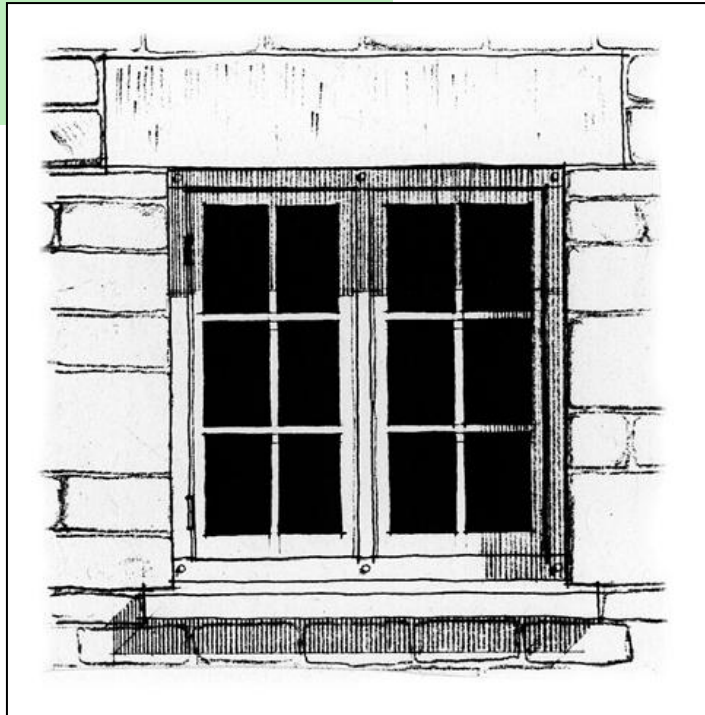


Windows in Listed Buildings & Conservation Areas

Guidance Note



Windows in Listed Buildings and Conservation Areas

Status of the Document

This Guidance has been produced to inform owners and applicants on the considerations taken into account when dealing with windows in historic properties. The document has been drafted with the full knowledge and participation of the South Downs National Park Authority (SDNPA) Historic Building Officers and has the support of the respective portfolio holders for East Hampshire District Council and Havant Borough Council. At this stage it has not been adopted as a Supplementary Planning Document, but serves as a working document for day to day use across the administrative areas of the two Councils, including the portion within the National Park. In the fullness of time it is likely the SDNPA will produce similar guidance relevant to the entire National Park. In the meantime it is a material consideration when determining applications within the administrative area of East Hampshire District Council and Havant Borough Council.

Purpose of Guidance

This leaflet is intended to address some of the frequently asked questions about the repair and replacement of windows. The guidance has been written specifically with listed buildings and conservation areas in mind, but could equally be applied to any traditional building. It is designed to provide clarity on when permission/consent is needed, to set out the considerations that apply, details required and to illustrate methods for improving efficiency without sacrificing important visual or historic detail.

1. Introduction

Windows commonly referred to as the 'eyes of a building', are often one of the most prominent features and significant components in determining a building's character through their arrangement, size and detailing. Window design has evolved continuously over the centuries, so can be an invaluable record in dating the phases of a building's development. Window development itself being closely allied to technological advances in glass manufacture and with it changes in architectural styles.

Consequently windows can have significant value through their visual appearance and the craftsmanship and technology deployed in their construction e.g. jointing, materials, fittings, opening mechanism, proportions and the type of glass. In larger houses there is often a range of windows reflecting the original social status and changes of fashion, with grander windows in the principal ground and first floor reception rooms and more modest windows in servants' or service facilities e.g. basement, attic and outbuildings. In simpler cottages and terraces this is less marked but whether it be a distinctive local style or consistent window pattern (as found in Victorian and Edwardian terraces), it makes a strong contribution to the sense of place or local identity. This is especially important for buildings that are listed or situated within a conservation area.

With rising fuel bills, energy efficiency is of increasing importance. This, coupled with aggressive marketing has resulted in pressure for replacement. Windows of architectural quality can easily be lost and replaced by inferior designs in the process, which devalues the character of the building. More benign methods of improving thermal performance are provided later.

WHEN PLANNING PERMISSION/LISTED BUILDING CONSENT IS REQUIRED, IN BRIEF

- Listed building consent is required to alter the design, material and possibly the colour of any window in a listed building.
- Listed building consent is not normally required for the selective repair of a window in a listed building where limited in scope i.e. replacement of a cill, new bottom rail etc, and where the original design, material and colour are faithfully replicated
- Planning permission is required to alter windows in unlisted buildings which are not single dwelling houses e.g. flats, offices and other commercial buildings. This will apply where it results in a material alteration. Although often described as “like for like” a change from single to double glazed windows particularly when using uPVC will result in a material visual change for which planning permission is required. If in doubt seek advice before proceeding. Planning permission is required to alter windows in unlisted single dwelling houses where an Article 4 Direction¹ is in force.
- Listed building consent and planning permission will generally not be granted for the use of aluminium, plastic (uPVC), or non-traditional timber replacement windows in listed buildings² or in unlisted buildings in conservation areas. .
- Listed building consent will not normally be granted for the use of double glazed units in listed buildings.
- Planning permission will normally only be granted for replacement double glazed units in unlisted buildings in conservation areas where the design of the original window will not be compromised and the test of “preserving or enhancing” the character and appearance of the area is satisfied.

In all instances the quality of the design, appropriateness to the character of the building and locality will be paramount.

If in doubt, please contact the Heritage Team with the address of the property.

¹ Article 4 Directions apply to some conservation areas. It is a mechanism for applying stricter planning restrictions to control changes that can have a detrimental impact on the character of the area.

² Nationally there is a wealth of appeal cases which underpins this approach.

2. Repair or Replacement?

Considerations

Replacement could be entirely the right choice. However, it is worth taking a step back, to consider the options and reasons for wanting to carry out the work.

Thermal Efficiency/Decay

This is rarely a sound reason in itself for replacing an old window which has architectural/historic significance. Consider using one of the specialist companies engaged in overhauling, repairing and fitting draught seals. Research undertaken by Historic England (formerly English Heritage) has demonstrated there are opportunities for enhancing the thermal efficiency of a typical timber window by up to 60% through the use of basic cost effective measures, including traditional curtains, blinds and shutters; draught proofing and secondary glazing incorporating low-emissivity glass.³



An example of a carefully incorporated secondary glazing system.

© selectaglaze

Further guidance on practical measures to thermally enhance historic buildings is available on the dedicated Historic England website www.climatechangeandyourhome.org.uk

Ease of Maintenance

There is no denying, like all products timber windows require regular maintenance. It is an on cost but should more than pay for itself by reducing the likelihood of decay. Should repairs become necessary it is feasible to undertake localised joinery repairs. uPVC (plastic windows) are promoted as maintenance free, although there has been problems of discolouration in the past. The units do not readily lend themselves to repair.

³ Research into the performance of traditional windows: timber sash windows English Heritage (2009)

Sustainability

Retaining historic windows is, in itself, sustainable. Existing historic windows contain embodied energy (i.e. the energy taken to originally make them). Preserving not only conserves their embodied energy, it also eliminates the need to spend energy on replacement windows. Consider where new windows would come from, and the amount of energy expended in creating them and transporting them from where they were made. The proven lifespan of upvc is much shorter and unlike wood is a non-renewable resource. It uses more energy to manufacture and dispose of.

Criteria for Assessment

The following is a step by step guide to the considerations applied when assessing applications requiring listed building consent or planning permission; which should be helpful to anyone contemplating such work.

Assessment

Architectural/Historic Significance

In considering repair or replacement the starting point is to assess the architectural and historic merit of the window(s) in question. This is based on age, the competence and quality of the design and historic importance. A surviving C18 sash window with historic glass will hence have greater significance than a later inserted standard 1950's timber casement. It also needs to be judged in its wider context, which would include the façade in which it is set and/or the broader street context.

Condition

Unless the window in question is clearly inappropriate, the next consideration will be its condition and the weight that should be accorded to this in considering replacement. A proportionate approach is required; however, too often common defects that can be fairly easily remedied using tried and tested methods are cited as the reason for replacement, and can result in unnecessary loss. Since windows often contribute immeasurably to the special interest of a building, this will be a critical consideration, particularly when dealing with listed buildings.

The majority of windows in historic properties are constructed of timber. With appropriate timely care and maintenance they have a long lifespan, as is evident from those that have survived over the centuries. The use of poor quality material particularly in the late C20 has unfortunately led to the premature decay of some timber windows and the product has been unfairly tainted as a result.

If the window has architectural/historical significance replacement should always be the last resort and a robust case will need to be made. Careful repair is always preferable, not only will this retain the historical integrity of the building but it also may work out cheaper. Window failures, where they do occur and acted upon quickly, tend to be contained to specific elements e.g.

cill, meeting rail etc. This can be addressed by a skilled carpenter. For example where rot has penetrated a frame, it is often possible to splice in new sections to match exactly the originals using compatible timbers.

Replacement

Replacement is appropriate where windows are out of keeping or of little significance. In some circumstances even though the existing window is original or of special architectural interest, its condition may be such as to be proven to be beyond repair. A clear case will need to be made and will be subject to rigorous examination. Where accepted the focus of attention is then on what it should be replaced with.

For the replacement of a window of architectural/historic importance a faithful facsimile is normally the appropriate solution. Listed building consent is required to replace windows and will need to be supported by appropriate drawings and information (see section 8)

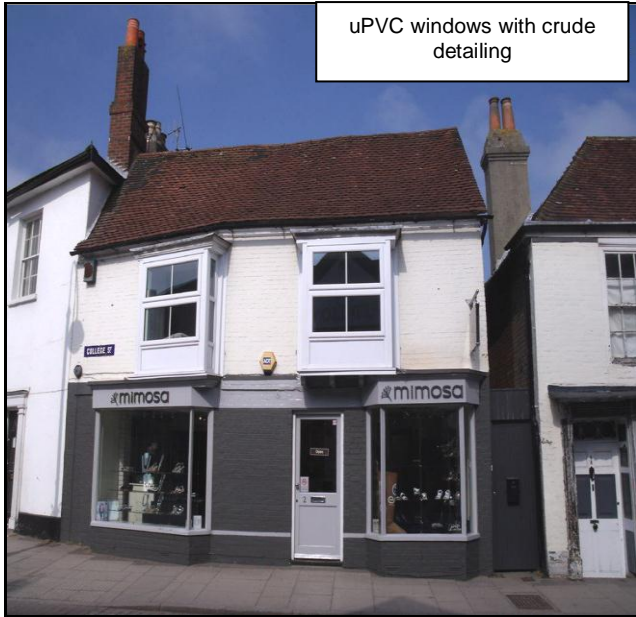
Where the existing windows are clearly inappropriate, clues to suitable replacements may be gained from historic photographs, surviving earlier windows in another part of the property or similar properties in the area. If the window openings have been enlarged and it is not possible to revert to the original size, a compromise is likely to be necessary. The objective should be a design embodying appropriate characteristic window proportions as far as possible. This is likely to require some experimentation based on large scale accurate survey material and an appreciation of historic window design

3. Which windows should be avoided?

With historic windows detail is of paramount importance. Windows using inappropriate modern materials or corrupted historic styles (e.g. pivot or top hung mock sash windows) should be avoided. Examples are given below:

uPVC or Plastic windows –

uPVC or plastic windows are not a traditional or vernacular material and are unsuitable for use in historic buildings or in particularly sensitive areas. Although designs have improved, faithful replication remains deficient in many areas. Casement windows are reliant on a stormproof openings (where the window closes proud of the frame) as opposed to the traditional flush framed timber casement. They are often less refined, and the size of the frame is of necessity usually larger than that of a traditional timber window giving an obtrusive and chunky appearance. Fake glazing bars are employed which are often too thick or sandwiched between the two layers of glass, and not detailed enough for historic buildings. The visual affect of shiny plastic is also out of keeping.



Steel or Aluminium windows –

As with plastic windows the appearance and detailing of these windows is not usually in character with most historic buildings. They may, however, be appropriate as replacements in industrial buildings or in more contemporary designs.



Replacement steel windows used in office conversion (London)

Mass produced timber Windows –

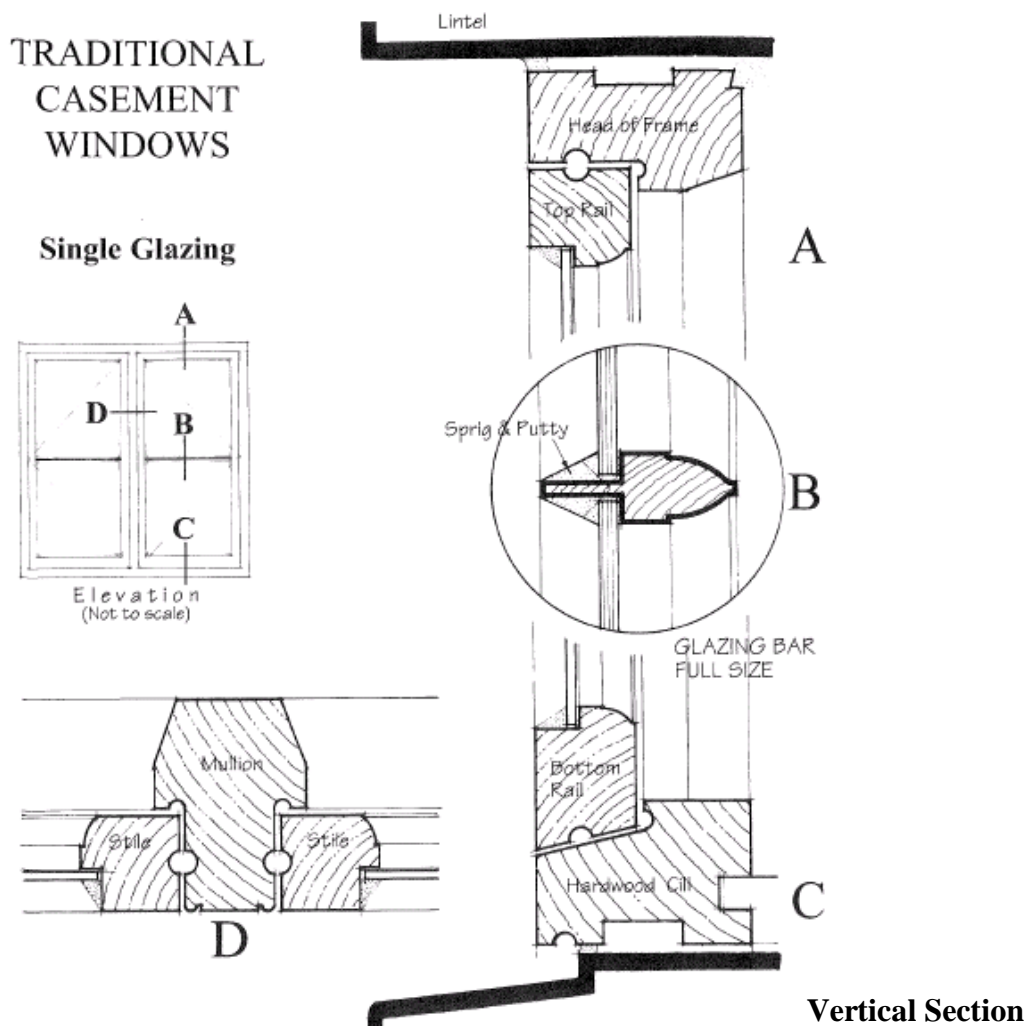
Mass produced timber windows with standard stock mouldings usually show little regard for the subtleties that give the originals their unique character and architectural interest. There is often little attention paid to pane proportions or symmetry, key features found in traditional window detailing.

4. Technical Details

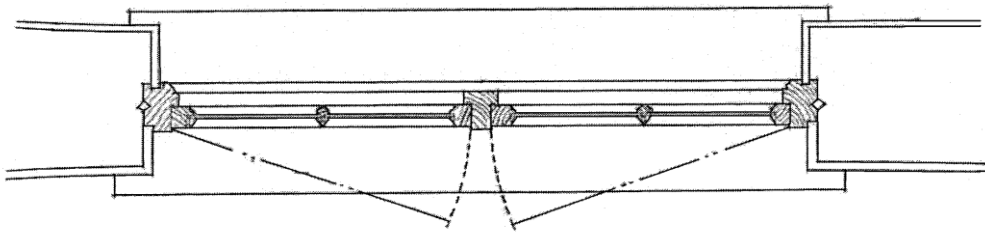
a) Information required in support of applications

Windows are an important visual component of a building. Accordingly it is essential to convey visually the intended changes, in context and in detail. Where a large number of windows are involved an elevation drawing, usually to a scale of 1:50 is required, annotated with window demarcations (for example WG.1, WG.2, WF1 etc) and cross-referenced to large scale drawn details. When confined to a single window in the same opening photographs of the existing window and its context, supplemented by large scale detailed drawings may suffice.

Shown below is an illustration of the window details sought by the local planning authority when making decisions on applications regarding historic buildings. In general this detail is required as part of any application on listed building which may involve windows (replacement, new extensions etc). These details can also form the necessary information required when a condition requiring window details has been imposed. Conveying in this form provides a succinct way of providing the information visually in context and in the necessary depth. Typically the elevation of a window should be at a 1:20 scale and the section of the window at a 1:5 scale so that the appropriate detail is shown. Full scale 1:1 details should also be provided to show the glazing bar detail.

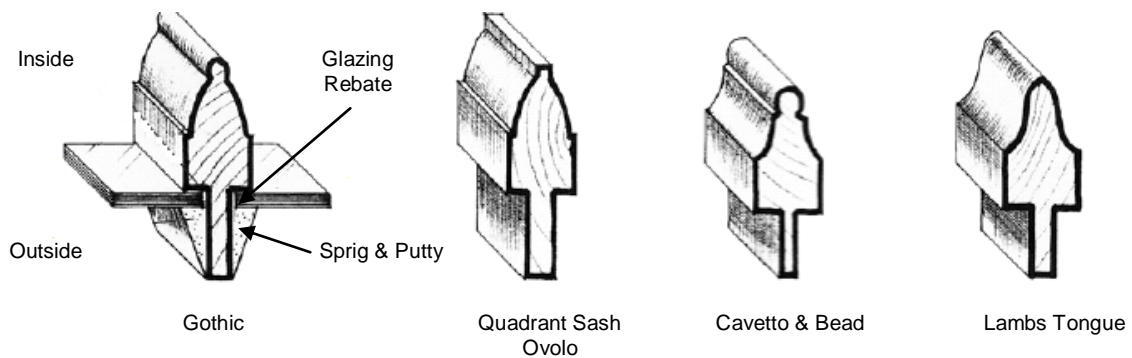


Plan (showing window in relation to opening into which it is set)

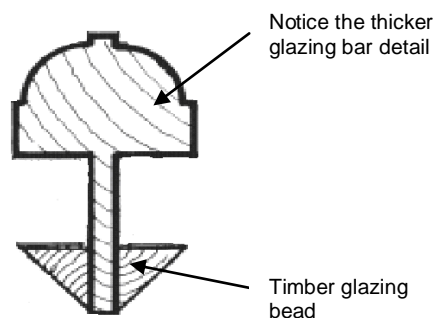


Glazing bars are an important component of a window and add to its visual character. Window designs in historic properties will be expected to utilise true glazing bars appropriate to the period or phase of development.

Below are some typical glazing bar mouldings..



By comparison the illustration below is a typical detail found in standard double glazed units.



The use of glazing bars sandwiched between layers of glass or stuck on the external faces, lack credibility and is not a suitable solution for listed buildings.

b) Double Glazing -

The approach set out below is informed by (a) research and guidance undertaken by Historic England, (b) practical experience in dealing with cases

across Hampshire and (c) cases tested at appeal. Safeguarding the architectural/historic interest and authenticity of detail are paramount. Based on this:-

- The replacement of windows within a listed building solely for the purposes of achieving sealed double glazed units with the resulting loss of important features and visual impact is not supported. It is not possible to obtain the very fine glazing bars, required in many instances to support double glazed units and the view of the window is distorted by the sandwich effect of the two sheets of glass.
- The retention of single glazed windows in listed buildings augmented by benign methods of upgrading to improve thermal efficiency is supported.
- The use of double glazed units in extensions to listed buildings and important historic buildings may be necessary and acceptable to meet increasing standards of thermal performance. It needs to form a critical part of the early design process, since the detailing will be crucial, particularly in a more traditional design solution. Due to the additional weight and thickness, a standard double glazed unit is incapable of achieving an authentic glazing bar profile. It is reliant either on an oversized, visually inappropriate glazing bar or applying false bars externally to the glass. Technological developments are leading to more refined solutions – see Slim Double Glazing below.

Slim Double Glazing

With technological advances there are specialist companies which are now able to supply very slim double glazing. Thermal performance is comparable. The lighter and slimmer units can be used in conjunction with an authentic glazing bar profile capable of taking a crisp putty bead. In some versions it is possible to include drawn glass to improve the visual appearance.

This would be a suitable solution where it is proposed to replace non-traditional, unsympathetic windows in unlisted buildings within conservation areas. It may also be an appropriate solution for use in **new** extensions to listed buildings. However, in all cases the windows must be constructed with appropriate traditional materials and detailing, with traditional proportions, frame size and glazing bars.

It is more costly and hence needs to be budgeted into the overall cost of the project at the outset.

Secondary Glazing

Secondary glazing can be equally efficient as double glazed units and, if fitted discretely, need not affect the character of the building. In this respect, it is important that secondary glazing units correspond closely with the sight lines of the original window pattern. Secondary glazing can be a more effective solution for sound proofing.

5. Compliance with Building Regulations

The replacement of windows is subject to Part L of the Building Regulations. Buildings Regulations approval is required unless the work is undertaken by a FENSA or similar registered contractor within their prescribed terms⁴. Part L seeks to improve the energy performance of all buildings, including existing ones when altered, extended or subject to change of use. However, it states with historic properties a 'reasonable' approach must be taken that balances the conservation of fuel and power with the conservation of fabric. "Historic" in the context of Part L includes buildings that are listed or in conservation area or unlisted but have recognised architectural/historic interest.

What at face value might be perceived as an apparent conflict in the legislation can usually be resolved by sensible discussion at an early stage in the design process. Where such issues are likely to arise early engagement with building control and the conservation officer is recommended.

6. Rooflights

Rooflights were not in common use in domestic buildings until the C19, but became popular in the late 19th century as a means of lighting stairwells and small attic rooms⁵. They were usually discreetly located on the rear roof or in relatively concealed positions and designed to sit in the plane of the roof. As a result the visual impact is minimal. In recent years, with a desire to maximise space, the conversion or use of attic spaces has become more prevalent. With this come higher expectations of comfort, more rigorous requirements for means of escape under the building regulations and the availability of off the shelf mass produced units. Roofs are a key feature of buildings and make an important contribution to the local townscape in many of our conservation areas.

Rooflights can have a detrimental effect on the quality and appearance of a building and the immediate area. When considering using rooflights, the visual impact on the building and locality is a key consideration. Proposals necessitating the punctuation of visually significant roofslopes require particular care and innovative design solutions. Aesthetic as well as purely desirable functional requirements need to be assessed, to minimise the visual impact. As in the past, discreet placing of roof windows is required, utilising available architectural features such as parapets, concealed valleys or on a less visible rear slope. Upgraded rooflights of a traditional design are now available from a range of manufacturers and where otherwise appropriate should be used in listed buildings and buildings of traditional design within conservation areas. The size can be better tailored to the building and the use of vertical glazing bars provides proportions more attuned to the architectural

⁴ Bespoke solutions are likely to fall outside the scope of the Trade organisations and would require building regulations approval.

⁵ Roof Lighting. Article by Peter King. *The Building Conservation Directory* (2003)

character found in traditional buildings. To further minimise the visual impact rooflights should be chosen to sit as flush as possible in the roofslope.

Reference/Further Reading

- Traditional Windows: their care, repair and upgrading (English Heritage) Sept 2014
- Energy Efficiency and Historic Buildings – Application of Part L of the Building Guidance Part L of the Building Regulations to historic and traditionally constructed buildings (English Heritage) March 2011.
- Old House Handbook – A Practical Guide to Care & Repair: Hunt.R & Suhr.M (2008)

Useful websites

www.climatechangeandyourhome.org.uk

www.spab.org.uk

www.historicengland.org.uk

Acknowledgements:

This document has been produced with the helpful input of the Hampshire & Isle of Wight Conservation Officers Group and Chris Wood, Head of the Building Conservation and Research Team English Heritage/Historic England). Thanks are also due to Stroud District Council for providing some of the illustrations found in this guidance.

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Date April 2015