



SPELTHORNE DESIGN CODE

SPELTHORNE BOROUGH COUNCIL

NOVEMBER 2025

Appendix C Design of Residential Extensions

This appendix adds further guidance on the design of residential extensions in Spelthorne. It augments the requirements of the Design Code.

It is based on the previously adopted 'Design of Residential Extensions SPD'.

3. Design of Extensions

- 3.1 The purpose of this section is to assist with the production of well designed extensions. Most of the guidance equally applies to new dwellings.
- 3.2 It sets out guidance on assessing the character of the area, impact on neighbours, taking account of the character of the property and detailed design and use of materials. The order in which the guidance is set out provides users with a systematic way of ensuring all the relevant issues are considered in producing an acceptable scheme. A checklist is provided at the end of this section.
- 3.3 Single storey rear extensions up to 4 metres in depth on detached and semi-detached properties, and 3 metres on terraced properties, are usually acceptable subject to appropriate design and use of materials. However, in all cases the requirements in this section must be met and submitted plans should show all necessary information to enable this to be checked.

Character of the area

- 3.4 A successful design will have regard to the character of a locality and how the scheme is viewed from all sides. The factors in the following box will need to be considered and, as appropriate, taken into account:

Table 1: Character checklist

<p>The character of a locality or street is determined by a number of factors:</p> <p>Street proportions:</p> <ul style="list-style-type: none">• its width,• height of buildings in relation to the street width. <p>Building form:</p> <ul style="list-style-type: none">• type of housing – whether detached, semi-detached, terraced, flats or a mix of uses,• space between buildings - whether regular with even gaps or varied,• whether there is a common property design,• heights of buildings,• position of garages. <p>Building line:</p> <ul style="list-style-type: none">• the distance properties are set back from the road or footway,• whether properties are positioned in a straight line when looking down the street or if they are staggered or varied,• street corners. <p>Building design:</p> <ul style="list-style-type: none">• existence of a common architectural style,• particular design features or use of materials,• design of roofs and chimneys,• detailed architecture of buildings e.g. window sizes and spacing, glazing patterns and door positions, brick detailing and downpipes. <p>Any other features such as trees, open space, open plan estates and non-residential buildings and their design.</p>

- 3.5 Where there are strong and regular patterns in the layout, spacing and design of existing properties, these must be maintained to help the extension fit in with the area. A good extension or alteration is one that fits in sympathetically with the building being extended and its locality. Poor existing design will not be accepted as a precedent for poor schemes.



Typical street scenes in Spelthorne

Impact on neighbours

- 3.6 Most developments will have some impact on neighbours. The aim should be to ensure that the amenity of adjoining occupiers is not significantly harmed. This will require careful attention to the position, scale and design of the extension (or new dwelling) to avoid loss of privacy, outlook, daylight and sunlight; each of these issues is considered below. It will also be important to identify differences in levels with adjoining sites and buildings and for this to be shown accurately on street scene elevations.

Privacy and Outlook

- 3.7 The position of windows should be carefully considered to avoid views into the windows of an adjoining property or onto patios or sitting out and garden areas immediately to the rear of these properties and vice versa. Where windows for bathrooms and toilets can be looked into they must be obscure glazed to obscurity level 5¹. Where side windows are required to give daylight, and there is scope for unacceptable overlooking into an adjoining property, they should either be high level - above 1.7 metres - or non-opening and have obscured glazing, again to obscurity level 5. This will also apply to side windows to conservatories where unacceptable overlooking and therefore loss of privacy could arise.
- 3.8 In the case of upper floor accommodation Building Regulations may require some windows to be a formal means of escape in case of fire. However, where opening windows would conflict with amenity considerations planning permission may be refused. If a design requires main bedroom or other main windows to habitable

¹ Textured glass is made to provide different levels of obscurity to ensure privacy. Level 5 is the highest level of obscurity.

rooms² to be obscure glazed to avoid overlooking, this would fail to provide an appropriate level of amenity to the occupiers of the property and the scheme is likely to be unacceptable.

- 3.9 An appropriate degree of separation must exist between properties to avoid overlooking, preserve privacy and outlook and avoid an overbearing impact. Diagram 1 shows a typical street layout with three rows of properties facing the respective roads. It shows the minimum distances that must exist between dwellings when new residential development is proposed. The figures in brackets relate to three storey development.
- 3.10 The term 'storey' is widely used to describe the number of floors up to the eaves or gutter level of a roof and is helpful in conveying the general scale of a building. Scale is an important consideration in assessing a potential overbearing impact of a structure and its impact on outlook. This is why the distance measurements in Diagram 1 differentiate between two and three storey buildings. These minimum distances must be maintained when two or three storey extensions are proposed for existing properties.
- 3.11 Where a proposal to build or alter an existing building to provide accommodation within the roof space results in a bulkier structure the potential adverse impact and need for greater separation distances must be assessed.
- 3.12 An additional floor of accommodation within the roof space can also provide greater scope for overlooking and therefore loss of privacy. It will be important for this to be carefully assessed, and in particular whether greater separation distances between properties in the line of view from new windows are necessary to preserve privacy. This will be particularly important where, as a result of conversion, a separate unit of accommodation is proposed.
- 3.13 Any proposal which results in a structure that is overbearing due to its scale, or which leads to loss of privacy due to overlooking will be considered as unacceptable.
- 3.14 Diagram 1 shows three types of distance measurement:
 - a. Back to back; 21m total distance with a minimum 10.5m garden length for each property (30m and 15m respectively for three storey development). (These distances will also apply between the fronts of buildings and front to back).
 - b. Back to side (flank): 13.5m minimum distance (21m for three storey development). Where the flank wall has, or is proposed to have, windows to habitable rooms the separation distances in a. above will apply.
 - c. Set-in of property from the side boundary of 1 metre (2m for three storey development)
- 3.15 Application of these measures will need to take account of circumstances where properties are skewed and not directly facing each other or are not at 90° and therefore a lesser degree of overlooking or impact on outlook might arise.

² Habitable rooms include bedrooms, lounges, dining rooms, kitchens, breakfast rooms and studies.

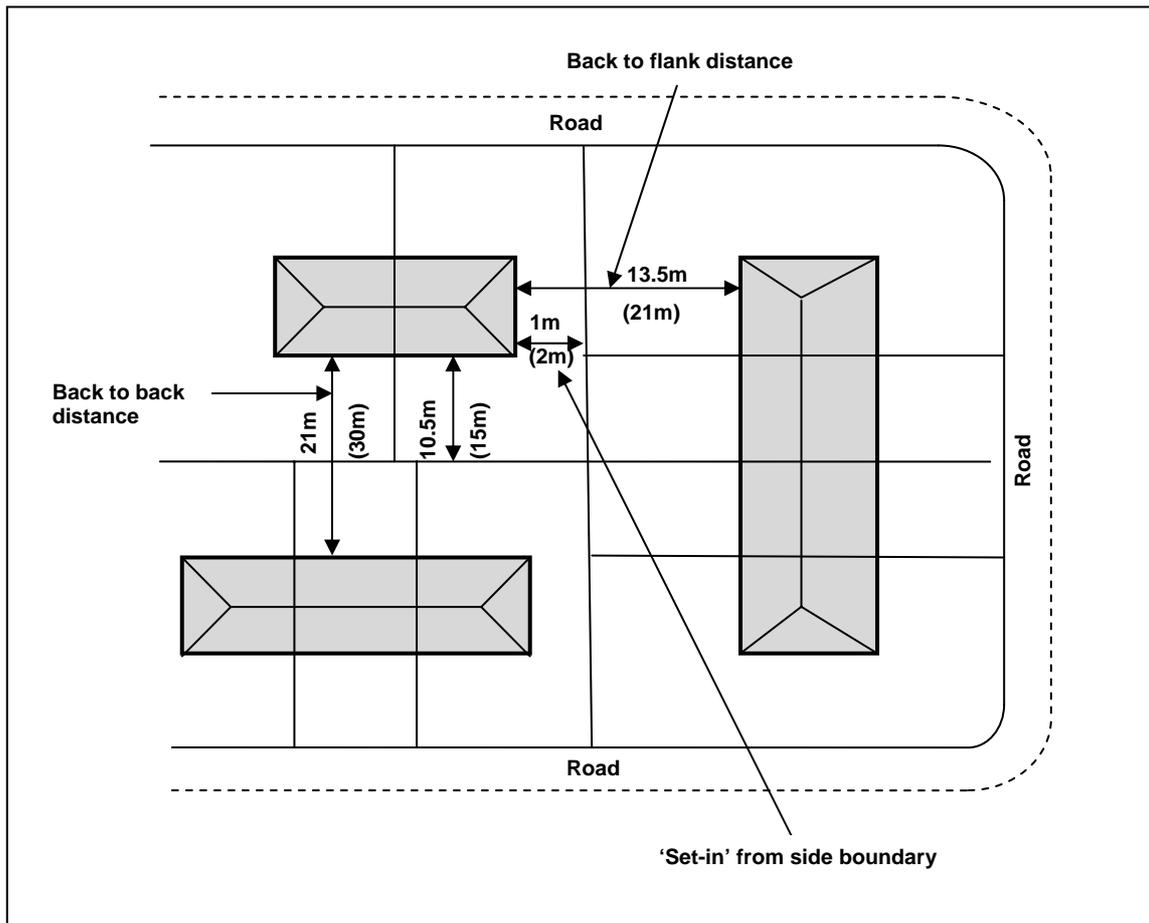


Diagram 1: Area to the rear of a property to be clear of development to preserve privacy and outlook. (N.B. the figures in brackets relate to three storey development).

- 3.16 The need to maintain privacy will also mean that the opportunity for balconies and roof terraces will be limited as they may allow overlooking into adjoining ground and first floor windows, patio areas and private garden space close to the house – whether to the rear or side. It should be noted that planning permission is usually required to put railings around the roof of a single storey extension to create a balcony or roof terrace.
- 3.17 Whilst home owners do not have a right to an uninterrupted outlook or view from their property across adjoining land, they rightly expect that adjoining extensions are not over-dominant and not so close that inappropriate levels of enclosure are created. The separation distances shown in Diagram 1 will also help to preserve outlook.
- 3.18 Large areas of flank wall to side and rear extensions can sometimes result in an overbearing impact and a poor outlook for adjoining occupiers. Where this is likely to occur the scale and the extent to which the extension projects from the rear of the host building will need to be limited.

Daylight

- 3.19 It is important for day to day tasks and health to allow sufficient daylight into dwellings. These requirements are highlighted in a British Standards document on 'Lighting for Buildings' and the Building Research Establishment (BRE) report 'Site Layout Planning for Daylight and Sunlight'.
- 3.20 The BRE document identifies the need to maintain a reasonable amount of light into habitable rooms. Such rooms include lounges, dining rooms, kitchens, breakfast rooms, studies and bedrooms. This will have a bearing on the position and height of extensions (and new dwellings) in relation to existing properties.
- 3.21 The BRE guidance provides three measures which the Council considers provides a useful guide to maintain adequate light levels and avoid excessive overshadowing by new buildings and extensions. Applicants will be expected to demonstrate on their plans that the following guidelines have been met.
- i. **25° Guide** – The purpose of this guide (illustrated in Diagram 2) is to ensure that in the area to the front or rear of a property no new extension (or new dwelling) is so close that a significant view of the sky is lost. No extension (or new dwelling) should break a 25° line as measured from the centre of the main window to a habitable room at a point 2 metres³ above ground level⁴. For guidance the height of the line at a point 10 metres distance is shown. In most cases this requirement can be met when the separation distances in Diagram 1 are followed. However, where there are differences in ground level or taller buildings are involved the 25° guide may require greater separation distances to maintain appropriate levels of daylight.

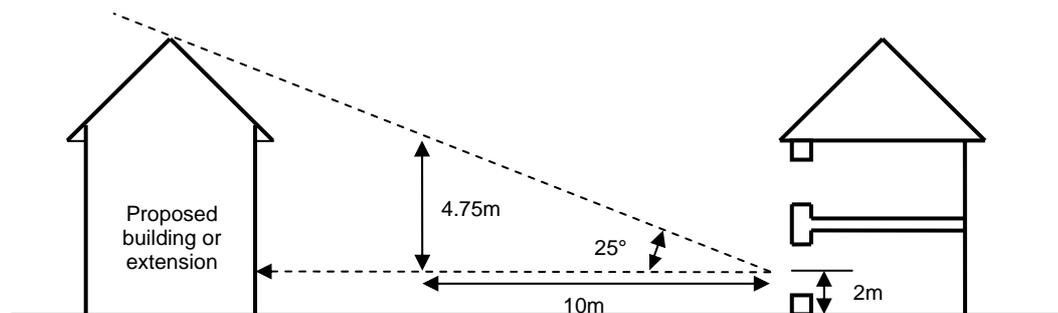


Diagram 2: Area of sky line to be clear of development to preserve daylight (25° rule)

³ The vertical measurement in Diagrams 2 to 5 will be taken 2 metres from ground level except where internal floor levels are significantly higher than 250mm and therefore a lesser impact on daylight might arise.

⁴ A two storey property set at least 13.5 metres away with a modest sized roof and with a floor level no more than 300mm above ground level will usually achieve the required clearance.

- ii. **45° Horizontal Guide** – The purpose of this guide (illustrated in Diagram 3) is to ensure that the position of two storey extensions (or new dwellings) either side of a property, whether to the front or rear, do not lead to an unacceptable loss of light to the windows of habitable rooms and patio/garden areas. Two storey extensions (or new dwellings) must therefore be positioned so that a clear area is maintained within a 45° horizontal arc from the centre of the face of the main window to a habitable room. Where this guide is met but unacceptable overshadowing of an adjoining patio/garden area is created within 3 metres of the rear of the property, permission may not be granted.

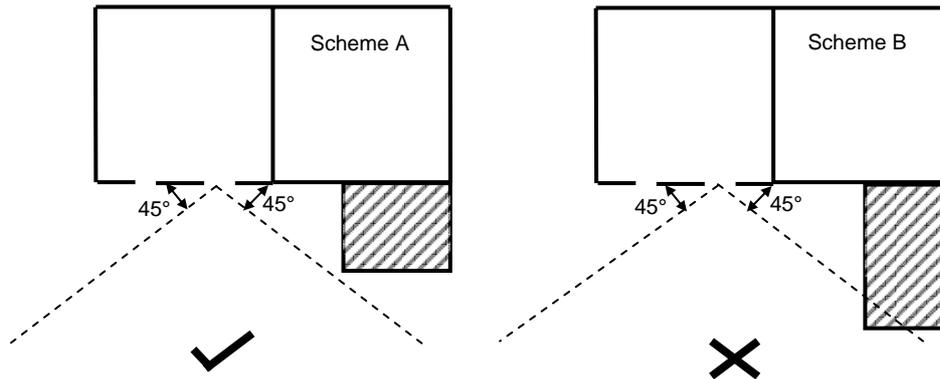


Diagram 3: Area to the side of a property to be clear of development to preserve daylight (45° horizontal guide)

- iii. **45° Vertical Guide** – The purpose of this guide (illustrated in Diagram 4) is to ensure that the height of extensions (or new dwellings) either side of a property, whether to the front or rear, do not lead to an unacceptable loss of light to windows of habitable rooms and patio/garden areas. Extensions (or new dwellings) must therefore be of a height that does not breach a 45° vertical arc measured from the face of the elevation of the affected property from the centre of the window to a habitable room nearest the extension. Where the rear elevations of properties are staggered in relation to each other, and an extension (or new dwelling) has only a very limited projection beyond the front/rear elevation of the adjoining property, any potential loss of daylight will be limited and compliance with the guide may be less critical. Unacceptable overshadowing of adjoining patio/garden areas must be avoided.

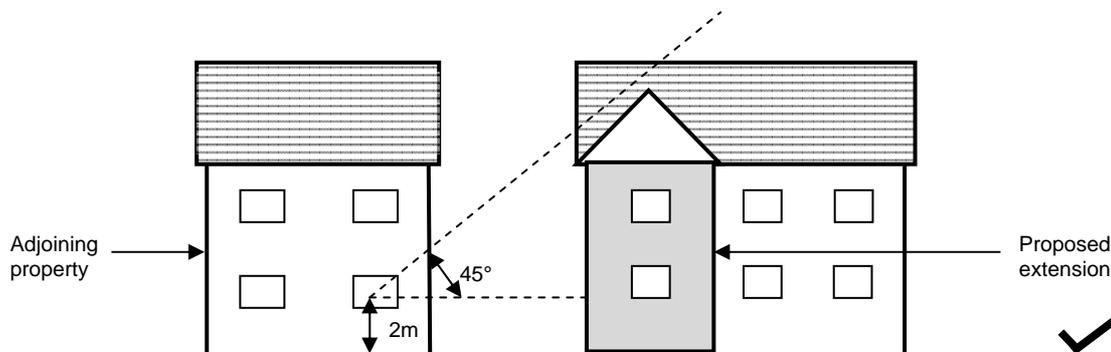


Diagram 4: Area to the side of a property to be clear of development to preserve daylight (45° vertical guide)

- 3.22 In a few cases the main window to a habitable room may be located on the side of a property. An unacceptable loss of light might therefore arise from an extension to the adjoining property. To avoid this problem any extension (or new dwelling) must not break a 45° vertical line drawn from the face of the affected side window as measured from a point 2 metres above ground level (see Diagram 5).

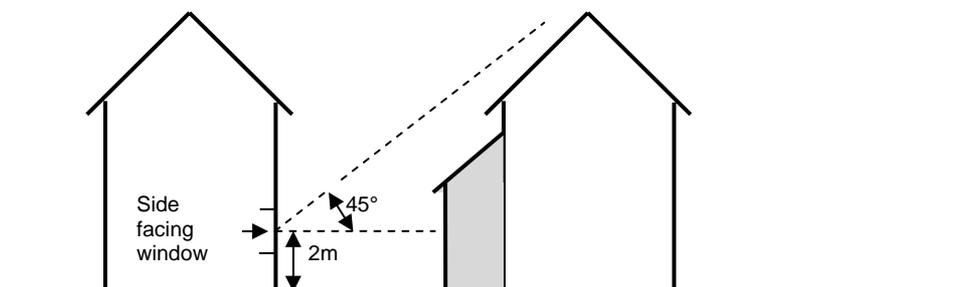


Diagram 5: Area of sky line to be clear of development to preserve daylight to principal side windows to habitable rooms

- 3.23 In assessing the adequacy of daylight to a side window the Council will also take into account the following circumstances which might reduce the adverse impact of an extension or new dwelling:
- The length of the flank wall facing the potentially affected window and therefore its degree of impact.
 - Any stagger in the position of the extension in relation to the side window, which may still allow good daylight to be retained.
 - Any stagger or skewing in the position of the properties to each other or difference in ground level which may also allow good daylight to be retained.
- 3.24 There are situations where there are secondary side windows to habitable rooms which provide significant lighting to rooms as a whole. The impact of loss of light through these may be important and must be considered in addition to the impact on the main window.
- 3.25 Permission will not be granted for irregular angled structures which have been designed to meet the above guides but are poorly proportioned and appear contrived and visually obtrusive.

Sunlight

- 3.26 In addition to providing daylight into buildings it is also important to consider the opportunity for sunlight to enter and to ensure existing sunlight levels are not significantly reduced by new development. The orientation of principal windows towards the sun is an important consideration in the design process and should be taken full advantage of.
- 3.27 Regard should also be had to ensuring no significant loss of sunlight. This is most likely to occur when an extension or new dwelling is to the south of an existing property. There should also be no significant loss of sunlight to patio and sitting out areas up to 3 metres from the rear of properties (or to the side where this is the main private sitting out area).

Character of the property and appropriate forms of extension

- 3.28 Extensions must respect the character of the host building in scale and design and should be difficult to distinguish from the original structure.
- 3.29 As a general approach extensions should not over dominate the host building. Whilst in some cases an extension to the side or rear can be fully integrated to appear as part of the original building, in most cases this cannot be achieved or may be inappropriate and the extension should be designed to appear subordinate. Extensions should be well proportioned in relation to the host building with appropriate symmetry of windows and other detailing.
- 3.30 Where the existing garden is comparatively small in relation to the house, the size of the extension may need to be limited to avoid an extended property being overlarge in relation to its plot and out of character with the locality. The Council will require the following minimum private garden area to be maintained, but a greater amount is needed in the case of larger properties where larger gardens are characteristic of the area. Only useable garden space to the side and rear of a property will be regarded as private and space for garages, driveways and access ways will not be included. The following minimum areas will apply:
- 3.31 Where an owner proposes to carry out work which involves work to a party wall, boundary wall or excavation works near a neighbouring building they must notify all adjoining owners where that work falls within the terms of the Party Wall etc Act 1996. This is in addition to any planning permission or approval under the Building Regulations. See Appendix 5 for further information.

Table 2: Minimum garden areas

a.	3 or more bedroom semi-detached or detached dwellings (new or extended)	70 sqm per unit
b.	Terraced or 2 bedroom semi-detached dwellings (new or extended)	60 sqm per unit
c.	Flats (new or by conversion) or 1 bedroomed dwellings or sheltered housing schemes	35 sqm per unit. Where amenity space is shared the requirement will be relaxed to 35 sqm per unit for the first 5 units, 10 sqm for the next 5 and 5 sqm for each unit thereafter. Usable balcony floorspace may be counted in this provision.

- 3.32 The remainder of this section is divided into four parts dealing with different types of extension and alteration and the design issues they raise:
- Front extensions
 - Side extensions
 - Rear extensions
 - Dormers and roof alterations

Front Extensions

- 3.33 Front extensions are, by their nature, prominent and can have a significant impact both on the street scene and the appearance of the host building.
- 3.34 Front extensions should be behind the prevailing building line, whether they are single or two storey, unless they clearly do not detract from the street scene or cause problems to neighbouring properties. The roof form should reflect the design of the host building and overall the proportion, symmetry and design detail in relation to the host building will be particularly important.
- 3.35 Any form of front extension must not result in a loss of parking spaces where this might cause highway problems through on-street parking. Further details of car parking standards and size of parking spaces are set out in the Council's 'Parking Standards' document.



Balanced front extension to a detached property



Front extension to semi-detached property with roof form to match main roof

Side Extensions

- 3.36 Side extensions will be visible from the street and can be prominent in relation to the host building, therefore attention to the position and scale of side extensions is important. Generally such extensions raise three main design issues:
- Respecting the character of the host building.
 - Avoiding what is often called a 'terracing' effect. This is where the visual gaps between buildings are a feature of a locality and where the loss of these gaps will give an impression of an almost continuous built frontage. This is particularly harmful to the character of an area where two storey side extensions are proposed and the regular and often limited gaps existing between properties are reduced.
 - Impact on neighbours by loss of daylight, sunlight and privacy.
- 3.37 To respect the character of the host building the extension should be in proportion and not over-dominate it. Side extensions should only exceptionally exceed two thirds of the width of the host building.
- 3.38 Problems can arise where there are irregular building lines and part of an adjoining building is already set back. The extension may therefore be particularly prominent and impact on amenity. In such cases a greater degree of 'set-back' and/or 'set-in' may be required.

Single Storey Side Extensions

- 3.39 Single storey side extensions should appear subordinate to host buildings of 2 or more floors of accommodation. This can be achieved by an appropriate 'set-back' from the front elevation. This should normally be a minimum of 300mm, and may need to be greater depending on the scale of the extension relative to the host building.
- 3.40 A minimum 'set-in' of 250mm from the boundary is usually necessary to allow for construction of foundations within the property boundary and to avoid roofs, gutters and downpipes overhanging neighbouring properties.
- 3.41 Roofs should have a full pitch. Dummy pitched roofs will only be acceptable where it is demonstrated that a better alternative approach cannot be achieved (see paragraph 3.50 to 3.56 for further details).

Two Storey Side Extensions

- 3.42 Two main design approaches can be taken with two storey side extensions:
- a. **Integrated approach:** This can be successful with detached houses located on a reasonably wide plot in a street of varying house designs and sizes. The extension should be designed in a way to replicate the existing design. This approach may also be appropriate for end of terrace properties. It will be important this does not result in a property with poor symmetry and proportions and that all the existing architectural detail is copied. The shape of the existing roof will dictate the extent to which the integrated approach can be followed. It will not work with gable ended roofs with a pitch running front to back.



Integrated side extensions

In streets where the gaps between buildings are regular and limited, and all existing properties are of the same or similar proportion, the integrated approach will not be acceptable as the extended property would clearly appear out of scale and could result in a 'terracing' effect. Poor existing extensions in a street will also not be accepted as a precedent.

- b. **Subordinate approach:** In the case of semi-detached properties and detached buildings which are symmetrical or the gaps between buildings are limited, an extension should normally be designed to be subordinate to the host building. Where a subordinate approach is required this can be achieved by an appropriate

'set-back' and 'set-in'. Possible exceptions are where the front elevation is already irregular, e.g. due to projecting bay windows or a stagger in the original design, and the extension will not result in an overbearing and unbalanced appearance.

- i. **'Set-back'** - Two storey extensions will need to be set back at least 1 metre, unless a lesser distance is clearly justified in supporting information with the application. In the case of larger host buildings/or larger extensions the distance may need to be greater. Generally the wider the extension in relation to the host building the greater the 'set-back' is required. The roof shape should follow the style and pitch of the existing roof. Hipped or gabled roof types should generally be copied. Window proportions and other detailing, including use of material, should match the existing.



Subordinate side extensions

- ii. **'Set-In'** - In the case of two storey extensions a minimum 'set in' from the boundary of 1 metre will be required. For large extensions, or large host properties, or where a more generous spacing between properties already exists, a greater degree of 'set in' from the boundary will be required. The test is whether the resulting extension is clearly subordinate, a terracing effect has been avoided where it would be harmful and the extended property is in keeping with the character of the area. Diagram 6 shows how the 'set-back' and 'set-in' distances should apply.

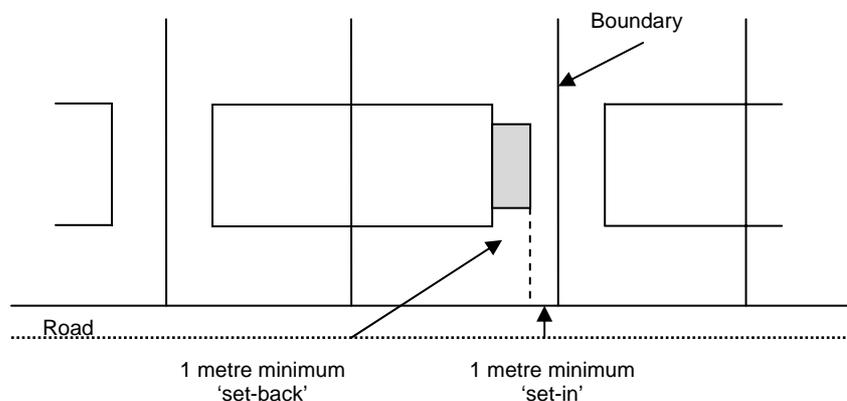


Diagram 6: 'Set-in' and 'set-back' required for two storey extension

Rear Extensions

- 3.43 The quality of the design of rear extensions is just as important as front and side extensions. Whilst they are less visible from the front they will be particularly visible from all properties that back onto the rear garden and can potentially cause loss of amenity to neighbours. Where the property is a corner plot or close to a corner, rear extensions will be particularly visible from the side road.
- 3.44 Very large extensions may also result in the scale of extended houses being out of character with their locality. Two-storey extensions which have a footprint greater than 50% of the original house are likely to require particular care in design and justification.
- 3.45 Generally rear extensions should be subordinate to the original house in both scale and design. However, where the roof form of the existing house allows, and there is no unacceptable impact on neighbours, an 'integrated' approach may be appropriate.



Integrated full width rear extension with subordinate single storey element



Subordinate two storey rear extension

- 3.46 Particular care is required when extending to the rear of terraced properties. The cumulative effect of two storey extensions in particular either side of a mid-terraced property could be overbearing, and subsequent extensions which enclose or 'box-in' the rear of a mid-terraced property may not be acceptable.

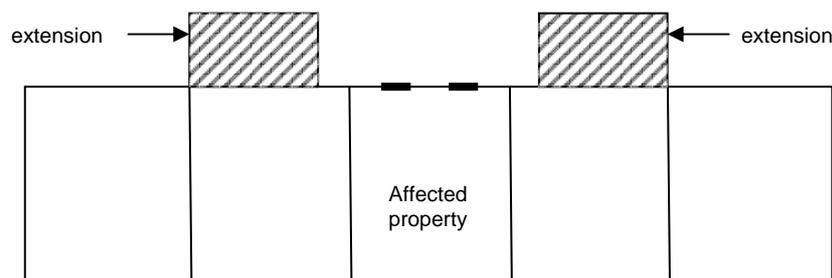


Diagram 7: Unacceptable boxing-in of mid-terraced property

Single Storey Rear Extensions

- 3.47 Single storey rear extensions can have flat roofs although pitched roofs are encouraged where it will enable the extension to fit in better with the host building and there is no adverse impact. Where a single storey extension is particularly prominent from outside the site a pitched roof will be required. The design of any pitched roof should follow where possible the style and pitch of the host building's roof. Flat roofed extensions and the height of pitched roofs nearest the property boundary should not normally exceed 3 metres in height.
- 3.48 Where single storey buildings are being extended the roof should tie into the existing roof and an integrated approach may be appropriate, as described below in the section on two storey extensions.
- 3.49 Some conservatories have a high proportion of glazing on side elevations and lead to a loss of privacy to adjoining properties. Where this occurs, solid walls or opaque panels will be required on the elevations concerned. Conservatories should be of a scale that are subordinate to the host building and, where possible, reflect its design.

Two Storey Rear Extensions

- 3.50 Two storey rear extensions should normally be clearly subordinate to the host building. However, where the extension covers the full width of the property an integrated approach may be more appropriate where the existing roof style allows that. Two storey extensions should always have a pitched roof, unless the host building has a flat roof.

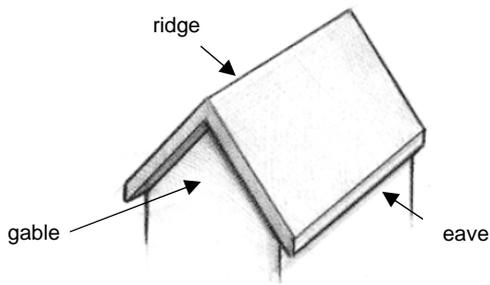


Two storey full width extensions with subordinate roof

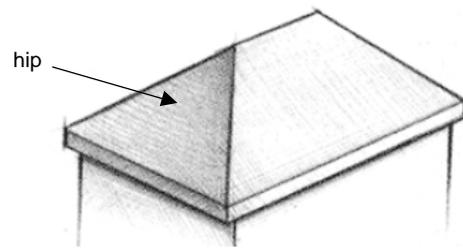
Roofs, roof lights, dormers and roof extensions

- 3.51 The type of roof over an extension is critical to a successful design and can help integrate the new with the existing building. They should match the existing angle of slope and design in terms of hipped or gable ends.
- 3.52 Roofs which are altered or rebuilt to accommodate a full floor of accommodation within the roof void can often be taller, bulkier and with a steeper pitched roof than would otherwise be the case, particularly if areas of flat roof are incorporated between sections of sloping roof. Where large areas of flat roof between pitched roof areas are proposed and/or where roof pitches in excess of 45° are created there is a risk they may be out of character with a locality. The impact of such alterations on adjoining properties and the locality as a whole in terms of overlooking and bulk will be carefully assessed.

Diagram 8: Types of roof form



Gabled roof



Hipped roof

- 3.53 Dummy pitched roofs which take the form of a tiled up-stand along the front wall of an extension or a short section of ridge should be avoided. This artificial approach is rarely successful in terms of the proportions of the roof to the existing building and especially when the outer corner is visible. They will only be acceptable where it is demonstrated that no better alternative approach can be achieved.
- 3.54 New roofs, roof extensions, dormers and velux style roof lights can harm the character of the existing property and therefore need to be carefully designed. Regard must be had to the position and scale of any alterations and their effect on the proportions and symmetry of the roof, particularly in the case of semi-detached and terraced properties.
- 3.55 Ideally the position of roof lights on sloping roofs should align with the windows on the elevations below and be positioned symmetrically.
- 3.56 Front dormers can have an adverse impact on the street scene and need to be subordinate to the roof and be well designed and proportioned. Care will also be needed in the case of dormers on side and rear elevations where problems of potential overlooking may arise. Well designed dormers should:
- be located centrally or symmetrically on a roof,
 - be set-in a minimum of 1 metre from the roof edge, down 0.5 metres from the ridge and up 1 metre from the eaves,
 - incorporate a roof which is compatible with the main roof,
 - not be over-dominant or out of proportion.



Dormers aligning with windows below and roof form and detail to match existing roof



Dormers to match existing roof

- 3.57 Where it is proposed to add an additional floor to an existing property, raise the height of the roof or change its shape, particular attention is required to the following:
- a. The scale and proportions of the extended property must be in keeping with the character of the area and in particular the adjoining properties.
 - b. The position of windows should not lead to unacceptable overlooking.
 - c. The position and design of windows should reflect the alignment, symmetry and design of existing window openings.
 - d. The roof design and any dormers should reflect the character of the property.
 - e. Materials must match or complement those used in the existing building.

Detailed Design and Use of Materials

- 3.58 Good detailed design and use of materials is critical to an acceptable scheme, whether on extensions or new residential development. Attention to detail will ensure that extensions will blend well with the existing property. Poor quality design with little or no attention to detail will be unacceptable.
- 3.59 It is important that these issues are considered as an integral part of the design process and that all design detail, including where different materials will be used, is clearly shown on submitted plans.
- 3.60 Key aspects of the detailing of extensions and use of materials are set out below.
- a. **Bricks.** New brickwork must match the existing in:
 - i. Colour, texture, and size of the bricks - good second-hand bricks which are free of mortar on their face can be useful when extending older buildings, particularly where there is likely to be a problem of matching imperial and metric sized bricks. Some existing bricks may be salvaged and re-used.
 - ii. Mortar colour, thickness and pointing.
 - iii. Existing detail such as:
 - String courses – horizontal bands in brick either relieved from the wall surface or shown by bricks of a different colour,
 - arches over windows and doors where bricks are laid vertically. Such arches may be horizontal or curved,
 - brick detailing around windows and doors,
 - any other special detailing in brick inherent to the design of the original house, e.g. quoins or artistic elements.



Brick and stone detailing



Matching rendering

- b. **Other construction materials.** Some buildings may have areas of rendered wall, tile hanging, cladding or mock timber framing; these materials may also be generally characteristic of properties in a street. It will be important to reflect the existing use of materials on a property and those found in its immediate locality. In all cases materials should be durable for the life of the building and capable of being maintained in good condition so that there is no long term detraction in appearance.
- c. **Roofs.** These should match existing materials, in particular:
 - i. Tiles or slates should be the same size, colour and texture as the existing. This includes ridge and hip tiles. When undertaking new work it may be possible to re-lay some of the existing materials so, for example, all the original tiles are on front elevations and new tiles at the rear. Alternatively good second-hand tiles could also be considered.
 - ii. Decorative finials and gable end upstands should be copied.
 - iii. Any details of lead flashing around chimneys, roof valleys or windows should also be copied.



Roof, brick and stone detailing



Brick, stone and lead detailing

- d. **Windows and Doors.** These provide important detailing to the elevation of a building.
 - i. **Size.** The size of window openings and glazing patterns should match the existing.
 - ii. **Window type.** Bay windows may need to be copied where symmetry is important. Sash or casement styles need to be followed.
 - iii. **Alignment.** Windows at the upper floor should generally align and be of the same width as those at ground floor level.
 - iv. **Amount.** The amount of window openings to areas of brick work should be in proportion. Very small window openings in large areas of otherwise unrelieved brickwork on the front or rear elevation can look stark and unattractive. Whilst areas of glass may have to be limited for reasons of thermal efficiency, where this imposes a limit on window size, other design features such as string courses and brick and stone detailing to window surrounds should be considered to provide an attractive and well proportioned façade.
 - v. **Replacements.** If replacing other windows in the main house when building an extension it is important to retain the original glazing pattern appropriate to the age and style of the house and avoid large and often unsymmetrical areas of glass.

- vi. **Reveals.** The extent to which existing windows are recessed into the elevation and reveal the brick work on the inner face of the window opening should be copied. An appropriate degree of recess can have a significant impact on the appearance of a property.



Diagram 9: Components of a window and opening

- e. **Renewable Energy.** The implications of this need to be fully considered in the design of new residential development, extensions and retro-fitting of existing properties to ensure a discreet installation. Where, for example, solar panels are contemplated it will be important that the roof area and orientation toward the sun are appropriate and account is taken of their impact on the character of the extended property. These panels should be flush mounted to the roof surface as shown in the following photographs. Propping up panels on flat sections of roof should be avoided. Details of the position of renewable energy equipment should be shown on submitted plans.



Flush mounted solar panels

- f. **Other details.** There will be other elements of detailing which need to be carefully considered. These include the design and position of hoppers and down pipes, stone detailing to existing window sills and window reveals, lead work as well as the appropriate siting of boilers in relation to the positioning of external flues and vents.

Design of Extensions – Checklist of key issues

1. Is the site in an area where particular constraints apply, e.g. Green Belt, flood risk, conservation area or area of archaeological importance?
2. Is the building an Ancient Monument, Listed Building or locally listed?
3. Have all existing trees been surveyed, shown on the plans and given sufficient space to continue growing.
4. Has an accurate site survey been undertaken and the exact position of adjoining buildings, their windows and other important features been established?
5. Does the design reflect the character of the area?
 - are gaps between buildings being maintained?
 - are building lines followed?
 - has a terracing effect been avoided?
6. Can it be built without the foundations, roofs and gutters encroaching onto your neighbour's property?
7. Has the design avoided problems for neighbours by taking account of:
 - privacy?
 - outlook?
 - daylight?
 - sunlight?
8. Does the design reflect the character of the existing house?
 - where it needs to be subordinate is this achieved?
 - is the width, depth, 'set in' and 'set back' appropriate?
 - will sufficient garden space remain?
 - does the extension have an appropriate roof which ties in with the existing roof?
 - are all the design features of the existing house followed through?
 - do materials match in every detail?



Prepared for Spelthorne Borough Council by



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