

Camden Planning Guidance

Design

London Borough of Camden

CPG **1**



July 2015

CPG1 Design

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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 adopted CPG1 Design on 6 April 2011 following statutory consultation. This document was updated in 2013 to include Section 12 on artworks, statues and memorials, and updated in 2015 to revise the guidance for recycling and waste storage. Details on these updates and the consultation process are available at camden.gov.uk/cpg.
- 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
- DP29 Improving access
- 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.

3 Heritage

KEY MESSAGES

Camden has a rich architectural heritage and we have a responsibility to preserve, and where possible, enhance these areas and buildings.

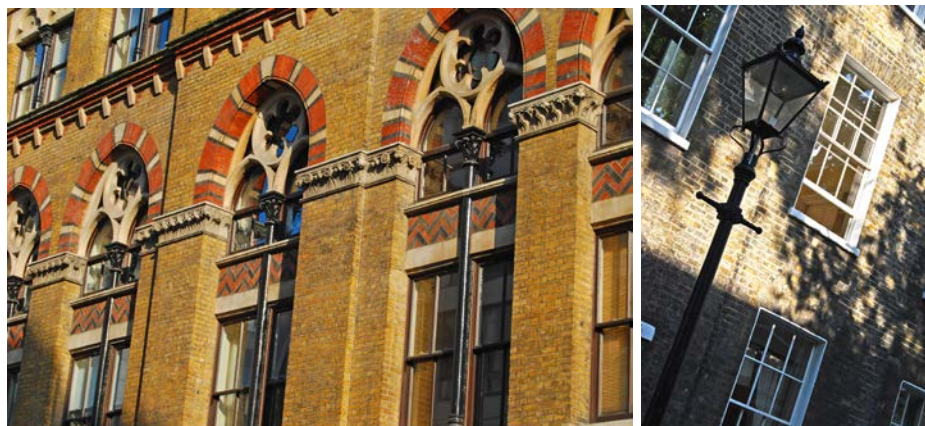
- We will only permit development within conservation areas that preserves and enhances the character and appearance of the area
- Our conservation area statements, appraisals and management plans contain more information on all the conservation areas
- Most works to alter a listed building are likely to require listed building consent
- Historic buildings can and should address sustainability and accessibility

3.1 This section provides guidance on our identified heritage assets (which include conservation areas, listed buildings and registered parks and gardens), including what they area and the implications of their status and designation. This section also sets out details on how historic buildings can address sustainability.

3.2 This section sets out further guidance on how we will apply Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policy DP25 Conserving Camden's Heritage.

When does this apply?

3.3 This guidance applies to all applications which may affect any element of the historic environment and therefore may require planning permission, or conservation area or listed building consent.

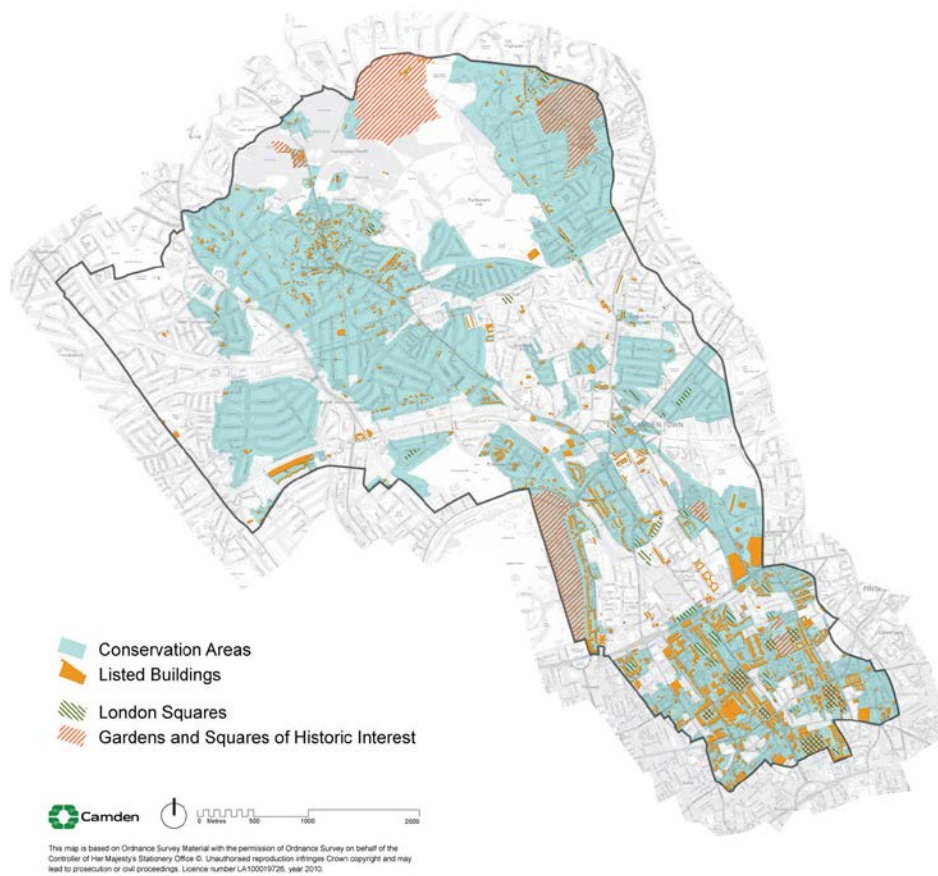


Conservation Areas

What is a conservation area?

- 3.4 A conservation area is defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve and, where possible, enhance. PPS5 identifies conservation areas as “heritage assets” and requires that proposals in conservation areas are assessed for their impacts on their historic significance. There are 39 conservation areas in Camden, which vary greatly in appearance, size, character and style and these are identified on the LDF Proposals Map.

Figure 1. Conservation Areas



- 3.5 Conservation area designation is a way to recognise the importance of the quality of an area as a whole, as well as giving some protection to individual buildings within it. Conservation areas are not designated to stop all future development or change but to ensure that change is managed to conserve the historic significance of the area as a whole.
- 3.6 Conservation area designation is shown on the proposals map and further information on heritage is available on the 'Conservation and Design' section of the Council's website www.camden.gov.uk and on English Heritage's website www.english-heritage.org.uk.

Effects of conservation area status

- 3.7 We will only permit development within conservation areas, and development affecting the setting of conservation areas, that preserves and enhances the character and appearance of the area (see Planning Policy Statement 5 (PPS5), policy HE8).
- 3.8 The Council has greater control over building work in conservation areas, including demolition, materials and detailed design. Planning permission may be required for alterations or extensions that would not normally need planning permission elsewhere, such as minor roof

alterations, dormer windows, renewable energy installations or installation of a satellite dish.

Renewable energy technology

Renewable energy technologies generate energy from natural resources such as sunlight, wind, rain and heat in the ground, which are naturally replenished.

Demolition in conservation areas

- 3.9 Conservation Area Consent is required to demolish or substantially demolish a building over 115 cubic metres or a structure such as a wall over 1 metre high that adjoins a highway, or more than 2 metres high elsewhere. When determining your application we will follow the guidance in PPS5, Core Strategy policy CS14 and Development Policy DP24 as well as that in our conservation area statements, appraisals and management plans (see below). It is an offence to totally or substantially demolish a building or structure in a conservation area without first getting consent from us and we would not normally allow their demolition without substantial justification, in accordance with criteria set out in government guidance PPS5 – Planning for the Historic Environment.

Trees

- 3.10 Planning legislation makes special provision for trees in conservation areas. Prior to pruning or felling a tree in a conservation area you must provide the Council six weeks notice in writing. All trees that contribute to the character and appearance of a conservation area should be retained and protected. For further information on trees, please see Landscape Design and Trees chapter in this CPG.



Article 4 directions

- 3.11 A range of minor changes can be made to buildings without the need to apply for planning permission as these have a general permission through planning legislation. These changes are known as permitted development. However, the character of a conservation area depends on the presence of specific original details and where these are lost the historic interest and attractive character of the area deteriorates.

- 3.12 In these situations we can issue an Article 4 direction through Article 4 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended). This removes permitted development rights and means a planning application has to be made for minor works that usually do not need one.
- 3.13 Further information on Article 4 directions, including where they apply in Camden is available on the 'Advice and help with planning applications' section of the Council's website www.camden.gov.uk and English Heritage has published Guidance on making Article 4 Directions, available at www.english-heritage.org.uk/publications/guidance-on-making-article-4-directions/

Conservation area statements, appraisals and management plans

- 3.14 We have published a series of conservation area statements, appraisals and management plans that set out our approach to preserving and enhancing the historic significance of each individual conservation area. Many of these conservation area statements are available for download on our website.
- 3.15 Conservation area statements, appraisals and management plans help guide the design of development in conservation areas and we take these into account when assessing planning applications.
- 3.16 Each conservation area statement, appraisal or management plan contains the following:
- A summary of the location and the historical development of an area;
 - A description of its character;
 - An outline of the key issues and development pressures that are currently of concern;
 - The key policy framework for that particular conservation area, and specific guidance for it;
 - An identification of heritage assets and elements of the wider historic environment which give an area its historic significance; and
 - An identification of sites and features that have a negative impact on the conservation area, or where an opportunity exists for enhancement of the area by redevelopment of a building or site.



Listed Buildings

What is a listed building?

- 3.17 A listed building is defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as a structure or building of special architectural or historic interest. These are included on the Statutory List of Buildings of Architectural or Historic Interest managed by English Heritage. Listed buildings are identified as heritage assets within the LDF and the Council is required to assess the impact that proposals to a listed building, or within their setting, may have on the historic significance of the building.
- 3.18 Listed buildings are graded according to their relative importance as either Grade I, Grade II* or Grade II. Grades I and II* are considered of outstanding architectural or historic interest and are of particularly great importance to the nation's heritage. The majority of listed buildings (about 94% nationally) are Grade II. However, the statutory controls on alterations apply equally to all listed buildings irrespective of their grade and cover the interior as well as the exterior and any object or structure fixed to or within their curtilage.

Listing description

The listing description contains details of a listed building's address, history, appearance and significance. These help to identify what it is about the building that gives it its special historic interest.

- 3.19 Further information on listed buildings in Camden is available on our website www.camden.gov.uk

How can I alter a listed building?

- 3.20 Most works to alter a listed building are likely to require listed building consent and this is assessed on a case by case basis, taking into

account the individual features of a building, its historic significance and the cumulative impact of small alterations. The listing description is not intended to be exhaustive and the absence of any particular feature in the description does not imply that it is not of significance, or that it can be removed or altered without consent. Listed status also extends to any object or structure fixed to the listed building, and any object or structure within its curtilage which forms part of the land. You should contact the Council at the earliest opportunity to discuss proposals and to establish whether listed building consent is required.

- 3.21 Some 'like for like' repairs and maintenance do not require listed building consent. However, where these would involve the removal of historic materials or architectural features, or would have an impact on the special architectural or historic interest of the building, consent will be required. If in doubt applicants should contact the Council for advice.
- 3.22 In assessing applications for listed building consent we have a statutory requirement to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. We will consider the impact of proposals on the historic significance of the building, including its features, such as:
- original and historic materials and architectural features;
 - original layout of rooms;
 - structural integrity; and
 - character and appearance.
- 3.23 We will expect original or historic features to be retained and repairs to be in matching material. Proposals should seek to respond to the special historic and architectural constraints of the listed building, rather than significantly change them.
- 3.24 Applications for listed building consent should be fully justified and should demonstrate how proposals would affect the significance of a listed building and why the works or changes are desirable or necessary. In addition to listed building consent, some proposals may also require planning permission. These applications should be submitted together and will be assessed concurrently.
- 3.25 It is a criminal offence to undertake unauthorised works to a listed building, even if you are not aware the building is listed, and could result in prosecution and fine or imprisonment (or both).
- 3.26 Some works that are required in order to comply with the Building Regulations (e.g. inclusive access, energy efficiency) may have an impact on the historic significance of a listed building and will require listed building consent.

Inclusive access to listed buildings

- 3.27 It is important that everyone should have dignified and easy access to and within historic buildings, regardless of their level of mobility. With

sensitive design, listed buildings can be made more accessible, while still preserving and enhancing the character of the building.

- 3.28 Further guidance is available in CPG4 Protecting and improving quality of life (Access for all chapter) and in the English Heritage publication “Easy Access to Historic Buildings” www.english-heritage.org.uk



How can historic buildings address sustainability?

- 3.29 We recognise the role that the historic environment can play in reducing the impact of climate change. For example, reusing existing buildings could avoid the material and energy cost of new development. There are many ways to improve the efficiency and environmental impact of historic buildings, for example improving insulation, draught-proofing and integrating new energy-saving and renewable-energy technologies. We will seek to balance achieving higher environmental standards with protecting Camden's unique built environment (in accordance with LDF Core Strategy policies CS13 Tackling climate change through promoting higher environmental standards and CS14 Promoting high quality places and conserving our heritage) and PPS5 policy HE.1.
- 3.30 More detailed guidance on how to modify buildings without compromising their significance is contained within CPG3 Sustainability (Energy efficiency: new buildings, Energy efficiency: existing buildings, Renewable energy, Climate change adaptation, Water efficiency, Flooding and Sustainable use of materials). For further information see the links at the end of this chapter.

Planning obligations relating to heritage assets

- 3.31 Many of the potential impacts of development on historic buildings and in archaeological priority and conservation areas can be covered through design and by conditions on the planning permission, for example the

need to carry out surveys or the storage and restoration of artefacts. Some objectives for building and area conservation or archaeology are unlikely to be satisfactorily controlled by a condition or in such cases and where impacts are off-site, or involve a particularly sensitive or complex programme of works, involving phasing, the Council may require implementation of these measures through a Section 106 Agreement.

Further information

<p>Planning Policy Statement 5 (PPS5)</p>	<p>The Government's national policies on the historic environment are set out in:</p> <ul style="list-style-type: none"> • Planning Policy Statement (PPS) 5 Planning for the historic environment – CLG, 2010 <p>If you want guidance implement this national policy, it is provided in:</p> <ul style="list-style-type: none"> • PPS5, Planning for the Historic Environment, The Government's Statement on the Historic Environment for England, and The Historic Environment Planning Practice Guide
<p>English Heritage</p>	<p>www.englishheritage.org.uk</p> <p>Guidance on heritage assets:</p> <ul style="list-style-type: none"> • Guidance on Conservation Area Appraisals, 2006 – English Heritage; • Guidance on Management of Conservation Areas, 2006 – English Heritage; • Climate Change and the Historic Environment (2008); and • Heritage at Risk Register - English Heritage http://risk.english-heritage.org.uk/2010.aspx <p>Guidance on sustainability measures in heritage buildings:</p> <ul style="list-style-type: none"> • Energy Conservation in Traditional Buildings • Climate Change and the Historic Environment <p>There is also an online resource dedicated to climate change and the historic environment, available at:</p> <ul style="list-style-type: none"> • www.englishheritage.org.uk/climatechangeandyourhome <p>Guidance on accessibility:</p> <ul style="list-style-type: none"> • Easy access to Historic Buildings, 2012 • Easy access to Historic Landscapes, 2013
<p>Energy Saving Trust</p>	<p>www.est.org.uk</p>

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:

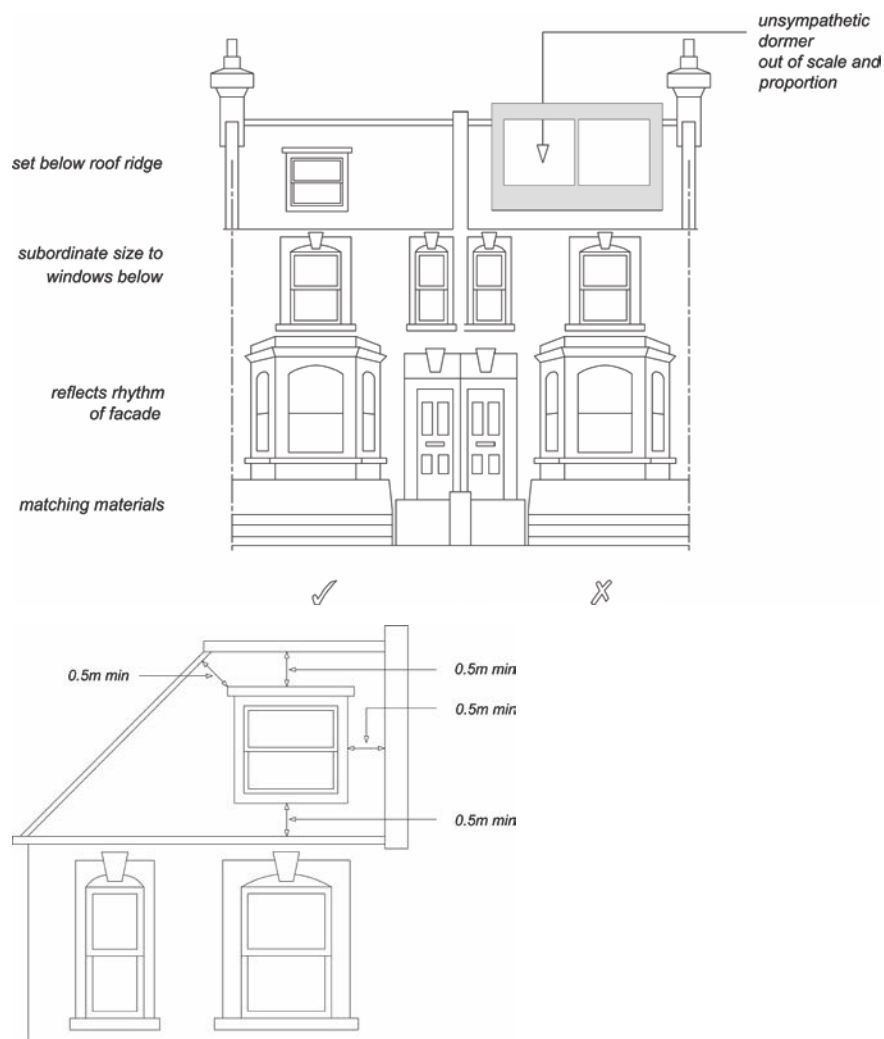
- There is an unbroken run of valley roofs;
- Complete terraces or groups of buildings have a roof line that is largely unimpaired by alterations or extensions, even when a proposal involves adding to the whole terrace or group as a co-ordinated design;
- Buildings or terraces which already have an additional 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.

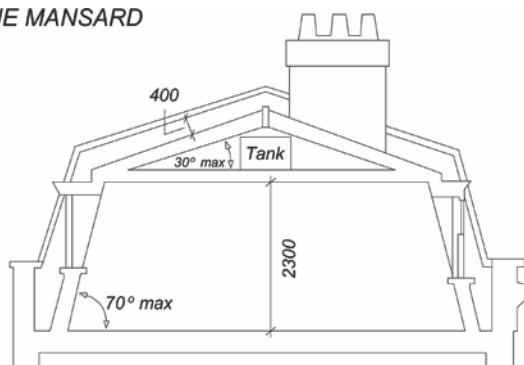
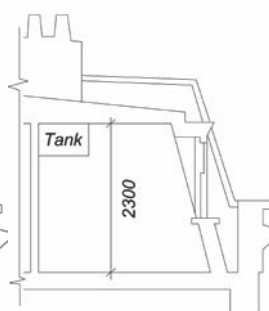
Figure 4. Dormer windows

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****FLAT TOP MANSARD****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

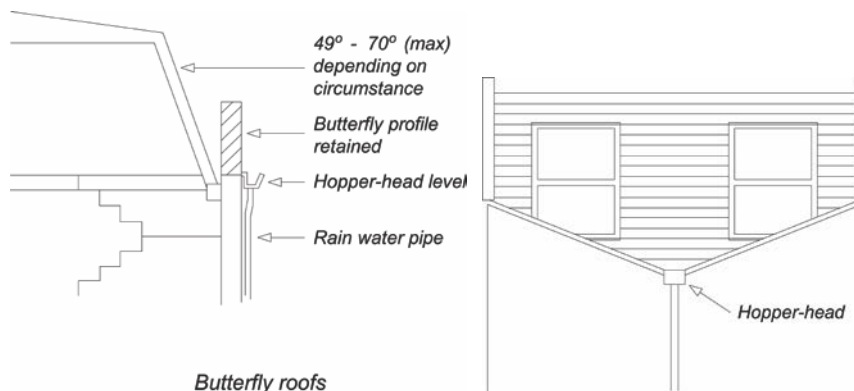
as is possible. (See also guidance on dormer windows and roof lights). Dormer windows or roof lights should be confined to the lower slope.

- 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 uncluttered 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.

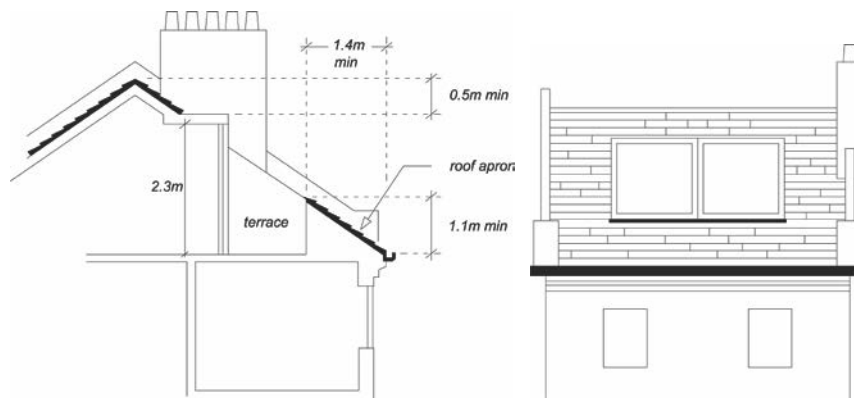
Roof Level

- 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

London Borough of Camden

CPG 2



July 2015

CPG2 Housing

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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) has been subject to two updates:
- 4 September 2013 following statutory consultation in November to December 2012, and
 - 17 July 2015 following statutory consultation in March to April 2015.
- Details on these updates and the consultation process are available at camden.gov.uk/cpg.
- 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

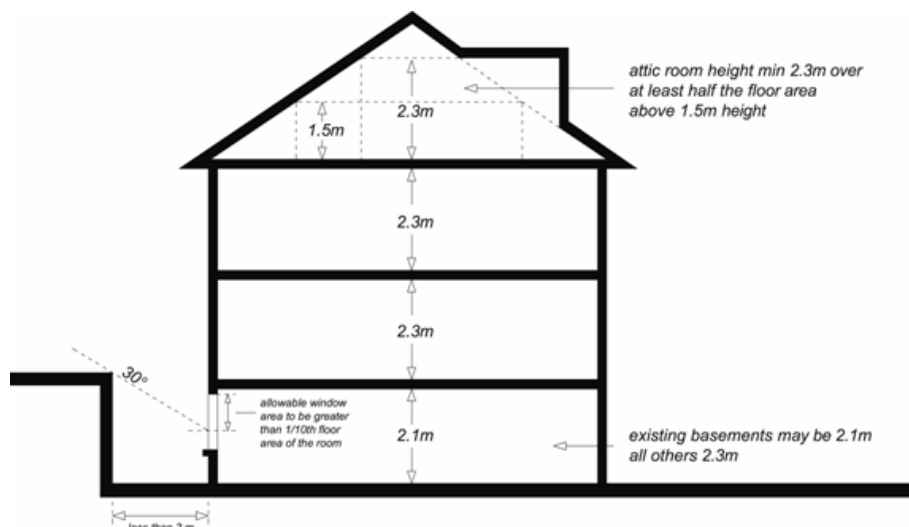
Flexible construction/layout

- 4.8 In addition, wherever practical dwellings should be designed to enable greater flexibility 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 9.
- 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 of 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 9. 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 sun's 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 9.

- 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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'.

5 Lifetime Homes and Wheelchair Housing

KEY MESSAGES

- All residential development should meet the 16 criteria that form the Lifetime Homes standards.
- The standards will be applied flexibly to existing buildings, but applicants should justify failure to meet any of the criteria.
- 10% of market housing development should meet wheelchair housing standards, or should meet the 13 key Habinteg wheelchair housing criteria so that they can be easily adapted to meet wheelchair housing standards.
- 10% of affordable housing development should be designed, built and fitted out to meet Wheelchair Housing standards in full.

What does this section cover?

- 5.1 This section provides advice on how proposals can made be accessible to all by incorporating “lifetime home” standards and creating wheelchair accessible homes. It supplements Camden Development Policies policy DP6 – *Lifetime homes & wheelchair housing*, as well as DP29 – *Improving Access* and Camden Core Strategy policy CS6 - *Providing quality homes*.
- 5.2 In line with policy DP6 all new residential development will be expected to meet the following standards.

LIFETIME HOMES

All housing developments should meet lifetime homes standards. A lifetime home is an ordinary home incorporating 16 design features for accessible living. These make homes easier to occupy for the entire life cycle of a household, whether its members are young, old, healthy or ill.

WHEELCHAIR HOUSING

A minimum of 10% of new housing should either meet wheelchair housing standards, or be easily adapted to meet them. Wheelchair housing provides independence and quality of life for wheelchair users and should be tailor-made for their specific needs.

- 5.3 In addition, the following building regulations should be considered where appropriate:
- Part M of the Building Regulations (2004 edition) – this sets minimum requirements for building standards in public buildings and new dwellings only.
 - BS 8300: 2009: Design of buildings and their approaches to meet the needs of disabled people – good practice guidance that covers non-domestic buildings and details on specific building types.
- 5.4 This planning guidance is applicable to all development. It applies equally to new build, refurbished, converted, extended and altered

premises. It should also be read in conjunction with the Council's 'Camden Wheelchair Housing Design Brief 2010'.

- 5.5 The application of Lifetime Homes and Wheelchair Housing Standards varies depending on the type of dwelling as follows (see also Development Policy DP6 and supporting paragraphs 6.7 to 6.9):
- Lifetime Homes standards apply to all developments of self-contained housing (but does not apply to hotels or student housing);
 - Wheelchair Housing Standards apply to all developments providing 10 or more self-contained homes and to student housing;
 - both sets of standards apply to housing in mixed-use developments as well as purely residential developments;
 - both sets of standards apply to new build development, conversions, reconfigurations and changes of use; and
 - the requirements will be applied flexibly to take account of the circumstances of existing buildings, particularly those that are listed. English Heritage has produced guidance on "Easy Access to Historic Buildings".

What is the guidance on Lifetime homes?

- 5.6 Lifetime homes are ordinary homes built incorporating 16 design features for accessible living. These features ensure a good level of accessibility from the outset, but they also allow a dwelling to be easily adapted for even higher levels of accessibility in the future should the need arise eg to cater for raising young children and declining mobility in old age.
- 5.7 Lifetime homes standards are not designed specifically for disabled people or wheelchair users but allow for accessibility features to be easily incorporated at a later date if needed. There are separate Wheelchair Housing standards to guide the design of homes to meet the specific needs of people who are long-term wheelchair users (see paragraph 5.15)
- 5.8 By planning for accessibility at the earliest stage, the Lifetime Homes features can be incorporated into the design of a dwelling without significant additional cost and can result in major cost savings to the building's occupants in the long run (for a discussion of cost benefits and savings of Lifetime Homes, refer to 'Costing Lifetime Homes' by the Joseph Rowntree Foundation.)
- 5.9 The table on the following pages gives key features of the 16 criteria forming the Lifetime Homes standards. These came into effect on 5 July 2010. We advise developers to refer to www.lifetimehomes.org.uk for additional and detailed guidance on how specific requirements can be met, and also for news of any future revisions.

Lifetime Homes – Features

LIFETIME HOMES CRITERIA	KEY OBJECTIVES	DETAILED CRITERIA
1. Parking (width or widening capability)	<p>Provide, or enable by cost effective adaptation, parking that makes getting into and out of the vehicle as convenient as possible for the widest range of people (including those with reduced mobility and/or those with children).</p> <p>General Note: Criterion 1 is not relevant to developments that do not contain any parking provision (for specific requirements refer to Camden Development Policy – DP18 Parking standards and limiting the availability of car parking - which specifically discourages on-site parking).</p>	<p>a) 'On plot' (non-communal) parking: Where a dwelling has car parking within its individual plot (or title) boundary, at least one parking space length should be capable of enlargement to achieve a minimum width of 3300mm.</p> <p>b) Communal or shared parking: Where parking is provided by communal or shared bays, spaces should be provided with a width of 3300mm and in accordance with the specification given in Appendix 2 on page 65 or www.lifetimehomes.org.uk.</p>
2. Approach to dwelling from parking (distance, gradients and widths)	<p>Enable convenient movement between the vehicle and dwelling for the widest range of people, including those with reduced mobility and/or those carrying children or shopping.</p>	<p>The distance from the car parking space of Criterion 1 to the dwelling entrance (or relevant block entrance or lift core), should be kept to a minimum and be level or gently sloping. The distance from visitors parking to relevant entrances should be as short as practicable and be level or gently sloping.</p>
3. Approach to all entrances	<p>Enable, as far as practicable, convenient movement along other approach routes to dwellings (in addition to the principal approach from a vehicle required by Criterion 2) for the widest range of people.</p>	<p>The approach to all entrances should preferably be level or gently sloping, and in accordance with the specification given at www.lifetimehomes.org.uk</p>
4. Entrances	<p>Enable ease of use of all entrances for the widest range of people.</p> <p>Note: For the purpose of requirements d) and e) of this Criterion, main entrances are deemed to be: the front door to an individual dwelling, the main communal entrance door to a block of dwellings, plus any other entrance door associated with the approach route from parking required by Criterion 2.</p>	<p>All entrances should:</p> <ol style="list-style-type: none"> Be illuminated Have level access over the threshold; and Have effective clear opening widths and nibs as specified given at www.lifetimehomes.org.uk In addition, main entrances should also: Have adequate weather protection* Have a level external landing.*
5. Communal stairs and lifts	<p>Enable access to dwellings above the entrance level to as many people as possible.</p>	<p>a) Communal Stairs Principal access stairs should provide easy access in accordance with the specification given at www.lifetimehomes.org.uk, regardless of whether or not a lift is provided.</p> <p>b) Communal Lifts Where a dwelling is reached by a lift, it should be fully accessible in accordance with the specification given at www.lifetimehomes.org.uk</p> <p>Note: provision of a lift is not a Lifetime Homes requirement, but is recommended where dwellings are not entered at the same level as the main block entrance.</p>
6. Internal doorways and hallways	<p>Enable convenient movement in hallways and through doorways.</p>	<p>Movement in hallways and through doorways should be as convenient to the widest range of people, including those using mobility aids or wheelchairs, and those moving furniture or other objects. As a general principle, narrower hallways and landings will need wider doorways in their side walls. The width of doorways and hallways should conform to the specification given at www.lifetimehomes.org.uk.</p>
7. Circulation Space	<p>Enable convenient movement in rooms for as many people as possible.</p>	<p>There should be space for turning a wheelchair in dining areas and living rooms and basic circulation space for wheelchair users elsewhere.</p>

Lifetime Homes – Features (continued)

LIFETIME HOMES CRITERIA	KEY OBJECTIVES	DETAILED CRITERIA
8. Entrance level living space	Provide accessible socialising space for visitors less able to use stairs.	A living room / living space should be provided on the entrance level of every dwelling (see Appendix 1 on page 65 or www.lifetimehomes.org.uk for definition of 'entrance level'). Note: Entrance level generally means the storey containing the entrance door to the individual dwelling. It may refer to the first storey that contains a room (habitable or non-habitable) if the entrance door leads directly to an 'easy-going' stair.
9. Potential for entrance level bed-space	Provide space for a member of the household to sleep on the entrance level if they are temporarily unable to use stairs	In dwellings with two or more storeys, with no permanent bedroom on the entrance level, there should be space on the entrance level that could be used as a convenient temporary bed-space (see Appendix 1 on page 65 or www.lifetimehomes.org.uk for definition of 'entrance level').
10. Entrance level toilet and shower drainage	Provide an accessible toilet and potential showering facilities for: a) any member of the household using the temporary entrance level bed space of Criterion 9, and: b) visitors unable to use stairs.	Where an accessible bathroom, in accordance with Criterion 14, is not provided on the entrance level of a dwelling, the entrance level should have an accessible toilet compartment, with potential for a shower to be installed – as detailed in the specification given at (see Appendix 1 on page 65 or www.lifetimehomes.org.uk for definition of 'entrance level')
11. Toilet and bathroom walls	Ensure future provision of grab rails is possible, to assist with independent use of toilet and bathroom facilities.	Walls in all bathrooms and toilet compartments should be capable of firm fixing and support for adaptations such as grab rails.
12. Stairs and potential through-floor lift in dwelling	Enable access to storeys above the entrance level for the widest range of households.	The design within a dwelling of two or more storeys should incorporate both: a) Potential for stair lift installation; and b) A suitable identified space for a through-the-floor lift from the entrance level to a storey containing a main bedroom and a bathroom satisfying Criterion 14.
13. Potential for fitting of hoists and bedroom / bathroom relationship	Assist with independent living by enabling convenient movement between bedroom and bathroom facilities for a wide range of people.	Structure above a main bedroom and bathroom ceilings should be capable of supporting ceiling hoists and the design should provide a reasonable route between this bedroom and the bathroom.
14. Bathrooms	Provide an accessible bathroom that has ease of access to its facilities from the outset and potential for simple adaptation to provide for different needs in the future.	An accessible bathroom, providing ease of access in accordance with the specification given at www.lifetimehomes.org.uk should be provided in every dwelling on the same storey as a main bedroom.
15. Glazing and window handle heights	Enable people to have a reasonable line of sight from a seated position in the living room and to use at least one window for ventilation in each room.	Windows in the principal living space (typically the living room), should allow people to see out when seated. In addition, at least one opening light in each habitable room should be approachable and usable by a wide range of people – including those with restricted movement and reach. Note: In kitchens areas or bathrooms with only one window situated behind kitchen units or bathroom fittings, the requirement for a potential clear approach space to that window need not apply. However, the window handle height/control requirement remains applicable. Any other window within the kitchen area or bathroom, not behind fittings, is required to satisfy both the approach and window handle/control height requirements.
16. Location of service controls	Locate regularly used service controls, or those needed in an emergency, so that they are usable by a wide range of household members - including those with restricted movement and limited reach.	Service controls should be within a height band of 450mm to 1200mm from the floor and at least 300mm away from any internal room corner.

APPENDIX 1 - DEFINITION OF 'ENTRANCE LEVEL' FOR THE PURPOSE OF LIFETIME HOMES CRITERIA

The entrance level of a dwelling for the purposes of the Lifetime Homes Criteria is generally deemed to be the storey containing the main entrance door as defined by Criterion 4. This will usually be the ground floor of a house, or the storey containing the entrance door of a flat approached a communal hall, stair, or lift.

Where there are no rooms (habitable or non-habitable) on the storey containing the main entrance door (e.g. most flats over garages, some flats over shops, some duplexes and some townhouses), the first storey level containing a habitable or non-habitable room can be considered the 'entrance level' if this storey is reached by an 'easy going' stair with maximum risers 170mm, minimum goings 250mm, and a minimum width of 900mm measured 450mm above the pitch line.

APPENDIX 2 - COMMUNAL CAR PARKING MANAGEMENT PLANS

Where communal parking is provided, the Council may require a Parking Management Plan to ensure that adequate parking space is available for disabled people. The parking management plan should include a mechanism to ensure that the supply and demand of wider bays / blue badge bays are regularly monitored and provision reviewed, to ensure that provision equates to any change in the demand from disabled residents and visitors and that the bays are effectively enforced to stop abuse by non blue badge holders. The needs of residents who occupy a home designated for wheelchair users and any residents who hold a blue badge and occupy any other home should be addressed.

Key requirements for lifetime homes standards:

- 5.10 As the Building Regulations do not currently require dwellings to be built to lifetime homes standards it is necessary to check compliance at the planning application stage. Therefore planning applications for new housing are expected to include information in the design statement and access statement showing how the proposed development addresses the 16 Lifetime Homes Criteria. Information on access statements can be found in the '**Access for all**' section of CPG6 **Amenity**.

- 5.11 Applicants should specifically submit a schedule setting out how each of the 16 criteria will be met. Plans should particularly include sufficient detail of the following key internal space criteria, such as:
- 6 - Internal doorways and hallways
 - 7 - all necessary circulation space within and between rooms
 - 8 - an entrance level living space
 - 9 – potential for an entrance level space that can be used as a bed-space
 - 10 - entrance level toilet and shower drainage at entrance level
 - 12 – stairs and potential through-floor lift in dwelling
 - 14 - an accessible bathroom
- 5.12 In the case of conversion of an existing building or other circumstances of a development may mean it may not be possible for new homes to meet all 16 criteria. In this case, the development should still seek to meet Lifetime Homes Standards as far as possible to maximise accessibility and demonstrate to the Council's satisfaction why it is not possible to meet particular criteria.
- 5.13 Applicants should include a schedule within the design and access statement for their development that sets out:
- how each of the 16 Lifetime Homes criteria will be met;
 - identifying any Lifetime Homes criteria that will not be met;
 - demonstrating that these criteria cannot be met, or otherwise justifying failure to meet them.
- 5.14 The Council will expect developments involving listed buildings to incorporate accessible features. English Heritage has produced guidance on “Easy Access to Historic Buildings”. This guidance document should be referred to for further advice.

What is the guidance on wheelchair housing?

- 5.15 In addition to requiring residential development to meet Lifetime Homes standards above, policy DP6 requires a minimum of 10% of all new housing designed to be suitable for permanent occupation by wheelchair users or be easily adapted to meet them. Wheelchair housing standards go significantly beyond Lifetime Homes standards, which do not provide for permanent wheelchair occupation.
- 5.16 The 10% requirement will be applied individually to each tenure within a given development scheme (ie applied to each affordability category whether market housing, social rented housing or intermediate affordable housing).
- 5.17 We may agree to increase the percentage of social rented wheelchair homes and decrease the percentage of intermediate affordable wheelchair homes (or vice versa) where this will better enable us to meet the needs of identified future occupiers.

For market housing:

- 5.18 We will encourage the provision of fully fitted out Wheelchair Housing, but will accept provision of 10% homes designed to be easily adaptable to meet the standards.
- 5.19 New homes that are capable of being easily adaptable should incorporate the key space criteria set out in the Habinteg Wheelchair Housing Design Guide (see Figure 10 below) and ensure that any fittings and fixtures required at a later date can be easily provided without enlarging or structurally altering the home.

For affordable housing:

- 5.20 The 10% wheelchair requirement should be designed, built and fitted out to meet Wheelchair Housing standards in full. These affordable homes should comply with the Camden Wheelchair Housing Design Brief 2010 produced by the Council.
- 5.21 As far as possible, the Council will seek to identify future occupiers of affordable wheelchair housing and seek to ensure that it is tailored to their needs.
- 5.22 The Council's Housing Partnerships Team should be consulted for any specific design requirements required to meet the needs of future occupiers of affordable wheelchair housing (see Further Information at the end of this guidance).
- 5.23 The Council may use its affordable housing fund to support the creation of fully-fitted out affordable wheelchair housing.

Habinteg Wheelchair Housing Design Guide:

- 5.24 All wheelchair housing should be designed in accordance with the standards set out in the nationally recognised Habinteg Wheelchair Housing Design Guide (WHDG).
- 5.25 The standards include guidance for main entrances, doors, hallways, storage space, bedroom space, windows, etc. Below are the 13 key space criteria relating to the internal layouts of individual dwellings. The main entrances and common parts should be designed in accordance with the relevant guidance (WHDG p30 & 31)

Figure 10. Summary of the 13 key Habinteg wheelchair housing criteria

1. Dwellings should normally be designed on one level storey. Where a dwelling is arranged in two or more floors a vertical rise lift serving all floors must be provided. (WHDG p63)
2. The entrance door to the dwelling should provide a minimum clear opening width of 800mm (when accessed head on) or 825mm (when the approach is not head on). It should be weather protected and lit and be provided with a 300mm clear space to the leading edge (pull side of the door) and a 200mm clear space on the push side. (WHDG p36)
3. The entrance hallway requires a manoeuvring space 1500 x 1800mm (enabling an occupier to open and close the door and turn into the living space) (WHDG p37 & 44)
4. A space to store and charge an electric wheelchair should be provided as an extension to the circulation space of the dwelling. Care should be taken to ensure that storage of the chair does not restrict the minimum clear effective width of any corridor. Consideration should be given to how the facility is accessed and used. To guarantee sufficient manoeuvring space an overall space of 1100 x 1700mm should be provided. (WHDG p45)
5. All halls and corridors (facilitating 90° turns) should have a clear unobstructed width of at least 1200mm and internal door clear opening widths of at least 800mm. To facilitate a 180° turn a corridor width of 1500mm is required. (WHDG p57)
6. All internal doors require a 300mm clear space to the leading edge (pull side of the door) and a 200mm clear space on the push side. (WHDG p58)
7. A 1500 x 1800mm turning circle should be provided in the kitchen. (WHDG p7)
8. In all bedrooms a 1200 x 1200mm clear space should be provided to one side of the bed, 1000mm circulation is required to the other sides and the foot of each bed. In single bedrooms access to one side of the bed is acceptable. All furniture and window controls should be reachable and usable. (WHDG p88)
9. In all bathrooms space should be provided to facilitate frontal, side and oblique transfer to the toilet. The bathrooms and toilets should normally have outward opening doors or provide a clear space of 1100mm between the door swing and any fixture or fitting. (WHDG p78)
10. All bathrooms should provide a 1500 x 1500mm square manoeuvring space, clear of all fittings (WHDG p78)
11. In all bathrooms a drainage gully and services to facilitate the installation of a level entry shower (1000 x 1000mm) should be provided. (WHDG p85)
12. A clear ceiling-track hoist route (suitably constructed and with a ready power supply) should be provided between the bathroom and the main bedroom (WHDG p80 & 15)
13. Windows should be able to be opened from a seated position. Controls should be located no higher than 1000mm above finished floor level and suitable for use by people with limited manual dexterity (WHDG p99)

For the latest edition of these standards, please refer to: "Wheelchair housing design guide" edited by Stephen Thorpe and available from Habinteg Housing Association:
www.habinteg.org.uk/pages/whdg.html (available from BREbookshop.com ISBN 1860818978)

Key requirements for wheelchair housing standards

- 5.26 Planning applications will need to show which units are wheelchair accessible and how they are wheelchair accessible or how they can be easily adapted to be suitable for wheelchair users. Full wheelchair housing standards should be met within affordable housing and will be negotiated within market housing on a case by case basis.
- 5.27 Applications for planning permission should show full details of how 10% of homes will comply with wheelchair housing standards or, in the case of market housing, design features that ensure that 10% of homes are easily adaptable to meet the standards.
- 5.28 Plans should identify all wheelchair housing (or homes easily adaptable to the standards) and applications should include drawings setting out how the 13 key space criteria identified in Figure 10 will be met.
- 5.29 Applicants should include a schedule within the design and access statement for their development that sets out:
- how each of the 13 key space criteria will be met;
 - identifying any key space criteria that will not be met;
 - demonstrating that these criteria cannot be met, or otherwise justifying failure to meet them.
- 5.30 In the case of conversion of an existing building, we will apply the 10% requirement flexibly to take into account any constraints that would prevent the inclusion of entrances and internal spaces suitable for a wheelchair user.
- 5.31 For further design guidance on wheelchair housing please refer to the Mayor of London's SPG: 'Accessible London – Achieving an Inclusive Environment' (April 2004) - http://static.london.gov.uk/mayor/strategies/sds/accessible_london.jsp (accessed April 2011).

Additional considerations

Requirements in other residential buildings

- 5.32 In general, mobility difficulties and the need to provide for wheelchair users should be considered in the design of all forms of housing. The type of provision will need to be individually tailored to suit the nature of the facility and the likely needs of future occupiers.
- 5.33 In relation to student housing there is no requirement to meet Lifetime Homes standards, however, 10% of student bedrooms/ study flats (together with supporting communal spaces) are expected to meet wheelchair standards. Suitable design layouts are included in Approved Document M (known as Part M) of the Building Regulations.

Key building regulation requirements

- 5.34 The accessibility of accommodation should be considered whether the proposal is for new build, conversions or refurbishments.
- 5.35 Part M of the Building Regulations sets minimum accessibility requirements for building standards in new residential dwellings and is required in addition to Lifetime Homes and wheelchair accessible housing standards being met. They apply at the Building Regulation approval stage and, as such, are not a matter for consideration in the planning process.
- 5.36 BS 8300:2009 'Design of buildings and their approaches to meet the needs of disabled people – Code of Practice' (BSI) provides good practice guidance for various types of non-domestic buildings.
- 5.37 For further information on part M of the Building Regulations or BS 8300:2009 please contact the Council's Building Control Service or refer to the regulations on the Department for Communities and Local Government's website:
www.communities.gov.uk/planningandbuilding/buildingregulations/

Securing lifetime homes and wheelchair housing through conditions and legal agreements

- 5.38 Homes need to satisfy specific layout and space criteria in order to meet Lifetime Homes and Wheelchair Housing Standards. If homes are not designed to meet these criteria from the outset, it may not be possible to accommodate the necessary spaces within the envelope of the dwelling as proposed. Consequently, if submitted applications do not show dwellings that meet Lifetime Homes and Wheelchair Housing Standards, they cannot be secured by condition.
- 5.39 Conditions may be used exceptionally in connection with Lifetime Homes Standards where:
- constraints of an existing building will prevent layout and space criteria from being met
 - key layout and space criteria can clearly be met by the proposed housing, but other Lifetime Homes criteria have not demonstrably been met by submissions with the planning application.
In each case, a condition may be used to secure submission of additional details of how specific Lifetime Homes criteria will be met before the development is implemented.
- 5.40 Development policy DP6 requires the provision of the 10% affordable wheelchair housing to be designed, built and fitted out to meet wheelchair housing standards in full. It will always be secured through a planning obligation (also known as a section 106 agreement or legal agreement). In most cases, the terms will specify:
- all wheelchair housing in the development

- which wheelchair housing will be social rented and which will be intermediate affordable housing
- arrangements to ensure that affordable wheelchair housing is fully fitted out to the agreed specifications, including payment of a bond where appropriate
- arrangements to ensure that affordable wheelchair housing is completed and fully fitted out to an acceptable timescale.

5.41 In some cases the terms may also specify:

- arrangements for submission of revised or additional plans or schedules where key space criteria have not demonstrably been met by submissions with the planning application;
- arrangements to ensure that affordable wheelchair housing can be viewed by potential occupiers before it is fitted out;
- arrangements to ensure that affordable wheelchair housing is available to wheelchair users in the future.

5.42 Provision of 10% wheelchair housing (or easily adaptable market housing) in market schemes is required but often future occupiers will be unknown until after the homes have been fitted out - under Development policy DP6 it may be exceptionally secured through a planning obligation where submissions with the planning application do not demonstrate that 10% of market homes meet the key space criteria. In such cases, the terms will specify:

- arrangements for submission of revised or additional plans or schedules showing that 10% of market homes meet key space criteria;
- arrangements to ensure that wheelchair housing is completed to the agreed specifications.

Further information

<p>Lifetime Homes www.lifetimehomes.org.uk</p>
<p>Mayor's guidance at http://www.london.gov.uk/strategy-policy/accessible-london-achieving-inclusive-environment (see Mayor's Priorities - Planning - Accessible London: Achieving an Inclusive Environment - July 2011): SPG 'Accessible London: Achieving an Inclusive Environment' (April 2004) 'Lifetime Homes – case study examples' (September 2006) Best Practice Guidance 'Wheelchair Accessible Housing' (September 2007)</p>
<p>Housing Supplementary Planning Guidance (Mayor of London, November 2012) http://www.london.gov.uk/who-runs-london/mayor/publications/planning/housing-supplementary-planning-guidance (see Mayor's Priorities - Planning – Supplementary Planning Guidance)</p>
<p>London Housing Design Guide (Mayor of London, August 2010) www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide (accessed April 2011)</p>
<p>Building Regulations 2010 Approved Document M - Access to and Use of Buildings (known as Part M)</p>
<p>British Standard BS 8300:2009+A1: 2010 Design of buildings and their approaches to meet the needs of disabled people – Code of Practice (BSI)</p>
<p>British Standard BS 9999:2008 Code of Practice for Fire Safety in the Design, Management and Use of Buildings (BSI)</p>
<p>Camden Council Housing Adult and Social Care 'Camden Wheelchair Housing Design Brief 2013' http://www.camden.gov.uk/ccm/content/housing/housing-policy-and-strategies/camden-wheelchair-design-guide/camden-wheelchair-design-guide.en</p>

Camden Planning Guidance

Sustainability

London Borough of Camden

CPG **3**



July 2015

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4 Energy efficiency: existing buildings

KEY MESSAGES

As a guide, at least 10% of the project cost should be spent on environmental improvements

Potential measures are bespoke to each property

Sensitive improvements can be made to historic buildings to reduce carbon dioxide emissions

- 4.1 Many of the sections in this guidance focus on reducing the environmental impact of new buildings, however Camden's existing buildings account for almost 90% of the borough's carbon dioxide emissions. Therefore it is essential that these buildings make a contribution towards the borough's reduction in carbon dioxide emissions.
- 4.2 This section provides more information on how existing buildings can be more energy efficient. It builds on the previous section, which covered Stage 1 of the energy hierarchy and improving energy efficiency in new buildings.
- 4.3 Camden Core Strategy Policy CS13, paragraph 13.9 expects development or alterations to existing buildings to include proportionate measures to be taken to improve their environmental sustainability, where possible.

WHAT DOES THE COUNCIL EXPECT?

- All buildings, whether being updated or refurbished, are expected to reduce their carbon emissions by making improvements to the existing building. Work involving a change of use or an extension to an existing property is included. As a guide, at least 10% of the project cost should be spent on the improvements.
- Where retro-fitting measures are not identified at application stage we will most likely secure the implementation of environmental improvements by way of condition. Appendix 1 sets out a checklist of retro fit improvements for applicants.
- Development involving a change of use or a conversion of 5 or more dwellings or 500sq m of any floorspace, will be expected to achieve 60% of the un-weighted credits in the Energy category in their BREEAM assessment. (See the section on Sustainability assessment tools for more details).
- Special consideration will be given to buildings that are protected e.g. listed buildings to ensure that their historic and architectural features are preserved.

How can I make an existing building more energy efficient?

- 4.4 There are many opportunities for reducing the energy we use in our homes. The design and the materials used can make a significant contribution. Simple measures, such as closing curtains at dusk, can help stop heat loss. Installing condensing boilers, heating controls and energy saving light bulbs and appliances reduce energy use and carbon dioxide emissions significantly. Reduced energy use also means lower energy bills.
- 4.5 When dealing with historic buildings a sensitive approach needs to be taken. Guidance on this is provided later within this section.

Draught proofing

- 4.6 There is a range of effective draft proofing measures you can use to help insulate your home:
- Fix brush seals to exterior doors and letterboxes, and tape to ill-fitting doors;
 - Put reflector panels behind radiators to reflect heat into the room; and
 - Use shutters for windows and/or thicker curtains that do not drape over radiators.

Energy efficient lighting

- 4.7 In most homes lighting accounts for 20% of the electricity bill. It is easy to cut waste by simply turning off lights and adjusting blinds and curtains to let in more natural light. When lighting a room, always use energy saving light bulbs.

Windows

- 4.8 Windows let light and heat into your home, but they can also let a lot of heat out when temperatures are colder outside than inside. If you are replacing windows or building an extension, thermally efficient glazed windows will provide more effective insulation than older windows. Double glazed panels can now be fitted into some original wooden frames, without the need to replace the whole frame. This helps preserve the historic character of the building.
- 4.9 The use of PVCu windows is not considered to be acceptable in historic buildings, conservation areas and listed buildings as this material detracts from their historic significance and the architectural qualities of historic buildings and places. See below for more information on listed buildings and conservation areas.
- 4.10 There is a range of simple measures which can improve the energy efficiency of windows. These include:



- General repair and maintenance – which can substantially improve the energy efficiency of windows, as much of the heat lost through windows is through leaks and cracks.
- Installation of draught seals – which can help to further eliminate cold draughts and leaks.
- Secondary glazing – adding a second sheet of glass or plastic to a window frame can improve sound-proofing as well as energy efficiency. If carefully designed it can be unobtrusive and appropriate in a listed property or one within a conservation area.
- Secondary protection - e.g. shutters or heavy curtains, although these are predominantly a night-time option.

Insulation

- Loft insulation - Your home may already have some loft insulation, but if the material is thin it will not be saving as much energy and money as it could. Fitting proper loft insulation is the most cost-effective way of saving energy. As a guide, your loft insulation should be around 250mm thick to be effective.
- Floor insulation - If you have any gaps between your floorboards and skirting boards, you can reduce heat loss by sealing them with a regular tube sealant, like the silicon sealant used around the bath. It is also very useful to insulate underneath the floorboards at ground floor level.
- Cavity wall insulation involves filling the gap between the bricks with insulating material. It can reduce heat loss by up to 60%. Most homes built after 1930 will have a cavity that could be insulated
- Solid wall insulation (internal or external) – buildings constructed before 1930 almost always have solid wall construction. The only way to insulate solid walls is to add insulation to the inside or outside of the wall. External insulation involves adding a decorative weather-proof insulating treatment to the outside of your wall while internal insulation involves attaching insulating plaster board laminates or wooden battens in-filled with insulation to the inside of the wall. Generally 100mm of insulation is required to be effective. Solid wall insulation, whether internal or external, will require relocation of the services attached to the wall e.g. radiators, electrical sockets, drainpipes.

Heating and hot water

- New boiler - Replacing an old boiler (more than 10 years old) with a high efficiency condensing boiler and heating controls to provide heating and hot water could significantly cut energy consumption.
- New/upgraded central heating – If you install a new boiler the rest of your central heating system may need upgrading, for example large, old radiators could be replaced with smaller, more efficient radiators that are better suited to the new boiler

- Upgrading heating controls - You can install heating controls that allow you to control the temperature in different parts of your building. These can be included as an electronic timer control for your boiler, room thermostats for your main living area and thermostatic valves on all your radiators.
 - Insulating hot water pipes and your hot water tank will retain hot water for longer, and save money on heating it.
- 4.11 See the Council's website for further information for householders on various retro-fitting measures and whether permission is required.

Generating your own energy

- 4.12 Buildings can also reduce their energy consumption by generating their own energy in the form of heat or electricity using low carbon and renewable technologies which use little or no energy. See section 6 of this guidance on renewable energy for more advice on the technologies that are available and appropriate in Camden.

CASE STUDY

Renovated Victorian Eco-home: A semi-detached Victorian house in one of Camden's conservation areas was transformed in 2007, reducing its carbon footprint by 60%. Works undertaken to improve energy efficiency included:

- internal solid wall insulation;
- a new fully insulated roof;
- underfloor insulation;
- double glazing; and
- draught proofing.

Heat is provided by an efficient condensing boiler complemented by solar hot water panels on the rear extension; power to the panels' water pumps is provided by solar panels. Other improvements include an upgraded ventilation system with heat recovery, water saving features (e.g. rainwater harvesting for garden irrigation, dual flush toilets), low energy lighting and energy monitoring.

For further information on this property and improvements to other properties of a similar age see www.sd-commission.org.uk



What if my building is historic, Listed or in a conservation area?

- 4.13 Historic buildings have special features that need to be conserved and therefore need to be treated sensitively. This section explains how energy efficiency improvements can be achieved without causing harm to the historic environment.

- 4.14 Reflecting the special qualities of historic buildings, additional consents may be required for statutorily designated buildings (listed buildings, or those in conservation areas). The Council's website has more detailed guidance on what types of permission are required. The Council will aim to balance the conservation of fuel and power against the need to conserve the fabric of the building.
- 4.15 Historic buildings can perform well in terms of energy efficiency. When looking to install high energy efficiency measures, however, it is essential to ensure that works do not compromise the character and significance of the building or area.
- 4.16 In order to identify the most appropriate measures, we recommend taking the following approach, which takes into account measures best suited to individual buildings and households (i.e. taking human behaviour into consideration as well as the building envelope and services):
- Assess the heritage values of the building;
 - Assess the condition of the building fabric and building services;
 - Assess the effectiveness and value for money of measures to improve energy performance;
 - Assess their impact on heritage values; and
 - Assess the technical risks.
- 4.17 A range of thermal efficiency measures can then be implemented, which avoid harm to the historic environment. Ranked according to their impact on heritage and the technical risks, these include:
1. Ensure that the building is in a good state of repair
 2. Minor interventions - upgrade the easier and non-contentious elements:
 - insulate roof spaces and suspended floors;
 - provide flue dampers - (close in winter, open in summer);
 - use curtains, blinds and window shutters;
 - provide energy efficient lighting and appliances
 - draught-seal doors and windows;
 - provide hot water tank and pipe insulation.
 3. Moderate interventions - upgrade vulnerable elements:
 - install secondary (or double) glazing (if practicable);
 4. Upgrade building services and give advice to building users on managing them efficiently:
 - install high-efficiency boiler and heating controls;
 - install smart metering;
 - install solar panels, where not visible from the street or public spaces.

5. Major interventions - upgrade more difficult and contentious elements (where impact on heritage values and level of technical risk shown to be acceptable)
- provide solid wall insulation.
- 4.18 When considering refurbishment, it is the owner's responsibility to ensure that any work does not cause unlawful or unnecessary damage to the building.
- 4.19 The Energy Savings Trust and English Heritage have published detailed guidance on refurbishing and improving the efficiency of historic buildings. See the Further Information section below for details of where to find these guides.
- 4.20 Before carrying out any work, find out if your property is listed, in a conservation area or subject to any other planning restrictions such as an Article 4 Direction. Then check if any of the proposed works require consent – such as listed building consent, planning permission or conservation area consent. See CPG1 Design for more information on Camden's historic buildings. The Council's website also provides detailed information on these matters.

Article 4 Direction

Removes the permitted development rights awarded to properties by legislation and means a planning application has to be made for minor works that usually do not need permission.

Further information

Energy efficiency in existing buildings:

The Energy Saving Trust	<p>A national agency promoting energy efficiency in the domestic sector. For information on home energy efficiency measures including grants, visit their website: www.energysavingtrust.org.uk</p> <p>The Energy Saving Trust also provides technical guidance on energy efficiency in the Publications and Case Studies section of their website. www.est.org.uk/housingbuildings/publications</p> <p>Recommended Best Practice in Housing technical guidance documents:</p> <ul style="list-style-type: none"> • CE120 - Energy Efficient Loft Extensions • CE122 - Energy Efficient Domestic Extensions
GreenSpec	<p>Provides details of products and how they can be used to improve the efficiency of your home or building</p> <p>www.greenspec.co.uk</p>
The Planning Portal	<p>Provides information on what alterations you can make to your home without requiring planning permission</p> <p>www.planningportal.gov.uk</p>

Energy efficiency in historic buildings:

Historic England	<p>Historic England, the UK government's adviser on the historic environment, has produced the following guidance:</p> <ul style="list-style-type: none"> • A Guide to Energy Conservation in Traditional Buildings, which looks at a range of improvements that can be made to reduce the heat lost through a building's walls, windows, floor and roof. This guide is one of a series looking at reducing energy consumption in traditionally constructed homes. https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/ • Meeting building regulations Part L in existing buildings. The purpose of the guidance is to help prevent conflicts between the requirements of the regulations and the conservation of historic and traditionally constructed buildings. https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/ • saving energy in historic buildings at www.climatechangeandyourhome.org.uk which includes very detailed information about a wide range of improvements, e.g. insulating solid walls.
The Energy Saving Trust	<p>Provides technical guidance on energy efficiency in the Publications and Case Studies section of their website. www.est.org.uk/housingbuildings/publications</p> <p>This includes their Recommended Best Practice in Housing technical guidance documents: CE138 - Energy Efficient Historic Homes</p>
The Victorian Society	<p>Has information on their website on greening Victorian homes - www.victoriansociety.org.uk/advice/greening</p>
Building Conservation	<p>Provides a directory of useful contacts, grant sources and websites www.buildingconservation.com</p>
The Sustainable Development Commission	<p>Provides case studies of existing homes that have improved their energy efficiency, including the example detailed in this section. www.sd-commission.org.uk</p>

Appendix 1: Checklist for retro-fitting measures

Applies to all:

- changes of use
- conversions
- extensions over 30sq m

Please note that not all the measures will be appropriate for all buildings and some measures will require planning permission e.g. alterations to the front of a property

Measure	Specification	Evidence
Draught proofing		
Reflective radiator panels		
Overhauling/upgrading windows		
New boiler		
LED lighting		
Meters, timers, sensors, controls on heating or lighting		
Mechanical Ventilation with Heat Recovery		
Insulation		
Hot water tank & pipes		
Roof		
Walls Internal		
Walls External		
Floor		
Renewable energy technology		
Solar PV panels		
Solar thermal (hot water) panels		
Ground source heat pumps		
Double glazed windows / Secondary glazing		
Combined heat and power unit		
Green or brown roof		
Rainwater harvesting		
Other measures		
Join the Camden Climate Change Alliance (commercial only)		
Off-setting contribution		

