-standard signs may be required for unusual or difficult locations. Floor plan maps would often be very useful as an aid to orientation. This more complicated project will require the assistance of wayfinding designers to assist the building managers to prepare the scheme and prepare the artwork prior to ordering from manufacturers.

It is imagined that most projects will be A or B types, with a few type C projects for complex, unusual buildings or special cases. However whatever the size of the project the steps to achieve the project will be the same, it is just that the solutions for a small project will be simpler and easily dealt with by the building manager without the need for additional specialist advice, and the time taken to do the project will vary depending on the size and complexity.

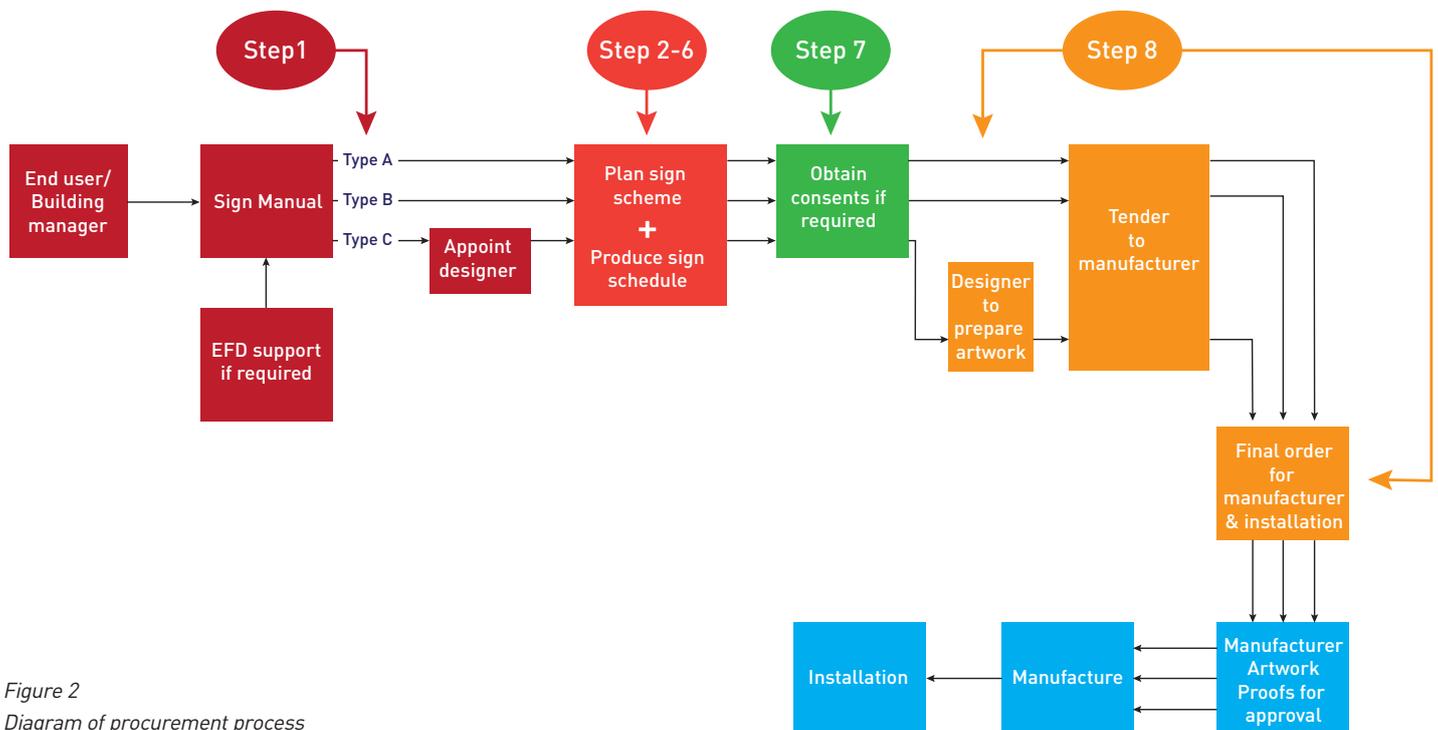


Figure 2
Diagram of procurement process

2.2 Step 2: Where do the signs need to go?

Before new signs are put up it is important to think carefully about where they should go so they can be easily seen, and make it clear for users.

Wayfinding Issues:

First an exercise in wayfinding needs to be undertaken to set out the principles for locating signs to ensure consistency between buildings. We set out here a not-exhaustive list of the sort of issues that may need to be considered.

- Where are the entrances to the building? Is there one or more? Understanding how people approach and use the building will dictate the best locations for signs.
- How do people move about the building? One key route or several interconnecting routes. Are there through routes? Understanding that people may be approaching from several directions, and /or passing on route to somewhere else will dictate the positioning of signs to allow free flowing movement of building users, by avoiding signs in areas where people stopping to look at signs would cause an obstruction.
- Where are the primary information nodes? ie where do people congregate/ routes cross over/ or change level? These areas naturally would be places where signs are needed unless visually it is clear.

- Where are the complicated areas and where it is difficult to see where you need to go? These areas will need special consideration. If it is a long complicated route then additional signs may be needed to reinforce the route or give confidence to users that they are going the right way, or the introduction of mapping to help visitors better visualise their route.
- How do people approach the proposed sign location? Straight on or from the side? Straight on means it will be seen from a long distance, side on means it may not be seen easily and may need a projecting sign for an important location.
- Is this in a corridor or space where there are likely to be lots of people in front of the sign? If so above the door head may be a better location than at the side of the door.
- Is this a sign that identifies a room, or a series of places along a route etc. It is important to locate the signs so that room names and local groups of rooms etc do not get confused with signs that are directing to further away destinations.

Having an understanding of core wayfinding issues will help to locate signs in the most effective locations, avoid over signing and so ensure consistency is achieved between buildings. The images of the following page show some common problems with signing.

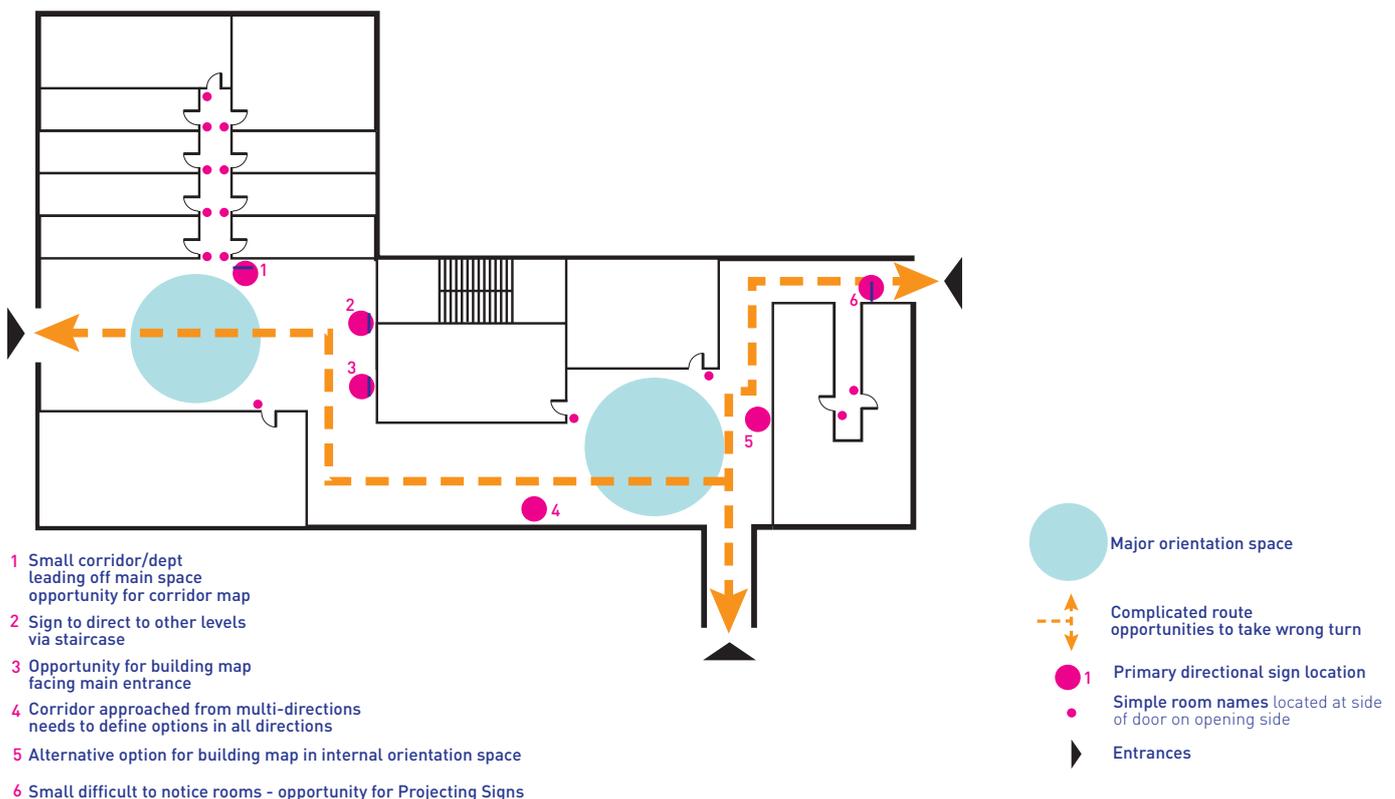


Figure 3
Wayfinding principles typical diagram



Figure 4 : Signs showing choice of direction and levels would be easier to read with the addition of arrows to aid navigation



Figure 5: Corridors leading to other spaces need a sign to direct through traffic



Figure 6 : Door mounted signs need to consider how the room is used. Open doors mean that only half the sign is visible



Figure 7: Groups of signs together need to be sized to line up vertically as well as horizontally



Figure 8: Doorways or entrances to a corridor with other accessible rooms would benefit from a plan at this point rather than just a directory



Figure 9: Changeable information needs to be managed to avoid oversigning and confusion

Common problems

2.3 Step 3: What do the signs need to say?

The choice of content for signs may seem obvious but different people have their own interpretation of what signs should say. In order to avoid oversigning a process of editing a list of destinations is required at the outset. All locations do not need to be signed from everywhere.

The hierarchy of sign destinations needs to be considered, and as a rule sign the general first and the specific later, i.e. signing a reverse address approach - Kent Beckenham The Avenue 11, instead of 11 The Avenue Beckenham Kent. So within a building that would mean signing to a department, then to a floor, then a room. Important spaces/ junctions/floors, may be better to sign to, rather than all the locations near those spaces. So it is important to identify the key routes and orientation spaces within a building, for example in buildings where there are wings, these should be named, primary halls/corridors which act as main orientation points should be named. In this way signs can be kept to a minimum.

Think about the primary destinations that visitors need to find. Bear in mind that once a destination is signed say from an entrance this will need to be signed every time to ensure that the route does not 'go cold'. The biggest cause of frustration to users is to find that they are following signs to a destination and then at a junction the signs for that destination disappear. So only sign what is really necessary from each point. Also coming into a building and finding a massive directory of destinations is also quite off putting, and so a simpler set of destinations to areas/ zones may be better with more detailed information developing as specific destinations are approached.

Sign content rules

- **Zones/spaces**

It is important that in order to reduce the amount of signage, users get to know the names of spaces/zones, so these should be shown on the signs. (see fig 10) The building may not have named zones, but many buildings do lend themselves to such naming, and so this should be considered.

- **Generic names**

Often department names change and room names change. To avoid having to change slats often then the use of more generic names can be helpful. In addition the word 'accessible' should be used. 'wheelchair' or 'disabled' should be avoided.

- **Toilets**

To identify toilets the word 'Toilet' should be used and just add the icon to identify the type of toilet, eg male, female, unisex or accessible (see fig 11). At the entrance to the toilet(s) signs should say 'toilet' with the icon, but, within, cubicle doors, if they need to be identified (which might not always be the case) it is not necessary to have the word 'toilet', but rather have just the icon.

- **Floor numbering**

Floor numbers needs to be signed at points of changing between level at stairs and lifts, but also the floor number should be shown on the directory panels. (See figs 10 and 12)

G is for the Ground floor

1,2,3 etc for upper floors

-1,-2 etc for below ground levels

The floor number/letter is shown in the top right hand corner of the sign.

- **House style**

It is essential that a consistent nomenclature is applied to the signage throughout the campus. Job Titles, room names, congregating areas and building names should all be consistent with current UCL directories and official UCL information such as the printed UCL Campus map.

- **Abbreviations and punctuation rules**

Where possible abbreviations should be avoided because they can be misinterpreted. Titles and initials are more legible if full stops are omitted between initials however apostrophes should be applied correctly. For clarity, it is often better to abbreviate sparingly, avoiding the use of full stops at the end of messages. DDA recommendations are to avoid the use of ampersands but there may be exceptional circumstances in long department names where it will only fit with an ampersand. Type size should not be reduced to make long names fit.

- **Use of capitals and lower case**

Upper and lower case letters should be adopted in all cases. Improved legibility will be achieved if the first letter of each of the key words begins with a capital letter, other words should begin with a lower case letter, for example:

Reception and General Enquires

- **Legend Order**

Legends should always appear in alphabetical order starting from the top, grouped together by arrow direction. Legends that are ranged right with directional arrows signed up and to the right will create one alphabetical group; legends ranged left with arrows signed left will create a second alphabetical group. The exception to this is UCL Library directories which always appear in alphabetical order regardless of the arrow direction. Where directories include information on more than one floor, the highest floor is to appear at the top of the directory with the lowest at the base. (see fig 10)

- **Offices**

For small signs at offices, just the office or person name should be used, with the possible addition of an insert type sign to avoid posters being stuck on the door. (See page 14)

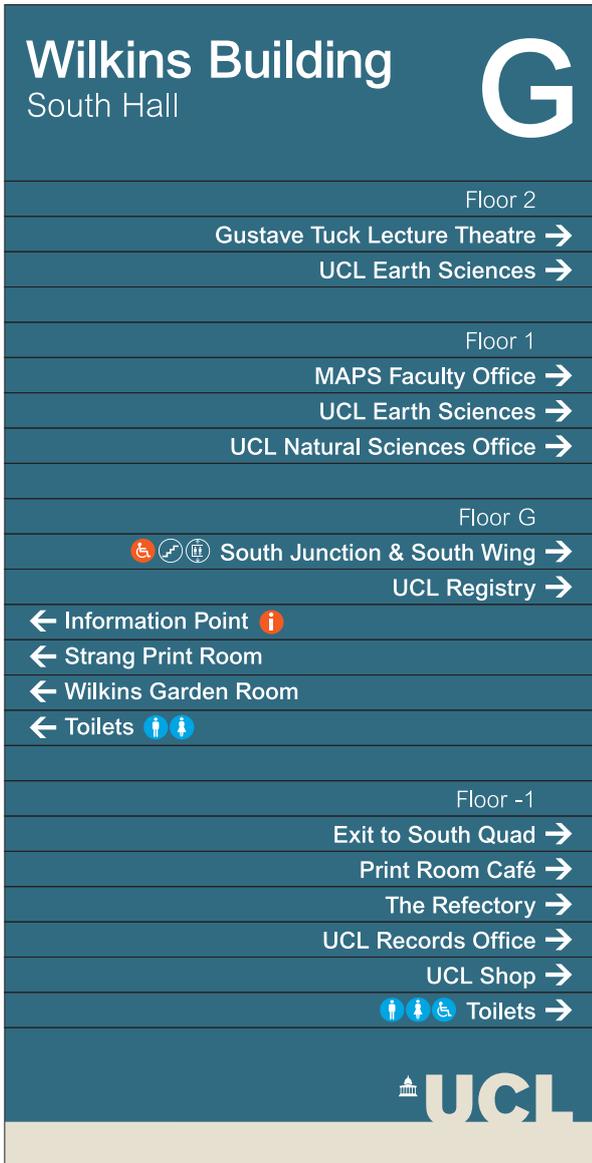


Figure 10 Directory showing word order, space name and floor number



Figure 11 Toilet sign



Figure 12 Floor number sign

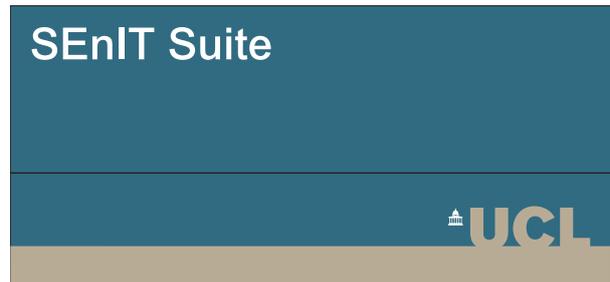


Figure 13 Office sign



Figure 14 Booking sheet insert sign

2.4 Step 4: Which signs do I choose?

The pilot projects have generated a family of sign types all following the same style but there is a wide range of types to allow for a variety of uses and requirements of different building types. Building managers and designers will choose from these sign types, and the choice of signs should be made based on hierarchy of use:

● Primary destinations

- Public accessible places such as Museums/ galleries
- Information areas
- Libraries
- Lecture theatres
- Restaurants

● Secondary destinations

- Important offices, admission offices,
- Student help etc
- Other services and Toilets

● Tertiary destinations

- Individual offices

The choice of sign will also depend on viewing distances along with the space available , if in doubt go for a smaller sign type.

In some unusual type C projects there may well be a need to produce a new sign type that has not yet been foreseen. In these cases it would be advisable to use a wayfinding designer to design the new sign layout in accordance with the ethos set out in this manual.

The matrix on the next pages shows the family of signs and the typical locations and use guide, along with a summary of the guidance for simple office room names and numbering options.

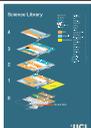
- Wall mounted and ceiling hung options.
- Wall mounted signs the back plate is fitted to a 20mm thick foamex panel fixed to the wall with countersunk screws.
- Foamex panel is sized to be 25mm smaller all round so that the backing is not visible from the front face
- Sign appears to be visually floating off the wall.
- The ceiling hung system is suspended to the required height by steel wire which is then simply bolted to the ceiling
- All wall mounted signs will be fixed at a head height of 1700 mm from the ground so all head heights will be the same
- To avoid visual clutter all redundant signs will be removed.

Section A-A
Section A-A shows that all wall mounted signs are the same height from the ground. This is to ensure consistency and readability. The sign is fixed to a wall with countersunk screws. The foamex panel is sized to be 25mm smaller all round so that the backing is not visible from the front face. The sign appears to be visually floating off the wall. The ceiling hung system is suspended to the required height by steel wire which is then simply bolted to the ceiling. All wall mounted signs will be fixed at a head height of 1700 mm from the ground so all head heights will be the same. To avoid visual clutter all redundant signs will be removed.

Section B-B
Section B-B shows that all hanging signs are the same height from the ceiling. This is to ensure consistency and readability. The sign is fixed to the ceiling with steel wire which is then simply bolted to the ceiling. All hanging signs will be fixed at a head height of 1700 mm from the ground so all head heights will be the same. To avoid visual clutter all redundant signs will be removed.

Section C-C
Section C-C shows that all room signs are the same height from the ground. This is to ensure consistency and readability. The sign is fixed to the wall with countersunk screws. The foamex panel is sized to be 25mm smaller all round so that the backing is not visible from the front face. The sign appears to be visually floating off the wall. The ceiling hung system is suspended to the required height by steel wire which is then simply bolted to the ceiling. All wall mounted signs will be fixed at a head height of 1700 mm from the ground so all head heights will be the same. To avoid visual clutter all redundant signs will be removed.

Sign Matrix

Sign Type	Application	Nominal Dimensions	Components	Notes	Illustrations	Budget Cost 2009
A1 Directory	Large directory panel for spaces with complex arrangements of departments	1470x1050mm	1) Large top Slat: building name and floor 2) Slats and map 3) Base logo panel	Ideally suited for library entrance areas		£ 1500
A2 Directory	Large directory with slats arranged in two columns	1170x700mm	1) Large top Slat: building name and floor 2) 30 slats 3) Base logo panel	To be used for directories where there are long/complicated names		£ 800
A3 Directory	Large directory with slats in single column	990x500mm	1) Large top Slat: building name and floor 2) 20 slats 3) Base logo panel	Most commonly used directory		£ 600
B Directory	Medium sized directory	690x500mm	1) Large top slat building name and floor 2) 14 Slats 3) Base logo panel			£ 450
C Directory	Small directory	510x500mm	1) Large top slat building name and floor 2) 8 Slats 3) Base logo panel			£ 300
D Map	Building map panel Horizontal format map	510x500mm	1) Large top slat building name and floor 2) Map 3) Base logo panel	Map digital printed and applied to slat		£ 300
E Map	Building map panel Horizontal format map	990x500mm	1) Large top slat building name and floor 2) Map 3) Base logo panel	Map digital printed and applied to slat		£ 600
F1 Map and directory	Small format Floor map combined with directory information in libraries	870x700mm	1) Large slat with digitally printed content 2) Base logo panel	Map and directory information digital printed and applied to slat Suitable for libraries		£ 700
F2 Map and directory	Large format Floor map combined with directory information in libraries	1500x1000mm	1) Large slat with digitally printed content 2) Base logo panel	Map and directory information digital printed and applied to slat Suitable for libraries		£ 1000
G Campus map	Campus map panel	990x500mm	1) Large top slat Campus name 2) Insert panel with printed map 3) Base logo panel			£ 600

See appendix 3.7 for sign template (on separate disc).

Budget costs for supply of sign only and exclude artwork, installation and removals.

Sign Matrix

H1 Poster case	Large lockable poster case	870x1000mm	1) Large Top slat building name 2) openable case 3) Base logo panel			£ 500
H2 Poster case	Small lockable poster case	690x1000mm	1) Large Top slat building name 2) openable case 3) Base logo panel			£ 400
H3 Poster case	Small lockable poster case	690x500mm	1) Large Top slat building name 2) openable case 3) Base logo panel			£ 300
J Free standing insert sign	A4 size insert sign	335x214mm	1) Small top building name panel 2) Insert panel 3) Base logo panel	Can be adapted as an A3 version		£ 300
K1 (A4) Insert sign	A4 size insert signs Portrait format	335x214mm	1) small top slat building name 2) Insert			£ 50
K1 (A5) Insert sign	A5 size insert signs Landscape format	190x214mm	1) small top slat building name 2) Insert			£ 50
K2 Insert sign	A4 size insert signs Landscape format	245x301mm	1) Top building floor name panel 2) Slats			£ 50
K3 Insert sign	A4 size insert signs Portrait format With additional slat	335x214mm	1) small top slat building name 2) additional slat 3) Insert			£ 50
K4 Insert sign	A3 size insert signs Portrait format With additional slat	500x301mm	1) small top slat building name 2) additional slat 3) Insert			£ 60
K5 Insert sign	A3 size insert signs Portrait format With additional slat	560x301mm	1) small top slat building name 2) additional large slat 3) Insert			£ 60
K6 Insert sign	A3 size insert signs Portrait format	560x301mm	1) small top slat building name 2) additional large slat 3) Insert			£ 60
K7 Insert sign	A3 size insert signs Landscape format	337x420mm	1) small top slat building name 2) Insert			£ 60

See appendix 3.7 for sign template (on separate disc).

Budget costs for supply of sign only and exclude artwork, installation and removals.

Sign Matrix

L1	Double sided large information sign	300x1200mm	1) Information slat 2) Base logo panel	Ceiling hung sign for one legend		£ 300
L2	Single sided large information sign	300x1200mm	1) information slat 2) Base logo panel	Wall mounted sign for one legend		£ 250
M1	Double sided information sign	270x600mm	1) Information slat 2) Base logo panel			£ 200
M2	Single sided information sign	270x600mm	1) Information slat 2) Base logo panel			£ 180
M3	Information sign	270x400mm	1) Information slat 2) Base logo panel			£ 80
M4	Information sign	210x1000mm	1) Information slat 2) Base logo panel			£ 250
M5	Information sign	135x600mm	1) Information slat 2) Base logo panel			£ 150
N Room name	Over door sign	270x600mm	1) Information slat 2) Base logo panel	Wall mounted sign for one legend		£ 200
O1 Small information sign	Room sign	270x214mm	1) Large top slat room name 2) large Slat 3) Base logo panel	Sign located at side of door		£ 60
O2 Small information sign	Room sign with small insert	270x214mm	1) Large top slat room name 2) Insert 3) Base logo panel	Sign located at side of door		£ 60
O3 Floor number	Small sign with floor number	270x214mm	1) Large top slat floor number 2) Base logo panel	Located at stairs lifts landings		£ 60
O4 Small information sign	Room name sign for multiple occupancy	195x420mm	1) 3 large Slat 2) Base logo panel			£ 150
O5 Small information sign	Room name sign for multiple occupancy	285x420mm	1) 5 Slats 2) Base logo panel			£ 150

See appendix 3.7 for sign template (on separate disc).

Budget costs for supply of sign only and exclude artwork, installation and removals.

Sign Matrix

O6 Small information sign	Room name sign for multiple occupancy	150x297mm	1) 2 Slats 2) Base logo panel			£ 40
P1 Small room number	Room number	60x60mm	1) Room number			£ 20
P2 Small room name and number	Room name and number	60x214mm	1) Room number and name			£ 20
P3 Small room name and number	Room name and number	100x214mm	1) Large top slat room name 2) Base logo panel and number			£ 30
P4 Small information sign	Room information (no slats)	190x150mm	1) Medium Large top slat room info 2) Base logo panel			£ 30
P5 Small information sign	Slatted room name sign	190x150mm	1) 5 slats 2) base logo panel			£ 30
P6a Small information sign	Room information (no slats)	190x150mm	1) Large top slat room number 2) Base logo panel	Variation for Toilets		£ 30
P6b Small information sign	Room information (no slats)	150x150mm	1) Large top slat	Toilets symbol only option		£ 30
Qa Projecting flag sign	Double sided sign	190x150mm	1) large slat room name 2) base panel	Projecting sign for difficult to see rooms Suitable for rooms along long corridors viewed from distance		£ 40
Qb Projecting flag sign	Double sided sign	190x150mm	1) large slat room name 2) base panel	Variation for Toilets		£ 40

See appendix 3.7 for sign template (on separate disc).

Budget costs for supply of sign only and exclude artwork, installation and removals.

Office and room signs

One of the most common signs that will need to be installed is a simple room name or number. Depending on the use of the building, the room number or room name will have different priorities. The hierarchy of the name and number needs to be clearly established for each building.

UCL preference for room name signs would be one of the three following signs: P1, K1(A5), K1 (A4). There are a few further options for specific cases where a different emphasis is required. Therefore set out here is a summary of these options:

● Room number only Type P1

For many rooms at UCL there is no need for a room title and just a simple room number is all that is required. (See fig 16) This sign will not need the UCL logo.

● Room name and insert for changable text Type K1(A5) & K1(A4)

For rooms where the information changes frequently a room name with an insert sleeve would be the best solution. In this case the insert sheet is easiest if it is a standard A4 size. But alternatively a smaller A5 insert sheet can be used (See fig 17a+b). In addition around some rooms where frequent notices are required insert signs allow for these notices to be managed. Care should be taken when setting out the insert to ensure text is readable and does not cover the UCL logo strip. Page 15 shows this template.

● Room number and name

For rooms or offices which have a name and a number, the sign again will be small and will not need the UCL logo. (See fig 18). There are some instances where the room name is more important and the name and number can be included on a sign where the UCL logo is also shown to give the sign more prominence. (See fig 19) Here the room number is small for reference only, eg in the library areas, as visitors are directed to the room name only.

● Room name and slats for additional text

There are some offices particularly with multiple occupancy where a number of slats showing names or information say about opening times etc, demands a sign type which allows space for this. (See fig 20) This central portion could be as one large slat with printed information or smaller as a series or removable slats. (See fig 21) In either case the top slat should show the room name and the bottom will have the room number (if required) and logo strip.

● Development in Use

The above provides a lot of flexibility and the most common solutions will be developed in use. UCL's policy is that, for economy's sake, individual names should not be printed on slats. Individual names should be accommodated by insert sleeves or insert slats, or slats over-printed with easily removeable film.

Figure 16
Type P1

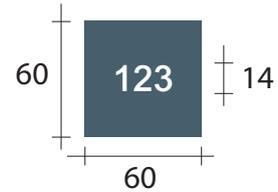


Figure 17a
Type K1 (A4)

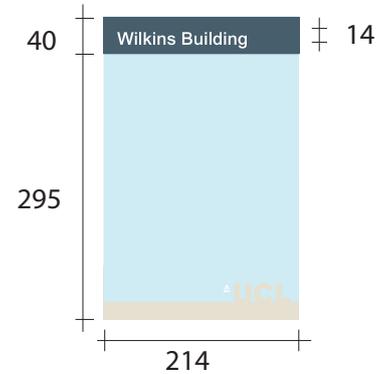


Figure 17b
Type K1 (A5)

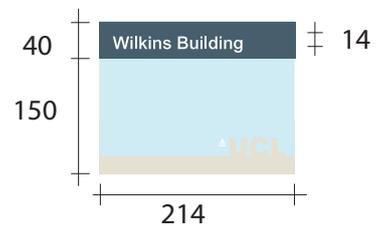


Figure 18
Type P2

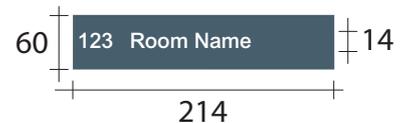


Figure 19
Type P3

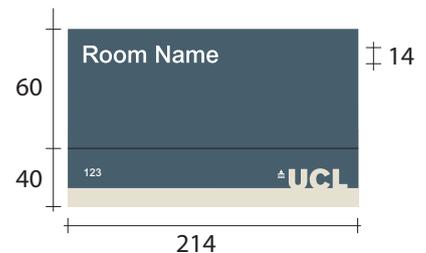


Figure 20
Type P4

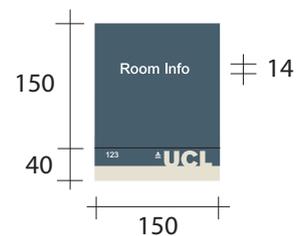
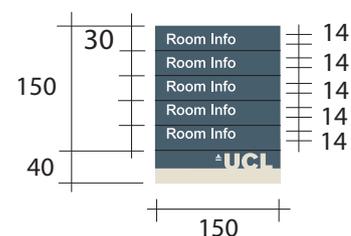
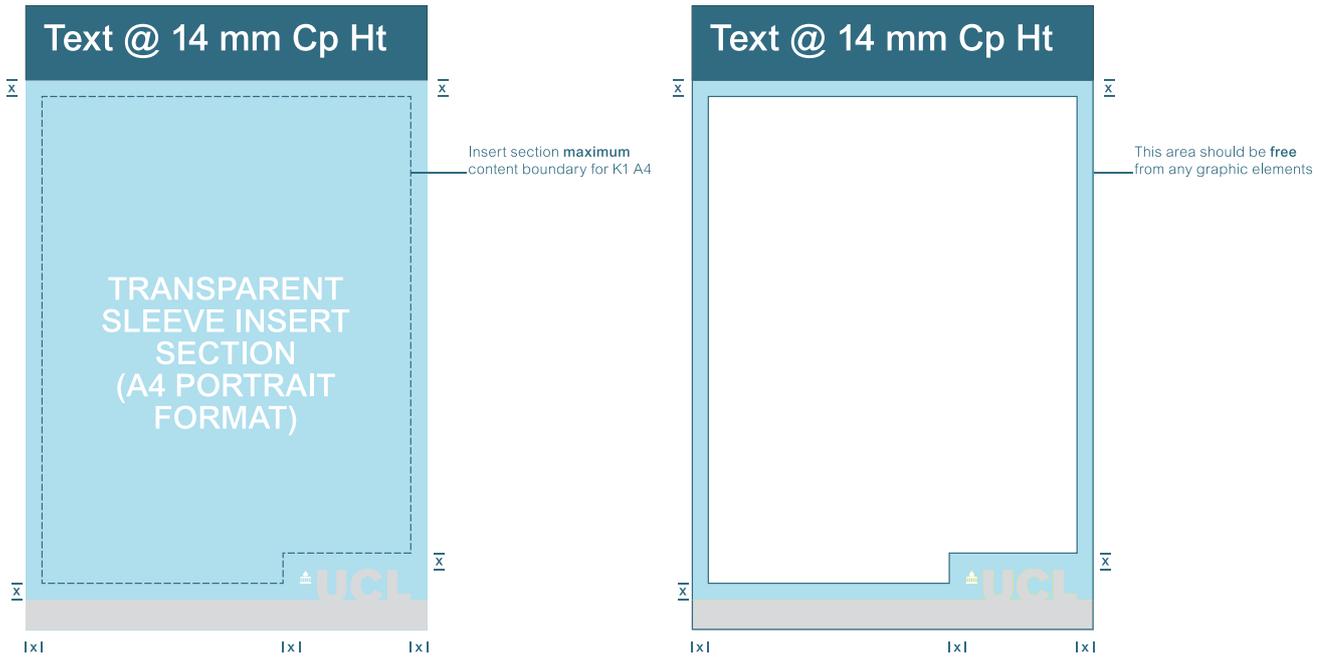


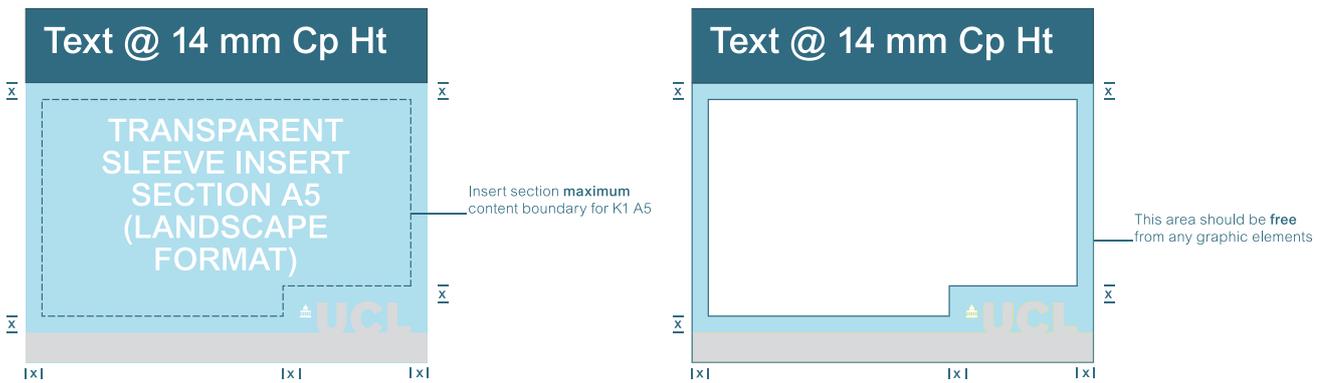
Figure 21
Type P5



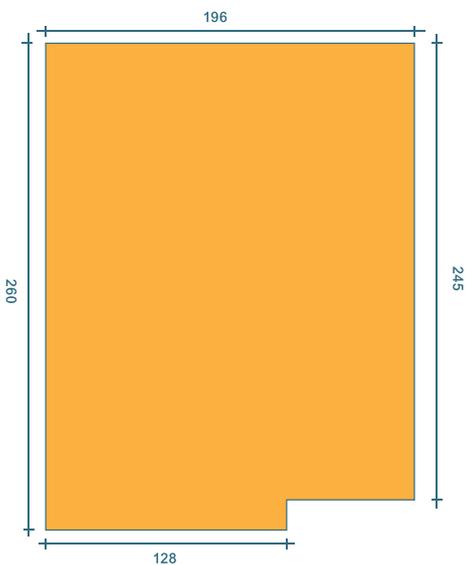
Insert Signs Templates



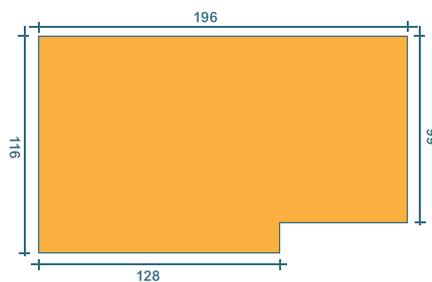
Type K1 A4



Type K1 A5



Template A4



Template A5

Information should be laid out within this border, **all text and images must not extend beyond these dimension.**

Suggested type size min. 16pt
Typeface Arial Medium

2.5 Step 5: Do I need a map?

Most buildings will not need a map where the layout is simple, and a directory will be sufficient to guide visitors to their destinations. However in some buildings where there is a demonstrable need, simple clear mapping is a good way of helping people understand the route to places and their locations within a building.

The key to successful mapping is editing a building plan to include just the locations that most visitors will need to go to, and to orientate the maps 'heads up'. This means that people viewing the map can see directly the route they need to take. Making maps always north up means they need to be mentally turned before users can understand the direction they need to take. For many people this is too difficult a task. Clear mapping can then allow for a reduction of the number of signs and yet still aids navigation.

As stated, many buildings will not need a whole building map, but a simple graphic 'heads up' map can be a very good way of showing groups of spaces and rooms along a corridor. (See fig 26)

● Map types

Floor plan maps (See fig. 22)

Reducing a building floor to a simple plan diagram is the most effective method of communicating route information. A 'You are Here' point will mark the user's current location. Entrances and exits, stairs to other floors, rooms, key routes and facilities can all be shown. When inside a building the user will have no sense of which direction is north, so 'heads up' maps that are turned so that they are orientated to the map reader must be used. Maps must use the same colour coding for room types and corridors as set out in the artwork templates and new colours should be avoided. The use of symbols with a key will reduce the number of annotations required.

3 dimensional maps (See fig. 25)

Where information on a number of floors needs to be communicated, 3 dimensional maps can be used. These contain the same level of information as simple floor plan maps, but are set out in an orthographic style. This can be effective in showing connections such as stairs and lifts between floors. Like simple floor plan maps, 3 dimensional maps should be heads up so that they are turned so to be orientated to the map reader. Maps must use the same colour coding as set out in the artwork templates and new colours should be avoided. The use of symbols with a key will reduce the number of annotations required.

● Interpreting floor plans

Floor plan drawings should always be used as a basis for setting out maps. This is to ensure a true scale and relationship between room and corridors sizes is achieved. Complicated room and corridor shapes should be simplified to a schematic level and all unnecessary details removed to ensure the floor map shows only what is important to help visitors find their destinations.

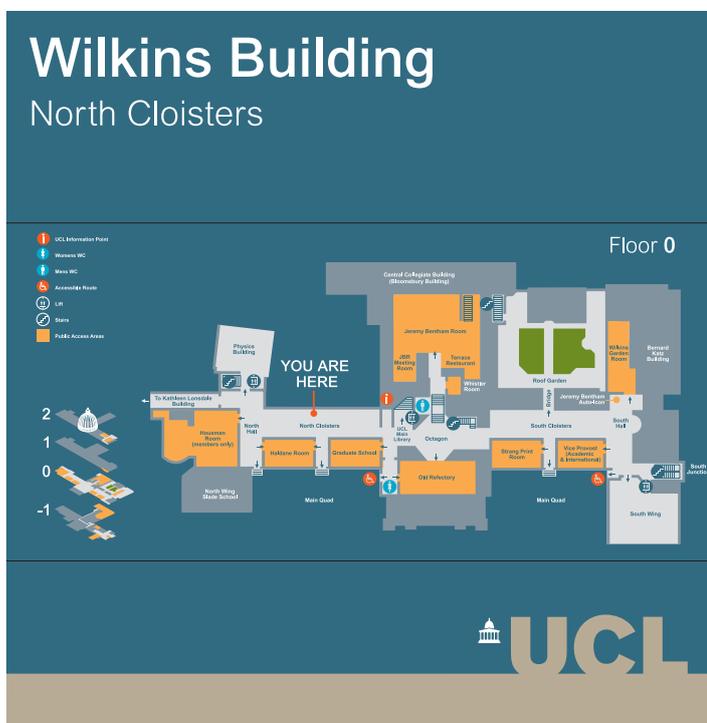


Figure 22 Wilkins map east up



Figure 23 Wilkins map south up

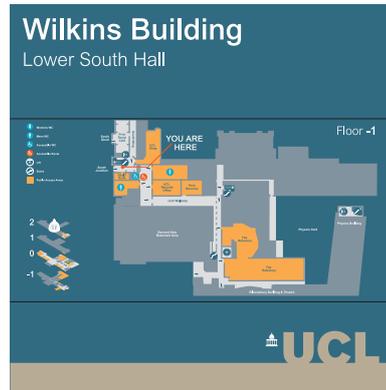


Figure 24 Wilkins level -1 map west up



Figure 25 Library mapping 3D map

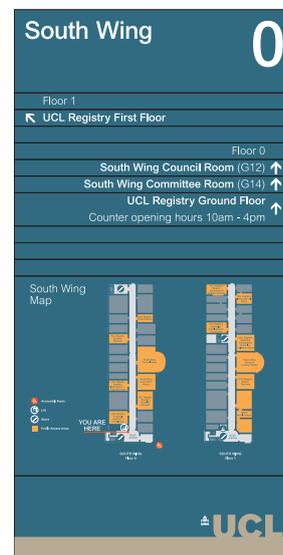


Figure 26 South Wing map

2.6 Step 6: How should signs be positioned

In order to maintain consistency and reduce visual clutter it is important to think about how the signs are positioned when they are installed.

● Grouping of signs

When several different signs need to be located in the same area it is important to group them in an ordered way, for example a room name and booking sheet or a directory and map. The signs should line up and have a 50mm gap between them with the room name above and booking sheet/insert sign below. (See fig 27 & 28)

● Heights

Sign head heights should be 1700mm from the floor level. Where signs are grouped this should be the head height of the top sign. The exception to this is signs where the sight line demands an over door head sign, or ceiling hung sign. In these cases the sign should be located centrally over the door or within the space available.

● Locations adjacent to edges

Where the sign needs to be located adjacent to doorways or near the corner edge of a wall/pier, they should have a gap of 100mm from the doorway edge. (See fig 32)

In addition it is important to note that the signs are changed by sliding slats out. So a grouping of signs or signs installed near architraves or in recesses need to allow for enough room to slide out slats, and enough room to insert changeable sheets etc. The signs are installed on a backing to lift them approximately 20mm from the wall to allow for easy sliding and gives a floating effect. (See figs 29-31)

● DDA Compliance

As with a number of issues it is important to locate signs so that they are not a hazard and can be accessible to all. DDA compliance is dealt with in appendix 3.8 (page 34)



Figure 27
Map sign and directory sign positioned to line up with each other



Figure 28
Three signs grouped to line up horizontally and vertically

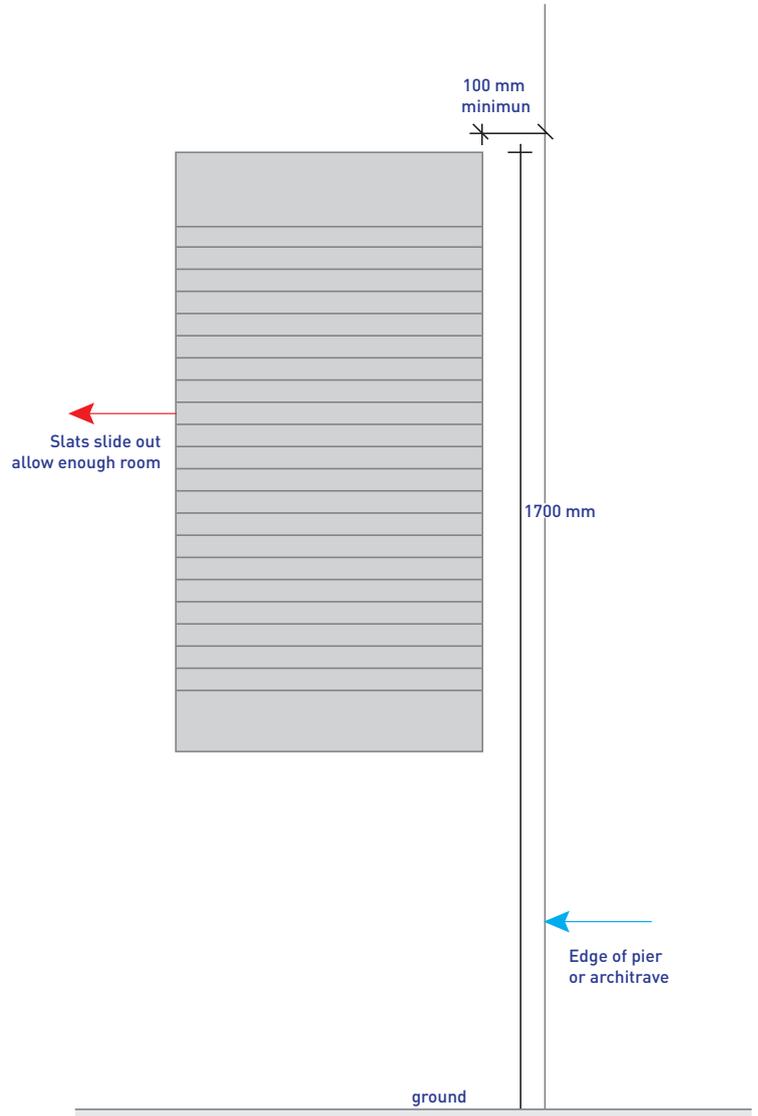
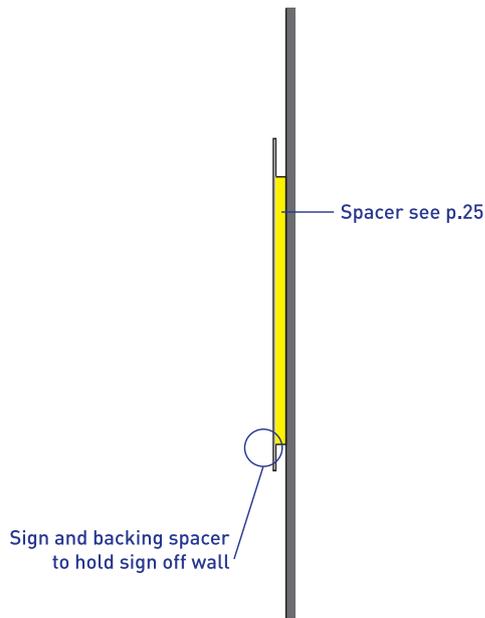


Figure 29 Sign shown with backing spacer to hold sign off wall



Figure 31 Sign next to edge of pier

Figure 30 Sign position criteria



Figure 32 Over door sign, side of door sign located 100mm from doorway edge, and directory located away from these to clearly avoid confusion

2.7 Step 7: Do I need any consents?

Depending on the type of building there will be different types of consents required.

● Listed Buildings

All listed buildings will require Listed Building consent to install new signs. The principle of the new signage system has been agreed for the Grade I Listed Wilkins Building with the Local Authority at Camden and English Heritage, and has been granted listed building consent. So this manual should be followed, highlighting the principles as illustrated with the Wilkins Building and sign locations chosen sensitively to suit the individual location. Listed Building consent currently takes 8 weeks to go through the local authority planning process. This is the minimum time from registration by the local Planning authority of the completed application documents. This timescale should be allowed for in the project programme.

Building managers and designers will be responsible for obtaining Listed Building consent for sign projects in listed buildings. This is a statutory requirement. Further advice can be obtained from UCL Estates and Facilities Division.

● Leased buildings

Buildings or parts of buildings not owned by UCL will require landlord's consent for the installation of new internal signage. The proposals should follow the manual and then be submitted to the landlord for consent prior to installation. Again allowing time in the project programme for this consent should be made.

For a listed and leased building the project programme may require even more time if the two consents cannot be achieved at the same time.

● Non listed and UCL wholly owned buildings

These types of buildings will not require legal consents, so deciding on the types and locations of the signs should be carried out by simply following the manual.



Figure 33 Grade I Listed interior of the Wilkins Building

2.9 Frequently Asked Questions

● What about door signs?

UCL has an existing standard design specification for door signs that remains current in areas not being re-signed with the new internal wayfinding signage. Departments requiring new door signs of this type should refer to Internal Signage on the UCL Estates and Facilities Division website.

Where the new internal wayfinding signage is being utilised, the family of signs includes a variety of door signs as illustrated on page 14 of this manual.

● How should I arrange new external signs?

Requests for new or modified external signs should be referred to UCL Estates and Facilities Division using contact details given on the Internal Signage section of the website.



Figure 35 new room signage



Figure 36 new external signage

3.1 Specification

All new internal wayfinding signage for UCL buildings is now to be in accordance with this specification.

- The internal signs are MSS (Modular Sign System) from Workshop 2 Limited, (www.wksp2.com) and distributed under licence from a number of suppliers. See section 3.6 (page 33) for the current list of suppliers. In this way the signs can be procured without UCL being tied in to one manufacturer.

It is a flexible simple system as it has essentially two components; profiles and locking strip. The profiles are manufactured from aluminium extrusions, which have half-dovetails on one side. The extruded profiles slide together to form a sign 6mm thick. The profiles are held in place by a hidden, locking strip. The profiles are offset so that there is always a dovetail showing and additional profiles can be hooked on. The signs are naturally double sided, without any special back plate.

The extrusions come in 3.3m lengths and are anodised. This has a number of benefits, it allows the extrusions to slide together smoothly, it seals the aluminium and it provides a 'key' for paint application. Each profile is painted to the specified colours and stoved for durability, and text legends are applied by screen printing.

Workshop2 can provide brochures and technical information on request, including an 8-page leaflet "MSS HB Modular Sign System", which includes illustration of the complete profile types available.



Figure 37 Colour specifications for typical directory

1 Material and Colour rules

Colours and finishes have been chosen to create a sophisticated feel, with a good matt finish to avoid finger marks and to give a good contrast to meet DDA requirements.

- Background for signs NEXTEL Suede Dove Blue S2
- Colour specifications are:

LEGENDS:
 WHITE RAL9003 SIGNAL WHITE
 PANTONE BLUE 632
 PANTONE RED 179
 PANTONE COOL GREY 3

See fig. 37 for locations of these colours

ADDITIONAL MAPPING COLOURS:
 PANTONE COOL GREY 3
 PANTONE ORANGE 716
 PANTONE GREY 7037
 PANTONE GREEN 7496

See fig. 38 for locations of these colours

- It is necessary for manufacturers to supply samples of Pantone and RAL colours for approval
- Colour application to be with high quality Silk Screen printing with a double printing process to ensure full colour match.
- Signs to be adaptations / updates of existing new signage to be colour tested on a sample prior to manufacture to ensure exact colour match, and checked for size compatibility.

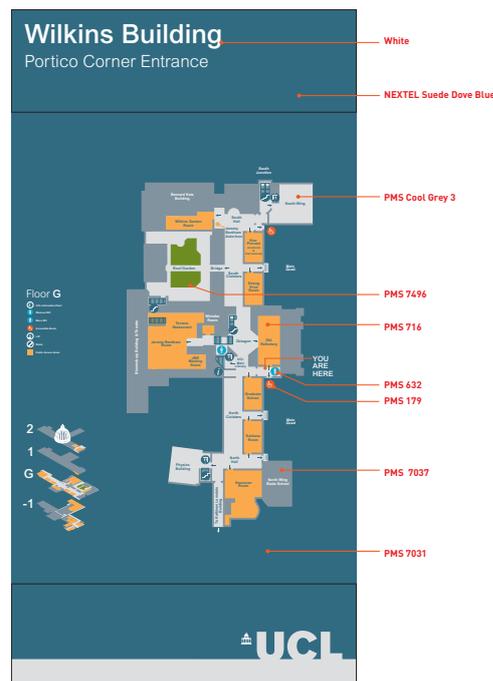


Figure 38 Colour specifications for typical mapping

2 Mapping manufacture

The maps are to be produced as a CMYK print applied to an aluminium backing plate with anti-graffiti coating over. This plate will form one large slat and fit onto the dove tailed grooved assembly. In this way the mapping can be easily changed by peeling off the sheet and replacing with a new printed sheet. The coating will ensure the maps should not be peeled off inadvertently

3 Typical Sign components

The sign matrix shows the range of signs that make up the family of signs. However there are some typical sets of components for the sign types.

- Directories

Top Section: slat with building name and floor level
 Middle Section: Slats with legends/map new slats
 Bottom Section: Logo brand strip

- Large Information signs

Top Section: One slat with legend
 Bottom Section: Logo brand strip

- Small Information signs

Top Section: Slats with legend
 Bottom Section: logo brand strip

- Insert signs

Top Section: Slats with legend
 Bottom Section: Clear sleeve to accept paper inserts

- Room name signs

Top Section: slat with legend

The sizes of slats and components is set out for each sign on the sign matrix and shown graphically in the sign templates in appendix 3.7 (on separate disc from EFD).

Where new slats are required to amend an existing sign, a measured survey should be undertaken to confirm existing slat size and type size to ensure the correct size is ordered.

- A sample sign showing all colours and finishes will be required for client approval.

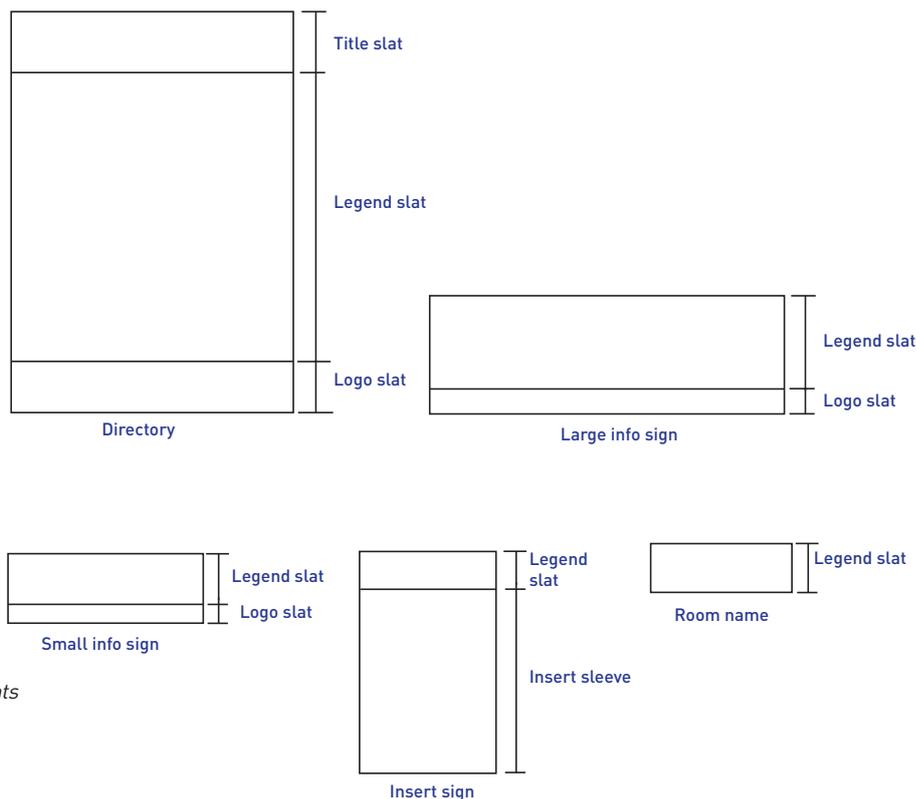


Figure 39 Typical Sign components

4 Special Variations

There are a few special variations to the MSS system signs that have been included in the UCL family of signs.

- Display case:

This is to be a DSS lite tamper-proof lockable case with fire-rated glass, suitable for use within corridors and stairwells. Door is to be hinged. The display cases can be provided with a secret toggle locking mechanism or a more traditional key operated lock.

DSS is Display Sign System and is a complementary range of display systems to match the MSS signs. The DSS lite version matches the MSS in terms of profiles and visual compatibility. Sizes of the display sign options are shown in the sign matrix.

- Insert signs:

These signs are designed to insert a standard A4 or A3 sheet and so are ideal for delivering information that changes frequently.

These signs ideally to have no bottom rail, and are held firm with the spacers behind the top legend slat and a velcro strip at the base to ensure the signs do not become loose at the base. The perspex insert sleeve to have the UCL logo strip etched or vinyl applied to the bottom edge.



Figure 40 Display case sign

Pages for insertion can be prepared directly by building users and so these signs do not need any specialists for updating. Layout of information on the insert page to be set out to not be obscured by the base logo strip on the sign. Blank sheets should be inserted when there is no information to be delivered.

- Free standing signs:

In some instances there is a need to have a sign where there is no available wall to fix the sign to. In these cases the family allows for a free standing sign. The post for these free standing signs to be a circular section aluminium leg approx 50mm diameter, with flat circular weighted base plate. Top of leg to have 60 degree angled plate to receive the sign. Ideally all painted surfaces are to match sign system. However a near match RAL colour PPC finish on the base and post may be acceptable and durable.

Manufacturer to supply final details for post assembly.

The sign element can be either an A4 or A3 sized insert sign similar to the wall mounted insert signs, alternatively the sign could be a small information type sign A4 or A3 sized for situations where the sign content will not need to change.



Figure 41 Free standing sign

5 Installation rules

- Mounting

All signs to be wall mounted, except where shown, and head heights to align except where shown. In a few exceptional circumstances signs will be ceiling hung or free standing.

The sign system slats need to be assembled to ensure the logo slat is aligned with the bottom of the sign. Any additional small strips required to stabilise the sign should be located at the top of the sign.

- Survey:

Each location must be surveyed by the manufacturer to confirm all sign sizes shown in the documents prior to manufacture.

In addition where new slats are being ordered to fit an existing sign, the manufacturer should survey the existing sign slat and type size to ensure consistency.

- Spacer

Signs are to be installed with aluminium backing plate on slatted signs and 10mm foamex spacer. (See fig 29)

The spacer is to be at least 25mm smaller than the sign edge to ensure the appearance of a floating stand off from the

background wall. It is preferred that spacers are painted the nextel dove blue finish, particularly in locations where the sign edge is very visible. However a white colour is significantly more economical and often acceptable, a near RAL colour match to the nextel blue is a mid-price option.

- Removals and making good:

When installing a new signage scheme in an existing building there will be old signs to remove. The contract for the installer should allow for removing all the redundant signs, and to make good the surfaces and decorations, to ensure that there are not holes and patches of unpainted walls etc left after the new scheme is in place.

- Changes to signs:

When a sign has been installed and changes are required to just a few slats, then blank slats should be inserted temporarily to ensure signs are not left with missing slats and the backing panel visible.

Building managers are advised to order a few blank slats for the various sign types, which can be used for this purpose from time to time in their building to ensure the signs always look good even when undergoing maintenance.



Figure 42 Ceiling hung sign

3.2 Artwork Guide

- Typographic rules

The UCL corporate typeface Arial must be used in all circumstances. Two weights are available, medium and light (See fig 43) . Arial Medium is used throughout as the primary typeface, however Arial Light can be used where a secondary level of information needs to be communicated, for example:

Exit to Gower Street 8.00am to 6.00pm

Figure 43 Typefaces

abcdefghijklmnopqrstuvwxyz1234567890
 ABCDEFGHIJKLMNOPQRSTUVWXYZ

Arial Light

abcdefghijklmnopqrstuvwxyz1234567890
 ABCDEFGHIJKLMNOPQRSTUVWXYZ

Arial Medium

The correct sizes for all legends are set out in the artwork templates to ensure a consistent visual configuration to the signs throughout the campus. Adherence to these sizes and legends is mandatory so that consistency is maintained.

In addition the branding application section page 29 sets out the rules for using the UCL logo in the bottom strapline of the sign.

- Symbol application

A suite of symbols (See fig 44) have been designed to accompany certain legends on signs and to simplify mapping information. This must be used in all cases.

On legends the destination and the symbol must appear together. On mapping the symbol can appear without the destination name, providing this is given in a key.

On right ranged legends the symbol appears before the text, on left ranged legends the symbols appears after the text (See fig 45)



Figure 44 Symbols

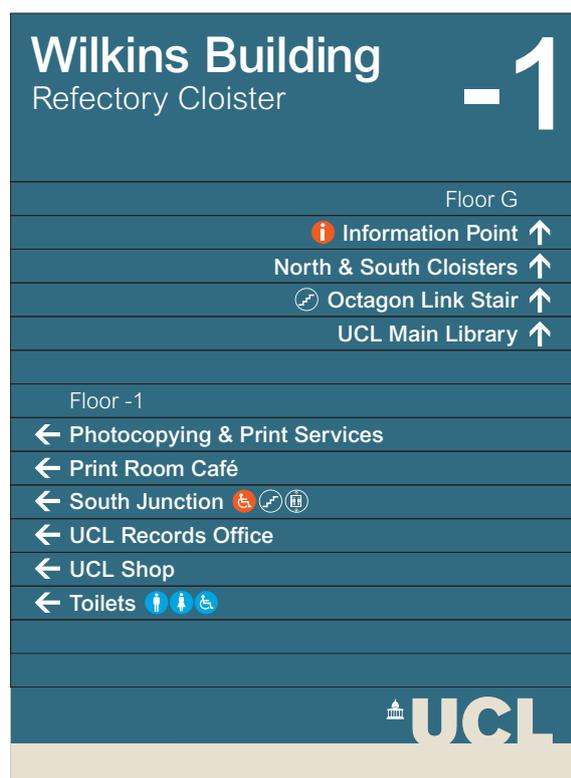


Figure 45 Symbol location

● Type size

Type sizes are set out in the templates for each sign type, and are sized according to the type of signs and the likely viewing distances.

Large High-level information signs: (medium viewing distance)
Legend 55mm (See fig 50)

Directory signs: (close viewing distance)

Primary text 32mm

Secondary text 20mm

Slat legends 14mm on a 30mm slat size (40 characters per line) (See fig 46)

A3 Insert room signs: (Close viewing distance)

Primary Information 18mm (20 characters per line)

Secondary information 14mm (See fig 48)

A4 Insert room signs: (Close viewing distance)

All text 14mm (17 characters per line) (See fig 49)

Room name signs: (Close viewing distance)

Normal room names (type P3) 14mm (17 characters per line) with room number 6mm (See fig 47)

The recommended text size from the Sign Design Guide for close up reading is 15-25mm, a text size of 14mm is slightly smaller than this recommendation but due to the lengthy names text was kept at this size to ensure the names would easily fit. This maximum would be less if the legend also required icons (for some legends there are up to three icons which accompany it). In special cases the text size is 12 mm for secondary information where the primary information is at the larger type size.

Slat legends are always shown with an arrow and are ranged to match the arrow direction.

Blank slats are shown between each floor (See fig 46)

The majority of the signs will be viewed from a relatively close distance and in an aim to provide consistent signage throughout the campus, it was agreed that 14 mm provided the best compromise between legibility and sign size and should be used wherever possible. In addition the signs have been designed to reinforce the brand of UCL through a subtle and sophisticated visual image throughout the interior of UCL buildings.



Figure 46 Type A3 Sign Directory.

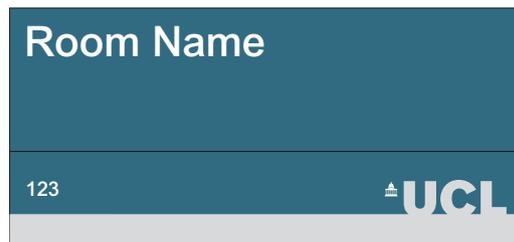


Figure 47 P3 Type room name sign



Figure 48 K7 Type A3 size insert sign

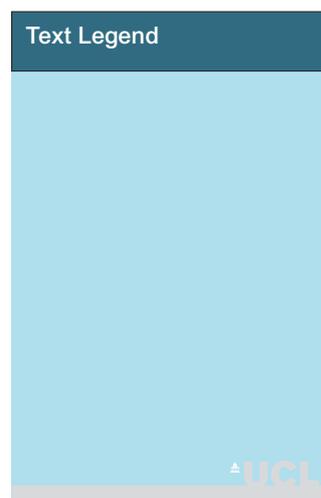


Figure 49 K1 Type A4 size insert sign



Figure 50 Type L1 sign Large information sign.

● Arrow configuration

A uniform arrow type is used on all signs (See fig 51). The size of the directional arrows is set in the artwork, however the correct arrow and legend configuration must be used on all signs.

The arrow is one of the most useful symbols used in signage, and when used correctly aids legibility and understanding. Text legends should be aligned according to the direction of the arrow. On legends that are to be arrow up or right, the legend will range right and the arrow appears on the right hand side of the legend. On arrows pointing left the legend is ranged left and the arrow appears on the left of the legend (See fig 52).

Figure 51
Arrow configurations

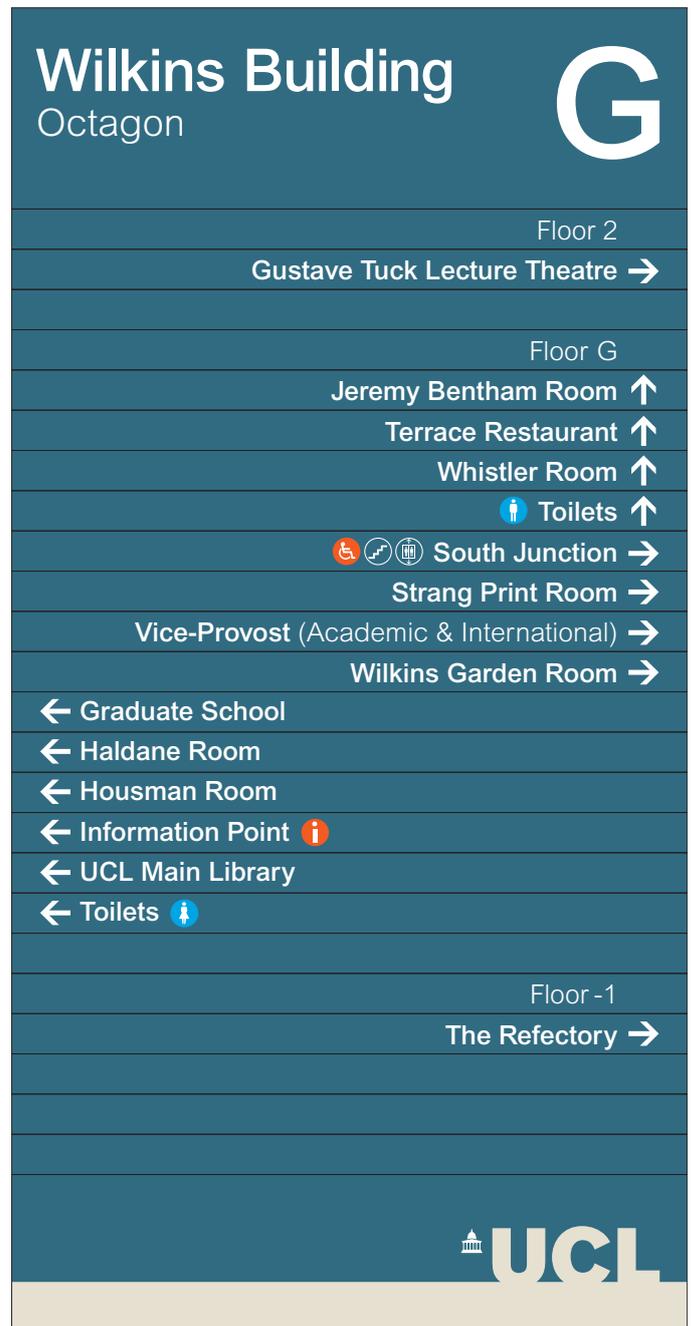
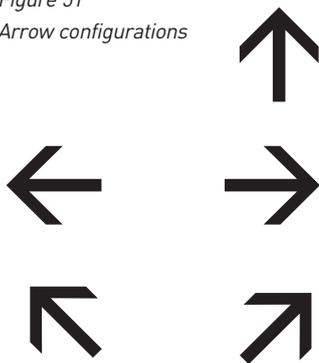


Figure 52 Arrow location shown on a directory where text legends are grouped and ranged according to the arrow direction.

● Branding application

UCL has introduced a new corporate identity to give all communications a consistent, strong and modern look. The corporate identity has been incorporated into the sign design and must not be changed or adapted in any way.

In all cases the UCL branding strip is to appear in PANTONE COOL GREY 3, with the exception of UCL Library Services, where it appears in PANTONE BLUE 632 (See fig 53)

The building pictogram element of the UCL logo always appears in white.

The sizes of the branding elements are scaled according to the size of the sign and are set out in the artwork templates.

The size of the branding elements must not be changed or adapted in in any way.

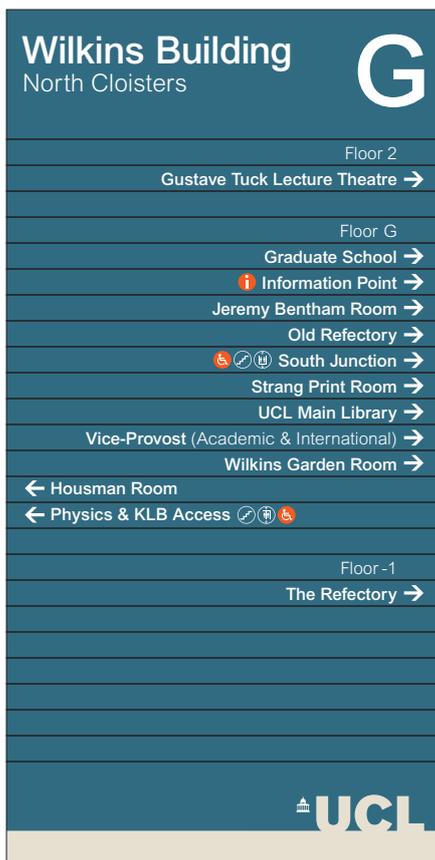


Figure 53 Logo brand strip colours

3.4 Sign Order Form

Order number:

Order by:

Name:

Address:

Project Address:

Please provide the signage in accordance with the following documents:

Sign schedule ref:

Location plans ref:

Also attached specification

Artwork to be supplied: yes / no

If artwork to be carried out by manufacturer proofs to be supplied for approval prior to manufacture.

Signed:

Date:

3.6 UCL approved suppliers

The MSS (Modular Sign System) as provided by Workshop 2 Ltd www.wksp2.com, is the only system to be used for UCL internal signage. The system can be made by a number of licensed companies, however only UCL approved suppliers should be used for the manufacture and installation of UCL internal signs.

UCL approved suppliers currently are :

Sign Box

Unit 3
Egham Business Village
Crabtree Road
Egham, Surrey
TW20 8RB
01784 438 688

Model Signs

1a Alpha Business Park
White House Road
Ipswich, Suffolk
IP1 5LT
01473 745 000

Sign Supply

Blays Cottage
Wick Road
Egham, Surrey
TW20 0PB
08702 402 678

DMA Signs

Unit 6 Bridge Works
Kingston Road
Leatherhead
Surrey
KT22 7SU
01372 363808

3.7 Signage Artwork Templates

Artwork templates for all signs sizes are held by UCL approved suppliers. Copies of the artwork are available on disk from UCL Estates & Facilities Division



Figure 54 MSS Signage system

3.8 DDA Compliance

The signage is designed to be legible and accessible, and there are a range of documents which offer suggestions as to how best to do this. These suggestions are guidance only and not statutory rules as the success of signage comes from a combination of different factors. Rather than just looking at typeface or font, there are a whole range of other issues such as location, colour contrast, material, viewing distance, layout, branding use, etc which will, when considered together, mean that a blanket solution is not appropriate for everywhere. Set out below are the issues that have been considered and the rationale for choosing the signage as set out in this UCL Signage Manual. Reference has been made to the Sign Design Guide and BS 8300:2009 where relevant.

June Fraser co-author of the Sign Design Guide states:

“There are four basic principles in sign design:

- *Signs should only be used when necessary*
- *Sign location should be part of the process of planning the building and environment*
- *Messages should be short simple and easily understood*
- *Signs should be consistent, using prescribed typefaces, colours and contrast”*

Types of disability

Making signage inclusive needs to consider a wide range of disabilities, from mobility issues, which requires that accessible routes are clearly shown, literacy issues such as non english speaking and people with learning difficulties where clear use of internationally recognised pictograms aids understanding, and more specifically people with a visual impairment, where many issues such as sign size, location and contrast are key factors. However like other disabilities visual impairment covers a wide range of sightloss conditions.

The Sign Design Guide gives a good summary of the varieties of sightloss, and extracts are quoted here.

“Different eye conditions create different problems. Very few blind people see nothing at all. A minority can distinguish light but nothing else, some have no central vision; others have no side vision. Some see everything as a vague blur; others see a patchwork of blanks and defined areas.”

There are four main categories of visual impairment:

- Central field loss where the sightloss affects the area of vision straight in front of them
- Peripheral field loss where people can see the the central area but lose the vision around the periphery.
- Combined central and peripheral field loss, where a portion of both these conditions may be experienced, and finally,
- Reduced contrast where the contrast perception is reduced and the visual scene becomes washed out.

Therefore inclusivity by its very nature has to accommodate a wide range of disabilities, and what works for one group will not be so good for others, so the solution will be a best compromise that considers the following range of issues.

- Use of signs
- Sign types
- Sign sizes
- Wayfinding
- Positioning
- Sign content hierarchy
- Punctuation and abbreviation
- Pictograms
- Arrows and rules for their use
- Typeface, size and layout
- Colour and contrast
- Illumination and glare

Use of signs

The sign manual sets out the principles for choosing when a sign is needed. The aim is to keep signs to a minimum and only add in signage when other orientation clues are absent. For UCL many of the buildings are existing buildings designed for other uses and taken over by UCL and so in many cases designing the building with the signage in mind at the outset is not possible. So the design of the wayfinding system is often to correct inherent problems within the building, or allow for a new use, layout or routes within a building. However in all cases the principle of keeping signs to a minimum still applies.

Sign types

Within the sign family there are a range of sign types to meet the varying needs to deliver the required information. However they can be grouped into three main types:

- Information signs:
Main orientation signs denoting primary locations, eg at building entrances, receptions denoting information relevant to the whole building.
- Direction signs:
Directing users to destinations using arrows and often set out as directories
- Identification signs:
Signs at individual destinations such as room names. These can hold simple room/office name or more specific information such as booking times, temporary information etc.
(see figs 55-59 for the three main sign types)

Key issues for legibility

- CONTRAST: white text on grey
- FINISH: matt background very non-reflective
- TYPE: Arial - very clear
- UPPER + LOWER case + punctuation rules
- WORD Shape **Lecture**
- SPACE
- SYMBOLS
- ARROWS



Figure 55 Type A3 Sign Directory.

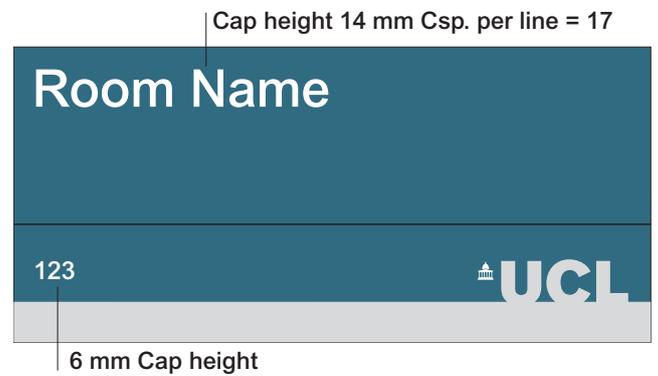


Figure 56 P3 Type room name sign

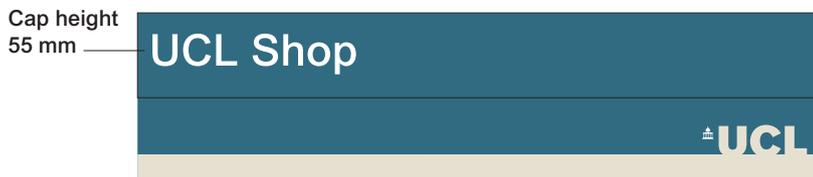


Figure 57 Type L1 sign Large information sign.

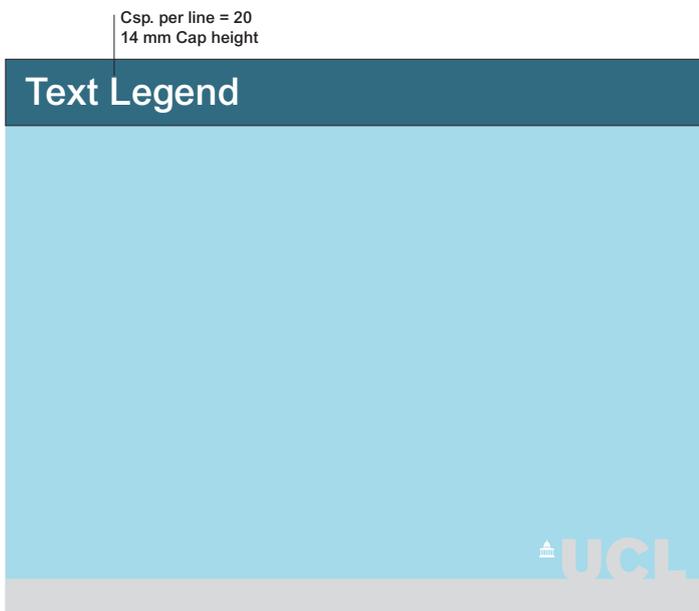


Figure 58 K7 Type A3 size insert sign



Figure 59 K1 Type A4 size insert sign

Sign Size

The family of signs has been carefully developed with sign sizes chosen to suit various requirements. Directory widths of 500mm usefully fit architectural features or places where wall space is confined. In addition UCL has several buildings with sensitive heritage or listed interiors extensive consultation was undertaken with local planning conservation offices and English Heritage to agree sign size to complement these locations

Wayfinding

An important part of the process for wayfinding is deciding on the content of the signs. A thorough analysis of the use patterns, routes and likely destinations needs to be undertaken as set out in Section 2.2 and 2.3 (page 5 & 7) to establish the priorities and principles for a wayfinding strategy, and thus the strategy for the sign content.

Positioning

Generally Information signs are located at high level at points of primary visibility. They normally need to be seen from a greater distance and so are located above head height, over the door frame or higher depending on the nature of the building and specific location limitations. Direction signs are located at key intersections and points of orientation. Identification signs are located on the wall to the side of the entrance door to the room. Generally 1700mm is the height of Direction and Identification signs consistently around the interior. (See figs 60 & 61) However there are a few exceptions to this where there is insufficient wall space and where a door mounted sign is more appropriate.

Sign content hierarchy

A hierarchy of information must be applied to avoid confusion. The manual sets out the principle to avoid visual clutter by keeping the messages short, signing to zones rather signing everything from everywhere, legend order and naming the floor and building location on the signs. This is set out in section 2.3 (page 7).

Punctuation and abbreviations

The manual sets out the principles of keeping names short by using generic names, avoiding abbreviations, and keeping naming consistent. See section 2.3 (page 7) In addition the word 'accessible' must be used rather than 'disabled' or 'wheelchair'.

Pictograms

This range of icons have been used to supplement the text legends to aid the legibility and understanding. (See page 26) In particular these are to highlight lifts stairs, accessible routes, toilets and information. (See fig 59) These are based on internationally recognised pictograms.

Arrows

Arrows are a very useful method of adding information to the sign directory signs, and text is set out to align with the relevant arrow. (See page 27)



Figure 60 Sign location adjacent to doors.

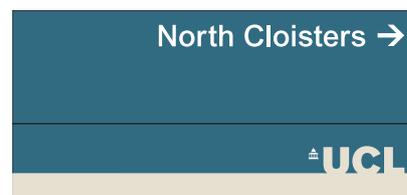


Figure 62 Signing to an area/zone avoids the need to sign every destination/room until the visitor has arrived at that zone.



Figure 61 Sign location above doors.

Figure 63 Sign icons.



Typeface, size and layout

The typeface chosen for the signage matches the UCL corporate typeface which is Arial. This is a non-serif typeface and is preferred by the Sign Design Guide as being more legible than serif faces. Two weights of typeface are offered - medium for the primary information and light for the secondary information, upper case is only used for the first letter and lower case is used elsewhere. (See page 26)

In order to make the signs legible a range of type sizes have been chosen to deliver the information required. The choice of type size is also balanced with the spacing between letters, words and lines to ensure the text is legible. Keeping plenty of free space around the legends aids legibility. (See fig 64) There are a number of very long department names and legends at UCL and in order to avoid unduly large signs the text cap height sizes have been chosen to meet these needs. See section 3.2 (page 26) artwork guide which sets out these type sizes.

Materials, colour and contrast

The Sign Design Guide suggests the signs although needing to be readable, also need to complement the interior of the building. The materials, colour and finish for the UCL signage has been chosen to fit a number of differing building styles from historic to modern interiors.

The colours are a grey background and white lettering so there is a good contrast between the legends and background. Black and white provides the greatest contrast but can sometimes be a problem due to the extreme contrast, so white lettering on a darker background with a matt finish provide a good legibility, and the grey background was chosen as it provides a good contrast with the wall colour on which it is to be fixed as most UCL buildings interiors are painted an off white colour. (See fig 66) Use of other colours are kept simple using only 6 of the basic 12 colour range - White Grey, orange, blue, green and red. (See fig 65)

Illumination and glare

The materials for the sign system is a powder coated paint finish which is a completely matt finish, so there is no glare or reflection possible whatever the light source. Signs should be located where there is good natural or artificial lighting.

Non signage aids

In order to further meet the needs of people with disabilities, a range of other non-signage aids to wayfinding such as audible websites, and large print mapping and information could be made available by UCL.

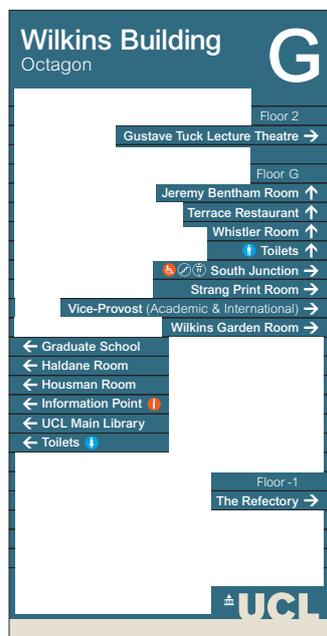


Figure 64 Free space on sign and legibility and legend ranged to align with the arrow direction.



Figure 65 Colour palette.



Figure 66 Good colour contrast between signs and background, and contrast between legend and sign.