

2.1 GROUND EXTENSIONS

There are several different types of extensions at ground level that you could consider to extend your home, depending on your housing type: terraced, semi-detached, detached.

As part of your preparation to extend your property at ground level, a preliminary site assessment is recommended, to consider the following:

- The existing rear elevation and any previous extensions to it;
- The rear elevation's visibility and prominence in relation to gardens, streetscene and wider area;
- The pattern of development of neighbouring buildings to include historic extensions and new types of development;
- Other rear extensions present at the neighbouring buildings which obtained permission through a planning application or permitted development.

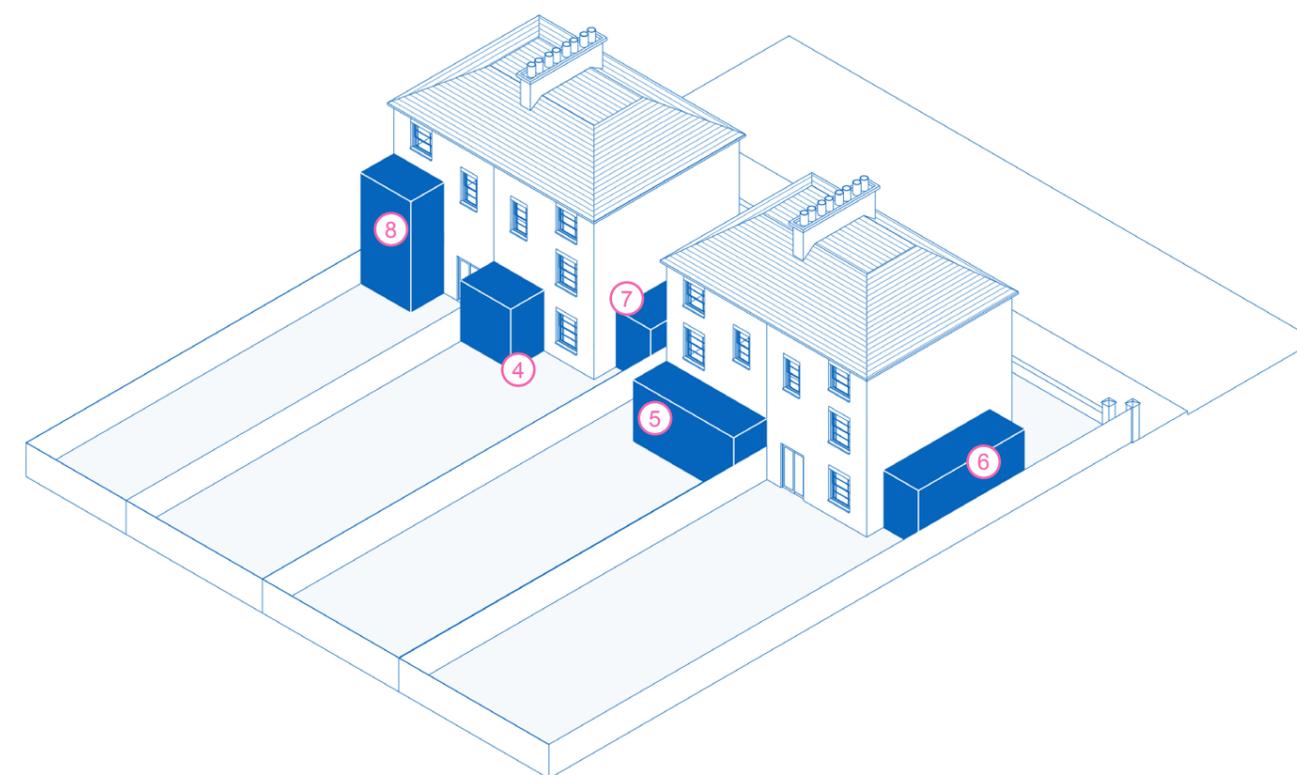
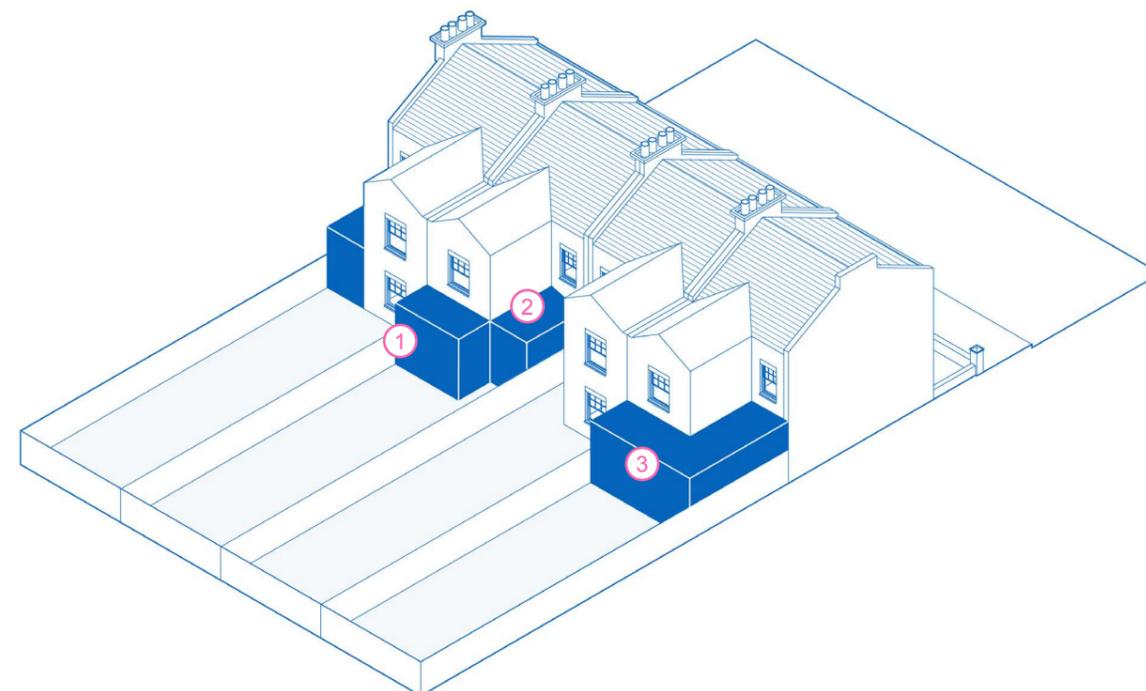
This assessment could be done by walking along your street and surrounding area to observe the rear of properties. You could also use Google or Bing Maps images for an aerial or bird's eye view of your property and surroundings.

You can find out if a certain extension has a planning record by searching for planning applications on the Council's website.

For extensions to blocks of flats you should consider requesting pre-application advice prior to any formal submission.

Ground extensions could be single or multiple storeys in height, and could include but are not limited to: a rear extension to the main rear elevation, to the rear return, an infill rear extension, a wrap-around rear extension, infill side extension, corner facing side extension, front extension.

The type of extension that is appropriate for your property will depend on a number of factors



If your property is in a Conservation Area, check the Conservation Area Appraisal and the information about ground extensions.

A conservatory is also considered a form of extension, but with a glazed roof and glass as the predominant building material.

INDICATIVE EXAMPLES OF DIFFERENT TYPES OF REAR EXTENSIONS

1. Rear extension off the rear return
2. Infill rear extension
3. Wrap-around extension
4. Half width extension off main rear elevation
5. Full width extension off main rear elevation

TYPES OF SIDE EXTENSIONS

6. Side extension
7. Infill side extension
8. Two storey extension

The type of extension that is appropriate for your property will depend on a number of factors as set out in the following pages.

2.1.1 REAR EXTENSION

Depending on where your home is located, there are times when 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 when it is considered appropriate. Some of the Borough's important rear elevations are identified in Conservation Area Appraisals.

In some cases, a more innovative design approach could address specific site constraints and in others, a structure that matches the existing home may better respond to the existing context. It is recommended that pre-application advice is sought where it is unclear what design approach would suit the host building.

There are certain considerations that should be taken into account when designing a rear extension to ensure it is sensitively and appropriately designed for its context. **Rear extensions should:**



Photo 17



- Be subordinate to the building being extended, in relation to its location, form, footprint, scale, proportions, dimensions and detailing;
- Be built from materials that are sympathetic to the existing building wherever possible;
- Respect and preserve the original design and proportions of the building, including its architectural period and style;
- Respect and preserve existing architectural features, such as projecting bays, decorative balconies, cornices and chimney stacks;
- Be carefully scaled in terms of its height, width and depth;
- Allow for the retention of a reasonably sized garden;



- Ensure your extension complies with Building Regulations for energy efficiency measures which include insulating cavities and floors, making provision for low energy lighting, installing thermostatic valves on any new radiators;
- Consider the installation of green roofs/walls and/or solar panels. Biodiverse green roofs with a substrate depth of 100mm are preferred rather than sedum roofs, as they provide a greater biodiversity value. For further information about the installation of a green roof, see [CPG on Energy efficiency and Adaptation](#).
- Allow retention of wildlife corridors, in particular at the end of streets. For further information regarding protection measures of wildlife corridors, see [Biodiversity CPG](#).

The soil in green roofs/walls act as a natural insulator which is superior in terms of efficiency than most typical synthetic roof coverings and insulation materials.



- Respect and duly consider the amenity of adjacent occupiers with regard to daylight, sunlight, outlook, light pollution/spillage, and privacy;
- Ensure the extension complies with the 45 degree test and 25 degree test as set out in the [Amenity CPG](#) – or demonstrate BRE compliance via a daylight test;
- Consider if the extension projection would not cause sense of enclosure to the adjacent occupiers;
- Ensure the extension does not cause undue overlooking to neighbouring properties and cause a loss of privacy. Consider opaque lightweight materials such as obscured glass on elevations abutting neighbouring properties, in order to minimise overlooking;
- Not cause light pollution or excessive light spillage that would affect:
 - neighbouring occupiers, including to those above where a property is divided into flats;
 - Wildlife on neighbouring sites, particularly near sites identified for their nature conservation importance. Consider the use of solid lightweight materials such as timber, one-way glass or obscured glass, in order to minimise light pollution;



Photo 18



- Respect and preserve the historic pattern and established townscape of the surrounding area, including the ratio of built to unbuilt space;
- Retain the open character of existing natural landscaping and garden amenity, including that of neighbouring properties, proportionate to that of the surrounding area;
- Have a height, depth and width that respects the existing common pattern and rhythm of rear extensions at neighbouring sites, where they exist.

If you live in a Conservation Area, you should check the Conservation Area Appraisal and be aware of what contributes to its significance. It might be that the rhythm of the original rear return is significant, and therefore the proposed design of extensions should respect this feature.



Photo 19

2.1.2 SIDE & FRONT EXTENSIONS

When designing a side extension be aware that given its likely visible location in relation to the streetscene, it could have a greater impact on the host building, group of buildings and wider area. Gaps between buildings could help to soften the urban grain and provide visual interest and it is important you consider existing trees and vegetation within the design of the proposed extension.

In some cases, a more innovative design approach could address specific site constraints and in others, a structure that matches the existing home may better respond to the existing context. It is recommended that pre-application advice is sought where it is unclear what design approach would suit the host building.

Front extensions including porches are usually highly visible alterations that can change the character of a building and the street. They can have a particular impact where front gardens are an important characteristic of the area, and where the street has a regular pattern of buildings and a clearly defined building line (as in many streets of terraced and semi-detached houses). You should always consider pre-application advice prior to submitting a proposal for a porch.

New development along the side of the building should ensure it unlocks potential development to the neighbouring properties.

There are certain considerations that should be taken into account when designing a side extension to ensure it is sensitively and appropriately designed for its context. **Side extensions** should:



- Be set back from the main front elevation;
- Be secondary to the building being extended, in relation to its location, form, footprint, scale, proportions, dimensions and detailing;
- Be built from materials that are sympathetic to the existing building wherever possible;
- Respect the dimensions of the existing front porch, where applicable;
- Respect and celebrate existing architectural features into new design, where they make a positive contribution to the character of the building or groups of buildings, such as projecting bays and porches.



- Consider adequate internal insulating materials;
- Consider the installation of green roofs/walls and/or solar panels. Biodiverse green roofs with a substrate of at least 100mm, are preferred rather than sedum roofs, as they provide a greater biodiversity value. For further information about the installation of a green roof, see [CPG on Energy efficiency and Adaptation](#).
- Allow retention of wildlife corridors, in particular at the end of streets. For further information regarding protection measures of wildlife corridors, see [Biodiversity CPG](#).
- An enclosed space internally or externally around an external door, will help with draught proofing and energy saving.



- Respect and duly consider the amenity of adjacent properties with regard to daylight, sunlight, outlook, light pollution/spillage, and privacy;
- Be designed to not cause overbearing or overshadowing to neighbour's front gardens and the interior of their home.
- Be designed to not result in sense of enclosure to the adjacent occupiers;
- Respect and not overlook neighbouring properties and cause loss of privacy. In order to minimise overlooking, opaque lightweight materials such as obscured glass may be necessary on elevations abutting neighbouring properties.



- Protect significant views or gaps;
- Ensure the established front building line is not compromised;
- Ensure the architectural symmetry or integrity of a composition is unimpaired;
- Ensure the original architectural features on a side wall are not obscured;
- Retain access to the rear of a property;
- Consider a sensitive approach for corner extensions which takes into account the neighbouring context.



Side extensions should be confined to a single storey, but there may be instances where a taller side extension could be permitted.

If you live in a Conservation Area, it is particularly important you check the Conservation Area Appraisal for your area and be aware of what contributes to its significance to inform your proposal. It might be that the gaps between buildings are significant, and therefore the proposed design of extensions should take this into account.

Properties in Conservation Areas DO NOT have permitted development rights for side extensions, nor for two storey extensions.



Photo 20

2.2 ROOF EXTENSIONS

Extending the roof to make it a habitable space is one of the most common and affordable types of development. There are times when only a small alteration, such as the installation of a dormer window could make your loft space habitable by providing more space and headroom.

As part of your preparation to alter or extend the roof of your property, a preliminary site assessment is recommended, to consider the following:

- **The existing roof form and any previous extensions to it;**
- **The roof visibility and prominence in relation to gardens, streetscene and wider area, considering land topography;**
- **The pattern of development of neighbouring buildings to include historic extensions and new types of development;**
- **Other roof extensions present at the neighbouring buildings which obtained permission through planning application or permitted development.**

This assessment could be done by walking along your street and surrounding area to observe the roof forms. You could also use Google or Bing Maps images for an aerial or bird's eye view of your property and surroundings.

You can find out if a certain extension has a planning record by [searching for planning applications on the Council's website.](#)



Photo 21

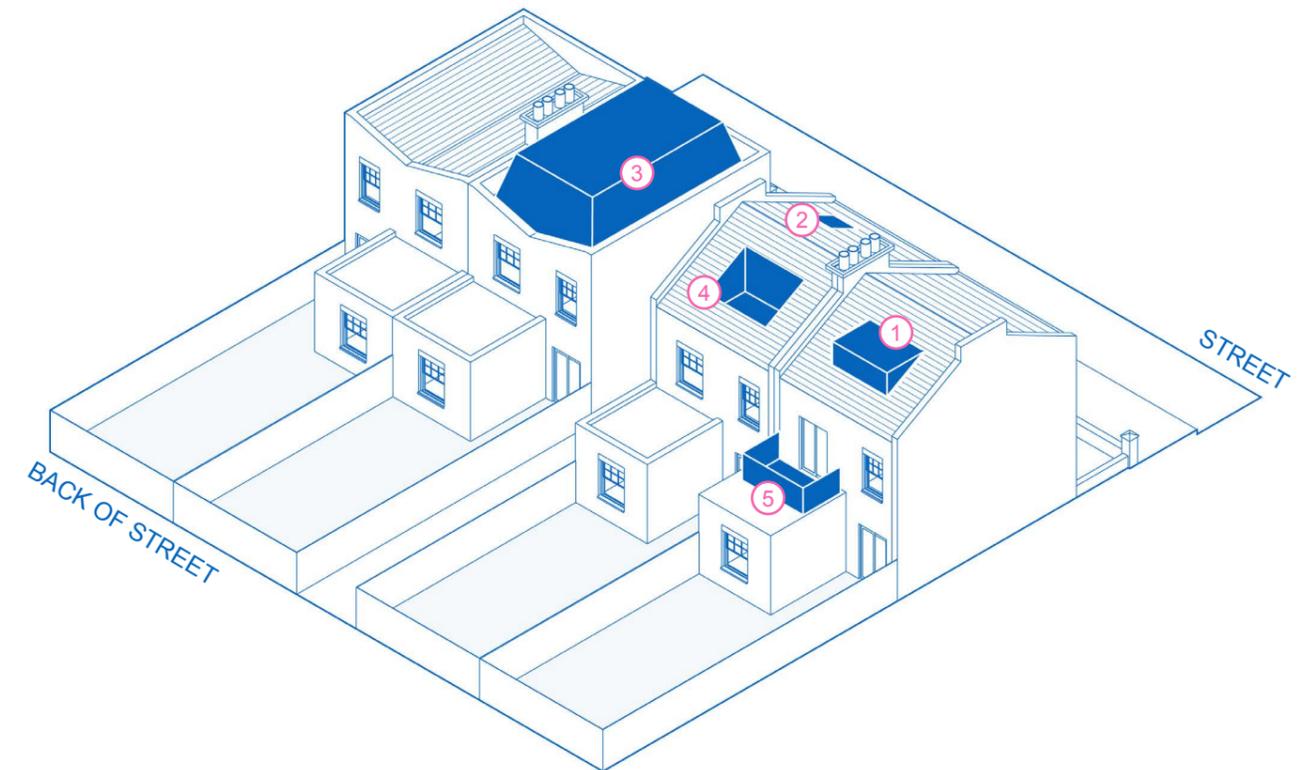
A successful roof extension would consider the overall roof form of the existing building, adjoining buildings and impact in key views (when relevant) and be proportionate to the roof slope being extended.

The previous guidance presented a hard line approach of restricting development at roof level on any unbroken roofline. Under this guidance, a more flexible approach is proposed, to give more weight to existing older extensions and to those allowed under permitted development, in the immediate context of the building being proposed for extension, within and outside Conservation Areas.

Not every unbroken roofline is of heritage value and therefore it is not worthy of preservation.

For buildings in Conservation Areas, the Conservation Area Appraisals identify if certain terraces or groups of buildings are significant due to their unbroken roofline, which means they hold heritage value. If subsequent development since the Conservation Area Appraisal has been issued, has altered the unbroken roofline, weight shall be given to the existing extensions, in the assessment of a new roof extension.

If your property is in a Conservation Area, check the Conservation Area Appraisal and the information about roof extensions.



INDICATIVE EXAMPLES OF DIFFERENT TYPES OF ROOF EXTENSIONS

1. Dormer
2. Rooflight
3. Mansard
4. Inset balcony
5. Balcony



Photo 22

2.2.1 DORMERS

Dormers are defined as a window that projects out of a sloping roof. The aim of the dormer structure is to house a vertical window to bring in more light and air into the loft space and make it habitable, without adding to the overall roof height.

The design of a dormer should therefore emphasise the glazing element and the solid structure should complement this in a form and scale appropriate to the roof being extended.

Roof dormers should sit within the roof slope and appear as an extension to the existing roof whilst the existing roof form is maintained.

Dormer windows fall within permitted development rights of single family dwelling houses (not flats) outside Conservation Areas subject to limitations and conditions set out under Town and Country Planning (General Permitted Development) (England) Order 2016 (as amended) Schedule 2, Part 2, Class B.

[Check the order and Householder Technical Guidance by Gov.](#)



Indicative examples of different types of dormers for properties in Conservation Areas.



Photo 23



Photo 24

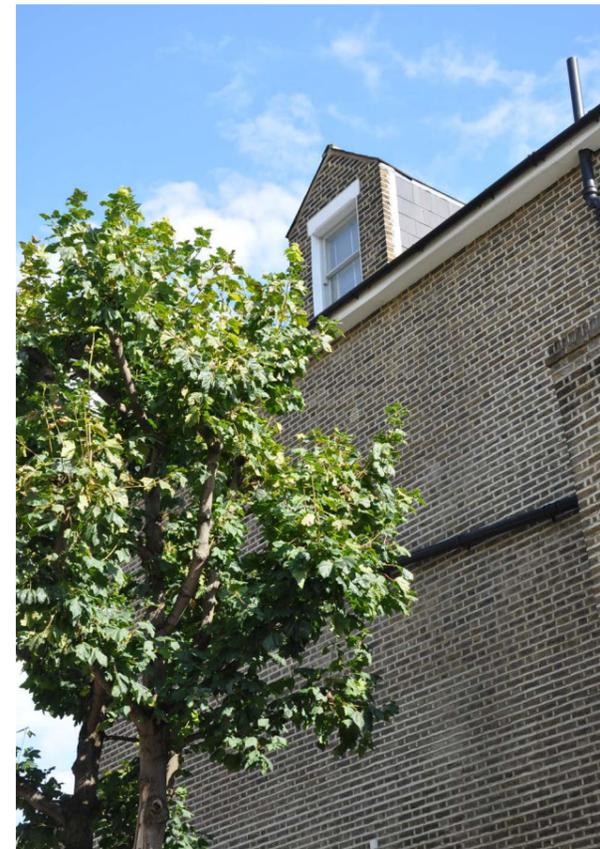


Photo 25



Photo 26

There are certain considerations that should be taken into account when designing a dormer window to ensure it is sensitively and appropriately designed for its context. A **dormer window** should ensure:



- The internal height of the existing loft space is sufficient to allow adequate habitable space more than 2m - headroom from staircase;
- Dormers should be subordinate in size to the roof slope being extended;
- The position of the dormer would maintain even distances to the roof margins (ridge, eaves, side parapet walls);
- Design of dormers would consider the hierarchy of window openings in terms of size and proportion, which generally result in smaller dormer windows than the ones at lower levels;
- The type, design and alignment of windows would relate to the ones below;
- The proportion of glazing should be greater than the solid areas and dormer cheeks should be of a high quality design and materials;
- Innovative approaches are encouraged and supported by pre-application advice;
- Dormer materials should complement the main building and wider townscape. Given the existing building stock, the use of traditional materials (timber, lead, hanging tiles) is encouraged; innovative approaches are encouraged and supported by pre-application advice;



- If not done already, consider insulating your whole roof;
- Include insulation materials into the dormer design and proposed drawings submitted;



- Consider whether the roof of your property is part of an unbroken roof line which is of heritage value - as set out in the Conservation Area Appraisal for your area;
- Consider whether there are other existing extensions in proximity, even if they are older or constructed under permitted development;
- Consider whether the dormer would have been permitted development if the property had not been converted into flats, only for properties outside Conservation Areas;
- On front roofslopes dormers could be a harmful addition due to its visual impact on the streetscene, especially in an unbroken roofscape. If your neighbouring properties do not have front dormers, then it is likely that this type of development would not be supported at application stage. Consider rear dormers and front rooflights instead;
- For side dormers you should balance carefully the dormer's quality and detailed design with its impact on streetscene and wider area. Side dormers in between buildings should carefully consider the existing architectural features on side elevation, such as chimney breasts and pots, and impact on the neighbouring amenity in terms of overlooking;
- Generally roofs of properties in Conservation Areas are part of the area's character, and as a general rule, dormer windows should retain a greater area of roof slope than properties outside Conservation Areas in order to preserve this character.



Existing character with front dormers along the street. Likely that a similar extension would be acceptable under a planning application.



On an unbroken roofslope, front dormers are unlikely to be supported by officers. You should consider rear dormer and front rooflight instead.

2.2.2 NEW ROOF LEVEL

Extending properties with a new storey at roof level is a well established method to increase the useable space of properties. This type of extension would retain more space at ground level available for greenery, garden storage and outdoor activities.

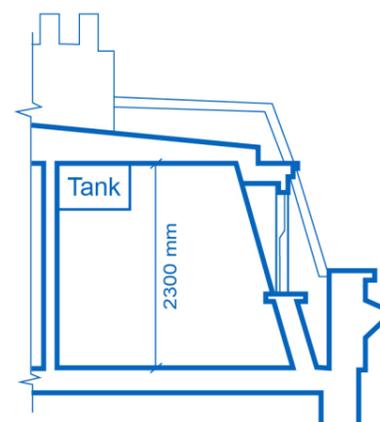
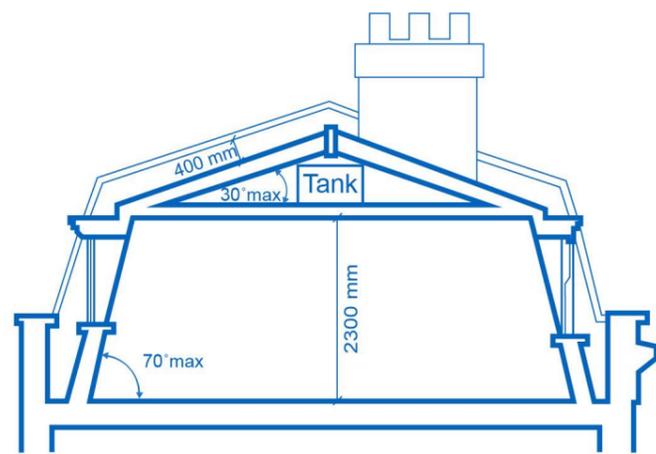
The most common type of extensions to the roof are mansards, traditionally associated with Georgian or Victorian buildings, as the existing roof structure with front parapets or valley roofs allow for a simple insertion of a new level in this traditional form.

In general, a traditional approach for mansard extensions would be preferred for traditional buildings. You are also encouraged to think about different approaches to additional roof levels. It is recommended that pre-application advice is sought where it is unclear what design approach would suit the host building.

There are two types of mansard roof extensions: a true mansard (A) and a flat topped mansard (B). In order to be designed successfully, you should follow the details below:

- The lower slope (usually 60-70°) should rise from behind the parapet wall, separated from the wall by a substantial set back and gutter;
- Retention of roof features such as original cornice, parapet, and chimney stacks;
- Windows should respond to the fenestration character of the host building and generally project at right angle similar to a dormer window with timber sash openings; and
- Materials to complement the existing roof and building and respond to the neighbouring context.

If you live in a terraced building and your neighbours have already extended their roofs with a traditional mansard, then it is likely that a similar extension would be an acceptable development.

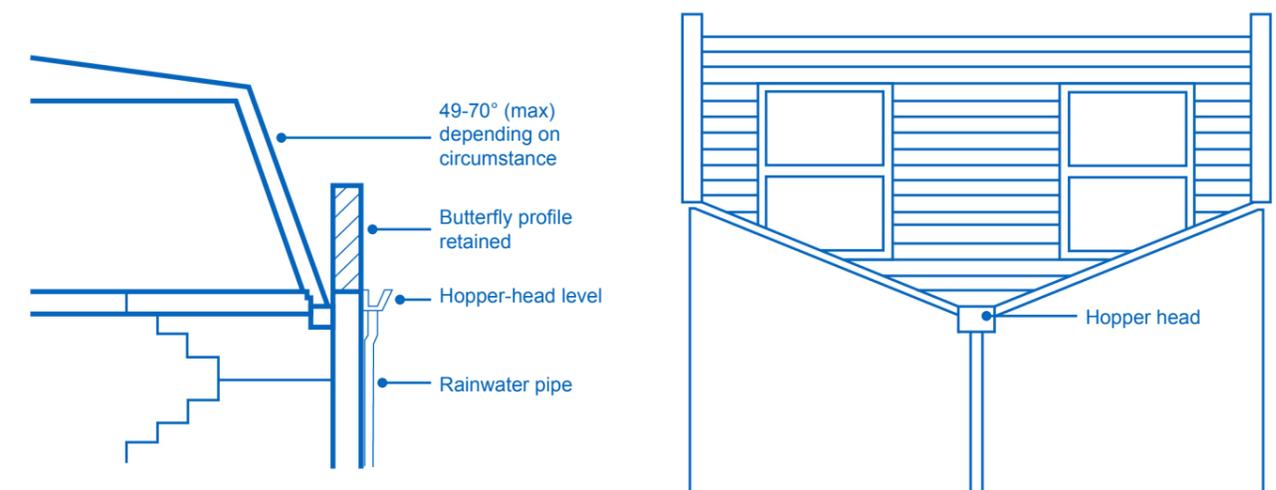


Mansard roof extensions: A. True mansard (left); B. Flat topped mansard



Photo 27

Above - Bad example of mansard extension which did not take into account the existing V shape roof parapet.



Example of mansard on butterfly roof

There are certain considerations that should be taken into account when designing an additional roof level, to ensure it is sensitively and appropriately designed for its context.

A new roof level should:



- Be subordinate to the host building;
- Include features informed by the host building and surrounding context;
- Take the form of a traditional mansard, a modern interpretation or a more innovative approach, supported by pre-application advice;



- Consider the installation of green roofs and/or solar panels. Biodiverse green roofs with a minimum substrate of 100mm are preferred rather than sedum roofs, as they provide a greater biodiversity value. For further information about the installation of a green roof, see [CPG on Energy efficiency and Adaptation](#);
- Consider other greening opportunities through planters;
- Consider adequate insulation materials to the new roof and floor below;
- Consider shutters and thick curtains to aid with the overheating in summer;

You should discuss your proposal with your neighbours to explore the possibility of a joint application. This could be secured by a section 106 legal agreement to ensure works are undertaken simultaneously.



- Be aware of the prominence of your home's roof to appreciate what impact an additional roof level would have on the streetscene and wider area;
- There are cases when an additional roof level could help re-unite a group of buildings and wider townscape. You should consider the scale of the adjacent development if proportionate to the host building and streetscene and reflect this into your proposal;
- Erecting a roof extension on a building within a complete terrace or group that currently has no extensions and it is not identified in Conservation Area Appraisals as being significant for its roofline, it is likely to be acceptable, generally, in a traditional form. If the complete terrace or group is identified as significant for its roofline, a new roof level is likely to not be acceptable regardless of its form. It is strongly recommended that pre-application advice is sought where it is unclear what design approach would suit the host building. You should also discuss your proposal with your neighbours to explore the possibility of a joint application;
- Where a group of buildings are originally designed as a complete composition a comprehensive design for the whole group is encouraged. Your design should be supported by pre-application advice, prior to a planning application submission. If a comprehensive design for the whole group is not achievable, you should still consider pre-application advice to ensure your proposal would not block further development;
- If buildings are part of a group where differing heights add visual interest, you should consider maintaining that pattern into the design of the new roof storey.



Photo 28



Photo 29

2.2.3 BALCONIES AND TERRACES

Balconies can provide valuable amenity space, especially for flats that would otherwise have little or no private exterior space. When considering a balcony for your property, it is important you appreciate the impact of this alteration on the roof form, host building, wider area and neighbouring amenity.

Depending on their size, balconies could generate harmful noise disturbance to your neighbours when in use. The intensity of the use of a balcony depends on the size and number of people they could accommodate at one time. A modest balcony is more likely to receive consent than larger ones.



Photo 30

There are certain considerations that should be taken into account when designing a **balcony**, to ensure it is sensitively and appropriately designed for its context. A new balcony should:

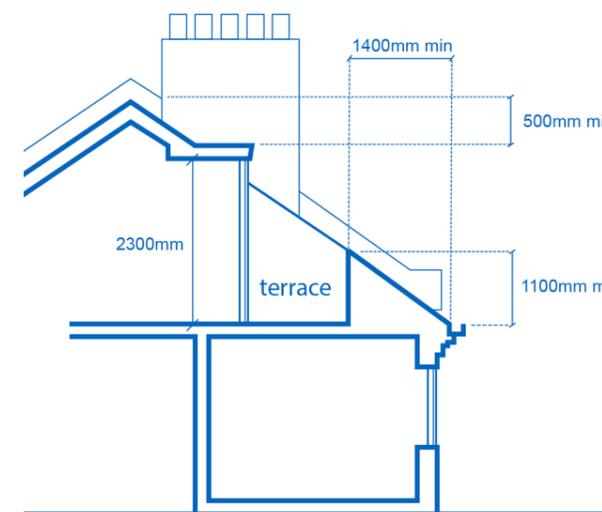


- Be subordinate to the roof slope being altered, and roof form overall;
- Preserve the roof form and complement the elevation upon which they are to be located;
- In case of pitched roofs, be set in within the roof slope, when possible;
- Should maintain the existing parapet height;
- Handrails and balustrades should be set back behind the line of the roof slope or parapet;
- Carefully consider materials for enclosure:
 - For traditional buildings, metal railings are preferred as they integrate well with the building's character, are more resilient, require low maintenance, support plants growth;
 - Glass balustrades could be appropriate for modern buildings with thin frames, or frameless; note they can generate sun reflection, are difficult to maintain clean, and do not support plants growth.
 - Timber balustrades could be appropriate at lower levels;
 - Raised parapets could contribute to shading where necessary and have different patterns, such as hit and miss brick pattern.
- The design of the balcony should take into account the risk of creating climbing opportunities for burglars;



- Consider spaces for planters within your balcony for screening and enhancement;
- When deemed necessary, privacy screens should be made of natural materials and allow plants to grow on them; plants act like a sound barrier, provide shade and lower air temperature;

You should engage with your neighbours prior to submitting an application for a balcony, so you can appreciate the impact this would have on their amenity.



Modest balcony, set in within the roofslope provides amenity space and retains the roof form.



- Be located at the rear of properties to ensure no impact on the streetscene and wider area;
- Be set back from roof's margins;
- For balconies as part of a roof extension within a valley roof, the front and rear parapet of buildings should be retained and balustrades to sit behind them;
- When deemed necessary, privacy screens should be no less than 1.8m in height, made of natural materials and support plants to grow on them.

