



MANAGING CHANGE IN THE HISTORIC ENVIRONMENT WINDOWS



HISTORIC
ENVIRONMENT
SCOTLAND

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Cover image:
© Nick Haynes

Cover image: Signet Library, Parliament Square,
Edinburgh. A round-headed sash and case window
with astragals, or glazing bars.

Below: Gourock Rope Works, Port Glasgow.
Conversion of a former industrial building with the
addition of new windows suitable for its change to
residential use.



MANAGING CHANGE IS A SERIES OF GUIDANCE NOTES ABOUT MANAGING CHANGE IN THE HISTORIC ENVIRONMENT. ALONG WITH HISTORIC ENVIRONMENT SCOTLAND'S POLICY STATEMENT (JUNE 2016), THEY SUPPORT THE SCOTTISH GOVERNMENT POLICIES SET OUT IN SCOTTISH PLANNING POLICY (2014)

The aim of the series is to identify the main issues that can arise in different situations, to advise how best to deal with these, and to offer further sources of information. They are also intended to provide advice to local authorities when developing their planning policies, and in the determination of applications relating to the historic environment.

KEY ISSUES

1. The windows of a historic building form an important element in defining its special interest and character.
2. The contribution windows make to the character of a historic building must be understood before considering alteration.
3. The size, shape, design and proportions of a window, the reflective sparkle and irregularities of old glass, the pattern of design, the materials and details of construction, the method of opening, the finish, and associated fixtures, typically contribute to the character of a historic window.
4. Maintenance and appropriate repair is the preferred means of safeguarding the character of a historic window.
5. Improvements in energy efficiency of existing windows can be achieved by draught-proofing, internal secondary glazing, and use of shutters and lined curtains.
6. Some types of double-glazing can be incorporated within existing window joinery and may be acceptable where no historic glass remains.
7. Where a window is of limited interest or beyond repair, its replacement should be permitted. New double-glazed windows may be acceptable, if they can closely match the original window design, detail and materials.
8. Local planning authorities give advice on the requirement for listed building consent, planning and other permissions, and will often have their own detailed guidance on windows. Listed building consent is required for any works affecting the special interest or character of a listed building and planning permission may be required for window replacement within a conservation area.

INTRODUCTION AND PURPOSE OF DOCUMENT

Historic Environment Scotland is charged with ensuring our historic environment provides a strong foundation in building a successful future for Scotland. One of its roles is to provide advice about managing change in the historic environment.

This note sets out the principles that apply to altering the windows of historic buildings. It has been produced to guide local authorities when developing their planning policies and in the determination of applications relating to the historic environment.

Historic Environment Scotland will be consulted on listed building consent cases for works to windows in A and B listed buildings, and expect this guidance to inform decision making.

Local authorities alone determine listed building consent applications for windows in Category C listed buildings and planning applications, where applicable, for windows in unlisted buildings in conservation areas. Whilst this guidance is best practice for historic buildings generally, local authorities will often have specific window guidance for listed and unlisted buildings in conservation areas, reflecting local character and particular circumstances, and thus, other approaches may be appropriate.

In this guidance note the term 'historic window' is used for both original and significant historic windows.

Monuments scheduled under the Ancient Monuments & Archaeological Areas Act 1979 require scheduled monument consent for any works. Where a structure is both scheduled and listed, the scheduling controls take precedence. Further advice is available from Historic Environment Scotland's website: www.historicenvironment.scot/advice-and-support/listing-scheduling-and-designations/scheduled-monuments

1. WHY ARE HISTORIC WINDOWS IMPORTANT ?

Windows make a substantial contribution to the character, authenticity and physical integrity of most historic buildings and also to the character and interest of historic streets and places.

They are an important element of a building's design. The size, shape and positioning of the openings are significant, as are the form and design of the framing, astragals and glazing. Their style, detailing and materials help us to understand the date when a building was constructed or altered, its function, and advances in related technology.

Windows can be a product of many factors, including the status of the building, architectural fashions, technological changes, local customs and even individual designers.

In simple vernacular or plainer buildings a considerable amount of the character and visual prominence of a building can derive from the windows.

2. IDENTIFYING THE INTEREST OF HISTORIC WINDOWS

The significance of a historic window is derived from a number of factors including its form or shape, the characteristics of historic glass, the materials and details of construction, the method and pattern of opening, associated fixtures, and sometimes even the paint colour.

This guidance is focused on the most common type of traditional historic window, the double-hung vertically-sliding timber sash and case window (the sash window). Other window types will be addressed later in the document.

FORM AND DESIGN

There are many shapes and sizes of historic window, from simple rectangular openings to arched or elaborately-traceried windows. Whilst some windows are sized and located for purely functional purposes, in most cases, windows are carefully provided as part of a broader design for a building or group of buildings.

Window proportions and spacing frequently relate to other elements of the building, such as the overall dimensions of an elevation or other features (e.g. doorways). Windows are important components of the hierarchy of an architectural design or interior, perhaps expressing different parts of a building and principal rooms within, through differences in size, positioning and design.

Six over six pane timber sash and case windows, Edinburgh. This style of window was popular from the eighteenth to the mid nineteenth century. This one image shows the varied reflections provided by different kinds of crown, cylinder and plate glass.



HISTORIC GLASS

The different production methods for various types of historic glass resulted in a wide range of thicknesses and tints, whilst irregularities in the process often provide an attractive reflective sparkle, refractive variety and distinctive appearance to each window.

Two forms of early glass predominated until the later nineteenth century. Crown glass was made by hand-spinning molten glass into a thin circular disc which was then cut into individual panes. From around 1700 onwards, cylinder or broad sheet glass was made by forming cylinders of molten glass that were then cut and flattened into thick panes. Both these methods were expensive, had a restricted pane size, and produced distortions and bubbles in the glazing that add character, and identify the production process. Surviving examples of this hand-made glass should be retained.

Early plate glass was quite thick and expensive, made in a similar method to cylinder glass or by casting molten glass on a table and then grinding and polishing it flat. The cylinder sheet glazing process was greatly improved in the 1830s which is also when Patent plate glass was invented, allowing thinner low-tax glass to be produced, with later mechanical polishing further reducing costs. The production methods of improved cylinder and plate glass retain varying levels of imperfections and irregularities in the glass that can add character to a window.

MODERN GLASS

Drawn flat sheet and float glass are both C20th mechanised processes, the latter producing glass with few imperfections. More recently, glazing technology has produced many different types of glazing, the major change being the advent of double-glazing or Insulated Glass Units (IGUs) with two panes of glass separated by either a vacuum cavity, or a cavity filled with air or an inert gas, to reduce energy loss through the glazing. Standard double glazing has two panes, usually of 4-6mm glass, with a cavity of around 13-20mm. Slim, thin or narrow-profile/section double-glazing has cavities of between 3mm and 6mm and a narrower edge strip. Vacuum glass has a 'cavity' between the panes of only 0.2mm. The latter two are sometimes used to replace historic glass within existing or new frames. Both double glazing and specialist single glazing can be fitted with low-emissivity coatings which can further improve their thermal efficiency.

GLAZING PATTERNS

The vertically sliding sash and case window was introduced to Scotland in the early 1670s. After some variation it commonly comprised two equally-sized glazed sashes that slide vertically, on counterbalanced lead or iron weights, in a sash case or box set in a rebate in the wall for weather protection. Windows were made of softwood, usually well-seasoned pine, often imported.

Early sash windows were sometimes fixed or held open by pegs rather than counterbalanced weights. Their sashes contained small thick panes, often square, held by thick glazing bars or 'astragals'. As the eighteenth century progressed an arrangement of two equally-sized sashes containing six 'portrait' format panes each became the standard. Generally, over time, astragal sections and glass thicknesses reduced as window openings increased in size and glazing technology improved. The standard six-over-six 'Georgian' pattern was widely used until at least the mid-nineteenth century, with occasional use of 'lying-panes' ('landscape' format) and margin panes, but the advent of improved cylinder and patent plate glass, and the removal of taxes, allowed larger panes of glass and fewer astragals. There was a gradual transition to larger panes with four-over-four and two-over-two panes frequently used, but by the later nineteenth century the one-over-one pattern was common. Horns, added to the meeting rails of sash windows to address these heavier panes of glass, are not very common in Scotland and often do not appear until late in the C19th, if at all.

When larger pane sizes first became available, often the astragals in existing sashes would be removed and retrofitted with single panes of glass. Again, due to expense, frequently only the front windows of properties would be re-glazed in this fashion. Likewise, in new buildings, sometimes the rear elevations continued

to be designed with cheaper smaller panes.

Either side of 1900 saw experimentation with different sash sizes, often a lower large-paned sash with smaller multi-paned sash above, or sometimes decorative glass. The popular 'Queen Anne' style saw the reintroduction of smaller panes, and sometimes exposed sash cases, whilst multi-paned sashes were popular in inter-war social and private housing developments.

OTHER WINDOW TYPES

Besides the sash and case window, there were other types of window used in Scotland, including timber and metal casements, often with leaded lights, associated with the 'cottage orne' style and with Arts & Crafts style housing.

Although timber windows continued to predominate as a framing material until the Second World War, the early C20th saw the introduction of steel casement windows, popularised by the Crittall Company. They allowed schools and industrial buildings to have large expanses of glazing and curtain walling, and also facilitated 'picture windows' in housing. The use of steel windows was largely superseded in the post-war period by aluminium, and later still, uPVC.

METHOD OF OPENING

The way in which a window opens can contribute significantly to the authenticity and appearance of a historic building. All traditional ‘double hung’ sash and case windows open by sliding the sashes up and down in the same plane: in the open position they never project outwards or inwards from the building. Other common forms of opening method are casements, which are hinged at the side and open outwards (or more rarely inwards), and hoppers, which are hinged at the bottom and usually open on a track or restrictor. Some C20th metal-framed windows use a vertical or horizontal pivot mechanism.

Associated fixtures such as traditional timber shutters, where they survive, contribute to the interest and character of a window



FINISH

Like most softwoods, window frames were traditionally painted, and this is the preferred finish. It is sometimes possible to sample underlying layers to establish the original paint colours. Whilst shades of white are now ubiquitous, many traditional colours were much darker, with green, brown and black often used. Lead-based paint is now prohibited, but more recently natural paint systems have offered an alternative to synthetic paint.

ASSOCIATED FIXTURES

A wide range of fixtures are often associated with historic windows, including sash cases, cords, weights, sash lifts, catches, shutters (and their ironmongery), architraves and blinds. Surviving original ironmongery should be retained and reused. Many sashes in Scotland incorporate ‘simplex’ hinges that allow them to be opened inwards for cleaning.

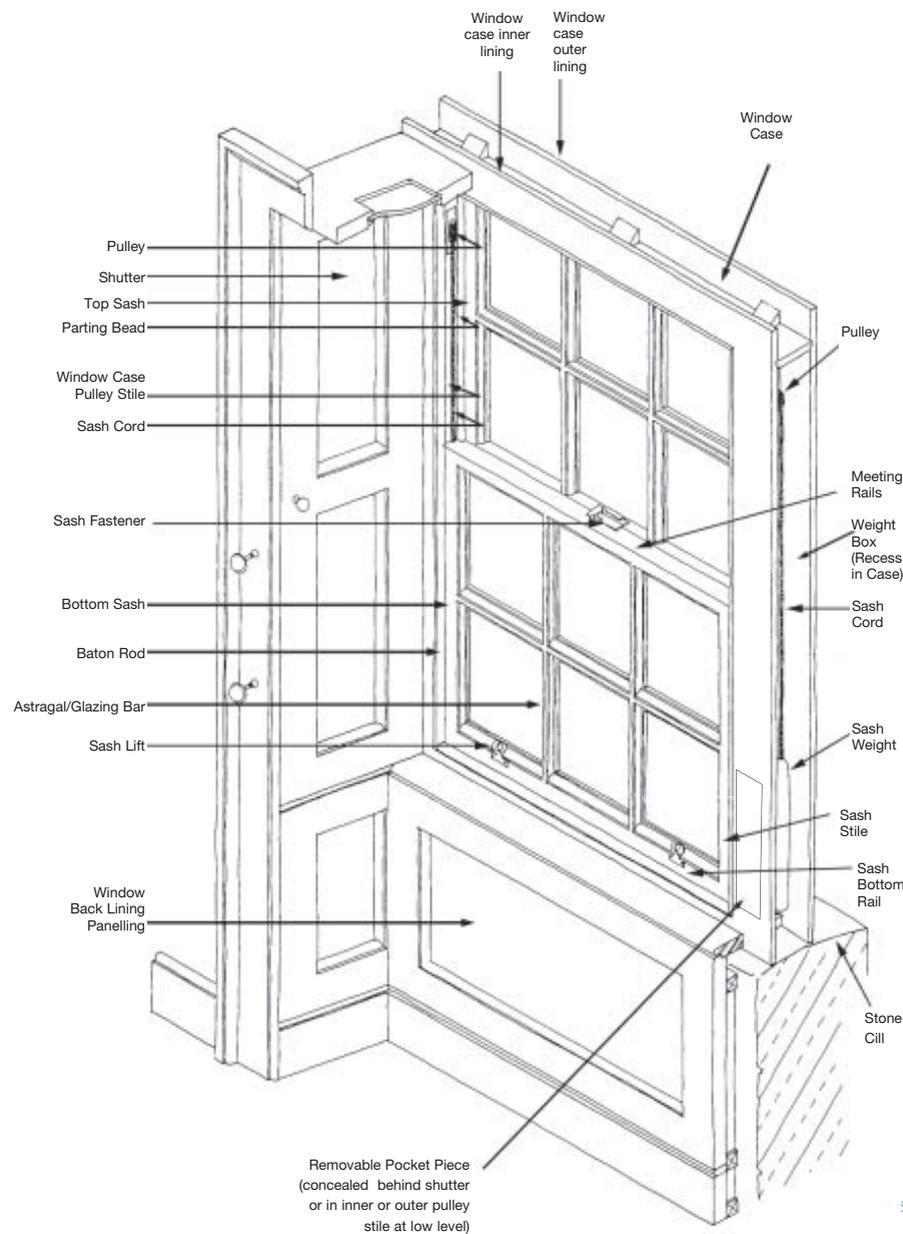


Illustration of a typical sash and case window

3. PRINCIPLES FOR REPAIR AND ALTERATIONS

CHARACTER AND INTEREST OF THE BUILDING

Repairs and alterations to a historic building should protect its character and special interest. The contribution windows make to this character must therefore be understood before proceeding. In assessing the character, it is essential to determine whether the windows are original to the building or, if later, whether they are of historic significance in their own right: e.g., part of a major or important scheme of overall works or decoration to the building. Evidence from adjacent or similar buildings, especially planned set-pieces or terraces, will be important. Such an assessment will inform any subsequent strategy for repair or replacement.

Repair of a sash and case window showing replacement of some of the component parts, such as the cill.

Image: © Derek Thompson



REPAIR

Where windows are of historic interest, repair of their components is preferable to replacement. This approach not only retains historically-important fabric and character, but is sustainable. Historic timber windows often used high-quality close-grained softwood, not easily available today, and with maintenance, have frequently lasted hundreds of years.

In some cases there will be cosmetic damage to windows, with sashes painted shut, or peeling paint, often only on the more exposed faces of the building. There may also be individually decayed elements, such as rotten cills, which can normally be repaired or replaced. However, there will be situations when a window is in such poor condition, damaged or rotten to an extent that it is not possible or practicable to repair it. A specialist joiner may be able to advise on condition, and more detailed advice on the repair of timber windows can be found in our Inform and Short Guides (details at the end of this leaflet).

Steel windows can also suffer from rust and distortion and, although repair is possible and preferable, sometimes this may not be practicable.

ALTERATION

An assessment of character and special interest will be important when changes to the window's design are envisaged. If clear evidence for an earlier pattern exists, reinstatement of that pattern should be acceptable, unless the later windows are of interest in their own right; for example, if they relate to significant alterations and additions that are part of the building's special interest.

In other cases the windows may be modern replacements, sometimes inexact copies of the original examples, or using inappropriate sections or materials. In such cases it should be acceptable to replace the windows with an aim to regain the original design intention or improve the existing situation.

VENTILATION

Sometimes additional controlled ventilation is required, especially in conversion works. Discreet vents inserted in the head, meeting rail or sides of the window should be used rather than adding prominent trickle vents. Further information on providing alternative methods of ventilation is available in our Short Guide to Sash and Case Windows.

SECURITY

Additional window security measures, such as security bolts or sash restrictors, can normally be installed discreetly without damage to the historic character of the building. Use of traditional internal shutters, or if necessary internal retractable grilles, is likely to be less disruptive to the historic appearance of a building than external shutters.

Where external measures are unavoidable, removable grilles are more acceptable than permanent fixtures (including roller shutters). Where no historic glass remains laminated, toughened glass can often be installed to increase security.

COLOUR

Where colour or early paint schemes can be established by analysis, their use should be acceptable, although individual changes to set-piece designs or terraces may be unwelcome. Some local authorities control the palette of window paint colours to maintain the unified design of a conservation area or groups of listed buildings in multiple ownership/occupation. In addition, some areas have developed a custom of using specific colours; e.g., black-painted frames in the West End of Glasgow and white frames in Edinburgh New Town.

NEW WINDOW OPENINGS

Location and design are key considerations in proposals for new window openings. New openings must be carefully located to avoid disruption to the characteristics of the surrounding external and internal context. For example, subsidiary elevations with no formal symmetry, or rooms with few internal features, are likely to be more suitable for new window openings than principal elevations or rooms.

In cases where the building forms part of a larger grouping, it may be necessary to consider the wider context of the group and the potential for unsuitable precedent and cumulative effect if similar work was undertaken on every building. Where the location is appropriate in principle, the design of the new window must take account of the size, proportion, material and detailing of surrounding nearby windows.

BLOCKING UP WINDOWS

Permanent blocking of windows by building up the opening should only occur where the window makes very little contribution to the character of the building. If the window is of any interest, evidence of the opening, such as the window surrounds, cill, lintel or relieving arch should be retained, preferably with the window kept in-situ with blocking materials set behind or with the blocking recessed to the position of the former window, creating a traditional blind

window. If the window being blocked is of no interest or detrimental to the building it can be blocked without any evidence being kept, using materials compatible with the surrounding masonry.

CONVERTING WINDOWS TO DOORS

Subsidiary elevations are more suitable for work of this type. Wherever possible the existing width of the window should be maintained and the opening expanded downwards to ground level. Depending on the circumstances, it may be appropriate to match any external window-surround detailing at the lower level. Where windows contribute to the character of an elevation or internal space, the replacement door should be solid to cill level and glazed above to match the pattern of surrounding windows. Any internal joinery, such as shutters or panelling, should be retained and matched at the lower level of the new opening. Doors are also sometimes converted to windows. Here, if the door is an important part of the character of the building, it will be desirable to provide a glazed or part-glazed door rather than blocking up the opening to insert a window.

BLIND WINDOWS

Original blind or dummy windows form an important part of the interest of a historic building and should not normally be opened up. Such features were originally designed to maintain the pattern and symmetry of window openings in the external elevations of a building, or

sometimes to provide a visual trick or 'trompe l'oeuil'. They are often faced in large stone slabs designed to resemble the sashes. Often fireplaces, chimneys, or other internal features prevented the

creation of working windows in some locations. Windows specifically blocked to avoid paying window taxation are rarer.



South Charlotte Street, Edinburgh. The blind openings are detailed with cills and a meeting rail to maintain the symmetry of the architectural elevation. There are chimney flues behind them within the walling.

Image:
© Nick Haynes

4. UPGRADING WINDOWS

ADDRESSING ENERGY EFFICIENCY AND HEAT LOSS

Having regard for the energy conservation of buildings in use is an important element in addressing climate change and reducing heating costs. In many cases effective and sustainable improvements to the energy efficiency of historic buildings are possible and can be achieved without damage to their character.

The use of traditional shutters at night can help reduce heat loss.



It is important to consider heat loss throughout the entire envelope of a building and, in most cases, less invasive approaches than double-glazing or window replacement may be more cost-effective in both the short and longer term. However, single-glazed windows are often the worst-thermally performing element in a building and a readily identifiable route for heat loss, especially in buildings with large window-to-wall ratios.

There are several methods of improving the energy efficiency of existing windows. Low-key and low-cost improvements include applying low-emissivity window films onto or behind the glass. At night, considerable improvements to heat loss can be obtained by lined curtains, insulated blinds, or using historic shutters, which can also be insulated. A combination of the above measures can be particularly effective.

DRAUGHT-PROOFING

Sash windows were designed to allow some air flow into a room but not to be draughty. Draught-proofing can reduce air-leakage and the feeling of cold within a building. It is relatively simple to draught-proof a window using silicone sealant, foam-backed strips or by inserting brush strips into the baton rods and meeting rails. Removing draughts can lead to reductions in the heating levels required and can also be helpful in reducing dust and noise.

SECONDARY GLAZING

Recent technical research (see section 6 & 7) shows internal secondary glazing can reduce heat loss by over 60% and also has the advantage of leaving the original windows untouched, a welcome approach where the window is significant, retains historic glass, or where adaptation for double-glazing would be complicated or damaging. It can also be cheaper than replacement, and can be a more permanent solution than double-glazed units, whose performance will degrade over time. Acoustically, secondary glazing can also be better at reducing noise transmission than double-glazing.

Systems vary, but normally comprise glass in thin aluminium or timber frames set on the internal window framing or staff beads, and they can sometimes be designed and fitted to still allow historic shutters to function. Secondary double-glazing is rarer, but has also been used. Care should be taken to keep frame sections minimal and match up internal meeting rails or frames with outside sashes. Painting the external frame face black can further disguise units from external view. Care is needed to allow ease of use for both opening and cleaning.

Inveraray Castle, Argyll, showing the discreet addition of secondary glazing, in this case polycarbonate sheeting on magnetic strips. The placing of the unit allows the shutters to operate freely.

Image: © Glaze & Save Ltd

Temporary or demountable secondary glazing solutions are also available, utilising clear rigid acrylic or polycarbonate sheets. These can also provide significant reductions in heat loss, and can be fitted easily (often with velcro or magnetic strips) for winter and removed and stored in summer. Another approach is to fix the sheets to individual panes. Again, these approaches can significantly reduce heat loss at a lower cost than more invasive works.

RETROFITTING DOUBLE-GLAZING

In some cases, where no historic glass survives, it can sometimes be possible to retrofit double-glazing within existing window frames. Due to the design and construction of historic windows, it is normally only vacuum- or narrow-profile double glazing that may be able to be used. Vacuum glazing is thin enough to directly replace single glazing, but if narrow-profile glazing is used, the windows concerned will have to be robust enough to withstand any adaption or routing required to accommodate the thicker panes. Any works that either weaken the window or may lead to exacerbated decay should be avoided.



5. REPLACEMENT WINDOWS

REPLACEMENT DOUBLE GLAZED WINDOWS

Where existing windows are beyond repair, or of little historic interest, it should be acceptable to replace them. This can involve replacing just the individual sashes or the sash case as well. Where a new sash case is fitted it should be set wholly within the wall's rebate, with no, or minimal, protrusion of the case's facing plate, unless exposed sash-cases are a feature of the original design. Sash cases were traditionally fixed with timber wedges and burnt sand mastic. Internal shutters and joinery should always be retained.

Generally, replacement windows should seek to match the original windows in design, form, fixing, method of opening and materials. In replacing sash windows, materials other than timber, e.g. uPVC, will rarely be acceptable. Softwood is traditionally used, now often treated to improve durability.

For metal windows, steel replacement double-glazed windows are available, although can be expensive for individual replacements. Aluminium may be acceptable as an alternative if original patterns and sections can be successfully replicated.

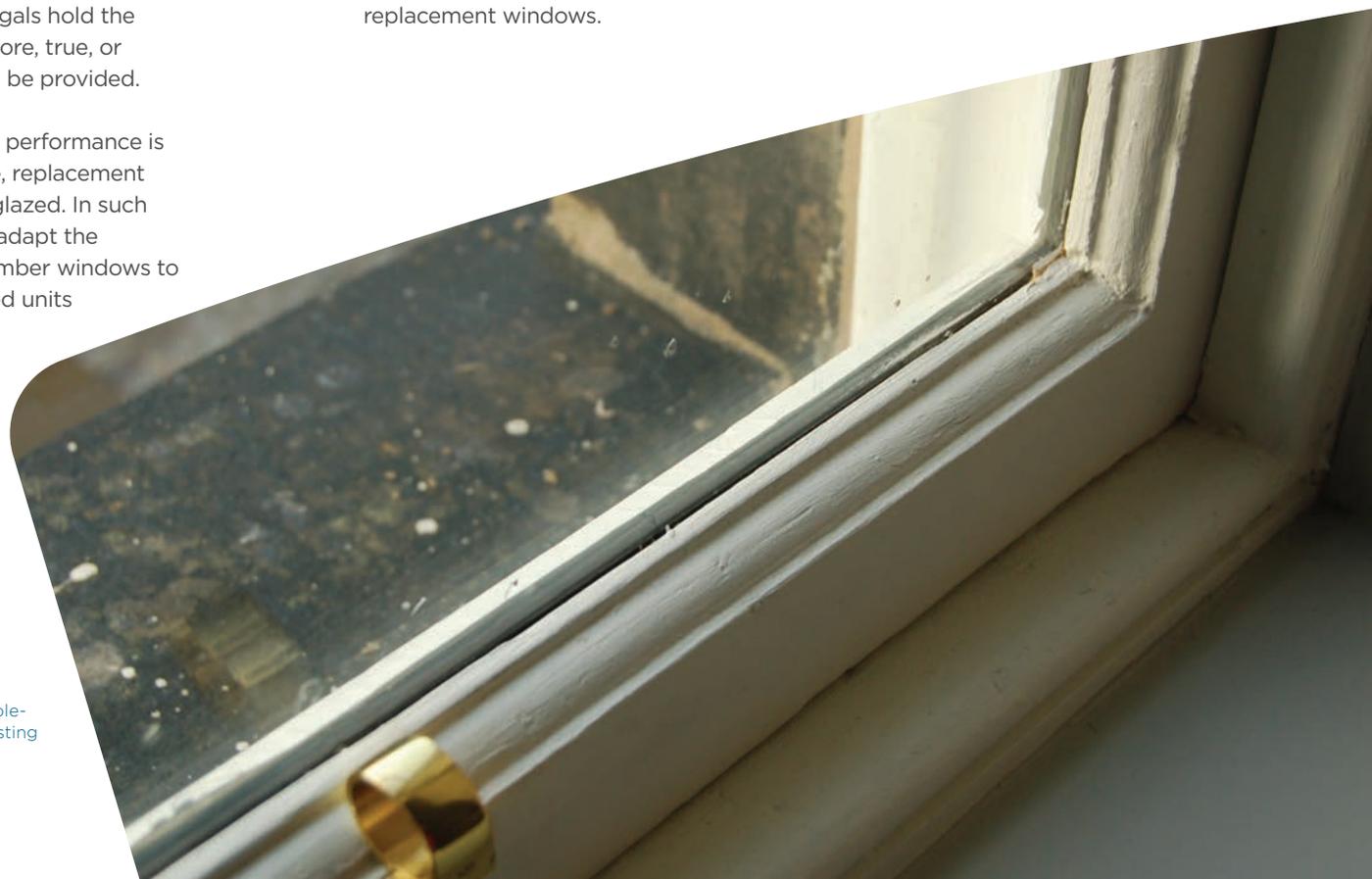
The success of a replacement window will depend on its detailed design, and on how well the new replicates the old. Features to consider in the design of new windows may include the correct placing of the case within the wall and, importantly, its method of operation with vertically sliding sashes. Sections of sash meeting rails and astragal profiles should match the original as closely as possible, and horns should only be provided if there is historical evidence for their use. In seeking the best replication of the design and construction of the window, how astragals hold the glass is important. Therefore, true, or through, astragals should be provided.

In most cases, as thermal performance is a major driver for change, replacement windows will be double-glazed. In such cases care is required to adapt the detailed design of new timber windows to incorporate double-glazed units

Example of narrow-profile double-glazing retrofitted within an existing sash window.

Narrow-profile double glazing has been specifically developed to allow more accurate replication of historic window patterns, and vacuum glass is similarly marketed. Such approaches have directly resulted in double-glazing becoming more generally acceptable in historic buildings, with consequent improvements in energy efficiency. Although some narrow-section units may not be optimised for thermal performance, they give significant improvements in heat loss from single glazing and can allow for near like-for-like replacement windows.

Standard double-glazing may occasionally be acceptable for some replacement windows, e.g. one-over-one sashes. However, the thicker astragals required by standard units, together with limitations on some manufacturer's guidance on edge-sealing of units, mean they often cannot successfully replicate historic multi-pane patterns, especially those windows with thinner astragals.



Some manufacturers have attempted to address this by using a standard double-glazed unit with applied astragals or an astragal cassette, often in conjunction with integral dividers in the cavity. Such approaches may be considered in cases where a replacement window will improve the current situation, allowing an aesthetically accurate match. Astragals sandwiched between panes alone, will be very unlikely to be acceptable.

FITTING GLAZING

Double glazed units can be fitted with putty, or a synthetic glazing compound. Windows should be fitted according to manufacturer's instructions as linseed oil putty may damage unit seals. It may be possible to use timber fixing beads, but the beads should replicate the 45-degree section of traditional putty. Smaller details such as the colour of internal spacer bars in unit cavities can also be important; e.g., white can better replicate the glazing bar colour.

6. CONSENTS

Listed building consent is required for any work to a listed building that affects its special interest and planning permission may be required for replacement windows in conservation areas.

The local authority determines the need for consent/permission. With listed buildings, they may consider minor works such as draught-proofing will not require consent. Other works, such as the installation of secondary glazing, may sometimes require consent, often depending on its detailed design. More intensive works; e.g., retrofitting double glazing, will be likely to require consent, as will window replacement.

Where consent is required, an application is made to the local planning authority. This should include accurate scale drawings showing both the existing windows and the proposed works in context. It is normally helpful to provide detailed technical information and photographs. A brief description of the interest of the windows and an explanation of the impact of the alterations are always helpful in assessing change. Where an application proposes the replacement of a window or windows in poor condition, a condition survey by an appropriately-skilled tradesman is useful.

Notwithstanding the need to protect the historic environment, applicants and local planning authorities should ensure replacement windows comply with the requirements of the Building (Scotland) Regulations 2004. Some change of use applications may have implications for windows (e.g. window guards). Historic Environment Scotland's guide for Practitioners 6 – Conservation of Traditional buildings – provides further guidance on the application of the Scottish Building Standards.

MEETING PERFORMANCE STANDARDS

If you are replacing your windows you will want assurance that the units being supplied achieve the results you seek. New glazing, in particular, Insulating Glass Units (IGUs), should be manufactured in accordance with the requirements of the Product Standard EN 1279-5, a requirement for legal compliance with the Construction Products Regulations (CPR). The industry body, the Glass and Glazing Federation (GGF) has a wealth of information for consumers and providers on its website and in its publications; <http://www.ggf.org.uk/publications>, which includes the Industry Guidance details on the Construction Product Regulations and the tests that must be complied with to meet them.

7. FURTHER INFORMATION AND ADVICE

For the full range of Inform Guides, Practitioner Guides, Technical Advice Notes and Research Reports please see the [Publications](#) section of the Historic Scotland website. The following will be of particular interest;

[Looking After your Sash & Case Windows \(2003\)](#)

[Guide for Practitioners: Conservation of Timber Sash & Case Windows \(2002\)](#)

[Research Report: The Historical & Technical Development of Sash & Case Windows in Scotland \(2001\)](#)

[Inform Guide: Maintaining Sash & Case Windows \(2007\)](#)

[Inform Guide: Maintaining Traditional Plain Glass and Glazing \(2007\)](#)

[Inform Guide: Decorative Domestic Glass \(2007\)](#)

[Short Guide: Fabric Improvements for energy efficiency in traditional building \(2013\)](#)

[Technical Paper 1: Thermal Performance of Traditional Windows](#)

[Technical Paper 23: Thermal assessment of internal shutters and window film applied to traditional single glazed sash and case windows](#)

In addition we have several Refurbishment Case Studies that show the upgrading or replacement of windows and also include costs for such works.

GRANT ASSISTANCE

In some cases grants and loans are available for energy efficiency improvements, including windows. Home Energy Scotland provide free, impartial advice. On 0808 808 2282 or www.energysavingtrust.org.uk/scotland/grants-loans





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Historic Environment Scotland is the lead public body established to investigate, care for and promote Scotland's historic environment.

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