This information can be provided in an alternative
format or language on request Tel: 01767 602405

Extensions and Alterations: A Design Guide for Householders
Contacts

Planning Division
Tel: 01767 602324
Fax: 01767 602354
Email: planning.admin@midbeds.gov.uk

Conservation and Design
Tel: 01767 602493
Fax: 01767 602333
Email: conservation@midbeds.gov.uk

Building Control
Tel: 01767 602377
Fax: 01767 602395
Email: building.control@midbeds.gov.uk
# Contents

## Section one

1.1 Status of This Guide 02  
1.2 What Will Require Planning Permission? 02  
1.3 Using This Guide 02  
1.4 The Importance of Consultation 03

## Section two

2.1 Analysis of Requirements and Limitations 04  
2.2 The House in its Site 05  
2.3 Consider the Character of the Surroundings 06

## Section three

3.1 Maintain Character 07  
3.2 Subservient Extensions 11  
3.3 Ensure Privacy for Neighbouring Properties 12  
3.4 Ensure Adequate Daylight to Neighbouring Properties 12

## Section four

4.1 Side Extensions to Semi-Detached Houses 13  
4.2 Garages 14  
4.3 Rear Extensions 15  
4.4 Extending into the Roofspace 17  
4.5 Porches 18  
4.6 Boundaries 19

## Section five

5.1 What will require Permission? 21  
5.2 Submitting an Application 21

## Appendix one

Glossary 22  
Contacts 23
This Guide has been compiled to provide advice to homeowners, builders and designers about the factors to consider when planning extensions and alterations to individual houses.

The Local Authority is committed to improving the quality of design throughout Mid Bedfordshire. This is reflected in the policies of the local plan, Government advice in Planning Policy Statement No 1 and through the wide ranging advice from the Commission for Architecture and the Built Environment. As a consequence of this recent advice the Design Guide for Residential Areas has been re-written and this document has been updated to encourage higher standards of extensions and alterations.

Estate agents agree that extensions and alterations which are out of character with a house or with the area, or which are poorly designed or constructed will adversely affect the value of a property. Increasingly people are recognising the value of maintaining and enhancing the character of their house and its setting by sensitive designs and choice of materials which are sympathetic to the original building and retain original features.

1.1 Status of this guide
This guide was approved as a Technical Guidance Document to the Mid Beds Local Plan First Review for the consideration and determination of planning applications for residential areas in October 2004.

1.2 What will require Planning Permission?
Most proposed work will require Planning Permission unless the work is considered like-for-like, replacement or repair, where it is in the category of permitted development. It is advisable to check with the Authority as to whether the proposed work requires permission. A few areas in the District have permitted Development rights revoked under an “Article 4 Direction”, as certain features of houses or boundaries are considered important.

If the property is a Listed Building or in a Conservation Area then Listed Building Consent or Conservation Area Consent will be required. The Conservation team will provide advice in this case.

1.3 Using This Guide
The structure of this guide follows the process of decisions required to produce a satisfactory design which reflects:

- The requirements of the owner, after careful consideration of the alternatives
- The character and structure of the house
- The consideration of the legitimate interests of adjacent householders
- The character of the house on its site and in its setting
- The need to gain Building Regulation and Planning Approval through providing appropriate information in sufficient detail

It is essential to see the proposed work within its context; the effect on the building, neighbours and the street scene.
1.4 The Importance of Consultation
Prior to proposals being finalised, it is strongly recommended that homeowners and/or their agents discuss proposals with a Development Control Officer in the planning department and possibly a Building Control Officer. Pre application discussions are recommended as the Authority does not accept amendments to applications after they have been submitted.

This is particularly important if the building is Listed and/or is situated in a Conservation Area, as questions of the volume and scale of proposals, their materials and details will be closely considered.

It is also important to consult with adjacent property owners to inform them of proposals and to allay any anxieties. There may also be opportunities to undertake coordinated or matching alterations and extensions, which would be of benefit to the final appearance of the proposals, especially if properties are semi-detached or terraced.

Unless the work is of a minor nature or the homeowner is experienced in these matters, it is advisable to appoint an agent such as an architect or other qualified designer, especially if the existing building is Listed or in a conservation area.
Section two
First Steps

2.1 Analysis of Requirements and Limitations

What is required of an extension or alteration?
Have all the options been considered? The location of an extension on one side of the house, to the roof space or the rear can have significant cost implications. Can extra space be found by changing the use of existing rooms?

There will be limitations on the extent and location of any alteration or extension: these must be recognised early in the design process.

- Are the requirements likely to result in an extension which would dominate the existing building or lose too much of the garden space?
- Will the proposals result in a coordinated overall design or would they appear as a patchwork of alterations and extensions which do not relate to each other or to the house?
- Would the requirements result in the removal of substantial portions of structural (loadbearing) walls or chimneys and chimney breasts, thus considerably eroding the character of the house and result in costly remedial work?
- Can matching materials be found for alterations? If so, will they match the weathered appearance of the original materials? (See ‘Materials’ in section 3.1)

If extending into the roofspace:
- Is there sufficient headroom?
- Will the joists require strengthening?
- Can a fixed staircase be easily inserted in a logical location?
- Will dormers or rooflights adversely affect the character of the house?
- Can adequate fire escape be incorporated?

Would the extension of a living room result in a long space with limited daylight?
The size and shape of the site, the position of the existing house on the plot, the relationship of the front of the house to the building line and need to retain privacy and daylight for neighbours, can all have a substantial effect on the possibilities for extension. Added to this there may also be questions of orientation to achieve good sunlight, view and the relationship with any trees on the site or an adjacent site.

The best location for an extension will be determined by aligning it with the house, or in some cases relating it to a boundary. Awkwardly angled extensions can result in some waste of remaining garden space.

It is essential to see the proposed work within its context; the effect on the building, neighbours and the street scene.
2.3 Consider The Character of the Surroundings

Stand back and look at the house within the setting of the street as a whole and imagine the effect of the proposed alterations or extension as others might see it. Will the positive aspects of the street and the views of the property be maintained or even enhanced by the proposals?

The following questions can help to identify the character of the surroundings, suggesting important factors which should influence the design of the alterations and extensions.

- Do all the houses have spaces between them? Would the proposals harm this pattern? (A)
- Do all the houses appear to have the same number of storeys? Would the proposals change the scale of the street? (B)
- Is there a dominant style or colour of materials? Would the materials chosen for the proposed work jar or fit in with the established materials and styles? (C)
- Are there particular proportions to the windows? Are they more vertical than horizontal for instance? (D)
- Is there a pattern of features which gives the street its character, such as bay windows, porches, chimneys? (E)
- Do the front boundaries share common characteristics? For example, hedges, low walls, railings or substantial gateposts (F)
- Even though proposals may be located at the rear, are they likely to be visible from the street or the wider setting? For example if the property is near a corner, would this be a problem? (G)

Analysis

Before starting to design the extension or alteration, draw a plan of the house and the whole of the site including parts of neighbouring properties, noting all the factors outlined above. This may help to analyse the issues and will help to justify the decisions taken. Include the north point in order to establish the path of the sun. Obtain an Ordnance Survey map of the site and the surrounding area to check the impact of major alterations on the wider area.
Basic Design Principles

The following four principles should form the basis for design proposals for alterations and extensions.

3.1 Maintain Character

All design decisions, large scale or detailed, will have an effect on the success or otherwise of the proposals in maintaining or enhancing the character of the house in its setting.

Would the extension spoil the proportions of the house?

- Does the house have a symmetrical design?
- Would the extension make the house look lopsided?
**Roof pitch and design**

It is advisable to maintain the original pitch (angle) of the roof and keep to the general roof design (gable end or hipped) in any extension. By retaining the same roof pitch as the original, it is likely that this will ensure that the size and proportion of the extension in are related to the original building.

It is usually not appropriate to mix hipped and pitched roofs. (Below)

There may of course be exceptions to this, e.g. a lower pitched lean-to roof is often characteristic of single storey extensions to cottages.
Window layout and proportions.
Thoughtless placing of a new window can spoil the balance of an elevation. Similarly, Window proportions which are alien to the original will emphasise the impression that the alterations have not been sensitively considered.

Windows and doors are usually set back by the depth of a standard brick (4.5 inches/112 mm) and windows have substantial cills (often of stone or reconstructed stone). These features protect the window frames and also give a sense of solidity to a house by casting a shadow on the elevation. Avoid the insertion of windows and doors on the front face of the elevation of pre 1920’s houses as it detracts from their character by flattening the elevation.

The house may also have some features which are emphasised by brickwork patterns in a different colour. These patterns should be respected when new windows or doors are inserted or where existing openings are blocked up. Go with the details on the existing building rather than imposing styles from elsewhere onto the house.
Brickwork
Brickwork, especially in houses built before about 1920, is usually laid in a different bond than later houses and the joints are usually thinner.

Flemish Bond. Pre c. 1920  
Stretcher Bond. Post c.1920

Materials
It is advisable as far as possible, to match existing and new materials. This is often not possible to achieve as some traditional materials are no longer produced (e.g. local white bricks). It is sometimes better to have a sensitive contrast rather than a poor match, for example render or a different tone of brick. Similarly, imitation stone is unconvincing when seen against natural stone. Again, contrast with render could enhance the natural material.

The use of uPVC or PVCu will not normally be approved in work requiring Listed Building Consent or in Conservation Areas, as it is not a material that relates to weathered historic materials. Generally it is rarely possible to achieve an exact replica and it is difficult to repair. Timber replacement windows or doors can be manufactured on a customised basis to match an original design. It can be an economical alternative to uPVC and does not release toxins in house fires.
The proposed extensions and alterations should not dominate the existing building: in other words they should be subservient, and appear as additions in a ‘supporting’ role.

The existing building should not be dominated by the bulk or volume of the extension. The character of the existing building could be lost. This consideration will be paramount if the building is Listed or is in a Conservation Area.

The approach should be that the extension is, designed as an addition, rather than a duplicate or an enlargement.

Extending exactly in line with the existing building can draw attention to the differences between new and weathered bricks, tiles and mortar joints. It also often makes the existing building look lopsided. In historic buildings it may be important to distinguish between the historic building and a later addition.

It is therefore important to set back the extension at the roof ridge and where the new walls meet the existing. The wall set back should be at least 112mm (4.5 inches) a brick dimension. It is recommended that garages should be set back by at least one metre. Whilst “stitching-in” of bricks and tiles has not been refused in the past, this is no longer the case with the increased emphasis on design quality.

Inappropriate Extensions (shaded)

Inappropriate Extensions (shaded) dominating and detracting from the original building.

Detail of bonding-in of new (shaded) brickwork. Certain proprietary systems allow for butt jointing. If these are used ensure that the joints of the new work line through with the original.
### 3.3 Ensure Privacy For Neighbouring Properties

Visual and sound privacy can be achieved in two ways – by distance and by design. Normally the distance between a rear extension and any rear windows of a building backing onto the property should be a minimum of 21 metres. This distance could be reduced on consideration of individual cases if it can be demonstrated that through the layout of an extension and the design of windows that neighbours reasonable expectations of privacy have been respected. (This would also have to be considered in relation to daylighting – see 3.4).

### 3.4 Ensure Adequate Daylight and Sunlight to Neighbouring Properties

Adjacent properties, especially to the side of the proposed extension site, have to be considered with regard to the potential loss of daylight caused by both the horizontal and vertical projection of the proposed extensions and alterations. Extension designs must demonstrate that they fall within the dimension rules set out in section 4.3.
4.1 Side Extensions to Semi-Detached or Detached Houses

**Issues**
Side extensions are usually required to provide a garage and possibly some additional accommodation over the garage. Space is often very limited and thus the first step is to see if there is sufficient room for a functioning garage.

The effect of side extensions to semi-detached houses on rather narrow plots is to create a virtual terrace, which can erode the spacious character of the street.

A pair of semi-detached houses have a symmetrical emphasis when viewed together. This symmetry is lost when an extension is added to one house or when the design of one extension differs radically from the other, (see above and also section 3.1).

**Design Guidelines**
It is essential to set back the extension from the front face of the house by at least one metre, to lessen the terracing effect and give the impression of the original freestanding buildings, when viewed along the street frontage.

It is also essential that the ridge of the roof of the extension is lower than the existing building, and that the roof pitch and design reflect the existing (see 3.1 and 3.2).

The colour of the extension should either match the existing or be slightly darker in tone to reflect its subservient role. If a double garage is planned, this should be expressed as two single garages with doors separated by a central pier, in order to not detract from the character of the existing house. Again the effect would be improved by a darker colour for the doors.
4.2 Garages

Issues
Garages, especially double garages, can be bulky structures taking up a considerable amount of floorspace on a plot. Therefore they need to be sited and designed in such a way that:

(a) they do not dominate the house
(b) they are not intrusive in the street scene
(c) they can help to create privacy between properties

Design Guidelines

It is essential to set back the extension from the front face of the house by at least one metre, to lessen the terracing effect and give the impression of the original freestanding buildings, when viewed along the street frontage. It is also essential that the ridge of the roof of the extension is lower than the existing building, and that the roof pitch and design reflect the existing (see 3.1 and 3.2).

The colour of the extension should either match the existing or be slightly darker in tone to reflect its subservient role. If a double garage is planned, this should be expressed as two single garages, in order to not detract from the character of the existing house. Again the effect would be improved by a darker colour.
4.3 Rear Extensions

Rear extensions, either two storey or single storey, including conservatories, can affect a neighbouring property’s outlook and daylight. This can be a serious problem on narrow fronted terraced houses.

If the rear of the property is facing south, southeast or southwest, it is particularly important to minimise loss of sunlight to neighbouring gardens. If the rear is facing in a northerly direction, loss of daylight could result in a gloomy outlook from the living room.

Issues
Rear extensions, either two storey or single storey, including conservatories, can affect a neighbouring property’s outlook and daylight. This can be a serious problem on narrow fronted terraced houses.

It may be that the local authority considers that the capacity for extension for the existing building has already been reached and therefore it may refuse side, rear or roof extensions.

Design Guidelines
The diagram shows the key dimensions and angles which govern the amount that an extension can project, related to the position of windows on adjacent properties. These dimensions will be used by the planning authority to establish whether the extension can be approved. Normally extensions should not project further than 3.1m from the existing building. Exceptionally, specific site situations relating to the existing house and its adjacent property may mean that longer extensions could be appropriate.

The size and position of windows on an extension can minimise problems of overlooking. Imaginative solutions should be found to these problems.

Pitched roofs will be appropriate in virtually all cases. However, if the existing building has a flat roof or if a ‘green’ (grass roof) is proposed, or if there are unusually constricting circumstances, then a flat roof may be acceptable. (Always consider the view from upper storeys and the possibility of break-in if the flat roof is on a single storey extension).
Conservatories
Conservatories are a popular means of extending the living area of the house. If located on the sunny side of the house they can act as a heat store and on cooler sides they aid insulation. However, conservatories can become a source of nuisance, from noise and loss of visual privacy for nearby neighbours.

The widespread neo-victorian designs in uPVC are popular, but can look out of place on some buildings. Consider elegant, lightweight, modern alternatives, with possible incorporation of solar heating panels to the roof.

Conservatories should normally be located on the rear or private side of the house. The long axis of the conservatory should normally be parallel with the long axis of the house. However it should not extend the whole width.

Normally the ridge of the conservatory roof should be no higher than the underside of the first floor window cills, to prevent dominance of the conservatory. In no case should the height be more than 4m.
4.4 Extending into the Roofspace

**Issues**

Loft extensions can provide a useful alternative to side or rear extensions, especially for houses on small sites. However they need to be carefully planned and they have considerable structural implications, as outlined in section 2.1 Analysis of Requirements.

If the roof pitch is too low to allow accommodation in the roofspace, extension elsewhere may be more appropriate. It will not be acceptable to create roofspace accommodation by removing an existing roof and replacing it with a flat roofed attic storey. This alters the character of the house and often the street scene.

**Design Guidelines**

**Dormer windows and rooflights.**

The location and size of dormer windows should be determined by the pattern of windows in the elevation of the house. It may be that the character of the house is such that dormers are inappropriate.

Generally dormers should take up no more than half the width of the house and should be centred on the windows below.

Side dormers can reduce the unbalancing effect of a loft conversion on one side of a semi-detached house.

Rooflights can be less disruptive in a roof, provided they are not too large. As more uninterrupted sunlight and daylight hits a roof than elsewhere on a house, the size of a rooflight can be quite modest. “Conservation” type rooflights which are relatively small and lie flush with the roof material should be considered. There may however be fire escape factors which need to be taken into account.

Avoid rooflights placed directly opposite each other on a roof – this can result in lack of privacy and can make the roof look insubstantial. ‘Sunpipes’ can be used to introduce daylight and sunlight into a deep plan, extension or roofspace, with minimum impact on the roof design.
4.5 Porches

Issues
Porches of a minimal size can look like very ‘boxy’ additions and if poorly designed can detract from the original character of the house and the streetscene.

Roof pitch related to that of the existing house and of relatively lightweight construction can help to integrate the porch with the smaller house.

Porches are useful in establishing some “defensible space” to improve home security. They are also useful in reducing heat loss from the house.

Design Guidelines
When designing a porch, consider the range of requirements for an entrance area; accommodation of a meter box, access by bicycle, bin and recycling storage, and access by people with disabilities, basic shelter, lighting, house numbering and delivery. It is also helpful to observe the size and design of original porches of similar houses in the locality.

There may be situations where the character of the street or the character of the building would be harmed by the addition of a porch. Advice should be sought from the Council’s Planning Division.
4.6 Boundaries

**Issues**
The boundary of a house, especially at the front, can contribute almost as much to the character of the house and the area as the building itself. Thus changes to the boundaries need to carefully considered, especially in conservation areas.

Whilst boundaries can often be changed to ‘personalise’ a house, this can have a detrimental effect on the character of the street, if there is a particular established pattern of boundary materials and heights. Boundary removal for car parking can also have a similar effect.

Rear boundaries forming the edge of a settlement can have a considerable impact as they can often be seen from a distance. A single length of close boarded fence or brick wall amongst boundaries of softer, greener type can be obtrusive. Where boundaries form the curtilge of a Listed Building, any alterations may require Listed Building Consent.

**Design Guidelines**
The design of some boundary treatments is more suited to one location than another. There are traditional ‘urban’ boundaries such as railings, suburban boundaries such as hedges over dwarf walls, and picket fences in rural locations. It is always worth looking at old established properties in the vicinity to influence any decisions.

The planting of quick growing evergreen bushes or trees along side boundaries can prove to be problematic in terms of depriving neighbours of light. It is recommended that these species are trimmed regularly to a maximum height of 3.5 metres.
4.7 Removal of front boundaries for car parking

**Issues**
Where terraced older properties preclude the possibility of a side garage, the desire to create a parking place in the front garden is understandable.

This option may be possible where it is considered that the character of the street or the house will not be harmed. If the property where this is proposed is in a conservation area or the building is Listed, it is likely that the authority may resist such a proposal.

However outside these areas, conversion is more likely to be successful if the guidelines below are followed.

**Design Guidelines**

The length of the front garden should be at least 5.5m ie a car parking bay plus a small planting strip in front of the house. There should only be one space per property (unless the plot is over 7m wide). This allows for a footpath and planting in order that the driveway does not dominate the frontage.

Gateposts, frontage trees, hedges and walls should be retained as much as possible to minimise the impact of open frontages on the street scene.

The surface of the vehicle hardstanding should be as porous as possible, to reduce rainwater run off, eg use gravel or grass between the paved area for vehicle wheels.
Section five

Next Steps

5.1 What Will Require Permission?

Virtually all works to a building will require approval under the Building Regulations. Planning permission will be required for most work.

Additionally separate consents will be required if the building is Listed or in a Conservation Area, or if it is proposed to cut down trees which may be protected. If a new or altered access to the highway is proposed, it may be necessary to seek permission from the Highway Authority.

Many minor works however, especially when not to a Listed Building or in a Conservation Area, might be categorised as Permitted Development.

Typically these include:

- Replacement of windows (like for like).
- The building of front boundary walls or fences (below one metre high) And others.

Whilst these may not require permission it is strongly advised that the guidance in this booklet is followed, in order that the character of the original building and the impact on its setting is not compromised.

As stated earlier, seek advice from the local authority if there is any doubt about the need for permission. If alterations or extensions will involve works to a Party Wall, a Part Wall Agreement will have to be undertaken. It is advisable to consult a Surveyor or other Agent if this is applicable.

Article IV Directions

This measure removes the usual Permitted Development Rights on specific works such as front boundaries, small porches etc, where it is considered that these may harm local character and amenities. Planning Permission must be applied for in these cases. At the time of writing, Article IV Directions relating to means of enclosure (ie. boundaries) exist in:

- Flitwick Moor
- Turnpike Road, Husborne Crawley
- Church Road, Clophill
- Land off High Road, Shillington

5.2 Submitting a Planning Application

An application can be registered and considered within the shortest possible time if it contains all the relevant information and the planning officer does not have to request further drawings or clarification.

The following information will usually be required:

A Location Plan.

This will normally be at 1:1250 or 1:500 scale, sufficient to show the property and all its neighbours, plus a little of the setting of the property. It is helpful if the existing building is shown in solid shading and the property boundary is clearly delineated in red. Other land in the same ownership should be outlined in blue.

Plans and Elevations.

Usually at 1:50, 1:100 or 1:200 scale, depending on the nature of the scheme. It is essential to show existing and proposed work. This may be in the form of ‘before’ and ‘after’ drawings in places or by difference in shading etc. Critical dimensions eg. for daylight, setbacks or privacy should be shown.

Sections

These may be more important in determining Building Regulations Approval, but can also help to establish headroom and other critical heights etc.

Design Statement

A short statement setting out the reasons for the proposals as designed, plus a schedule of the materials (type and colour) is important. As a guide, if alterations only are proposed, then notes on drawings will normally be sufficient. Where extensions and major alterations are proposed, a brief illustrated report will be required.

An agent such as an architect or building surveyor will be experienced in producing this information.
**Glossary**

**Agent**
A specialist acting on behalf of the house-holder in the design of the works to a house and the preparation of a planning application. The agent is usually an architect or building surveyor.

**Bond**
(eg Flemish or stretcher bond) The method of laying bricks in courses.

**Character**
The combination of features of a building or an area that give it a distinctive identity compared with other buildings or areas.

**Cill**
The horizontal ledge at the base of a window frame, often projecting from the wall.

**Context**
The setting or surroundings of a building, usually the area from which a building can be seen (front, rear or side).

**Density**
Usually expressed as dwellings per hectare, sometimes as persons per hectare.

**Dormer window**
A window set vertically in a pitched roof.

**Fenestration**
The arrangement, size and proportion of windows on a façade.

**Footprint**
The area and shape of the building at ground level.

**Habitable room**
A living room, dining room, study or bedroom.

**Hipped roof**
A pitched roof in two directions; side as well as front and back.

**Lintel**
A beam inserted in a wall to create an opening for a window or door. In traditional buildings the lintel is visible; in recent buildings it is designed to be located behind the brick cladding of the wall.

**Quoin**
The junction formed between the front and side wall of a building; also at a window or door opening. In traditional buildings the quoin is emphasised by larger blocks of stone, or different colours of brickwork.

**Reveal**
The depth of recession between a window and the front face of a wall.

**Roof Pitch**
The angle of slope of a roof, usually between 30° and 60°.

**Rooflight**
A window set within the slope of a pitched roof.

**Street scene/Streetscape**
The character of the street or road in which the building is located; i.e. buildings set back from the footpath; terraced houses with short front gardens etc.

**Subservience**
The effect of an extension on the original building i.e. the extension should not dominate the original.

**Symmetrical**
When the design of a building is identical either side of (a) a party wall in a semi-detached house or (b) the centreline of the elevation of a detached house.

**45° Principle**
A method of defining the limits of an extension in order that it does not deprive adjacent properties of privacy and light.
This information can be provided in an alternative format or language on request Tel: 01767 602405

Extensions and Alterations: A Design Guide for Householders

CAN I GET ADEQUATE HEADROOM IN THE ROOFSPACE?
-A ROUGH GUIDE
IS IT POSSIBLE TO ACHIEVE A HEADROOM FOR 12 ROOF PITCH?

120° ROOF PITCH

3m

6m

1m

52°

Dormer

Mid Beds District Council
Planning Division

This information can be provided in an alternative format or language on request Tel: 01767 602405

Extensions and Alterations: A Design Guide for Householders

CAN I GET ADEQUATE HEADROOM IN THE ROOFSPACE?
-A ROUGH GUIDE
IS IT POSSIBLE TO ACHIEVE A HEADROOM FOR 12 ROOF PITCH?

120° ROOF PITCH

3m

6m

1m

52°

Dormer

Mid Beds District Council
Planning Division

This information can be provided in an alternative format or language on request Tel: 01767 602405