

## 2. Design excellence for houses and flats

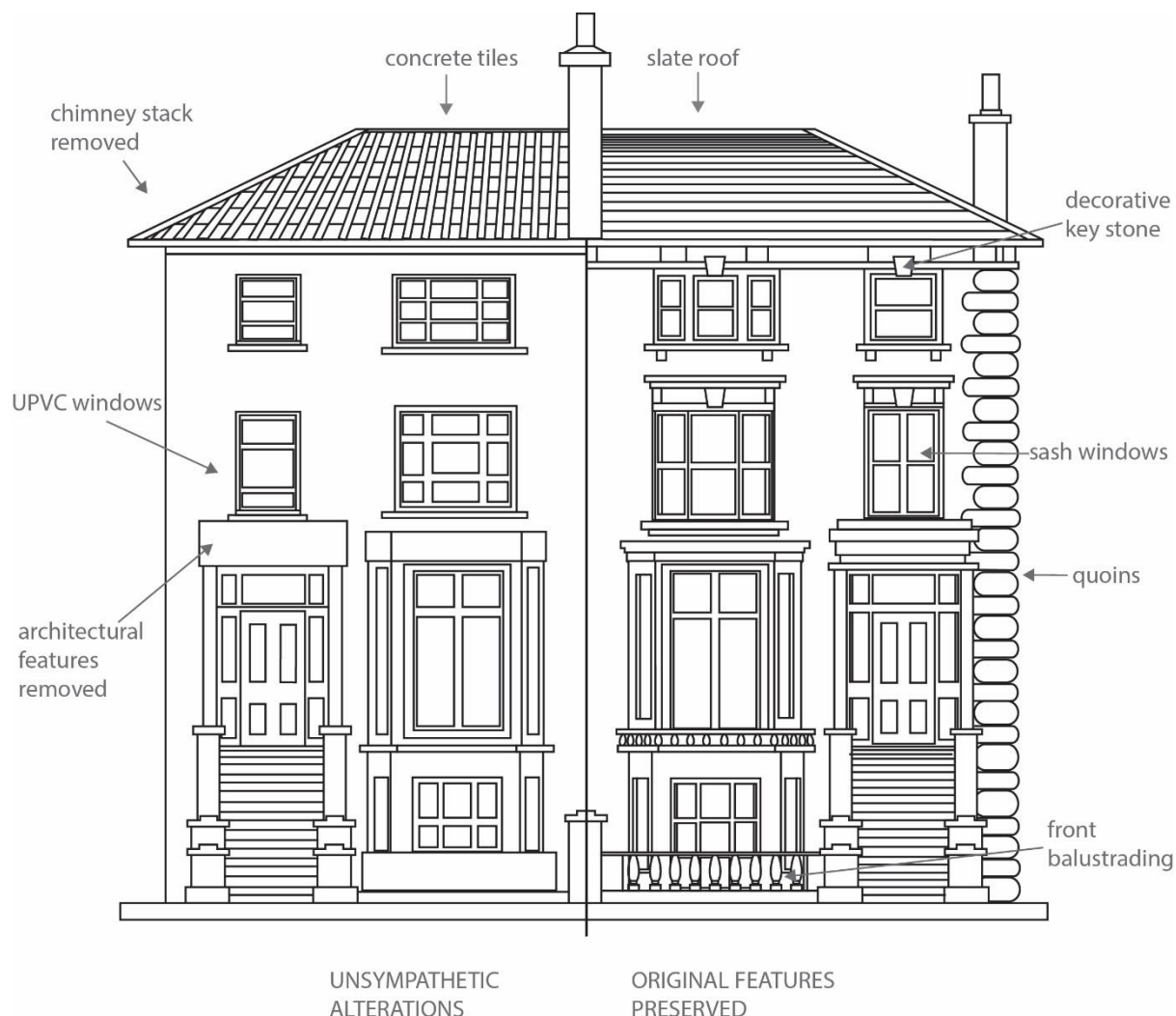
### Good practice principles

- 2.1 Camden is committed to excellence in design throughout the borough. The design of the built environment affects many things including the way we use spaces and interact with each other, comfort and enjoyment, safety and security, our sense of inclusion and health and well-being. Good design should always positively enhance its surrounding context. This is particularly important in conservation areas.
- 2.2 Contemporary design approaches in alteration and extensions must be sensitive to the property and its context. The addition or alteration must compliment the property without eroding or harming its character and the surrounding area or having a negative impact on neighbouring amenity.
- 2.3 Extensions and alterations, and the digging or movement of soil, should respect and be sensitive to natural and physical features, both within and outside the curtilage of a property. This includes (but may not be limited to) consideration of slope and topography, planting, biodiversity, habitats, waterways and drainage, sunlight and shade.
- 2.4 Reference should be made as necessary to the Council's [other CPG documents](#) (such as those on Amenity, Basements, Biodiversity and Energy Efficiency) for information that may apply to your proposed extension or alteration. If you live in a conservation area or listed building, please also refer to the heritage section in CPG on Design.

### Materials and other alterations

- 2.5 Alterations to a property and the materials used should always be complementary to the existing building and its original features. Consideration of materials should form an integral part of the design process. To do this, you must take into account its existing colours and textures, character and design and the surrounding area. Materials for alterations should weather well, so their ageing process contributes positively to the character of the building, and the site's wider context.

**Figure 1** : Illustration of how unsympathetic alterations to a residential façade can erode its character



- 2.6 New work to a property should blend with the old, though in some cases it may be appropriate for the alteration to be more distinct from the original building. In other cases, closely matching materials and design details are more appropriate to ensure the new work blends with the old. This is something you can discuss with your architect and Planning Officer through the pre-planning process.
- 2.7 With buildings of traditional construction, the use of traditional and some new non-synthetic building materials for repairs and alterations, including lime-based renders and mortars to match existing, internal plasters, floor screeds, and insulation, will generally reduce maintenance costs, support the longevity of the historic structure and ensure the original building materials function together as intended, better than highly-engineered synthetic products. More advice on sustainable building technologies and the benefits and range of natural building materials can be found in CPG for Energy Efficiency and adaptation.

### Original surface finishes

- 2.8 These should be retained or replicated wherever possible, as they are usually central to the architectural design / character treatment of a building. These may cover the entire

building or façade (such as stucco facing), the roof elements (such as roof tiles and roof ridges), highlight specific features (such as windows or doors) or act as decorative elements (such as ironwork or terracotta panels).

### Roofs

- 2.9 Clay tiles, natural 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 and where possible, re-instated where they have been removed. Please be mindful that replacement by inappropriate substitutes will erode the character and appearance of property and area.
- 2.10 With roof extensions such as a mansards and dormers, 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.
- 2.11 Ongoing maintenance and repair or partial replacement of roof coverings is preferable to wholesale replacement even with appropriate original materials, for sustainability reasons and to maintain consistency of patina and weathering in groups of buildings.

### Walls

- 2.12 When repairing existing wall finishes, the composition of the original material (such as brick, concrete or stucco/render) should be determined, the defective area cut out and a replacement material of identical chemical composition applied and properly bonded. Concrete or cement repairs to the masonry, mortar or render of traditional houses are generally non-original, can damage the surrounding historic materials, and should be replaced with lime-based alternatives. There may be scope for contemporary design materials for example on extensions, but these must be of a high quality and will be considered on site context.

### External pipework

- 2.13 Original external pipework and guttering should be repaired or reinstated in a like-for-like manner, where possible. In the case of historic buildings, cast iron replicas of original pipework are preferable to uPVC pipes. New pipework should be restricted to the side and rear elevations of buildings to avoid spoiling the appearance of the principal façade and should be grouped together and located in a discreet position

### Acoustic and insulation blocks

- 2.13 The insulating quality of materials should be considered along with their embodied energy (the energy used in manufacture) and the potential for re-use and recycling. For conservation areas, further information about energy efficiency can be found in Camden's [Energy Efficiency planning guidance](#) on the Council website.

### Brickwork or stonework

- 2.14 Alterations or repairs to brickwork or stonework should match the original in all respects while satisfying the needs of durability and maintenance. This should include matching the original bond, mortar colour and texture. Retention of any existing pointing is encouraged wherever possible.

### Brick samples

- 2.15 Brick type and mortar colour will normally be required as a sample to be submitted to the Council as part of any application

### Painting, rendering or cladding of brickwork

- 2.16 The original exterior wall finish of a building is normally an important aspect of its architecture and should be preserved, while consistency of original façade finishes can be important to the character and appearance of a group of buildings, especially in conservation areas. Where original masonry - or in modern buildings concrete or cladding - is exposed on exterior walls it should not be painted, rendered or over-clad.
- 2.17 Some brick and stucco finishes to exterior walls were traditionally painted. When repainting these, care should be taken to use sympathetic non-synthetic paints, and to replicate the original colour and texture or that of matching neighbours. Exterior stucco renders originated in the eighteenth century to emulate stonework, so non-white, bright white and gloss paint finishes are not normally appropriate; off-white or cream will normally be preferred.
- 2.18 Painting or rendering masonry can also cause physical damage to buildings, including by inhibiting the breathability of traditional natural materials or trapping moisture in walls. For these reasons synthetic emulsion paints and cement-based renders are generally inappropriate.

### Windows

- 2.19 Original windows or those in the style of the original should be replaced or repaired with 'like for like' wherever possible in order to preserve the character of the property and the surrounding area. New windows should match the originals as closely as possible in terms of type, glazing patterns and proportions (including the shape, size and placement of glazing bars), opening method, materials and finishes, detailing and the overall size of the window opening.
- **Frames** - Where timber is the traditional window material, replacements should also be in timber frames. Similarly, where steel is the traditional window material, steel replacements will be sought wherever possible. Please note that uPVC windows are strongly discouraged for both aesthetic and environmental reasons.
  - **Glazing bars** - Where the original glazing bars are highly detailed and intricate, or contain stained glass or leaded panes these should be retained and repaired.

- **Energy efficiency** - Where windows are replaced they should have the lowest 'U-value'<sup>1</sup> feasible. Secondary glazing and other ways to improve energy efficiency while retaining attractive original features should be considered and further guidance can be found in the [Energy efficiency planning guidance for conservation areas](#) on the Council's website.
- **Listed building consent** – This will normally be required for replacement windows, secondary glazing and double-glazing in listed buildings
- **Conservation areas** - original single-glazed windows often contribute to the character and appearance of the area, and should be retained and upgraded. There may however be some instances where double-glazing can be installed in a design that matches the original, for instance sash windows or casements with large individual pane sizes, or in secondary glazing. In such cases, the window frame and glazing bars of the replacement windows should closely match the existing. Please check the [Article 4 Directions](#) for your conservation area.
- Further guidance on window alterations and the effect that this can have on energy efficiency and protecting heritage assets can be found on English Heritage's 'Climate Change and your Home' website: [www.climatechangeandyourhome.org.uk](http://www.climatechangeandyourhome.org.uk)



## Doors and porches

- 2.20 The design of replacement doors should match the dimensions, proportions, joinery details, panelling and glazing of the original. Where timber replacement doors are proposed the timber should be sustainably sourced.
- 2.21 Characteristic doorway features such as porches should be retained where they make a positive contribution to the character of groups of buildings.

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<sup>1</sup> A U-value is a measure of how effective a material is as an insulator. The lower the U-value is, the better the material is as an insulator.

## 3. Extensions: rear and side

### Good practice principles

- 3.1 The following considerations should be reflected in an extension to ensure it is not insensitively or inappropriately designed and to ensure it does not spoil the appearance of the property or group of properties or harm the amenity of neighbouring properties. Proposals should:
- a. be secondary to the building being extended, in relation to its location, form, scale, proportions, dimensions and detailing;
  - b. be built from materials that are sympathetic to the existing building wherever possible
  - c. respect and preserve the original design and proportions of the building, including its architectural period and style;
  - d. respect and preserve existing architectural features, such as projecting bays, decorative balconies or chimney stacks;
  - e. respect and preserve the historic pattern and established townscape of the surrounding area, including the ratio of built to unbuilt space;
  - f. not cause a loss of amenity to adjacent properties with regard to daylight, sunlight, outlook, light pollution/spillage, privacy. Please ensure the extension complies with the 45 degree test and 25 degree test as set out in the [CPG for Amenity](#) – or demonstrate BRE compliance via a daylight test.
  - g. allow for the retention of a reasonably sized garden;
  - h. retain the open character of existing natural landscaping and garden amenity, including that of neighbouring properties, proportionate to that of the surrounding area.
  - i. allow for the retention of wildlife corridors, in particular at the end of streets

### Rear extensions

- 3.2 A rear extension is often the most suitable form of extension to a house or flat. From the outset of a design for a rear extension, the general principles in paragraph 3.1 should be followed as well as the guidance below.

#### Height and depth of a rear extension

- 3.3 In order for a new extension to be subordinate to the original building, its height and depth should respect the existing common pattern of rear extensions at neighbouring sites, where they exist. As such, the following is advised:
- A single storey ground floor extension is generally preferable to those proposed at higher levels/floors, as extensions above ground floor tend to have greater negative impacts on neighbouring amenity. In cases where a higher extension is found to be appropriate, a smaller footprint will generally be required in order to mitigate any increase in visual mass and bulk, overshadowing and sense of enclosure that would be caused by the additional height of the extension.
  - Extensions that are higher than one full storey below roof eaves/parapet level, or that rise above the general height of neighbouring projections and nearby extensions, will be strongly discouraged. This is because such extensions no longer appear subordinate to the building.

### Width of a rear extension

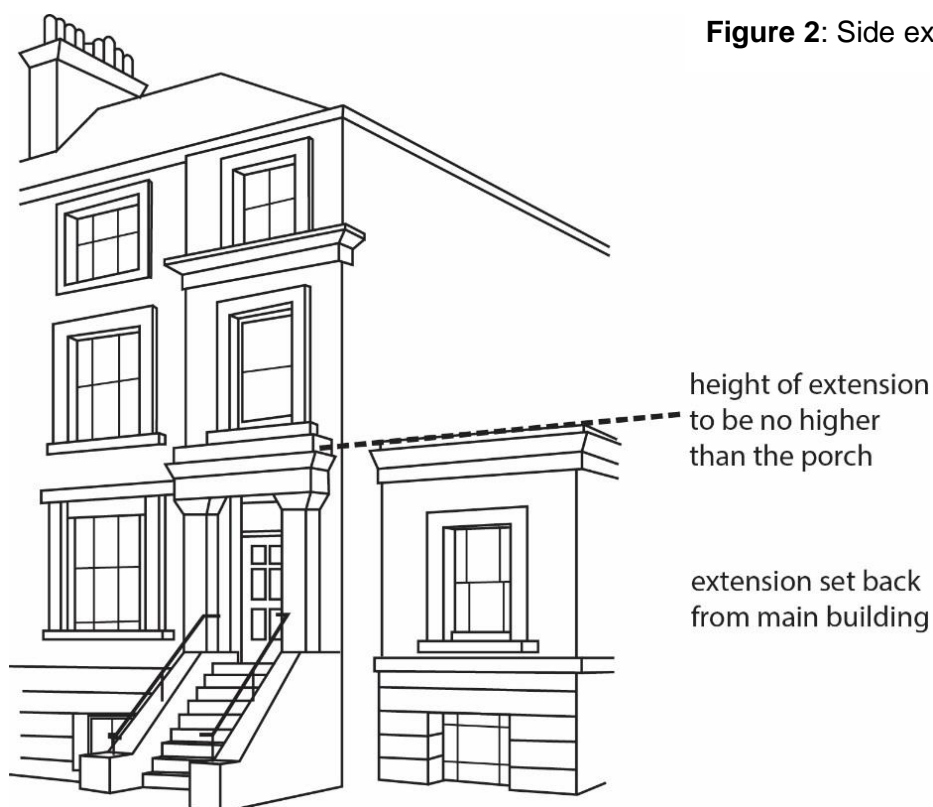
- 3.4 The width of a rear extension should be designed so that it is not visible from the street and should respect the rhythm of existing rear extensions in neighbouring sites.
- 3.5 Sometimes the rear of a building may be architecturally distinguished, either forming a harmonious composition, or visually contributing to the townscape. Where architectural merit exists, the Council will seek to preserve it where it is considered appropriate. Some of the Borough's important rear elevations are identified in conservation area statements, appraisals and management plans.

## Conservatories

- 3.6 A conservatory is also a form of extension, but with glass as the predominant build material. As such, a conservatory should follow the general principles for assessment of normal extensions set out in paragraph 3.1 and also:
- respect and preserve existing architectural features, e.g. brick arches, windows etc;
  - Only in exceptional circumstances will conservatories be allowed on upper levels;
  - be of a high quality in both materials and design.
  - should not overlook neighbouring properties or create excessive light spillage to neighbouring sites, including to those in flats above.
  - Should not cause light pollution or excessive light spillage that would affect wildlife, particularly near sites identified for their nature conservation.
- 3.7 In order to minimise overlooking, opaque lightweight materials such as obscured glass may be necessary on façades abutting neighbouring properties. Also in order to minimise light pollution, it may be necessary to use solid lightweight materials, one-way glass or obscured glass.
- 3.8 Further guidance about artificial light pollution and how to mitigate its adverse impacts is provided in the Council's [CPG on Amenity](#) and for impacts on biodiversity in [CPG on Biodiversity](#)

## Side extensions

- 3.9 Certain building forms may lend themselves to side extensions. Such extensions should be designed in accordance with the general principles set out in paragraph 3.1 and should also be:
- located adjacent to the side and rear elevations of the building;
  - subordinate to the original building in height and scale;
  - no taller than the porch; and
  - set back from the main building.



3.10 **Infilling of gaps:** In many streets in the north of the Borough houses have mature rear gardens and trees that can often be seen through gaps between buildings, which helps to soften the urban scene and provide visual interest.. As such, these gaps have a design value that will be taken into consideration when assessing a proposal. The infilling of gaps will not be considered acceptable where:

- significant views or gaps are compromised or blocked;
- the established front building line is compromised;
- the architectural symmetry or integrity of a composition is impaired;
- the original architectural features on a side wall are obscured; or
- access to the rear of a property is lost.

3.11 Where a property is located in a [conservation area](#), reference should be made to the relevant [conservation area statements, appraisals and management plans](#), which often identify important gaps and vistas that would not be appropriate to infill.

Example of a sensitively designed side infill extension to a home





## 4. Roofs, terraces and balconies

### General principles

- 4.1 Rooflights, additional storeys, dormers, mansards, terraces, balconies and other 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.
- 4.2 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 that already have an additional storey or mansard roof;
  - Buildings already higher than neighbouring properties where an additional storey would add significantly to the bulk or unbalance the architectural composition;
  - Buildings 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;
  - Buildings designed as a complete composition where its architectural style would be undermined by any addition at roof level;
  - Buildings that 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.
- 4.3 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](#)

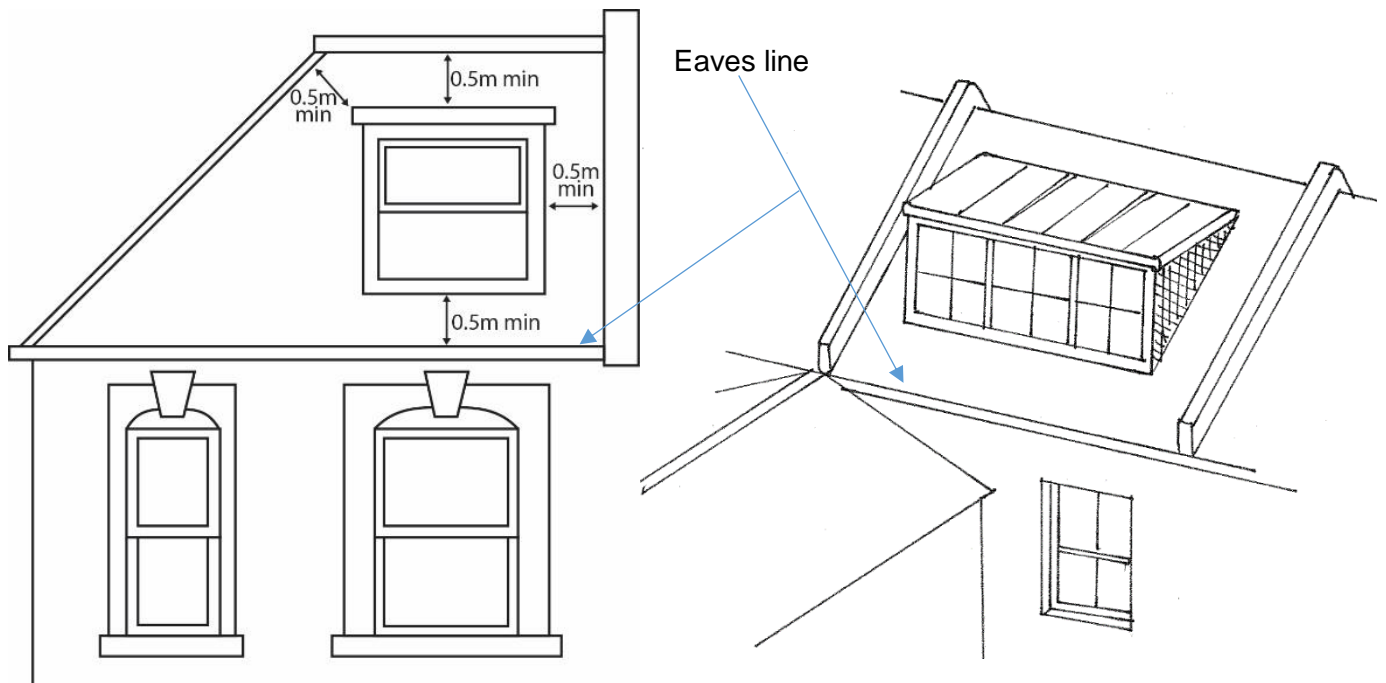
## Dormer windows

- 4.4 Roof dormers should be designed sensitively so they do not dominate the roof plane. This means they should sit within the roof slope so that the overall structure of the existing roof form is maintained. To do this, the following circumstances must be met:
- a. The pitch of the existing roof is sufficient to allow adequate habitable space without the creation of disproportionately large dormers or the raising of the roof ridge. Dormers should not be introduced to shallow-pitched roofs.
  - b. Dormers should be appropriately designed and subordinate in size to the main roof and host building – see figures 3a & 3b for general design principles. They 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 as well as from the party wall and eaves to maintain an adequate separation (see Figures 3a & 3b). However this distance should not be treated as a maximum entitlement and sometimes greater distances will be required to provide a smaller dormer to ensure that it is not too bulky or prominent as a roof feature. 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 window 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. It is important to ensure the dormer cheeks (window surrounds) 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
  - 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.
- 4.5 Please note that 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.

**Figure 3a:** Front dormer window



**Figure 3b:** Rear dormer window

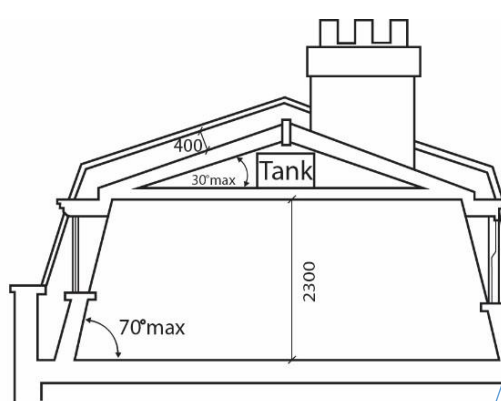


## Mansards

4.6 A mansard is a traditional type of roof extension normally associated with Georgian or Victorian buildings which have a front parapet wall and valley roof or flat roof structure behind. Where mansards are an established feature within a group of buildings or townscape, they will be considered as an acceptable addition. In general, there are 2 types of mansard roof form:

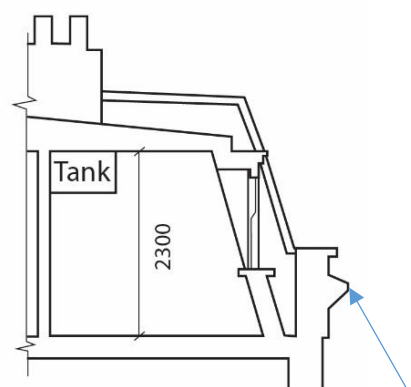
- **A true mansard** : where the lower slope is at a steeper angle than the upper, and the upper slope is visible (figure 4a)
- **Flat topped mansard**: where the upper slope of a pitch is below a 5° angle or totally flat (figure 4b)

Figure 4a: True Mansard



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

Figure 4b: Flat topped Mansard



**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.

4.7 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 extensions already in the terrace.

4.8 As well as the general principles set out in paragraphs 4.1 and 4.2, there are four main features to consider when designing a mansard roof extension. These are:

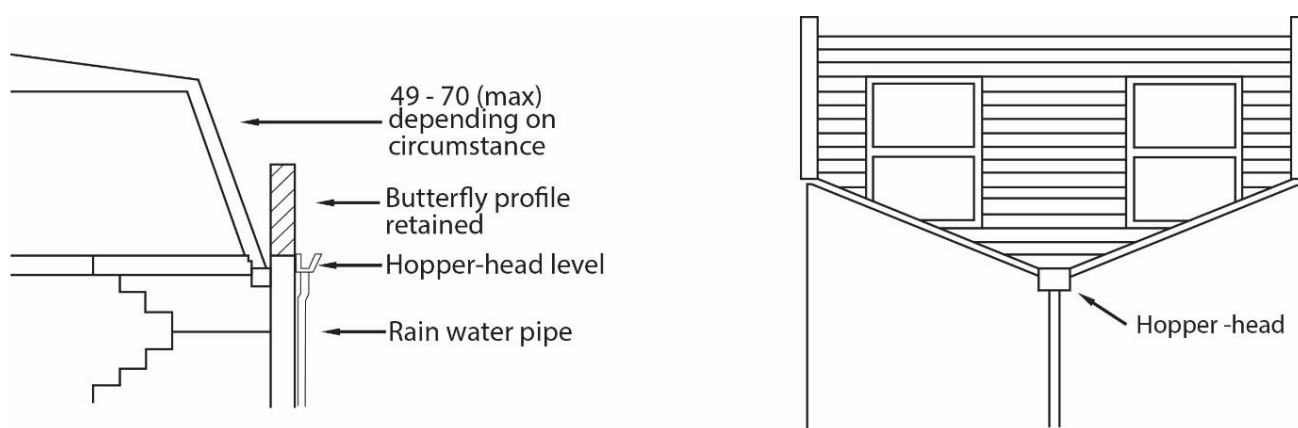
- i. **Height** - to avoid excessive additional height to the host building, the mansard should not exceed the height illustrated in figures 4a and 4b.
- ii. **Pitches and profile** - The lower slope (usually 60-70°) should rise from behind and not on top of the parapet wall, separated from the wall by a substantial gutter. Any original cornice, parapet and railing details should be retained and where deteriorated or lost, should be incorporated into the design of the new roof extension(s). Visible chimney stacks should be retained and increased in height, where they are part of the character of the property. Only party walls with their chimney stacks and windows should break the plane of the roof slope, and these should be accommodated in a sensitive way and be hidden as far as is possible.
- iii. **External covering** – Materials should be of the highest quality, see 'materials' section

- iv. **Windows** – Depending on the context and design of the mansard roof, windows or rooflights should be confined to the mansard's lower slope. It is preferable that windows project at a right angle similar to a dormer with timber sash openings; though rooflights or flush windows to the lower slope will be acceptable where the site context or design allows it.

## Valley or butterfly roofs

- 4.9 On properties with a 'valley' or 'butterfly' roof where a mansard extension is considered acceptable in principle and in accordance with the guidance set out in paragraphs 4.1 and 4.2, then the rear v-shaped parapet should be retained. The new roof addition should start from behind the parapet at existing hopper-head level, forming a continuous slope of up to a maximum of 70° (see Figure 5). 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 5:** Mansard for a butterfly roof



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 types of roof extension

- 4.10 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.

## Balconies and roof terraces

4.11 Balconies and roof 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, overshadowing, noise, light spillage and security. Please refer to the [CPG n amenity](#) for more details.



4.12 Balconies and terraces should complement the elevation upon which they are 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 roof terrace 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;
- preference for screens to be 1.7m high, made of timber, and not be visually permeable
- need to avoid creating climbing opportunities for burglars.

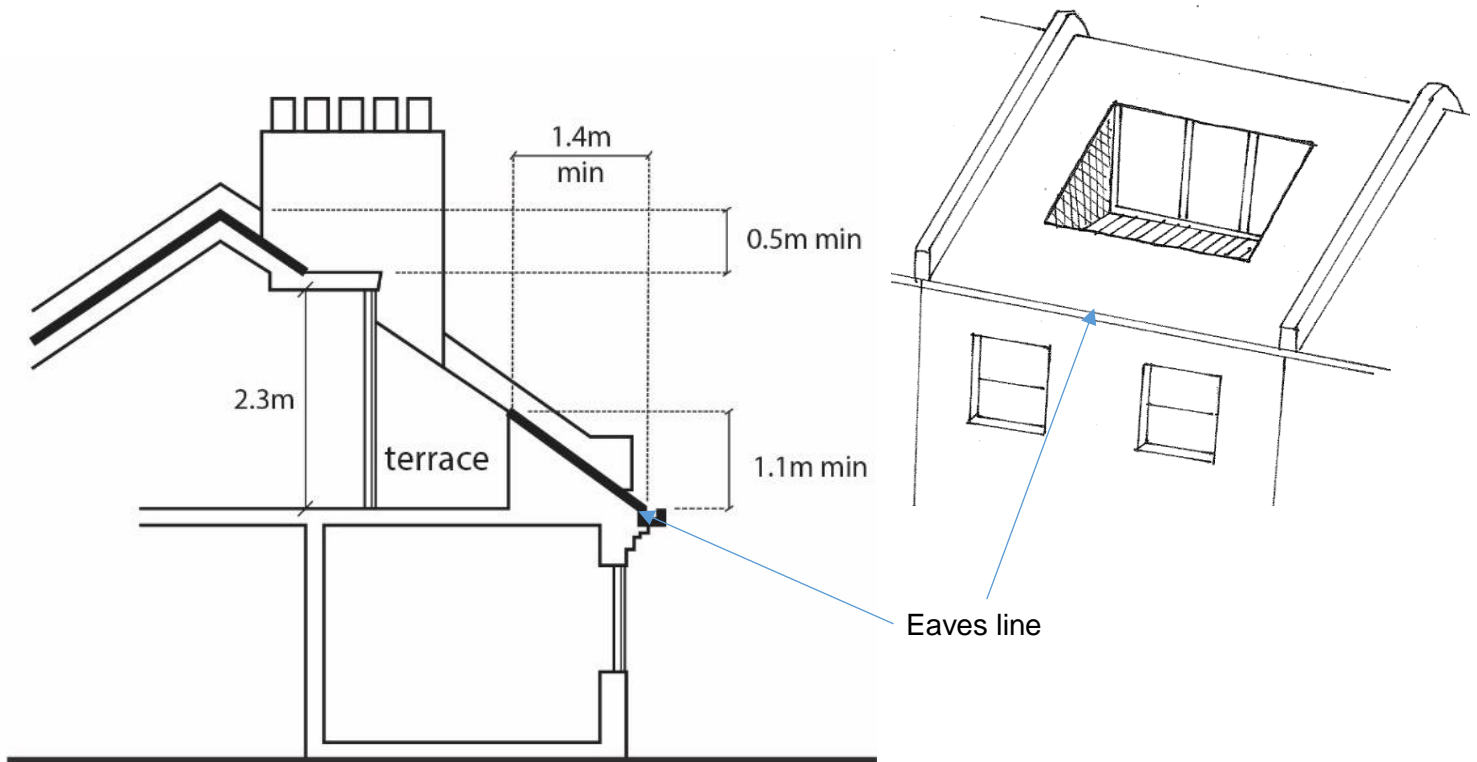
### Roof level Terraces

4.13 A terrace area provided at roof level should be set back behind the slope of a pitched roof in accordance with Figure 6, or behind a parapet on a flat roof. A roof 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 roof 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. Glazed balustrades around balconies or roof terraces are unlikely to be acceptable on traditional buildings because they can appear unduly prominent
- It should not result in overlooking of habitable rooms of adjacent properties.

4.14 When an inset roof terrace is provided within the slope of a pitch as in Figure 6, 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 the height requirement set by Building Regulations.

**Figure 6:** Inset roof terrace



## Roof lights

4.15 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
- they are an incompatible introduction into an otherwise un-cluttered roofscape, or
- they conflict with other architectural roof elements, e.g. gables and turrets.

4.16 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.



- 4.17 Please note that rooflights on lower floors can have an impact on neighbouring amenity through the creation of light spillage from them. This is particularly relevant where a building is divided into flats; where neighbouring habitable room windows are present directly above the proposed rooflights to a rear extension. As such, rooflights should be positioned at least 1m from the building line below windows to habitable rooms, and / or obscure glazing be inserted in order to minimize any glare!

## Solar panels

- 4.18 The installation of solar panels falls within the permitted development rights of houses and flats, under Schedule 2, Part 14, Class A of the [Town and Country Planning \(General Permitted development\) \(England\) Order 2015](#). If the property is within a [Conservation Area](#), there is a restriction on where solar panels can be placed. Please refer to the [Planning Portal website](#) for further details about PD rights and solar panels. Additionally, if the property is within a Conservation Area, please refer to the necessary appraisal or any [Article 4 Directions](#) which may apply.
- 4.19 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.
- 4.20 Further information about solar panels and other renewables can be found in the [CPG on Efficiency and adaptation](#)



## Green roof installation

- 4.21 The installation of green roofs are a welcome attribute to homes in Camden on a rear extension. They are beneficial to and encourage biodiversity but also help to mitigate the impacts of climate change and can contribute to improving air quality. Generally, planning permission is not required for those on flat roofs which are concealed by a parapet and where there is no increase in height or bulk of a roof.
- 4.22 Further information about the installation of a green roof is provided in our CPG on Energy efficiency and adaptation.



