Camden Planning Guidance

Design

London Borough of Camden

CPG 1

September 2013

Camden

CPG1 Design

1 Introduction

What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. The Council formally adopted CPG1 – Design on 6 April 2011 following statutory consultation. This document was updated on 4 September 2013 following statutory consultation to include Section 12 on artworks, statues and memorials. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.

1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's LDF.

Design in Camden

1.3 Camden has many attractive and historic neighbourhoods as well as both traditional and modern buildings of the highest quality. These are a significant reason that the borough is such a popular place to live, work and visit. As well as conserving our rich heritage we should also contribute towards it by ensuring that we create equally high quality buildings and spaces which will be appreciated by future generations.

1.4 This objective of achieving high quality design does not just concern new development or large-scale schemes, but also includes the replacement, extension or conversion of existing buildings. The detailed guidance contained within this section therefore considers a range of design-related issues for both residential and commercial property and the spaces around them.

What does this guidance cover?

1.5 This guidance provides information on all types of detailed design issues within the borough and includes the following sections:

1. Introduction
2. Design excellence
3. Heritage
4. Extensions, alterations and conservatories
5. Roofs, terraces and balconies
6. Landscape design and trees
7. Shopfronts
8. Advertisements, signs and hoardings
9. Designing safer environments
10. Waste recyclables storage
11. Building services equipment
12. Artworks, statues and memorials

1.6 This guidance supports the following Local Development Framework policies:

Core Strategy

- CS14 Promoting high quality places and conserving our heritage
- CS15 Protecting and improving our parks and open spaces & encouraging biodiversity
- CS17 Making Camden a safer place
- CS18 Dealing with our waste and encouraging recycling

Development Policies

- DP24 Securing high quality design
- DP25 Conserving Camden's heritage
- DP27 Basements and lightwells
- DP30 Shopfronts

1.7 It should be noted that the guidance covered in this section only forms part of the range of considerations that you should address when proposing new development. In addition to these specific design matters you should also consider wider issues such as cycle storage, residential space standards, wheelchair housing, designing in sustainability measures and impacts on neighbours. Further guidance on these, and other issues, is contained within the Local Development Framework documents and the Camden Planning Guidance.

5 Roofs, terraces and balconies

KEY MESSAGES

Roof extensions fall into two categories:

- Alterations to the overall roof form; or
- Smaller alterations within the existing roof form, such as balconies and terraces.

When proposing roof alterations and extensions, the main considerations should be:

- The scale and visual prominence;
- The effect on the established townscape and architectural style;
- The effect on neighbouring properties

5.1 This guidance provides advice on roof alterations and extensions and on proposals for balconies and terraces. The Council will seek to ensure that roof alterations are sympathetic and do not harm the character and appearance of buildings or the wider townscape in the borough.

5.2 This guidance replates primarily to Development Policies DP24 Securing high quality design and DP25 Conserving Camden's Heritage.

When does this apply?

5.3 This guidance applies to all planning applications involving roof alterations, roof extensions, balconies and terraces, and is particularly relevant to residential properties.

5.4 For properties in conservation areas, reference should also be made to the relevant conservation area statements, appraisals and management plans. These describe the area and its special character and contain specific area-based advice.

5.5 Where buildings are listed, reference should also be made to planning guidance on Heritage.

Roof alterations and extensions – general principles

5.6 Proposals to alter and extend roofs fall into two categories: those that are accommodated within the existing roof form, such as dormer windows and roof lights, and those which alter the overall roof form, such as the construction of mansard roofs.

5.7 Additional storeys and roof alterations are likely to be **acceptable** where:

- There is an established form of roof addition or alteration to a terrace or group of similar buildings and where continuing the pattern of development would help to re-unite a group of buildings and townscape;

- Alterations are architecturally sympathetic to the age and character of the building and retain the overall integrity of the roof form;
- There are a variety of additions or alterations to roofs which create an established pattern and where further development of a similar form would not cause additional harm.

5.8 A roof alteration or addition is likely to be **unacceptable** in the following circumstances where there is likely to be an adverse affect on the skyline, the appearance of the building or the surrounding street scene:

- There is an unbroken run of valley roofs;
- Complete terraces or groups of buildings have a roof line that is largely unimpaired by alterations or extensions, even when a proposal involves adding to the whole terrace or group as a co-ordinated design;
- Buildings or terraces which already have an additional storey or mansard;
- Buildings already higher than neighbouring properties where an additional storey would add significantly to the bulk or unbalance the architectural composition;
- Buildings or terraces which have a roof line that is exposed to important London-wide and local views from public spaces;
- Buildings whose roof construction or form are unsuitable for roof additions such as shallow pitched roofs with eaves;
- The building is designed as a complete composition where its architectural style would be undermined by any addition at roof level;
- Buildings are part of a group where differing heights add visual interest and where a roof extension would detract from this variety of form;
- Where the scale and proportions of the building would be overwhelmed by additional extension.

5.9 Materials, such as clay tiles, slate, lead or copper, that visually blend with existing materials, are preferred for roof alterations and repairs. Where roofs are being refurbished, original materials such as keyhole ridge tiles or decorative chimney stacks and chimney pots should be reused. Replacement by inappropriate substitutes erodes the character and appearance of buildings and areas.

5.10 Where the principle of an additional storey is acceptable, the more specific guidance set out below will apply. This advice is supplemented by more specific area-based advice as set out in the Council's conservation area statements, appraisals and management plans which set out our approach to preserving and enhancing such areas. Many of these appraisals and management plans are available for download on our website, or are available as hard copies from our Planning reception.

Roof dormers

5.11 Alterations to, or the addition of, roof dormers should be sensitive changes which maintain the overall structure of the existing roof form. Proposals that achieve this will be generally considered acceptable, providing that the following circumstances are met:

a) The pitch of the existing roof is sufficient to allow adequate habitable space without the creation of disproportionately large dormers or raising the roof ridge. Dormers should not be introduced to shallow-pitched roofs.

b) Dormers should not be introduced where they cut through the roof ridge or the sloped edge of a hipped roof. They should also be sufficiently below the ridge of the roof in order to avoid projecting into the roofline when viewed from a distance. Usually a 500mm gap is required between the dormer and the ridge or hip to maintain this separation (see Figure 4). Full-length dormers, on both the front and rear of the property, will be discouraged to minimise the prominence of these structures.

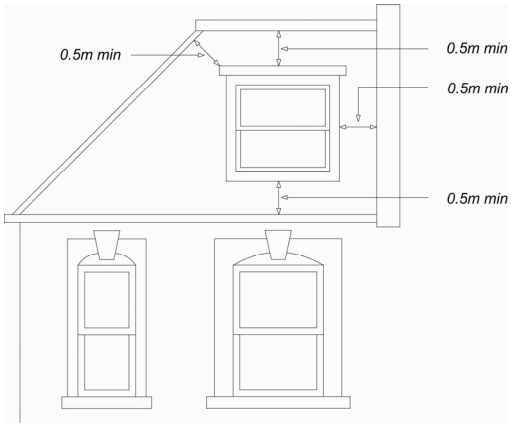
c) Dormers should not be introduced where they interrupt an unbroken roofscape.

d) In number, form, scale and pane size, the dormer and window should relate to the façade below and the surface area of the roof. They should appear as separate small projections on the roof surface. They should generally be aligned with windows on the lower floors and be of a size that is clearly subordinate to the windows below. In some very narrow frontage houses, a single dormer placed centrally may be preferable (see Figure 4). It is important to ensure the dormer sides (“cheeks”) are no wider than the structure requires as this can give an overly dominant appearance. Deep fascias and eaves gutters should be avoided.

e) Where buildings have a parapet the lower edge of the dormer should be located below the parapet line (see Figure 4).

f) Materials should complement the main building and the wider townscape and the use of traditional materials such as timber, lead and hanging tiles are preferred.

Figure 4. Dormer windows



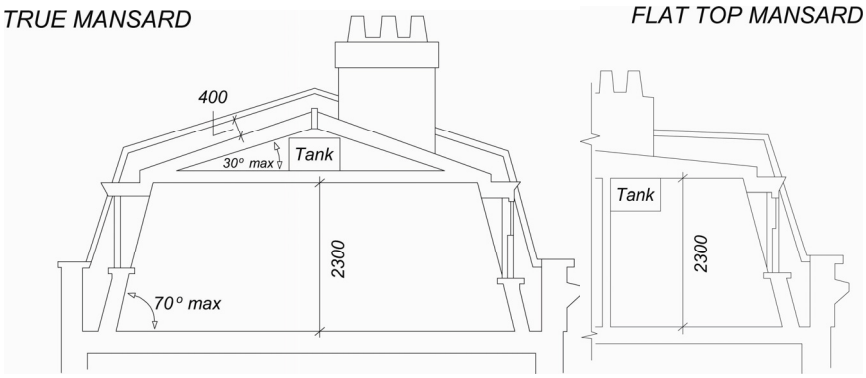
5.12 See CPG2 Housing (Residential development standards chapter) for further information, particularly the section on ceiling heights.

5.13 The presence of unsuitably designed new or altered dormers on neighbouring properties will not serve as a precedent for further development of the same kind.

Mansard Roofs

5.14 Mansard roofs are a traditional means of terminating a building without adding a highly visible roof. This form is acceptable where it is the established roof form in a group of buildings or townscape.

Figure 5. Mansard Roofs



True Mansard
Lower slope is at a steeper angle than the upper, and the upper slope is visible

Flat topped Mansard
Upper slope of a pitch below 5° or totally flat

5.15 Mansard roofs are often the most appropriate form of extension for a Georgian or Victorian dwelling with a raised parapet wall and low roof structure behind. Mansard roofs should not exceed the height stated in Figure 5 so as to avoid excessive additional height to the host building. They are often a historically appropriate solution for traditional townscapes. It should be noted that other forms of roof extensions may also be appropriate in situations where there is a strong continuous parapet and the extension is sufficiently set back or where they would match other existing sympathetic roof extension already in the terrace.

Parapet wall

A low wall or railing that is built along the edge of a roof, balcony or terrace for protection purposes.

Cornice

The topmost architectural element of a building, projecting forward from the main walls, originally used as a means of directing rainwater away from the building's walls.

5.16 The three main aspects to consider when designing a mansard roof extension are its:

- pitches and profile;
- external covering; and
- windows.

5.17 The lower slope (usually 60-70°) should rise from behind and not on top of the parapet wall, separated from the wall by a substantial gutter. Original cornice, parapet and railing details should be retained and where deteriorated or lost, should be incorporated into the design of new roof extensions. Visible chimney stacks should be retained and increased in height, where necessary. Only party walls with their chimney stacks and windows should break the plane of the roof slope, and should be accommodated in a sensitive way and be hidden as far

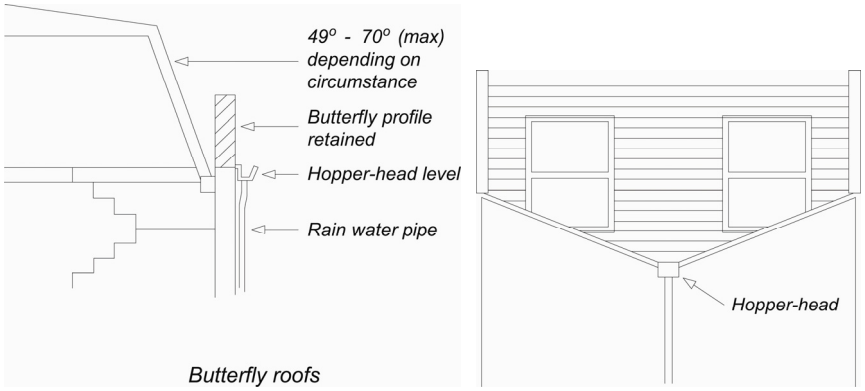
as is possible. (See also guidance on dormer windows and roof lights). Dormer windows or roof lights should be confined to the lower slope.

5.18 Roofing materials should be of the highest quality because of their significant visual impact on the appearance of a building and townscape and the need to be weather-tight. Natural slate is the most common covering and this should be laid with a traditional overlap pattern. Artificial slate or felt are not acceptable roof coverings in conservation areas. Where a roof in a conservation area is being re-covered, the choice of covering should replicate the original, usually natural slate or clay tile.

Valley or Butterfly roofs

5.19 On buildings with a 'valley' or 'butterfly' roof if a mansard extension is considered acceptable in terms of the guidance in paragraphs 5.7 and 5.8 of this chapter, then the parapet should be retained. The new roof should start from behind the parapet at existing hopper-head level, forming a continuous slope of up to a maximum of 70° (see Figure 6). In this context, it is usually more appropriate to introduce conservation-style roof lights, which are flush with the roof slope, rather than dormers. Terraces and additional railings will not usually be acceptable.

Figure 6. Butterfly roofs



Hopper head level

The level at which the 'hopper head' (a square or funnel shaped receptacle to connect rainwater or waste pipes to a down-pipe) is positioned.

Other roof additions

5.20 On some contemporary buildings a less traditional form of roof addition may be more appropriate. In such cases, proposals should still have regard for the following general principles:

- The visual prominence, scale and bulk of the extension;
- Use of high quality materials and details;

- Impact on adjoining properties both in terms of bulk and design and amenity of neighbours, e.g. loss of light due to additional height;
- Sympathetic design and relationship to the main building.

Roof lights

5.21 Roof lights can have an adverse impact upon the character and appearance of buildings and streetscapes. This occurs where they are raised above the roof slope rather than being flush with the roof profile, or where they are an incompatible introduction into an otherwise un-cluttered roofscape, or where they conflict with other architectural roof elements, e.g. gables and turrets.

5.22 Roof lights should be proportioned to be significantly subordinate both in size and number and should be fitted flush with the roof surface. Some properties, particularly listed buildings and those within conservation areas with prominent roof slopes may be so sensitive to changes that even the installation of roof lights may not be acceptable.

Balconies and terraces

5.23 Balconies and terraces can provide valuable amenity space for flats that would otherwise have little or no private exterior space. However, they can also cause nuisance to neighbours. Potential problems include overlooking and privacy, daylight, noise, light spillage and security.

5.24 Balconies and terraces should form an integral element in the design of elevations. The key to whether a design is acceptable is the degree to which the balcony or terrace complements the elevation upon which it is to be located. Consideration should therefore be given to the following:

- detailed design to reduce the impact on the existing elevation;
- careful choice of materials and colour to match the existing elevation;
- possible use of setbacks to minimise overlooking – a balcony need not necessarily cover the entire available roof space;
- possible use of screens or planting to prevent overlooking of habitable rooms or nearby gardens, without reducing daylight and sunlight or outlook; and
- need to avoid creating climbing opportunities for burglars.

Roof Level

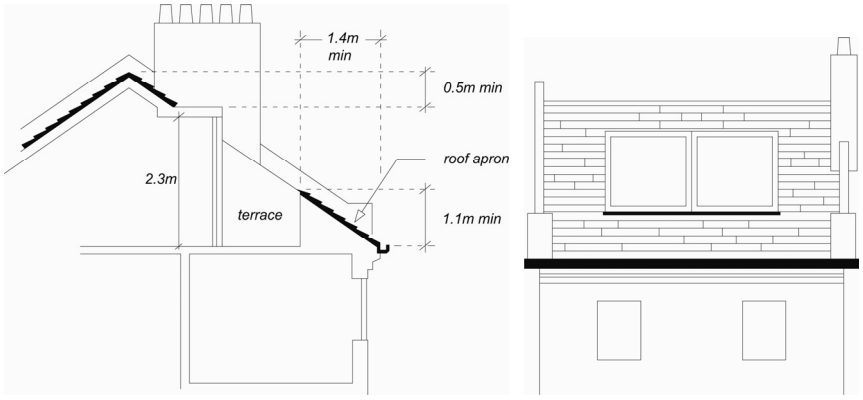
5.25 A terrace provided at roof level should be set back behind the slope of a pitched roof in accordance with Figure 7, or behind a parapet on a flat roof. A terrace should normally comply with the following criteria:

- The dimensions of the roof should be sufficient to accommodate a terrace without adversely affecting the appearance of the roof or the elevation of the property.
- A terrace will only normally be acceptable on the rear of properties. It is normally inappropriate to set back a mansard to provide a terrace.

- It should not result in the parapet height being altered, or, in the case of valley/butterfly roofs, the infilling of the rear valley parapet by brickwork or railings.
- Any handrails required should be well set back behind the line of the roof slope, and be invisible from the ground.
- It should not result in overlooking of habitable rooms of adjacent properties.

5.26 When a terrace is provided within the slope of a pitch as in Figure 7, the adjacent tiles or slates should be kept unbroken above the eaves. The width of the terrace should be no wider than a dormer opening. A terrace may be acceptable behind an existing parapet. Where the height of the parapet is less than 1.1m, a railing will be required to fulfil Building Regulations.

Figure 7. Roof terraces



Building services equipment

5.27 New building services equipment and water tanks should be accommodated within the envelope of the building and its siting should be considered as part of the overall design (see chapter on Building services equipment in this CPG). Building services equipment includes, but is not limited to, heating and cooling systems, ventilation and extraction systems and associated ducting for electricity, communications and plumbing.

Green roofs

5.28 We encourage the incorporation of green roofs into schemes where appropriate in design terms (see chapter on Green roofs and walls in CPG3 Sustainability). You should contact the Council to confirm whether planning permission is required for green roofs. Planning permission is not required on flat roofs which are concealed by a parapet.

Solar panels

5.29 We encourage the installation of solar panels into schemes and for some properties these will not need planning permission. You should

contact the Council and visit the Planning Portal website www.planningportal.gov.uk to confirm whether planning permission is required for solar panels. Solar panels should be sited so as to maximise efficiency but minimise their visual impact and glare, for example utilising valley roofs and concealed roof slopes. Reference should be made to CPG3 Sustainability (Energy Efficiency: existing buildings and Energy Efficiency: new buildings chapters).

Camden Planning Guidance

Housing

CPG 2

London Borough of Camden

September 2013

Camden

CPG2 Housing

CPG2 Housing

1 Introduction

What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance (CPG) to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. The Council formally adopted CPG2 Housing on 6 April 2011 following statutory consultation. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.

1.2 This document (CPG2 Housing) was updated on 4 September 2013 following statutory consultation in November to December 2012. The Council has also consulted on other amendments to CPG2 relating to "affordable rent", which have not yet been adopted or withdrawn, and will be considered when the Mayor of London has determined how early alterations to the London Plan will be taken forward. These changes are included in appendix (i) to this document for information, with proposed additions underlined and proposed deletions ~~struck through~~ (see page 79).

1.3 The Camden Planning Guidance covers a range of topics (such as design, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's LDF.

Housing in Camden

1.4 A key priority for the Council is to ensure that everyone has the opportunity to live in a decent home at a price they can afford in a community where they want to live. Camden is a very popular place to live, which means that average house prices are high and that the demand for affordable housing far outstrips supply.

1.5 The Local Development Framework seeks to make full use of Camden's capacity for housing to establish a plentiful supply and broad range of homes. In addition to meeting or exceeding Camden's housing targets, the Local Development Framework seeks to ensure that new homes are built to a high standard and provide well-designed accommodation that meets the needs of a range of occupiers.

What does this guidance cover?

1.6 This guidance provides information on all types of housing development within the borough. It provides specific guidance on:

- Affordable housing
- Student housing
- Residential Space standards
- Lifetime homes and wheelchair housing
- Development involving net loss of homes

1.7 It highlights the Council's requirements and guidelines which support the Local Development Framework policies:

- CS1 – Distribution of growth
- CS5 – Managing the impact of growth and development
- CS6 – Providing quality homes
- CS14 – Promoting high quality places and conserving our heritage
- DP1 – Mixed use development
- DP2 – Making full use of Camden's capacity for housing
- DP3 – Contributions to the supply of affordable housing
- DP4 – Minimising the loss of affordable housing
- DP5 – Homes of different sizes
- DP6 – Lifetime homes and wheelchair housing
- DP7 – Sheltered housing and care homes for older people
- DP8 – Accommodation for homeless people and vulnerable people
- DP9 – Student housing, bedsits and other housing with shared facilities
- DP26 – Managing the impact of development on occupiers and neighbours

4 Residential development standards

KEY MESSAGE

Development should provide high quality housing that provides secure, well-lit accommodation that has well-designed layouts and rooms.

4.1 This guidance relates to Camden Core Strategy policies CS5 – *Managing the impact of growth and development*, CS6 – *Providing quality homes* and CS14 – *Promoting high quality places and conserving our heritage* plus Camden Development Policy DP26 – *Managing the impact of developers on occupiers and neighbours*. In addition, homes of all tenures should meet lifetime homes standards in accordance with Development Policy DP6 and the CPG on Lifetime homes and wheelchair housing.

TENURE

Describes the ownership of a home and the relationship between a household and their home i.e. owner-occupied, shared ownership, private rented, social rented, etc.

4.2 The '**Access for all**' section in CPG6 **Amenity** sets out the Council's approach to providing buildings and spaces that are accessible to everyone. Reference should also be made to the **Design Excellence** section of CPG1 **Design** and to other sections of CPG2 **Housing**.

4.3 The space standards in this guide are minimum requirements and should not be taken as maxima. Housing which exceeds the minimum standards will always be encouraged.

4.4 This guidance applies to planning applications involving the provision of residential accommodation and residential conversions, extensions and change of use. In cases involving residential conversions of listed buildings a sensitive and imaginative approach to achieving these standards may need to be taken.

MAYOR'S HOUSING SPG

The Mayor has prepared a draft replacement housing SPG. The Mayor's draft SPG supports the emerging replacement London Plan, which makes provision for residential standards to be applied across all tenures of development. Both the draft replacement London Plan and the draft replacement Housing SPG are expected to be adopted in autumn 2011.

In addition, we anticipate that housing with public subsidy in London will have to comply with the Mayor's London Housing Design Guide from April 2011 (published in interim form in August 2010). The Mayor is seeking to adopt the London Housing Design Guide standards for all housing tenures in London through the London Plan.

4.5 Camden's Core Strategy indicates that we will seek a range of self-contained homes to meet identified dwelling size priorities. These

priorities are set out in detail in our Development Policies document – see particularly policy DP5 and paragraph 5.4.

Guidance on residential development standards

General principles

4.6 All residential developments in the Borough are required to be designed and built to create high quality homes:

- All newly created dwellings for households of 2 or more people should be self-contained (applies to homes in Use Class C3, but does not apply to care homes for elderly or vulnerable people, student housing, bedsits, or other Houses in Multiple Occupation (HMOs)).
- Each dwelling should have its own secure private entrance which leads either directly from the street or off a common entrance hall – the number of entrances off one corridor should be limited.

SELF-CONTAINED

Accommodation with its own kitchen, bathroom and toilet for the sole use of occupants behind a separate front door.

HOUSES IN MULTIPLE OCCUPATION (HMO)

HMOs are flats or houses permanently occupied by more than one household, where each household does not have exclusive access to all cooking, washing and toilet facilities behind a locked front door.

Layout

4.7 There should usually be a permanent partition between eating and sleeping areas. Kitchens and living rooms that are permanently separated are preferable. However, combined kitchen and living areas are considered acceptable as long as the floor area is sufficient to allow for the greater range of activities that will take place in them.

Rooms

- All rooms should be able to function for the purpose for the purpose for which they are intended.
- They should have an adequate size, shape, door arrangement, height, insulation for noise and vibration and natural lighting and ventilation.
- They should lead off a hallway or lobby so that it is possible to access any habitable room without passing through another habitable room, although Building Regulations Part B - Fire Safety allow inner rooms provided they meet certain criteria.

HABITABLE ROOM

A room that is capable of being used as primary living space. Generally consists of living rooms, dining rooms, large kitchen/diners and large bedrooms

Flexible construction/layout

4.8 In addition, wherever practical dwellings should be designed to enable greater flexibly in construction design so that they can be capable of some form of extension or adaptation in order to accommodate changing lifestyles and family needs or other social use.

4.9 For example design features that could be considered, include:

- open plan layouts or generic layouts/floor plans;
- avoiding load bearing internal walls;
- easily accessible services and utilities e.g. a central accessible core or accessible floor/ceiling cavity.
- For further examples see: By design urban design in the planning system: towards better practice: www.communities.gov.uk/publications/planningandbuilding/bydesignurban by DETR (2000) (accessed April 2011).

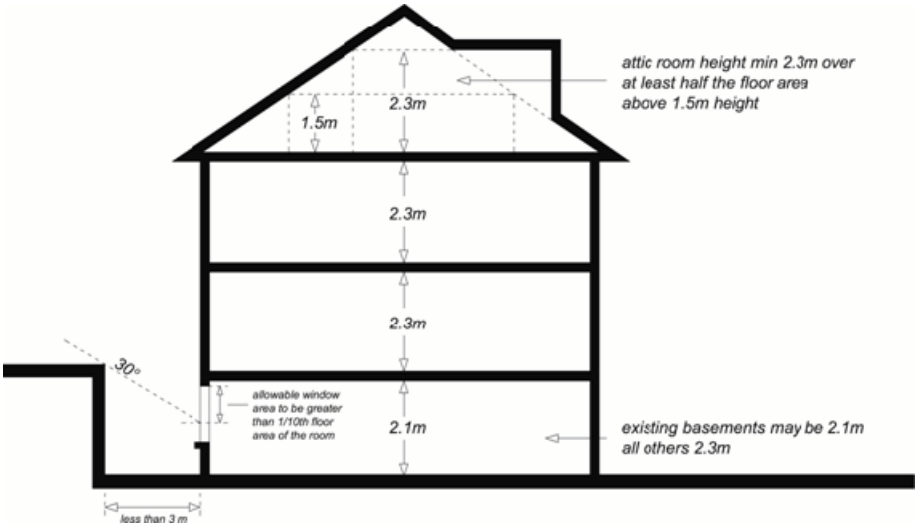
Internal space standards

Ceiling heights

4.10 All habitable rooms should have minimum headroom of 2.3 metres. The exceptions are habitable rooms in existing basements, which may have 2.1 metres headroom, and habitable rooms in attics which should have a minimum room height of 2.3 metres over at least half of the floor area (not including any floor space where the ceiling height is less than 1.5 metres). See Figure 10.

4.11 Any floor area where the ceiling height is less than 1.5 metres will not count towards the habitable floorspace. We will also consider the suitability of floor to ceiling heights in relation to context of building and how size or windows and floor to ceiling heights impact design. Please also refer to CPG1 **Design** (see particularly the sections on '**Design Excellence**' and '**Roofs, terraces and balconies**') and CPG4 **Basements**.

Figure 10. Ceiling heights and natural light for basements



Space and room sizes

4.12 Although planning cannot control the precise internal layout of individual proposals, it is important to ensure that dwellings are capable of providing a suitable layout and adequate room sizes that reflect the use and type of accommodation. The Council will be flexible in the application of these guidelines in order to respond to site-specific circumstances.

4.13 The Council has set minimum space standards to ensure rooms are large enough to take on varying uses. Space standards relate to the occupancy of a home rather than number of bedrooms and the developer will be required to state the number of occupants each dwelling has been designed to accommodate. The occupancy of housing at the time of its first occupation is not a reliable prediction of future levels of occupancy over the lifetime of a home. The only sensible assessment of occupancy is therefore the designed level of occupancy.

4.14 The overall internal floorspace in new self-contained dwellings (excluding communal lobbies and staircases) should normally meet or exceed the minimum standards set out in the following table.

Number of Persons	1	2	3	4	5	6
Minimum floorspace (sq m)	32	48	61	75	84	93

4.15 For dwellings designed for more than 6 people, allow approximately 10sq m. per extra person. In order to successfully to provide ease of movement and storage space for wheelchair users, the council will normally wheelchair housing dwellings to exceed the minimum floorspace standards. Please also refer to the section on ‘Lifetime homes and wheelchair housing’ in this CPG document.

4.16 The Council will expect bedrooms to meet or exceed the following minimum sizes:

- First and double bedrooms - 11.0 sq m
- Single bedrooms - 6.5 sq m

4.17 The Council's Private Sector Housing Team has produced specific minimum standards for Houses in Multiple Occupation (HMO's) and hostels which includes guidance on room sizes and facilities. Schemes for bedsits, shared houses and flats and hostels should be prepared with reference to these standards. These can be viewed on Camden's website www.camden.gov.uk/housing (see Private Sector Housing/ Private Housing Standards pages).

4.18 Self-contained homes providing a floorspace below the minimum standards may be considered in exceptional circumstances, for example to reduce the cost of Intermediate Housing to the occupier, however their acceptability will depend on other aspects of the development proposed. Sympathetic consideration may be given where a proposal meets a number of the criteria below:

- Dwellings are targeted at, and affordable to, groups identified by the Borough as being in need.
- External amenity space is provided
- A limited number of dwellings are accessed from each entry point and corridor (ideally 8 or fewer, unless controlled by a concierge or a CCTV system allowing clear facial identification).
- Security controlled access is provided where a larger number of units are accessed from one point.
- Where cluster flats are provided in response to a demonstrable demand (i.e. there are good indications that properties will not be hard to let to the targeted tenants), a limited number of flats are clustered into each dwelling (ideally 8 or fewer) (cluster flats are bedsits with a communal kitchen/eating area).
- A laundrette or communal laundry is provided (sufficient to cater for forecast resident demand at periods of peak usage) where individual dwellings cannot accommodate a washing machine - subject to keeping service and management charges at an acceptable level. The Council will take into account any existing commercial laundrettes that would be convenient for residents.

Storage and utility spaces

4.19 All accommodation should have sufficient internal storage space to meet the likely needs and requirements of potential occupiers. Dwelling layouts should make suitable provision:

- for washing machines and drying clothes;
- a storage cupboard with a minimum floor area of 0.8 sq m should be provided for 1- and 2-person dwellings;
- for each additional occupant, a minimum of 0.15 sq m storage area should be provided;

- storage for bicycles and prams should also be provided, located at the ground or lowest level of the dwelling, preferably accessed from a hall or lobby area;
- for waste and recycling bins, reference should also be made to the section '**Waste and Recycling Storage**' in CPG1 **Design**.

Daylight, sunlight and privacy

4.20 Residential developments should maximise sunlight and daylight, both within the new development and to neighbouring properties whilst minimising overshadowing or blocking of light to adjoining properties. Maximising sunlight and daylight also helps to make a building energy efficient by reducing the need for electric light and meeting some of the heating requirements through solar gain. The orientation of buildings can maximise passive solar gain to keep buildings warm in winter and cool in summer.

PASSIVE SOLAR GAIN

Design to optimise the amount of the suns energy that heats and lights a building naturally.

4.21 All habitable rooms should have access to natural daylight. Windows in rooms should be designed to take advantage of natural sunlight, safety and security, visual interest and ventilation. Developments should meet site layout requirements set out in the Building Research Establishment (BRE) Site Layout for Daylight and Sunlight – A Guide to Good Practice (1991).

4.22 Overall the internal layout design should seek to ensure the main living room and other frequently used rooms are on the south side and rooms that benefit less from sunlight (bathrooms, utility rooms) on the north side. Kitchens are better positioned on the north side to avoid excessive heat gain.

Minimum requirements:

4.23 In particular the following minimum requirements need to be met to avoid the unacceptable loss of daylight and/or sunlight resulting from a development, including new build, extensions and conversions. For example:

- Each dwelling in a development should have at least one habitable room with a window facing within 30 degrees of south in order to make the most of solar gain through passive solar energy;
- Rooms on south facing walls should always have windows, south facing windows and walls should be designed, sized and/or shaded in summer to prevent overheating. Appropriate shading might be achieved by:
  - mature deciduous trees located so as to shade the structure
  - eaves or overhangs that protect from sun that is high in the sky only

  - external shutters or blinds that can be operated by the occupant;
- External shading should be provided for western facing windows and outdoor spaces to minimise overheating in summer. Deciduous trees provide the best shade for this purpose;
- Windows on north facing walls should be sized to prevent heat loss but allow sufficient daylight;
- All habitable rooms, including basements, must have an external window with an area of at least 1/10 of the floor area of the room;
- An area of 1/20 of the floor area of the room must be able to be opened to provide natural ventilation;
- Windows to atriums will be acceptable as external windows in exceptional circumstances only;
- Passive ventilation should be favoured where possible and mechanically assisted ventilation should be silent in operation.

4.24 For further guidance reference should be made to 'The Code for Sustainable Homes' which provides technical guidance on designing for adequate internal daylighting and requires daylight levels to be calculated using the BRE assessment method. Reference should also be made to CPG3 **Sustainability**.

Privacy and security

4.25 House and flat developments should be arranged to safeguard the amenity and privacy of occupiers and neighbours.

- New development, extensions, alterations and conversions should not subject neighbours to unacceptable noise disturbance, overlooking or loss of security.
- Developments should seek to improve community safety and crime prevention. This may include:
  - designing developments so that open spaces are overlooked by windows, avoiding dark secluded areas and buildings face onto streets.
  - obtaining Secured by Design certification – please refer to the '**Designing safer environments**' section of CPG1 **Design**.

Basements

4.26 All rooms within a basement should be able to function for the purpose of which they are intended. They should have an adequate size, shape, door arrangement, and height, insulation from noise and vibration, and access to natural lighting, ventilation and privacy (similar to the standards set out above). Four key considerations are set out here.

- Natural light - to ensure that adequate natural light is provided to habitable rooms, walls or structures (including the sides of lightwells) should not obstruct windows by being closer than 3 metres. Where

this is not achievable, a sufficient proportion of the glazing should be above the point on the window(s) from which a line can be drawn at 30° above the horizontal to pass the top of obstruction. The glazed area above the point should total not less than 10% of the floor area of the room. See Figure 10.

- Forecourt parking – nearby vehicles can also restrict light to basements, and consideration should be given to any further obstruction from vehicles parked on the forecourt that may present a barrier to light serving basement windows.
- Means of escape - basements should be provided with either a door or suitably sized window allowing access to a place of safety that gives access to the external ground level, or with a protected escape route within the building leading to a final exit at ground level.
- Lightwells - stairs, ladders and gates in any railings around a lightwell that are required for means of escape should be designed to be as discreet as possible and should have regard to the character of the building and surrounding area.

4.27 Further detailed guidance on basements is contained within CPG4 **Basements**.

Noise and soundproofing

4.28 The layout and placement of rooms within the building should be carefully considered at an early stage in the design process to limit the impact of external noise on bedrooms and living rooms. The impact of noise should also be considered in the placement of private external spaces. Detailed guidance is provided in the '**Noise and vibration**' section of CPG6 **Amenity** and . The following requirements must be met.

- Internal layouts of dwellings should be designed to reduce the problem of noise disturbance between adjoining properties by using ‘vertical stacking’, i.e. placing living room above living room and bedrooms above bedrooms etc.
- Bedrooms should not be placed above, below or next to potentially noisy rooms, circulation areas of adjacent dwellings or noisy equipment, such as lifts.
- Windows should be located away from busy roads and railway lines/tracks to minimise noise and pollution and vibration.
- The layout of adjacent dwellings and the location of lifts, plant rooms and circulation spaces should seek to limit the transmission of noise to sound sensitive rooms within dwellings.
- Party walls and floors of flats created by conversion must be adequately soundproofed.
- All housing should be built with acoustic insulation and tested to current Building Regulations standards, but acoustic insulation should not be relied upon as the only means of limiting noise.

- Minimum levels of soundproofing are set out in the Building Regulations Part E - Resistance to the passage of sound. Levels of sound insulation above the minimum are encouraged.
- Further advice is given in the London Plan SPG on Sustainable Design and Construction

Outdoor amenity space

4.29 Outdoor residential amenity space can be provided in the form of private garden space, balconies, terraces, roof gardens or as communal amenity space. Where practical the following requirements should be met.

Private outdoor amenity space:

- All new dwellings should provide access to some form of private outdoor amenity space, e.g. balconies, roof terraces or communal gardens.
- Private gardens should be allocated to family dwellings.
- Where provided, gardens should receive adequate daylight, even in the winter.
- The access to private amenity space should be level and should be from the main living space.
- Balconies should have a depth of not less than 1.5 metres and should have level access from the home.
- Balconies and terraces should be located or designed so that they do not result in the loss of privacy to existing residential properties or any other sensitive uses.
- Balconies should preferably be located next to a dining or living space and should receive direct sunlight (they can be designed to project from main building line or be recessed).

4.30 In some instances, it is accepted that existing buildings may not be able to provide balconies or roof terraces, however, external amenity space i.e. access to communal gardens should still be provided where possible. See CPG1 **Design** for further guidance on '**Roofs, terraces and balconies**'.

Communal amenity space:

- Space should meet the requirements of the occupiers of the building and be wheelchair accessible. For example, if there are a large proportion of family units, child and young person's facilities should be included in the communal space. The council will use the Mayor of London's 'Providing children's and young people's play and informal recreation SPG' (March 2008) when calculating requirements: http://static.london.gov.uk/mayor/strategies/sds/spg-children-recreation.jsp (accessed April 2011).
- Space should be well designed so that residents have a sense of ownership of the space, which will encourage its use.

- Space should be located sensitively so that it is overlooked by surrounding development and secure for residents.
- Space should be designed to take advantage of direct sunlight.
- Space should be designed to minimise disturbance to occupiers and neighbours, e.g. by being sheltered from busy roads, by being located in the rear of the buildings, back to back, behind perimeter blocks or in courtyards.
- Landscaping and facilities provided for the space should be of a high quality and have suitable management arrangements in place.

Further information

GLA Housing Design Guide	The Mayor's London Housing Design Guide from April 2011 (August 2010) provides detailed guidance on housing design in London http://www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide (accessed April 2011)
Lifetime Homes and Wheelchair Housing Standards	In addition to the above residential standards, most residential schemes will also need to meet specific requirements for Lifetime Homes and Wheelchair Housing Standards: • For further guidance on how to meet Camden's requirements refer to CPG on Lifetime homes and wheelchair housing. • For good practice guidance specifically on Lifetime Homes www.lifetimehomes.org.uk
Daylight and Sunlight	For good practice advice on overshadowing and providing daylight and sunlight to buildings, refer to the widely used BRE Report "Site Layout Design for Daylight and Sunlight; a guide to good practice". It provides specific guidance on: • Providing good daylighting and sunlighting within a new development • Safeguarding sunlight and daylight within existing buildings nearby • Protection of daylighting of adjoining land for future development • Passive solar site layout • Sunlighting of gardens and amenity areas
Sustainability	The Council will require all that all buildings are designed to be sustainable, thus reference should also be made to CPG3 **Sustainability**, in particular, the 'Code for Sustainable Homes' sub-section in 'Sustainability assessment tools'.

Camden Planning Guidance

Sustainability

CPG 3

London Borough of Camden

September 2013

Camden

CPG1 Sustainability

1 Introduction

What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. This document was updated on 4 September 2013 following statutory consultation to clarify the guidance in Section 9 related to the Code for Sustainable Homes. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.

1.2 The Camden Planning Guidance covers a range of topics as well as sustainability (such as design, housing, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's LDF.

What is this sustainability guidance for?

1.3 The Council is committed to reducing Camden's carbon emissions. This will be achieved by implementing large scale projects such as installing decentralised energy networks alongside smaller scale measures, such as improving the insulation and energy performance of existing buildings.

1.4 This guidance provides information on ways to achieve carbon reductions and more sustainable developments. It also highlights the Council's requirements and guidelines which support the relevant Local Development Framework (LDF) policies:

- CS13 - *Tackling climate change through promoting higher environmental standards*
- DP22 - *Promoting sustainable design and construction*
- DP23 - *Water*

What does the guidance cover?

- Energy statements
- The energy hierarchy
  - Energy efficiency – in new and existing buildings
  - Decentralised energy and combined heat and power (CHP)
  - Renewable energy
- Water efficiency
- Sustainable use of materials
- Sustainability assessment tools - Code for Sustainable Homes, BREEAM and EcoHomes
- Green roofs, brown roofs and green walls
- Flooding
- Climate change adaptation
- Biodiversity
- Urban food growing

10 Brown roofs, green roofs and green walls

KEY MESSAGES

All developments should incorporate green and brown roofs

The appropriate roof or wall will depend on the development, the location and other specific factors

Specific information needs to be submitted with applications for green/brown roofs and walls

10.1 As development densities increase, brown roofs, green roofs and green walls can provide valuable amenity space, create habitats and store or slow down the rate of rain water run-off, helping to reduce the risk of flooding.

10.2 Green and brown roofs can help to reduce temperatures in urban environments. This is particularly valuable in Camden where we suffer from increased temperatures in Central London (known as the urban heat island effect).

10.3 Development Policy DP22 states that schemes must incorporate green or brown roofs and green walls wherever suitable. Due to the number of environmental benefits provided by green and brown roofs and green walls, where they have not be designed into a development the Council will require developers to justify why the provision of a green or brown roof or green wall is not possible or suitable.

WHAT WILL THE COUNCIL EXPECT?

The Council will expect all developments to incorporate brown roofs, green roofs and green walls unless it is demonstrated this is not possible or appropriate. This includes new and existing buildings. Special consideration will be given to historic buildings to ensure historic and architectural features are preserved.

What are green and brown roofs?

10.4 Green and brown roofs are roofs that are specially designed and constructed to be waterproof and covered with material to encourage wildlife and to help plants grow. They can be left without planting - 'brown' or planted with a range of vegetation - 'green' depending on the depth or the soil or substrate.

Substrate

Substrate is a layer of material which supports the roots and sustains the growth of vegetation.

There are three main types of green and brown roof:

1. Intensive roofs

2. Semi intensive roofs
3. Extensive roofs.

The general features of these roofs are shown below:

	Extensive	**Semi Intensive**	**Intensive**
Use	Ecological Landscape	Garden/Ecological Landscape	Garden/Park
Type of vegetation	Mosses, Herbs, Grasses	Grasses-Herbs-Shrubs	Lawn, Perennials, Shrubs & Trees
Depth of Substrate	60-200mm	120-250mm	140-400mm
Weight	60-150 kg/m2	120-200 kg/m2	180-500 kg/m2
Maintenance requirement	Low	Periodic	High

Intensive roofs

10.5 Intensive roofs provide the widest range of uses such as for accessible amenity space or to create ecological habitats. They are known as 'intensive' due to the high level of design, soil or substrate depth and maintenance that they require. They can also be used to manage water by including systems that process wastewater or store surplus rain water. They can also be designed specifically for food production.

Semi Intensive roofs

10.6 Semi Intensive Roofs can provide a degree of access and the potential for the creation of habitat. Similar water management functions can be integrated into their design as outlined above.

Extensive roofs

10.7 Extensive Roofs are generally light weight, with a thin layer of substrate and vegetations. They can be further sub divided into 3 types:

1. Sedum Roofs:

These either take the form of Sedum mats or plug planted Sedum into a porous crushed brick material. Sedum roofs are relatively light weight and demand low levels of maintenance. They can be more readily fitted on to existing roofs.

Sedum

Sedum is a type of vegetation. They are generally short plants with shallow roots and thick leaves.

2. Brown roofs for biodiversity:

Brown roofs should create habitats mimicking local brownfield sites by using materials such as crushed brick or concrete reclaimed from the site. However, these materials are very heavy and cannot hold water for irrigation. Therefore it is preferable to use materials of known quality and water holding capacity. The brown roof is then planted with an appropriate wild flower mix or left to colonise naturally with areas of dead wood or perches for birds.

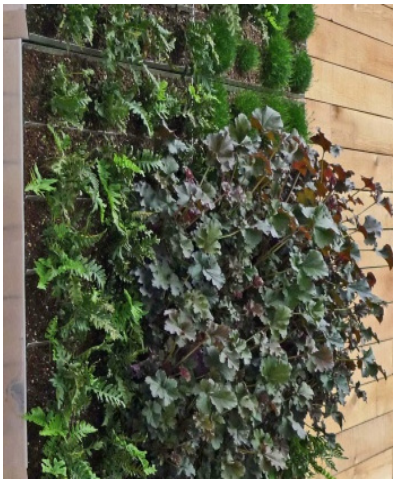
3. Green roofs for biodiversity:

Green roofs are usually formed by planting a wild flower mix on an appropriate layer of material. There are various techniques for the creation of this type of roof.

What are green walls?

10.8 Green Walls are walls or structures attached to walls where plants have been planted. Plants can be planted directly into a material within the wall or can be planted in the ground or a pot and encouraged to climb up a structure so that the wall is covered with vegetation.

Green walls provide a number of benefits:



- They provide useful habitat for invertebrates which in themselves provide a food source for birds and bats. Dense foliage provides nesting sites for a number of birds such as robin, wren and blackbirds
- evergreen, climbing plants provide insulation and can reduce wind chill during winter months
- climbing plants provide shade which can help to cool a building in summer, particularly when grown on south and western facing walls.
- climbing plants can also be effective in trapping airborne pollutants
- provide visual interest adding colour and texture to the wall surface

Green wall can be split into 3 main types:

1. Self clinging climbers such as Ivy, Russian Vine and Virginia Creeper. These plants are able to grow directly onto the wall surface.
2. Climbers which need support e.g. Honeysuckle and Jasmine. Supports are usually provided by trellis structures, wires etc. Well designed trellis or cable structures can become design features in themselves.

3. Vertical Systems (also known as Living Walls, Vertical Gardens). These walls are called 'systems' as they are made up of modular panels designed to support plant growth and require a feeding and watering system. The modules themselves are supported on or within a steel framework. Watering systems and a plant nutrient supply is incorporated into these systems requiring ongoing maintenance. The planted panels can be designed with a variety of plants depending on the aesthetic and habitat requirements of a project.

What to consider when choosing green roof or brown roof or green wall

10.9 Selecting the appropriate type of green/brown roof or wall type will depend on a number of factors including:

- the type of building
- cost
- maintenance
- weight of the roof or wall
- provision of amenity space
- provide visual interest to surrounding building occupants
- habitat creation
- reduction of rain water run off
- reduction of heating and cooling energy usage of a building
- water conservation and recycling
- space for food production (see section 14 of this guidance on urban food production).

What will the Council consider when assessing applications?

10.10 All developments should aim to incorporate green or brown roofs and green walls. Careful consideration needs to be given to the design of the roofs and any blank walls to enable the incorporation of these features and the need to access these areas for maintenance.

10.11 The Council will expect green or brown roofs and green walls to be provided in areas with low levels of vegetation, such as town centres and Central London, which are both more likely to feel the effects of climate change and developments where occupiers will be susceptible to overheating such as schools and offices. (See Camden Core Strategy policy CS15 - *Protecting and improving our parks and open spaces and encouraging biodiversity*).

10.12 The assessment of planning applications incorporating green/brown roofs and green walls will be made based on appropriateness for the site, the degree to which the chosen design objectives are met by the proposal and sustainable maintenance. Where green roofs are to be accessible for amenity purposes potential overlooking and loss of

privacy to adjoining properties will also be assessed (See the Overlooking, privacy and outlook section of the CPG6 Amenity)

10.13 The most appropriate green or brown roof and green wall should be incorporated into a development. We will consider the following factors when determining the most appropriate form of roof and wall:

- the loss of any biodiversity habitat on the site and the surrounding area;
- the existing need for habitat on the site and surrounding area;
- whether the site is overlooked;
- whether the site is an area that has historically suffered from surface water flooding;
- the amount of external heat generated by the development;
- whether the roof is to be accessible;
- the location of mechanical plant;
- the inclusion of areas of blank wall;
- access to walls and roofs;
- where being retro-fitted, the weight of the new roof or wall; and
- the amount of irrigation and maintenance required.

WHAT INFORMATION WILL THE COUNCIL EXPECT?

- a statement of the design objectives for the green or brown roof or green wall
- details of its construction and the materials used, including a section at a scale of 1:20
- planting details, including details of the planting technique, plant varieties and planting sizes and densities.
- a management plan detailed how the structure and planting will be maintained

Further information

The Environment Agency	The EA has a green roof toolkit that can be used to help you determine what solution is best for your development www.environment-agency.gov.uk/business/sectors/91967.aspx
"Living Roofs: Promoting green roofs, roof terraces and roof gardens across London"	GLA document which highlights the significant role that the roof space on buildings have to play in providing amenity space, increased biodiversity and improved building performance in terms of energy conservation and SUDS.
LivingRoofs.org	Provides detailed information on all the types of green and brown roofs as well as case studies, articles and research. www.LivingRoofs.org
National Centre of Excellence for green roofs	This website has a wide range of information on green roofs, including best practice, guidance, research and case studies. www.greenroofcentre.co.uk