

Conservation guidance note 1 – window replacement

Windows are a major contributor to the character of a building. They provide important evidence about the history of a property in addition to the attractive appearance they may give a house. Modern replacement windows can have a significantly harmful appearance upon a building's appearance.

This conservation guidance note will explain when consent is required for window replacement, why repair is preferable to replacement, the styles of windows traditional in North Somerset and why modern replacement windows are unlikely to be acceptable in historic buildings.

Do I need permission?

No...

If the building is a single dwelling house - not flats or commercial premises, not a listed building and permitted development rights have not been removed by an Article 4 Direction or by conditions attached to a previous planning approval for example, it is unlikely that you will need consent to replace your windows. We advise that you contact us beforehand to make sure consent is not needed.

Yes, if it is...

- a listed building

Any alterations that may affect the building's character as a building of special architectural or historic interest require Listed Building Consent. If you wish to replace one or more windows, an application for Listed Building Consent will be necessary.

- in a conservation area

Some conservation areas have Article 4 Directions in respect of windows, placed upon them by the Secretary of State. This removes the permitted development rights of occupiers of single dwelling houses to replace, alter or introduce windows without planning consent. In those areas planning permission will always be required. You should contact us to find out if your property is affected by an Article 4 Direction if you live in a conservation area.

- a flat or commercial property

If you live in a flat or occupy a commercial property you will require planning permission if you wish to replace your windows with units that are different in their material, method of opening or design. This is because flats and commercial properties do not have permitted development rights.

Replacement or repair?

We will always suggest that you consider repairing your existing windows. Remember that these windows may have been functioning perfectly well for over a century.

There are three main problems that occur in traditional timber windows:

‘Wood rot’ can often be found in the bottom rails and sills of timber windows when they have not been properly maintained. The rot may have spread further depending on how neglected the window has been.

Total replacement of the window is usually not necessary or cost effective. It is generally a very simple process for a joiner to remove the damaged timber and insert new treated woodwork, giving old windows a new lease of life.

Draughty, badly fitting and rattling windows can also be a problem. This is particularly true of sash windows. You do not need to use PVC-u as traditional timber windows can benefit from new, high performance draught-exclusion systems. There are a number of companies that can fit these systems to your windows at the same time that they renovate them to bring their performance to a par with modern, plastic replacement windows, while still retaining their original appearance.

Neglecting the **maintenance** of timber frames, particularly regular repainting to protect the timber from weathering, is a common problem. There is research to suggest that because of the initial capital investment made for replacement windows, taking account of all savings and expenditures over a fifty year period, it is still cheaper to retain your existing well-maintained timber windows and repaint them every five years.

Types of traditional timber windows

If you still feel that you would like to apply for permission to replace your windows, it is important that you think carefully about the type of window that you would like to use. In North Somerset there are two main types of traditional timber window – sash windows and casement windows.

Sash windows

After their introduction from Holland, sliding sash windows were embraced by English classical renaissance designers in the middle of the 17th Century and their use continued until the early 20th Century. This much-favoured design started in a crude form which used wooden pegs to hold up the one sliding sash and developed a double-hung sliding sash which used cords, pulleys and weights to balance the sash so that it may be left open in any position.

The construction of sash windows is derived from the principles of Classical Architecture which places importance on vertical orientation and attractive proportions. This relationship between window proportion and the building is critical, which is why inappropriate alterations to windows can have a disastrous effect on the visual appearance of the building.



Casement Windows

The other type of traditional window found in period properties, often in more modest or rural buildings, is the casement window. This pre-dates the sash window and is the first design that could be opened for ventilation. The traditional casement is almost always side-hung. Some open inwards but more generally they open outwards. Casement windows may be found in single opening units or arranged in a group of up to four units to fill a larger opening with a mixture of side-hung and fixed casements.



There are various designs of glazing patterns in the casement which will differ depending on the size and proportions of the casement. A casement usually has one central vertical glazing bar and one or two horizontal glazing bars.

The construction of a traditional timber casement is such that the opening and fixed casements are built identically in size and are then fitted into a main frame. This gives the whole casement a balanced appearance.

Why are modern replacement windows not considered acceptable in old buildings?

Modern replacement windows do not respect the traditional character of appearance of a window and its host building. The most important features are explained below.

The materials

- PVC-u



Caution is advised when considering PVC-u. Its appearance differs greatly from traditional timber. It has a smooth even texture that lacks any of the minor surface variations associated with the grain, knots and putty and can often sit at conflict against the traditional materials used in the rest of the building.

- Aluminium

While the profile and sections of aluminium windows are usually thinner than PVC-u and are more able to respect the dimensions of timber windows, they do not offer the same depth of appearance as timber windows. This flat appearance does not normally sit comfortably in historic buildings.



- New timber

The like-for-like replacement of timber windows is usually acceptable when the existing timber is not reparable. These windows will usually have to be made to measure using treated timber and modern paints, in which case the maintenance cycle can be significantly reduced.

The method of opening

In a sliding sash window the two sashes slide vertically past each other within the confines of the window frame and never protrude beyond the outer face of the wall.

In modern replacement windows using the friction hinge, the opening sash will be hung from the top, the side, centrally pivoted or in the 'tilt and turn' pattern, hinged at the bottom. When shut the window resembles a sliding sash window, but when open it protrudes at an angle from the frame. This usually harms the appearance of an old building.

Traditional casement windows are side-hung; however, modern replacement windows often incorporate top-hung vents which disturb the balance and symmetry of the window. They use the friction hinge that pushes the whole casement out away from the frame. The fixed windows are often glazed straight into the main frame, making this glazed area substantially larger than the opening window. The opening windows are constructed so that their sub-frame overlaps the main frame. This means the opening windows stand proud of the main frame dominating the window and creating further imbalance.



Glazing patterns and glazing bars

The glazing of windows in domestic buildings was very rare in the 14th and 15th Century because glass was very expensive and difficult to produce in large sheets. As glass became more available, glazed panels for these windows would have been made up from small diamond shaped pieces of glass held together with lead. This diamond pattern started to be replaced with square panes in the late 16th Century. Modern replacement windows are available with strips of lead stuck to the surface of the plate glass. These are unacceptable because the single sheet of glass that is used does not produce the complex pattern of reflections created by small individual panes as they reflect the light at different angles.



Timber glazing bars began to appear in casement windows in the late 17th Century but leaded-lights continued to be used well into the 18th Century.

Traditional timber windows have a wonderful variety of glazing bars. Glazing bars allowed the use of small panes of glass and contributed to the structural strength of the window frame. The development and design of glazing bars give a guide to the date the windows were manufactured and, therefore, an insight into the history of the building in which they are fitted. Traditional timber glazing bars are proud of the face of the glass and therefore provide the window with a feeling of depth by casting shadows and reflections on the glass.

In contrast, the glazing-strips in modern double glazed replacement windows are flat strips of plastic that are set between the glass and the sealed unit. The glass therefore has an unbroken flat surface with no illusion of depth.

The set-back or 'reveal'

Another important difference can arise if the modern replacement windows are fitted flush with the wall face without a set back or a 'reveal'. These 'reveals' are very important as they produce light and shade to the face of the building and a visual break to the continuous surface of the building's façade.



For more information contact our Development Control team on 01275 888 811 or dccomments@n-somerset.gov.uk.

For advice contact our Conservation officer on 01934 426 250.